REPORT BY THE AUDITOR GENERAL OF CALIFORNIA

PORTABLE CLASSROOMS IN CALIFORNIA SCHOOL DISTRICTS: THEIR SAFETY, USES, COST, AND THE TIME IT TAKES TO ACQUIRE THEM

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Portable Classrooms in California School Districts: Their Safety, Uses, Cost, and the Time It Takes To Acquire Them

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Office of the Auditor General
California

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May 15, 1991 P-977

Honorable Robert J. Campbell, Chairman
Members, Joint Legislative Audit Committee
State Capitol, Room 2163
Sacramento, California 95814

Dear Mr. Chairman and Members:

The Office of the Auditor General presents its report concerning the safety, uses, and cost of portable classrooms in California school districts and the time it takes to acquire them.

Respectfully submitted,

KURT R. SJOBERG
Auditor General (acting)

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Summary

Results in Brief

No single state agency is responsible for overseeing the safety, use, and acquisition of portable classrooms in California school districts. However, the Department of General Services is responsible for some portable classroom programs. The Department of General Services helps finance the purchase of some portable classrooms by school districts, and it is responsible for the safety inspections of these classrooms. During our audit we noted the following conditions:

- Only 40 (26 percent) of the 153 portable classrooms that both we and the Office of the State Architect (OSA) reviewed had been certified as meeting state safety requirements. Moreover, 35 (23 percent) of the 153 classrooms were being used without final certification;

- California school districts have approximately 48,000 portable classrooms, of which approximately 43,000 are used as classrooms and approximately 5,000 for other purposes such as offices or storage facilities;

- More than 70 percent of California's school sites have portable classrooms, which may house approximately 27 percent of the State's students;

- According to the portable classroom manufacturers and leasing agents who responded to our survey, the costs of portable classrooms, for the basic and mid-range models we assessed, range from $24,000 to $66,900 when the units are purchased directly by the

district; they range from $2,000 to $7,500 per year when the units are leased directly or through state programs;

- School districts acquired approximately 23 percent of their portable classrooms with state resources and approximately 77 percent with their own resources;

- For portable classrooms funded through state programs, four to five years may elapse between the school district's application for funding and the initial use of the units by students; and

- When school districts use their own resources to finance new facilities, they can procure portable classroom units in 4 to 14 months.

Background

California's public school enrollment has increased greatly, and as a result, classrooms are overcrowded and some school facilities are inadequate. Consequently, many school districts use portable classrooms to meet the needs of growing enrollment and overcrowding. Despite the widespread use of portable classrooms, no single state agency is responsible for overseeing portable classrooms, although the Department of General Services' Office of Local Assistance (OLA) administers programs that assist school districts in leasing and purchasing them.

In addition, both the Department of General Services' OSA and the Department of Housing and Community Development (HCD) inspect units used as portable classrooms. According to the California Education Code, only those portable classrooms certified by the OSA meet the State's Field Act standards of classroom safety. Under the California Education Code, unless the school district has obtained a limited waiver from the State, no facility can be used as a classroom for instruction of students until it meets Field Act standards.

Some Portable Classrooms Do Not Conform With State Safety Requirements

The lack of inspection records for specific school buildings makes it difficult to determine whether portable classrooms meet state safety standards. In our visits to 48 school sites throughout California, we examined 429 portable classrooms and found many at 32 school sites that did not appear to have been certified as meeting state safety requirements. Subsequently, we requested that the OSA review the structures we questioned. According to the OSA, state engineers inspected 153 portable classrooms at 20 school sites. Only 40 (26 percent) of the 153 portable classrooms we reviewed and the OSA inspected had the appropriate OSA certification. In addition, according to the OSA, school districts were using an additional 35 (23 percent) of the portable classrooms without having received a final inspection and approval from OSA inspectors. The OSA was unable to determine if the remaining 78 (51 percent) had ever been inspected and certified. However, state law does not appear to provide for enforcing safety requirements in California schools.

Nevertheless, according to information received from the Office of Emergency Services, school districts suffered only limited damage as a result of the October 1989 Loma Prieta earthquake. School districts in the affected areas submitted claims showing that portable classrooms received only minimal damage as a result of the earthquake.

School Districts Use Portable Classrooms for Various Purposes and With Varying Costs

California school districts use approximately 48,000 portable classrooms for various purposes. We estimate that 829 (78 percent) of the more than 1,000 school districts in California use portable classrooms. Based on our statewide survey of 118 school districts and 484 school sites within these districts, California school districts use approximately 43,000 portable buildings for classrooms and approximately 5,000 for offices, storage, and other purposes.

Of California's 7,358 school sites, we estimate that more than 5,300 (72 percent) have portable classrooms on-site. Using the California Department of Education's guidelines for class size, we estimate that as many as 1.2 million (27 percent of the State's total public school enrollment) may be housed in portable classrooms.

According to our survey, school districts purchased portable classrooms at an average cost of approximately $35,000, while the average annual cost of leasing a portable classroom was approximately $9,500. Furthermore, based on our survey of the manufacturers of portable classrooms, we determined that the cost of purchasing a new portable classroom ranges from $24,000 to $66,900. The average annual leasing cost of a new portable classroom ranges from $2,000 to $7,500.

It appears that California school districts plan to continue to expand the use of portable classrooms to house growing enrollments. We project that more than 30 percent of California's school districts plan to acquire portable classrooms during fiscal year 1990-91 and that more than 38 percent of the school districts plan to acquire them for fiscal years 1990-91 through 1994-95.

The Methods and Length of Time Required To Acquire Portable Classrooms Vary

California school districts acquire portable classrooms through state programs or by purchasing or leasing them with their own resources. Based on our survey of California school districts, we estimate that the districts acquired 11,200 (23 percent) of the approximately 48,000 portable classrooms through state programs. They acquired the 37,000 remaining portable classrooms (77 percent) with their own resources.

Based on our time studies and survey, we believe that school districts use their own resources instead of state programs because acquiring portable classrooms through state programs can take substantially longer. For example, we found that school districts can take up to five years to purchase and 13 months to lease portable classrooms through state programs. In contrast, school districts can procure portable classrooms using their own resources in 25 to 35 days, and, according to one leasing company, they can lease a portable classroom in one to 3 days.

Recommendations

The Legislature should take the following actions:

- Require a state office to aid school districts in the acquisition of portable classrooms by innovative financing and lease programs;
- Require that the Office of the State Architect inspect and certify each school building separately, including portable classrooms, and that the certifications of final approval state the type and location of the building; and
- Require each school district to maintain at the school sites and district office copies of certifications for all of the district's facilities.

Agency Comments

The Department of General Services (DGS) noted that, because of the length of the report and the level of detail provided, the DGS did not attempt to respond to the factual accuracy of this report. However, the DGS stated that it believes that this report provides relevant information that can be used in future policy discussions related to the safety, use, cost, and acquisition of portable classrooms used by California school districts. The DGS also stated that, while further study is necessary to determine the feasibility of implementing the report's recommendations, the DGS believes that the overall goals of the recommendations have merit.

Introduction

According to information provided by the Association of California School Administrators (ACSA) and based on Department of Finance statistics, public elementary and secondary school enrollment in kindergarten through grade twelve will increase approximately 35 percent, from 4.5 million in 1988 to 6.1 million in 1998. To put the increase of 1.6 million in perspective, it is equal to the total population of the states of Idaho, Montana, and Wyoming combined. Constructing facilities for 1.6 million students is equivalent to building schools for all of the students currently living in Orange, San Diego, Riverside, San Bernardino, Imperial, Inyo, Ventura, Santa Barbara, San Luis Obispo, and Kern counties. To create school facilities for this growth in enrollment would mean building eleven new classrooms every day, 365 days a year, for the next ten years.

According to the ACSA, the Department of Finance estimates that 48 of California's 58 counties will experience growth in enrollment. At least 22 of California's counties expect student enrollment increases of more than 20 percent; at least 6 counties expect growth of more than 50 percent. San Bernardino County faces a projected growth of nearly 80 percent and Riverside County a growth of almost 90 percent. All of these new students will have to be accommodated in appropriate facilities.

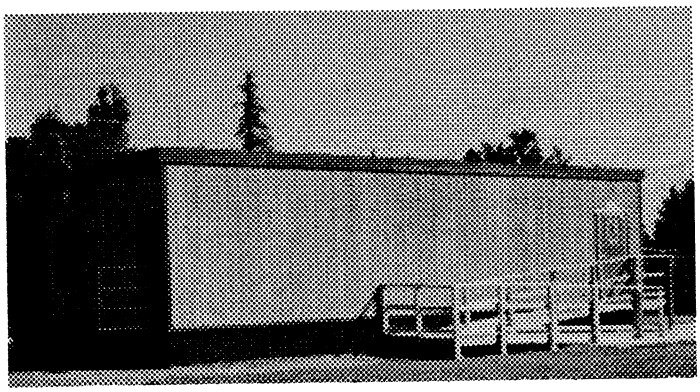
Even school districts that are not experiencing rapid growth have problems with their school facilities, according to the ACSA. More than a third of California's school facilities are more than 30 years old, and 55 percent of the facilities were built before 1964. School districts need to maintain, renovate, and modernize their existing facilities.

The lack of new school facilities and the deterioration of the old facilities leads to overcrowded classrooms. Further, California has the largest average classroom size in the nation. The results of a 1988 survey published by the ACSA indicate that 60 percent of the State's classrooms were overcrowded and 55 percent of the school facilities were inadequate. The lack of school facilities also means that space for specialized programs such as science laboratories and libraries declines as these facilities are used for regular classes.

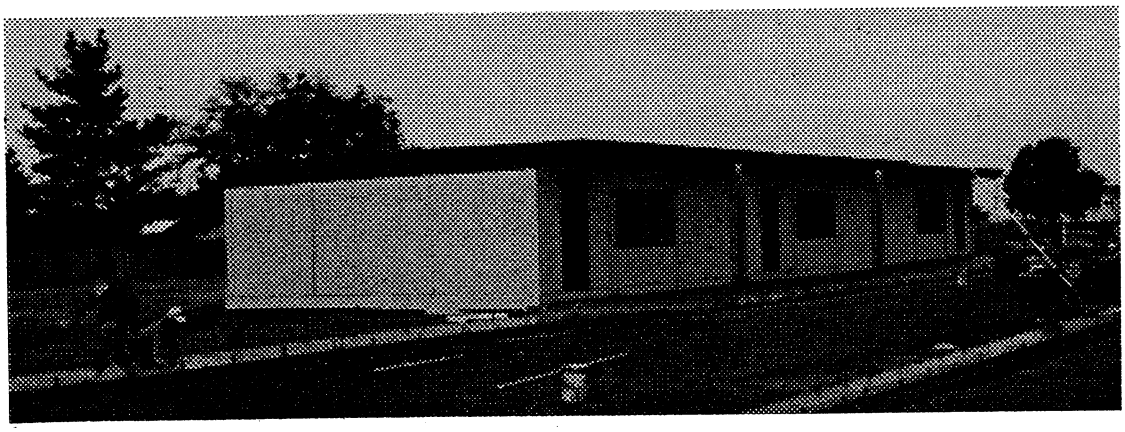
It appears that California school districts are extensively using relocatable, factory-built buildings, which are known as portable classrooms, to address the need for upgrading old and establishing new facilities. Section 39190 of the California Education Code states that the Legislature's intent is for school districts to be permitted to use factory-built buildings as an alternative to buildings that are constructed on the school site. This code section defines a factory-built building as any building that is designed or intended for use as a school building and is wholly or in a substantial part manufactured at an off-site location. The California Education Code defines a portable classroom, in part, as a school building of modular design and construction that can be relocated without the separation of the roof or floor from the building. Any factory-built portable buildings that can be occupied by students, such as those used as rest rooms, libraries, and cafeterias, are considered under the law to be school buildings. Offices, teachers' lounges, and storage facilities do not necessarily come under this definition, although many school districts use factory-built portable buildings for these purposes. In this report, we will use the term portable classroom to mean any factory-built, relocatable structure used at a school site for any purpose.

Figure 1 is a group of photographs showing the typical uses of portable classrooms. The photographs show portable classrooms used singly and collectively.

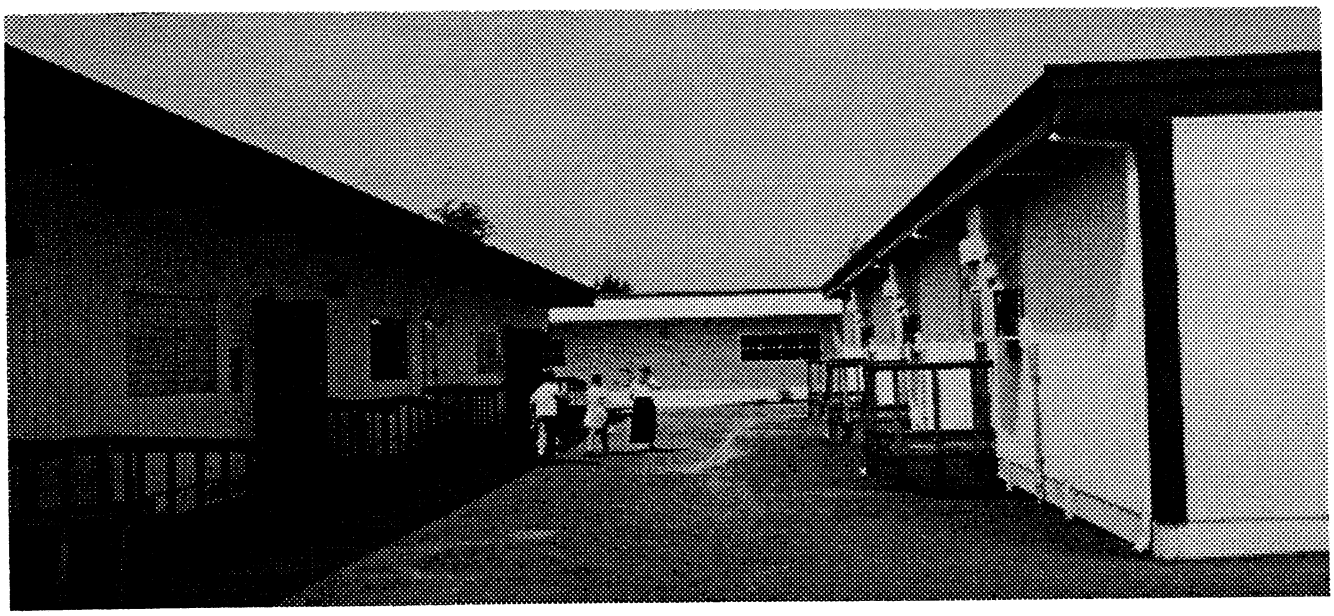
Typical Uses of
Elementary School Portable Classrooms



A single portable classroom.



A structure of three portable classrooms.



An entire school of portable classrooms.

Figure 1

How Portable Classrooms Are Used

Portable classrooms may be arranged to provide a structure of approximately 1,000 square feet. Generally, the portable classrooms we observed consisted of two 12- by 40-foot modules or three 10- by 32-foot modules. The modules may also be arranged to provide other configurations for offices, rest rooms, or storage areas. Figure 2 shows the floor plan of a portable structure consisting of twelve 10- by 32-foot modules used as special education and kindergarten classrooms, rest rooms, a teachers' workroom, an office, and storage space.

Floor Plan of a Structure Built With Portable Classroom Modules

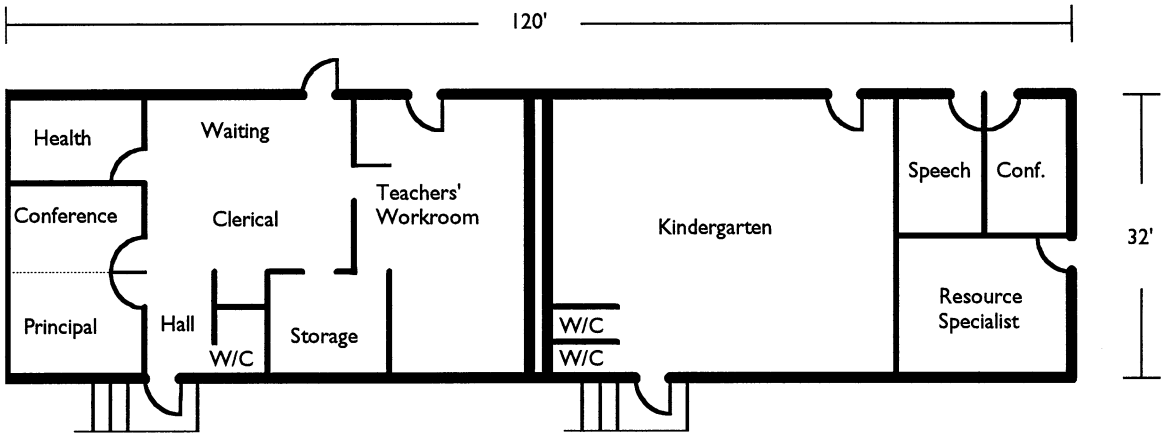


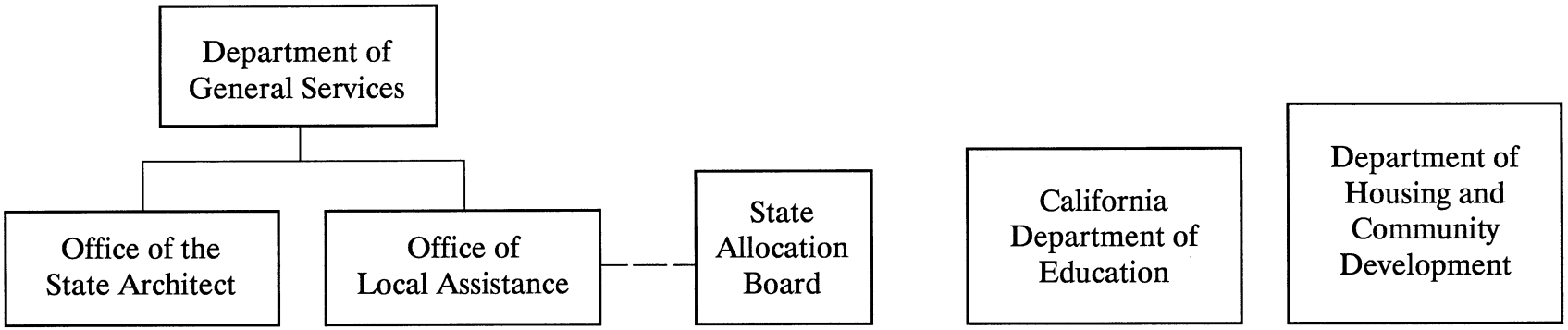
Figure 2

School districts can add any number of amenities to the modules. For example, one manufacturer told us that school districts can upgrade carpeting or wall coverings, upgrade or relocate heating, ventilation, and air conditioning units, and add different kinds of cabinets and built-in furniture or equipment. At one high school in southern California, we observed a portable classroom that had a screen at the front of the module and ten seats set up to model drivers' seats of automobiles for use in drivers' education. We also observed portable classrooms used as a cafeteria, a library, rest rooms, a computer lab, an office, and in one instance, as a florist shop for vocational education classes. We also observed entire schools composed of portable classrooms. However, certain factors, such as ceiling height, limit the use of portable classrooms for some types of buildings, such as gymnasiums.

State Oversight of Portable Classrooms

No single state agency is responsible for the oversight of the safety, use, and acquisition of portable classrooms. As shown in Figure 3, however, several agencies do have some responsibilities.

Organization Chart of State Agencies Overseeing Portable Classrooms



- Using Field Act safety standards, reviews and approves architectural plans for school buildings;
- Requires in-plant construction inspections and site installation inspections.

- Provides administrative support to the State Allocation Board;
- Administers the Leroy F. Greene State School Building Lease-Purchase Law of 1976 and the Emergency Portable Classroom Program.

- Controls apportionment of state funds for school construction projects.

- Reviews and approves new school sites and additions to school sites;
- Helps districts develop five-year facilities plans.

- Has primary responsibility for manufactured housing, some of which is used for classrooms;
- Requires in-plant inspections.

Figure 3

The State Allocation Board (SAB) and the Department of General Services' Office of Local Assistance (OLA) and its Office of the State Architect (OSA) have some oversight responsibilities they share with the California Department of Education (CDE). In addition, the Department of Housing and Community Development (HCD) has some safety oversight of portable structures not used primarily as classrooms.

The Office of Local Assistance

The OLA administers school facilities' funding programs, including the Leroy F. Greene State School Building Lease-Purchase Law of 1976 (lease-purchase program) and the Emergency Portable Classroom Program. In providing administrative support to the SAB, the OLA processes and reviews applications from school districts to ensure that the districts submit complete and accurate information. The SAB approves applications from school districts for lease-purchase projects, apportions school building funds to projects, and establishes regulations, policies, and procedures for the administration of the lease-purchase program. The Appendix presents an overview of the methods school districts use for acquiring portable classrooms.

The Office of the State Architect

The Department of General Services' OSA oversees the architectural and engineering aspects of school facility construction. For portable classrooms, it reviews and approves architectural plans and specifications for structural safety and statute compliance, and it conducts construction inspections, plan reviews, and site installation inspections using the safety requirements included in the California Education Code and the California Code of Regulations, known together as the Field Act standards. The OSA's safety responsibilities under state law and the California Code of Regulations, however, do not include the authority to condemn unsafe structures or prevent occupancy to enforce school district compliance with Field Act standards.

The California Department of Education

The CDE reviews and approves all new school sites and additions to school sites. The CDE's School Facilities Planning Division ensures that school districts applying for state school building funds comply with SAB policies regarding site acquisition. The CDE also helps districts develop five-year facilities plans which are required for participation in state school building programs. Additionally, through the California Basic Educational Data System, the CDE provides the enrollment data to organizations such as the OLA for the purposes of reporting, program management, and planning.

The Department of Housing and Community Development

The Department of Housing and Community Development (HCD) has the primary responsibility for manufactured housing in California. The HCD requires that certain types of factory-built structures, such as mobile homes and commercial coaches, bear an insignia of approval. Some of these structures are used as portable classrooms. The HCD approval process differs from the OSA process most significantly in that the HCD does not require an installation inspection. School districts using HCD-approved portable classrooms are allowed to do so if they obtain a waiver from the SAB. As of March 1991, we determined that 234 school districts had received waivers from the SAB. These onetime waivers are for a maximum of three years.

California School Districts

The Legislature acknowledges that school districts, county boards of education, and county superintendents of schools, collectively known as the school districts, have diverse needs unique to their individual communities and programs. Section 35160.1 of the California Education Code states that the Legislature's intent is for school districts to have broad authority to carry out their activities and programs, including the expenditures of funds.

Scope and Methodology

We were requested to review the safety, uses, cost, and acquisition of the portable classrooms in California's school districts. To accomplish our goals, we reviewed the laws, regulations, and policies governing the acquisition and use of portable classrooms. We also reviewed the laws and regulations pertaining to school facilities financing and the laws governing the safety of portable classrooms and other types of manufactured buildings. Because this review is limited to the safety, use, cost, and acquisition of a particular type of structure instead of a review of governmental agencies or programs, the review has certain limits. Primarily, we did not conduct an audit of the programs of the Department of General Services, the California Department of Education, the Department of Housing and Community Development, or any California school district. Rather, we gathered information from each of these entities to present a complete picture of the role portable classrooms play in housing the State's growing student enrollment.

We reviewed the California Education Code and other laws and regulations to determine the responsibility and authority for portable classrooms accorded to school districts, the State Allocation Board, the Department of General Services, the CDE, and the HCD.

We visited 48 school sites in 12 counties to observe how portable classrooms were used and whether they had been inspected and approved by the Office of the State Architect. We did not evaluate the safety of these structures but we did ask the OSA to determine if certain questionable structures were certified. To determine the extent of damage sustained by portable classrooms after the 1989 Loma Prieta earthquake, we visited three school districts that reported damage to school buildings. We also reviewed data from the Office of Emergency Services on the extent and costs of damage reported by the school districts as a result of the earthquake.

To determine the number of portable classrooms and how they were being used, we conducted a random, stratified survey of school districts. We received responses from the 118 districts in our sample. Our statistical consultant used the data from the completed survey to make statewide projections. Because we received a range of data for the questions in our survey, the consultant used mid-range values to calculate averages. We did not audit the information we received.

In addition to developing historical information on costs from school districts, we determined the current cost of purchasing portable classrooms. We requested that six portable classroom manufacturers and three leasing agents furnish us with purchase and leasing price estimates for two models. We did not validate the information provided by the two manufacturers and two leasing agents who responded.

Furthermore, we reviewed the programs of the Leroy F. Greene State School Building Lease-Purchase Law of 1976 and the Emergency Portable Classroom Program to determine the steps necessary for school districts to acquire portable classrooms through the State and to determine the roles of the state agencies involved in the programs. We studied 20 state-funded projects to determine the length of time required to complete school facilities projects. In addition to our time study, we reviewed new construction and modernization projects of the lease-purchase program to determine the proportion of projects at various stages in the approval process. We did not evaluate the State's effectiveness or compliance with laws and regulations during our review.

We also reviewed methods for funding school facilities projects using local and district resources, such as local bonds and developer fees. We reviewed the processes and estimated the time necessary to acquire portable classrooms using these methods. We also surveyed manufacturers and leasing agents to determine the time required to provide portable classrooms to school districts.

Chapter 1 Some Portable Classrooms Used at School Sites Do Not Conform With State Safety Requirements

Chapter Summary

The lack of inspection records for specific school buildings makes it difficult to determine whether a school district's portable classrooms meet state safety requirements. In our visits at 48 school sites throughout California, we examined 429 portable classrooms and found many classrooms at 32 school sites that did not appear to have been certified as meeting the State's safety requirements. We then requested that the Office of the State Architect (OSA), the state agency responsible for school safety standards, review the structures we questioned. According to the OSA, state engineers inspected 153 portable buildings at 20 school sites. Only 40 (26 percent) of the 153 portable classrooms that we reviewed and the OSA inspected met state safety requirements. In addition, according to the OSA, school districts were using an additional 35 (23 percent) of the portable classrooms without having received a final inspection and approval from OSA inspectors. The OSA was unable to determine if the remaining 78 (51 percent) of the classrooms had ever been inspected and approved as meeting safety requirements. As a result, school districts are using classrooms that might be unsafe. Nevertheless, according to information received from the Office of Emergency Services, portable classrooms at school districts suffered only limited damage as a result of the October 1989 Loma Prieta earthquake.

The Certification Process

Since 1933, the safety of public school buildings in California has been under the jurisdiction of the OSA. To protect school buildings from the dangers associated with the State's seismic activity, all public school buildings, including portable classrooms, are required to meet the requirements in the California Education Code, Section 39140 et seq., and those in Part 2, Title 24, of the California Code of Regulations. These requirements are known as the Field Act standards.

According to information provided by the OSA, to certify portable classrooms as conforming to Field Act standards, the OSA requires school districts to meet a series of safety requirements. The OSA stated that its requirements for portable classroom safety are more stringent than the requirements of the Uniform Building Code because a higher level of safety is required for public school buildings than for residential, commercial, and industrial buildings.

School districts are responsible for initiating the certification process. In order to receive the OSA's certification for portable classrooms, the districts must use a licensed California architect or structural engineer to prepare design calculations, drawings, and specifications for the district's proposed portable classrooms. The licensed architect or structural engineer must retain general responsibility for observing the work of construction. The OSA's licensed structural engineers review the design calculations, drawings, and specifications to ensure that the districts' plans meet code, seismic, wind exposure, and access standards. The OSA also requires that plans include reports on soil, the building's foundation, geological hazards, and other school site information.

After the plans receive the OSA's approval, the OSA requires adequate, competent, and continuous inspection of the construction of the portable classroom units by an inspector acceptable to the OSA. This statutory requirement includes inspecting both the in-plant fabrication and the installation of factory-built classroom buildings.

The OSA's regulations for the installation of a portable classroom require that the responsible architect or structural engineer or the qualified delegated design professional visit the site and submit a report verifying that the construction conforms to approved plans and specifications. In addition, the regulations require that the inspector and the contractor certify under penalty of perjury that all of the construction work and materials comply with the plans and specifications. OSA field engineers periodically visit the school construction sites to monitor the construction and supervise the on-site inspectors. School districts must obtain the OSA's recertification when they move a portable classroom from one site to another.

According to state law, no contract for the construction or alteration of a portable classroom would be valid without complying with the OSA's requirements. A certified portable classroom is considered a conforming structure, while a structure that has not been certified is considered nonconforming. However, the law does not prevent occupancy before the OSA's final certification. Until September 1, 1990, a school district was permitted to lease classroom buildings for a period of less than three years without seeking the review and approval of the OSA. Furthermore, the California Education Code allows certain exemptions from OSA approval, and the State Allocation Board grants waivers for three-year periods.

Some Portable Classrooms Lack Certification Tags

As part of our review, we conducted field visits at 48 schools in 12 counties to document how the schools were using their portable structures. Before our field visits, we reviewed the building safety standards contained in the California Education Code. We also reviewed school building project records that include inspection information maintained by the OSA. However, these records did not clearly identify which individual portable classrooms had been inspected and approved. Using these records, we could not easily identify which schools had portable classrooms or determine if the portable classrooms had been inspected and approved.

According to the OSA, all inspected and approved portable classrooms are required to display an OSA tag signifying that the building has undergone inspection and conforms with Field Act standards. Figure 4 shows an example of this tag.

Office of the State Architect's Portable Classroom Certification Tag

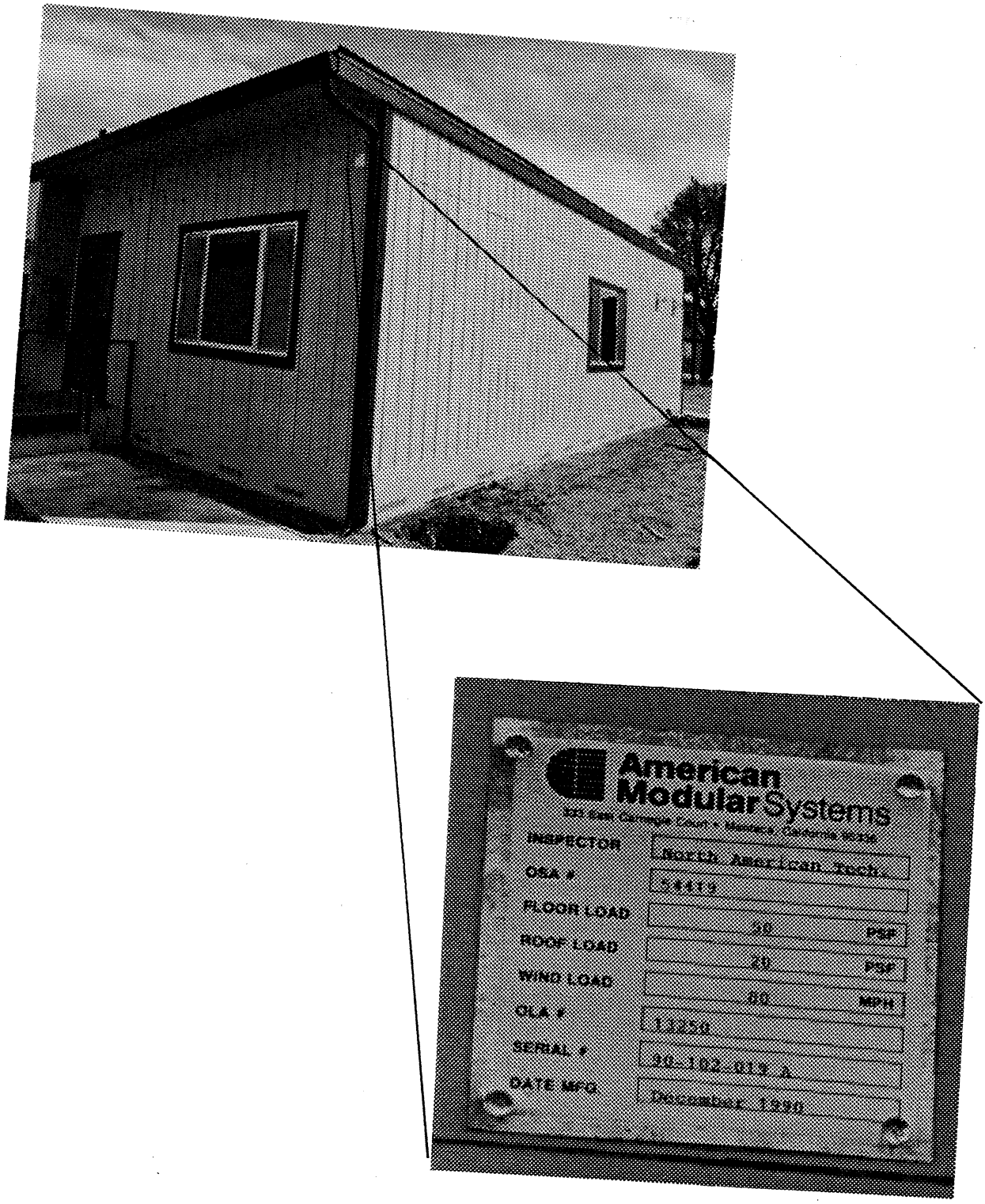


Figure 4

Anyone interested in easily determining at a school site whether portable classrooms have been inspected and certified is limited to looking for this inspection tag. However, even a tag does not always ensure that a given classroom conforms to state safety requirements. For example, if a school district has moved an inspected portable classroom to a new site without applying for a new OSA inspection, the tag will remain in place but the portable classroom will no longer be certified.

We examined 429 portable classrooms at 48 school sites. As part of the field visits, the auditors inspected the portable classrooms to determine whether the structures displayed the OSA tag, and we documented the condition of the portable classrooms and their use. The purpose of these steps was to determine whether schools were using conforming classrooms. We did not evaluate the safety of these structures because we did not have sufficient expertise, nor did we attempt to determine whether the school districts had improperly relocated OSA-inspected buildings.

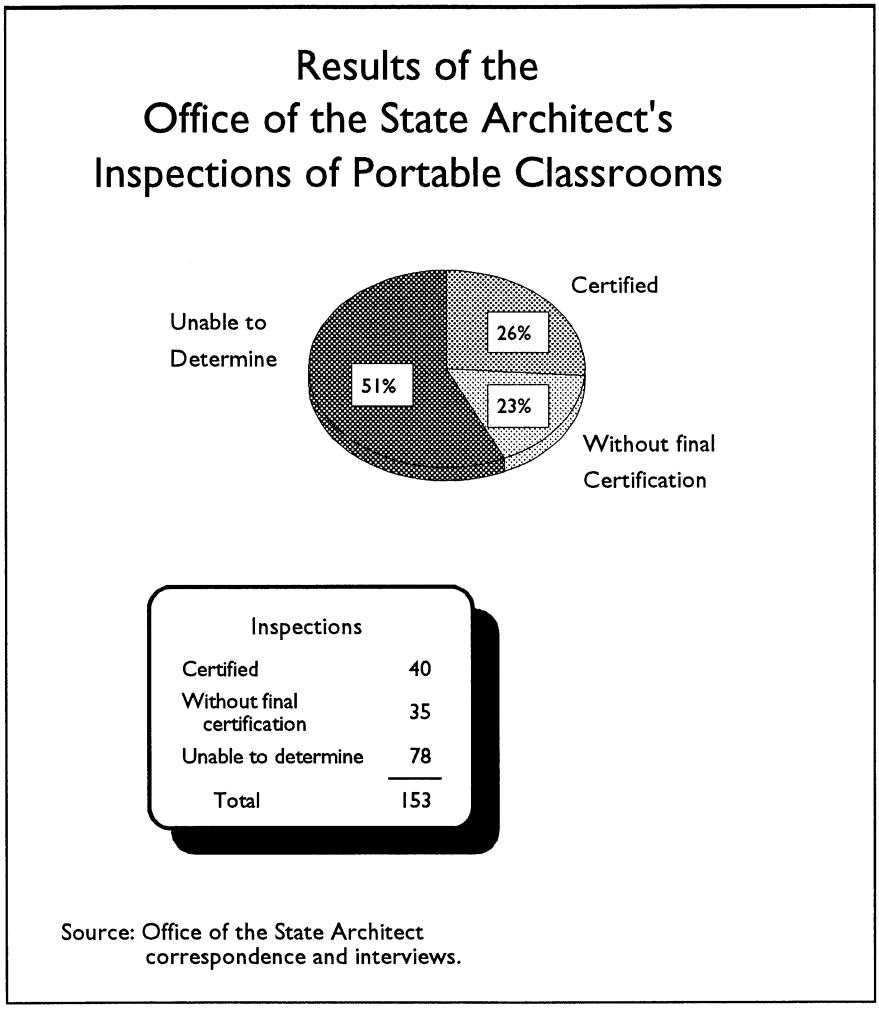
We found that only a limited number of the buildings we inspected had evidence of an OSA inspection and approval. However, some of the buildings we observed that did not have evidence of an OSA inspection and approval did not appear to have required an inspection and approval because the structures were used for noninstructional purposes, such as storage, or were structures that appeared to have been inspected but had the OSA tag partially covered with paint or stucco.

Based on our review, we determined that the remaining portable buildings at 32 of the 48 school sites appeared to be used for instructional purposes and therefore should have been required to conform with Field Act standards. In each case, we found no clear evidence of OSA inspection either in the OSA's records or at the school site. In some instances, the questionable buildings were in poor condition, raising the question of pupil safety, but we did not have sufficient engineering expertise to determine if the structures were safe. Consequently, we sent a list to the OSA identifying the school sites with the portable buildings without evidence of OSA inspection and requesting that the OSA tell us whether these structures met state requirements.

The OSA's Inspections

In response to our request, the OSA's Structural Safety Section in Los Angeles inspected portable classrooms at some of the school sites we had identified. The OSA engineers inspected portable classrooms at 20 school sites in four counties, limiting themselves to these sites because of time constraints. According to the OSA's inspecting engineers, 153 portable buildings at these school sites appeared to be subject to the OSA's certification. Figure 5 shows the results of the OSA's review.

Figure 5



Source: Office of the State Architect correspondence and interviews.

As Figure 5 shows, the OSA identified only 40 (26 percent) of the 153 portable classrooms as having the appropriate OSA certification. Of the remaining 113 portable classrooms, the OSA told us that school districts were using 35 (23 percent) of the portable classrooms without final OSA certification. Further, the OSA was unable to determine if the remaining 78 (51 percent) of the portable classrooms had applications or certifications for inspections on file.

The OSA noted that it does not have the authority or the responsibility to prevent the use of buildings without final certification or buildings that do not conform to the State's safety standards. When school districts acquire or move a portable structure, the school districts are responsible for initiating the OSA certification process. However, school districts do not always do so. For example, a school district in southern California installed 30 portable classrooms and rest rooms without applying for the OSA's approvals, inspections, or certifications. An OSA field engineer inspected the facilities and determined that the portable classrooms may not have met state safety requirements. The OSA notified the school district of its findings, but the district denied that it needed to take corrective actions. Beyond using correspondence to inform the school board that it was violating state law, the OSA takes no further action because it does not have the authority to condemn school structures that are unsafe or the authority to prevent unsafe occupancy. Consequently, there appears to be no mechanism for enforcing Field Act standards for state school structures. Therefore, many school structures may be unsafe.

The Effects of the Loma Prieta Earthquake on Portable Classrooms

As noted above, to protect California's school children from injury and to protect schools from damage caused by seismic activity, school safety requirements are more stringent than those applied to other types of buildings. According to the California Code of Regulations, school buildings, including portable classrooms, constructed according to these rules and regulations should be designed to resist forces generated by major earthquakes

of the intensity and severity of the strongest experienced in California without catastrophic collapse but only some reparable architectural or structural damage.

To determine whether portable classrooms were meeting these safety requirements, we reviewed data on the damage school districts suffered as a result of the October 1989 Loma Prieta earthquake. We received data from the Office of Emergency Services (OES), the state agency that administers the program providing financial assistance to entities, including school districts, that have received damage as a result of a natural disaster.

The OES reviewed the damage survey reports of 89 school districts. Of these 89 school districts, 16 reported damage to portable school facilities. Based on these damage survey reports, it appears that the most frequent result of earthquake damage was that portable classrooms needed to be reset or releveled on their foundations. The majority of the damage claims appeared to be minor and did not indicate any major structural problems. Therefore, since the portable classrooms only had damage that was easily reparable, they met the primary requirement of the California Code of Regulations. However, the earthquake occurred at 5:04 p.m., so most students and teachers were not in the portable classrooms.

Chapter 2 The Number, Age, and Cost of Portable Classrooms Used by California School Districts

Chapter Summary

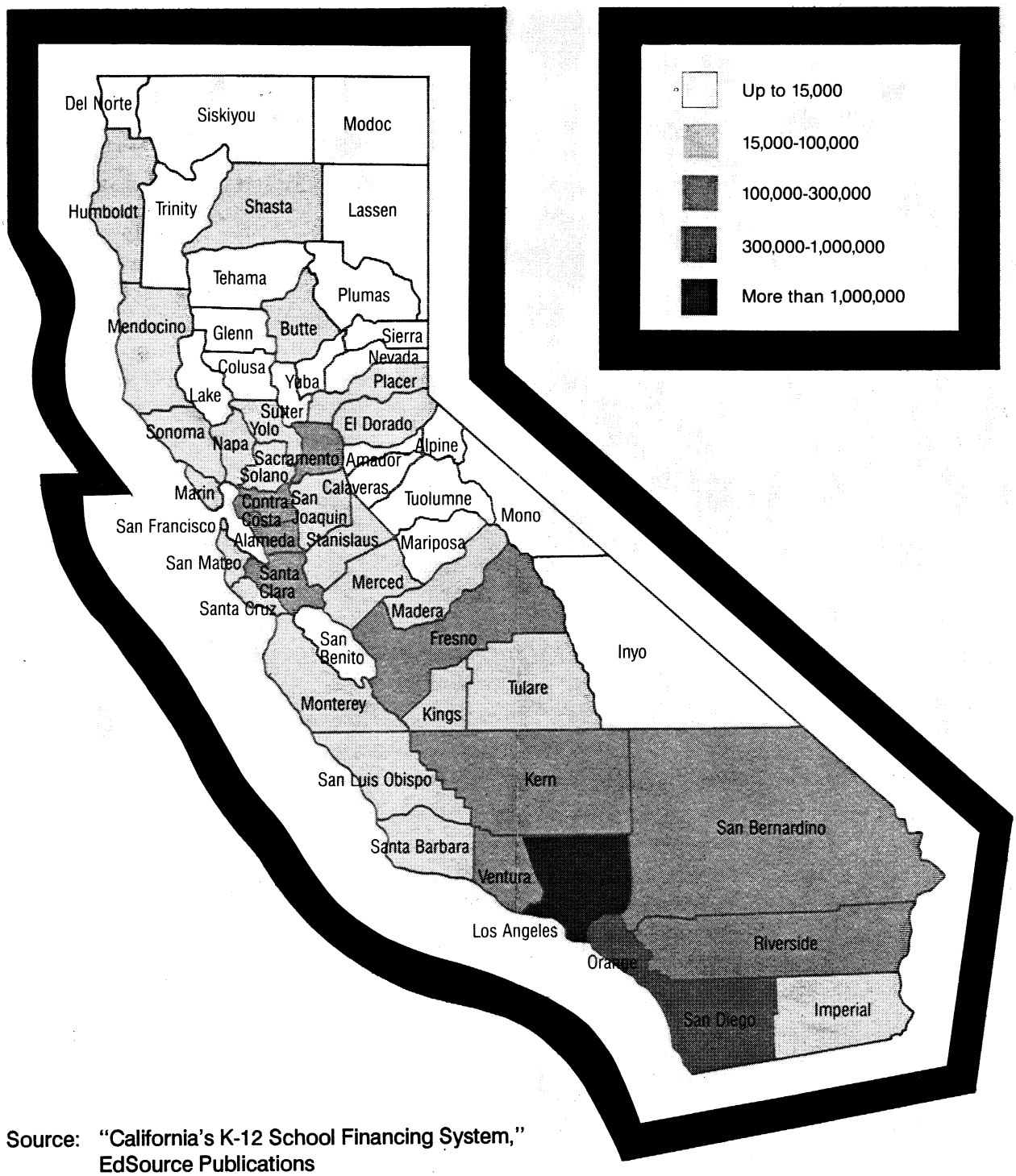
California school districts use approximately 48,000 portable classrooms for a variety of purposes. Of the 7,358 school sites in California, we estimate that more than 5,300 (72 percent) have portable classrooms. Using California Department of Education (CDE) guidelines for class size, we estimate that as many as 1.2 million students (27 percent of the State's total public school enrollment) may be housed in portable classrooms.

We determined that the historical costs of purchasing these portable classrooms average approximately $35,000, while the annual historical costs of leasing a portable classroom average approximately $9,500. Based on the results of our survey, we project that more than 30 percent of California's school districts plan to acquire portable classrooms during fiscal year 1990-91 and that more than 38 percent of the school districts plan to do so for the five fiscal years 1990-91 through 1994-95.

Background

According to data we received from the CDE, there are more than 1,000 school districts (including county superintendents of schools and boards of education) in California, serving 4.7 million students. Figure 6 shows the number of students in each of California's counties.

Distribution of Student Population by County



Source: "California's K-12 School Financing System," EdSource Publications

Figure 6

More than 4.7 million students are housed at 7,358 school sites throughout the State. The State's largest school district has more than 600,000 students located at 630 school sites, while many school districts have only one site. Figure 7 shows how the number of school districts and enrollment are associated based on the size of the district. The total school enrollment is divided into four groups from the largest to the smallest districts. Each group has an equal number of students.

As Figure 7 shows, in the first group, only 12 large school districts comprise 25 percent of the State's school enrollment at more than 1,500 school sites. In the fourth group, 878 smaller school districts with over 2,600 school sites also house 25 percent of the student enrollment.

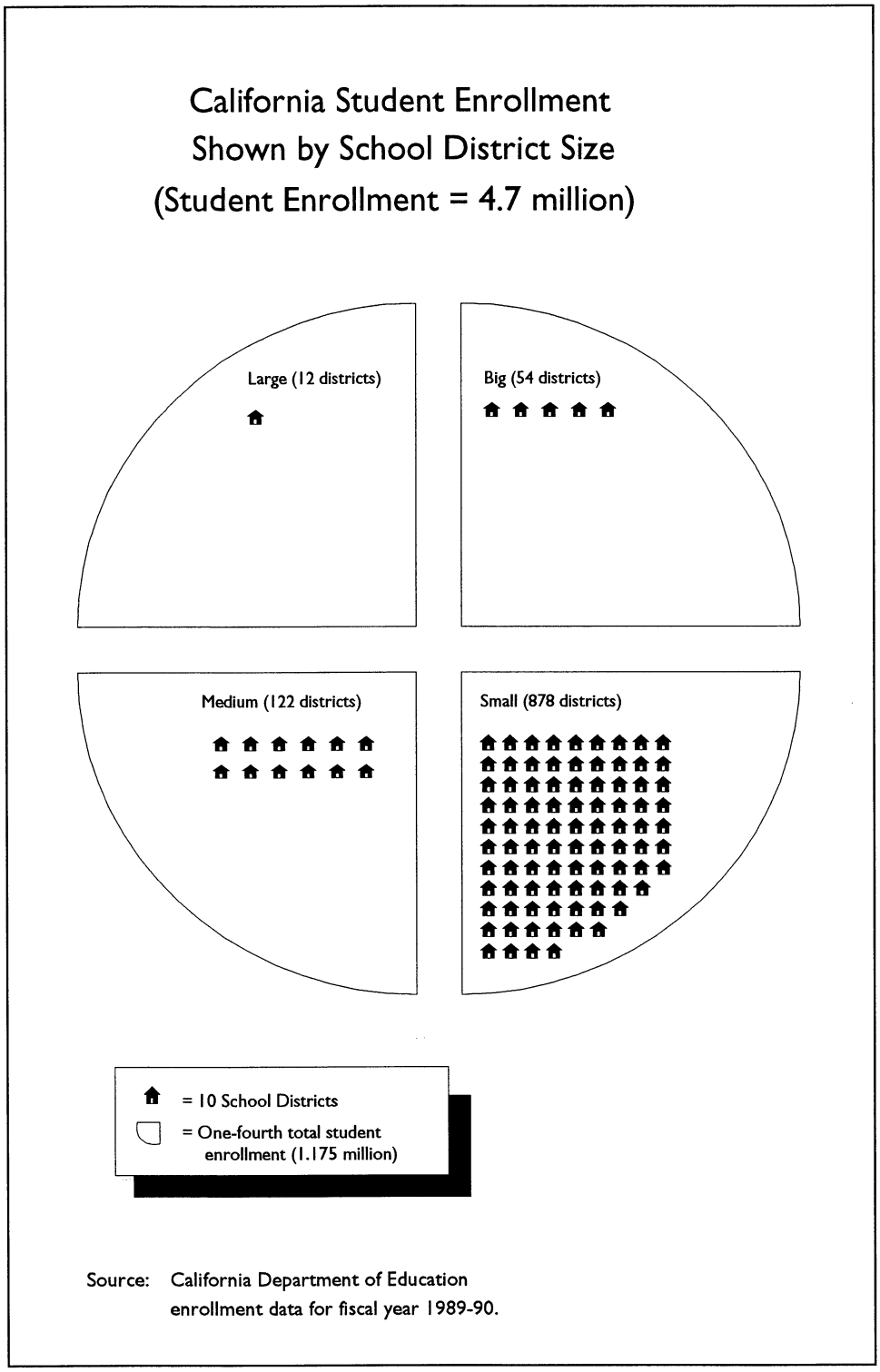
Results of Our Survey of California School Districts

One of the goals of this review was to determine how school districts use portable classrooms. Since we determined that no single state agency has the sole responsibility for the oversight of portable classrooms, no state agency could tell us how many portable classrooms were owned or leased by school districts, how old they were, how they were used, or where they were located.

To determine the number of portable classrooms in the State and how they were used, we conducted a random, stratified, statistically valid survey of public school districts. First, we arranged the school districts in order from largest to smallest. Then we divided them by population into the four equal groups. We sent detailed surveys to 118 school districts and 484 school sites within these districts. We sent the surveys to all of the twelve largest school districts which comprise the first group, and we randomly selected school districts in the other three groups. For the larger school districts, we randomly selected a representative number of school sites to survey, and for many of the smaller districts, we requested information from all of the school sites. This table depicts the composition of our sample.

Composition of the Office of the Auditor General's Survey Sample of School Districts by Four Groups

Districts	Number of Districts in Sample	Number of School Sites in Sample
Large	12	152
Big	6	30
Medium	12	60
Small	88	242
Total	**118**	**484**



Source: California Department of Education enrollment data for fiscal year 1989-90.

Figure 7

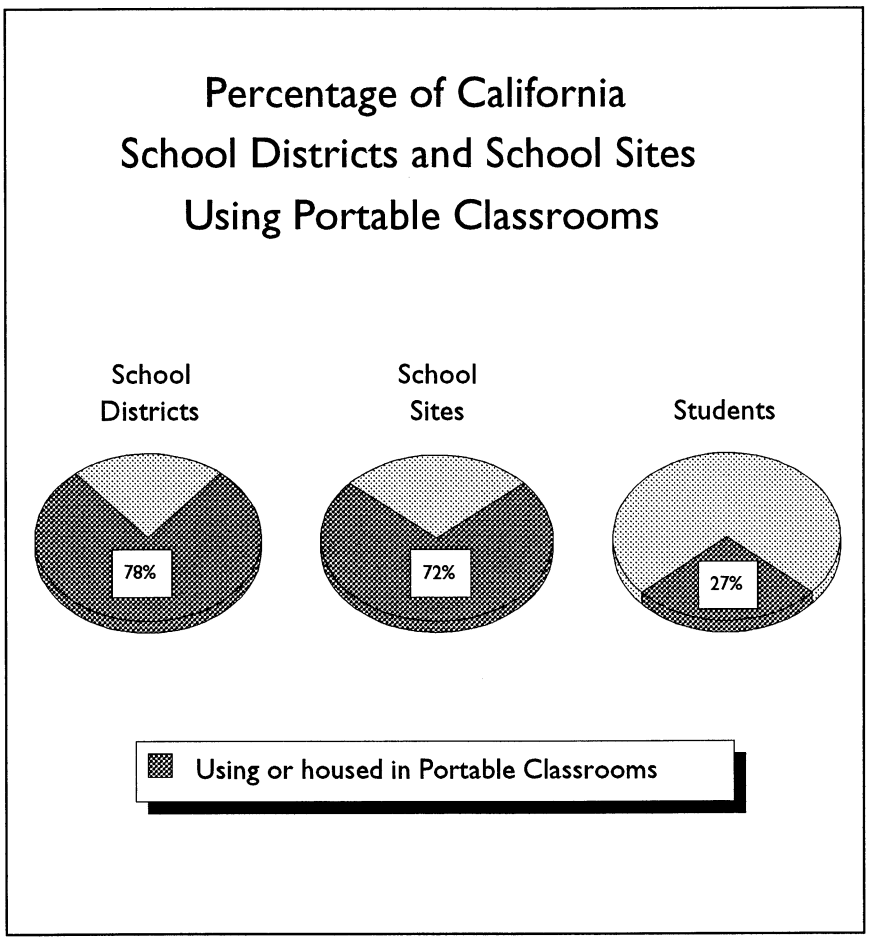
We asked the districts to tell us how many portable classrooms they had, how they were used, how old they were, and how they were acquired. For school sites, we asked similar questions. We received completed responses from every district and from 99 percent of the school sites surveyed. By asking for separate data from both the districts and the school sites, we were able to verify, using the separate projections, that the data provided to us was internally consistent and reliable. We did not audit the information we received.

The Number of Portable Classrooms

California school districts use approximately 48,000 portable classrooms for a variety of educational programs. Based on the results of our survey, we estimate that almost 5,200 school sites use approximately 43,000 portable buildings as classrooms. The remaining 5,000 portable classrooms at over 2,100 school sites are used for offices, storage, and other purposes. Of the 7,358 school sites in California, we estimate that 5,300 (72 percent) have portable classrooms on-site.

Figure 8 shows the percentage of school districts using portable classrooms and the percentage of school sites within the districts using portable classrooms.

Figure 8

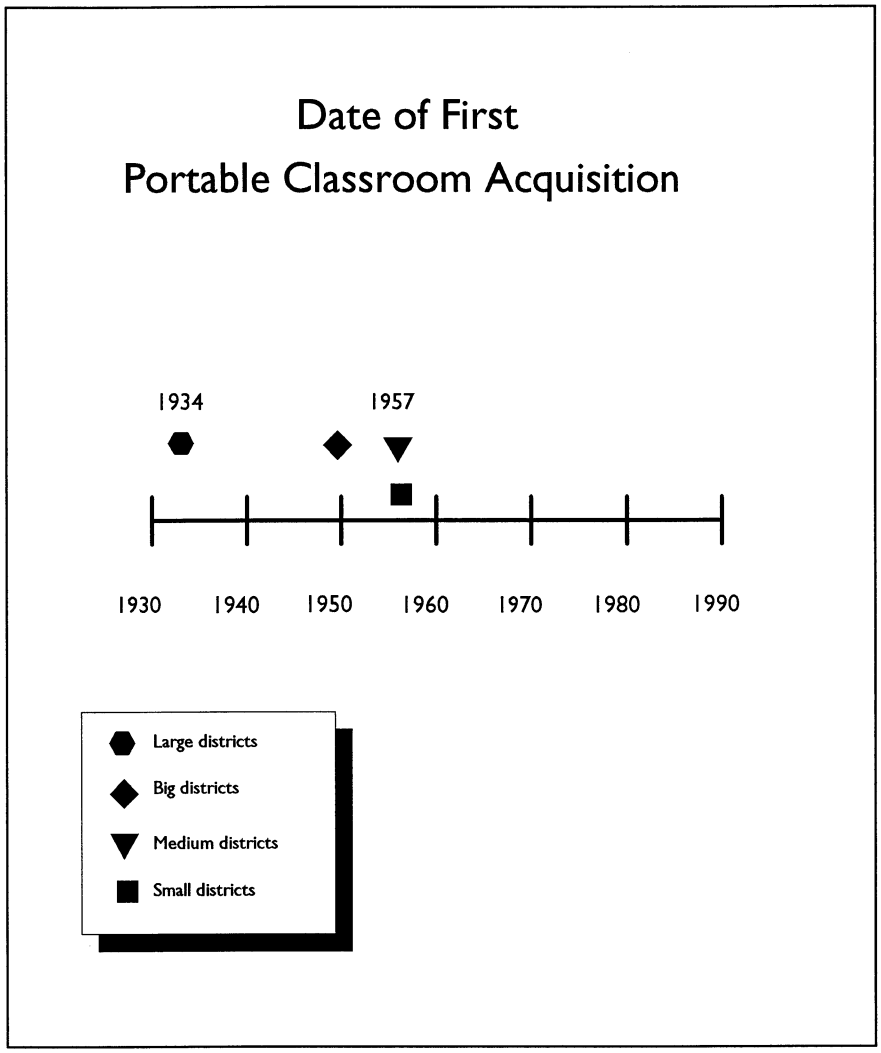


As Figure 8 shows, we estimate that 829 (78 percent) of the more than 1,000 school districts in California use portable classrooms. Using the CDE's guidelines for class size, we estimate that the school districts may house as many as 1.2 million students (27 percent of the State's total public school enrollment) in portable classrooms.

The Age of Portable Classrooms

According to the responses to our survey, at least one school district still uses a portable classroom acquired as early as 1934, but many districts began acquiring portable classrooms in the 1960's, a period during which the population increased by more than 25 percent. Figure 9 shows the dates of first acquisition for the school districts in our sample.

Figure 9



As Figure 9 shows, larger school districts tended to acquire portable classrooms earlier than smaller districts.

The Cost of Portable Classrooms

Based on the results of our survey of school districts, we found that the purchase prices of portable classrooms ranged from approximately $2,000 to more than $170,000. As part of our survey, we requested information such as the range of purchase prices per portable classroom, the range of annual leasing costs per portable classroom, and whether the school district received a volume discount. We aggregated this information and submitted it to our statistical consultant who prepared statewide projections.

The Costs of Purchasing Portable Classrooms: Based on our survey, we estimate that the range of historical prices paid by school districts to purchase portable classrooms was approximately $2,000 to $173,900 and that the average price was approximately $35,000 per portable classroom. This average was calculated by using the mid-range of the least and most expensive portable classroom purchase prices.

We contacted the school districts in our sample that reported both high and low prices to determine why their prices varied so greatly from the norm. The school districts' explanations for the range appeared reasonable. For example, one school district with a low price reported purchasing portable classrooms for an estimated cost of $2,000 each. The district purchased these portable classrooms before 1978 from other school districts or federal installations. In the case of one of the most expensive portable buildings reported, the school district stated that it purchased the $120,000 portable building in 1990. It is a 40- by 48-foot classroom/office building, consisting of one classroom, counseling offices, a site administration office, and rest rooms for students, faculty, and staff. The building is located at a continuation high school, and because of the special needs of such a school, it is equipped with more amenities than the average classroom.

In addition to our survey of school districts, we also sought to determine the current costs of purchasing portable classrooms as stated by the manufacturers. As part of our review, we contacted manufacturers of portable classrooms and requested price estimates for two specific types of portable buildings. One model was a basic portable classroom of the type the State leases to school districts as part of the Emergency Portable Classroom Program. We also requested the price of a mid-range model that includes more amenities than the basic model. We specifically requested that the price estimates omit the costs of storage, site preparation, transportation, and installation because these costs vary based on the location of the school district, the conditions at the school site, and the quantity of the order. The manufacturers' estimates for a basic model ranged from $24,000 to $26,900, with an average price of approximately $25,600. The manufacturers' estimates for a mid-range model ranged from $48,800 to $66,800, with an average price of approximately $59,700.

Volume Discounts: We asked the school districts whether they received any discounts when they purchased multiple portable classrooms. According to our survey, the discounts ranged from zero to 30 percent of the total purchase price. We estimate that 102 school districts throughout the State have received discounts averaging from 2.00 to 4.80 percent.

We also asked manufacturers about volume discounts. The volume discounts offered by the manufacturers for the basic model ranged from 2.04 percent to 9.27 percent, with an average of 4.77 percent. One manufacturer told us that the volume discounts became effective when ten or more portable buildings had been purchased. The volume discounts offered by the manufacturers for the mid-range model ranged from 2.00 percent to 12.12 percent, with an average of 5.72 percent. The volume discounts, according to one manufacturer, were applied when five or more portable buildings had been purchased.

Costs of Leasing Portable Classrooms: Based on our survey of school districts, we found that the annual historical costs for leasing portable buildings ranged from approximately $650 to $140,000 each. Of the 118 school districts in our sample, 65 (55 percent) reported that they leased portable classrooms. We estimate that the average annual leasing cost to school districts throughout the State was about $9,500 per portable classroom. This average was calculated by using the mid-range of the least and most expensive portable classroom leasing costs.

For example, one school district in our sample reported that its least expensive leasing cost was $2,000 for the portable classrooms obtained from the Emergency Portable Classroom Program of the Office of Local Assistance. Another school district reported leasing a 12- by 60-foot trailer for about $4,200 annually from 1988 through 1990 during the construction of a project funded by the Leroy F. Greene State School Building Lease-Purchase Law of 1976. The single trailer was divided into three rooms. One section was used as a special education classroom, one as teachers' offices, and the other as a counseling office. One of the more expensive leased portable buildings reported was an elementary school's 60- by 60-foot media center, which was acquired in 1987 at an annual leasing cost of $39,360. The media center houses a library, a computer lab, and two rest rooms.

In addition to the information obtained from our survey, we contacted leasing and financing companies that specialize in leasing or providing financing to lease-purchase portable buildings. We requested information about the leasing costs of a portable classroom inspected by the Office of the State Architect (OSA) and one inspected by the Department of Housing and Community Development (HCD) and the leasing and financing costs for portable classrooms in general.

According to the leasing and financing companies who responded to our survey, the annual cost of leasing an OSA-inspected portable classroom ranges from $6,000 to $7,500, based on a one-, two-, or three-year lease, with an average cost of approximately $6,800 per unit. The annual leasing cost for HCD-inspected portable classrooms range from $4,400 to $5,500 per year, with an average cost of approximately $5,000 per unit.

The leasing and financing companies that responded to our survey offer various lease-purchase options to school districts, including conventional financing and municipal financing. Conventional financing arrangements use interest rates based on the rate of U.S. Treasury bills to calculate lease payments. However, school districts do not use this option if they can qualify for municipal leasing arrangements, which use lower interest rates than conventional arrangements to calculate lease payments. As a result, school districts can save money by using municipal leasing instead of conventional financing. By financing portable classroom purchases themselves, school districts may acquire the school facilities they need now and pay for them in installments over several years. (A detailed description of alternative leasing methods is contained in the Appendix.)

The Number of Portable Classrooms Districts Plan To Acquire

Based on our statewide survey, it appears that California school districts will continue to expand the use of portable classrooms to house growing enrollments. We asked each district the number of portable classrooms the district plans to acquire in fiscal year 1990-91 and for the five fiscal years 1990-91 through 1994-95. Based on the results of our survey, we project that more than 30 percent of California's school districts plan to acquire almost 3,000 portable classrooms in fiscal year 1990-91 and that more than 38 percent of the school districts plan to procure more than 9,500 portable classrooms in the five fiscal years from 1990-91 through 1994-95. Figure 10 shows the possible increase in the number of students that districts may house in portable classrooms for that period.

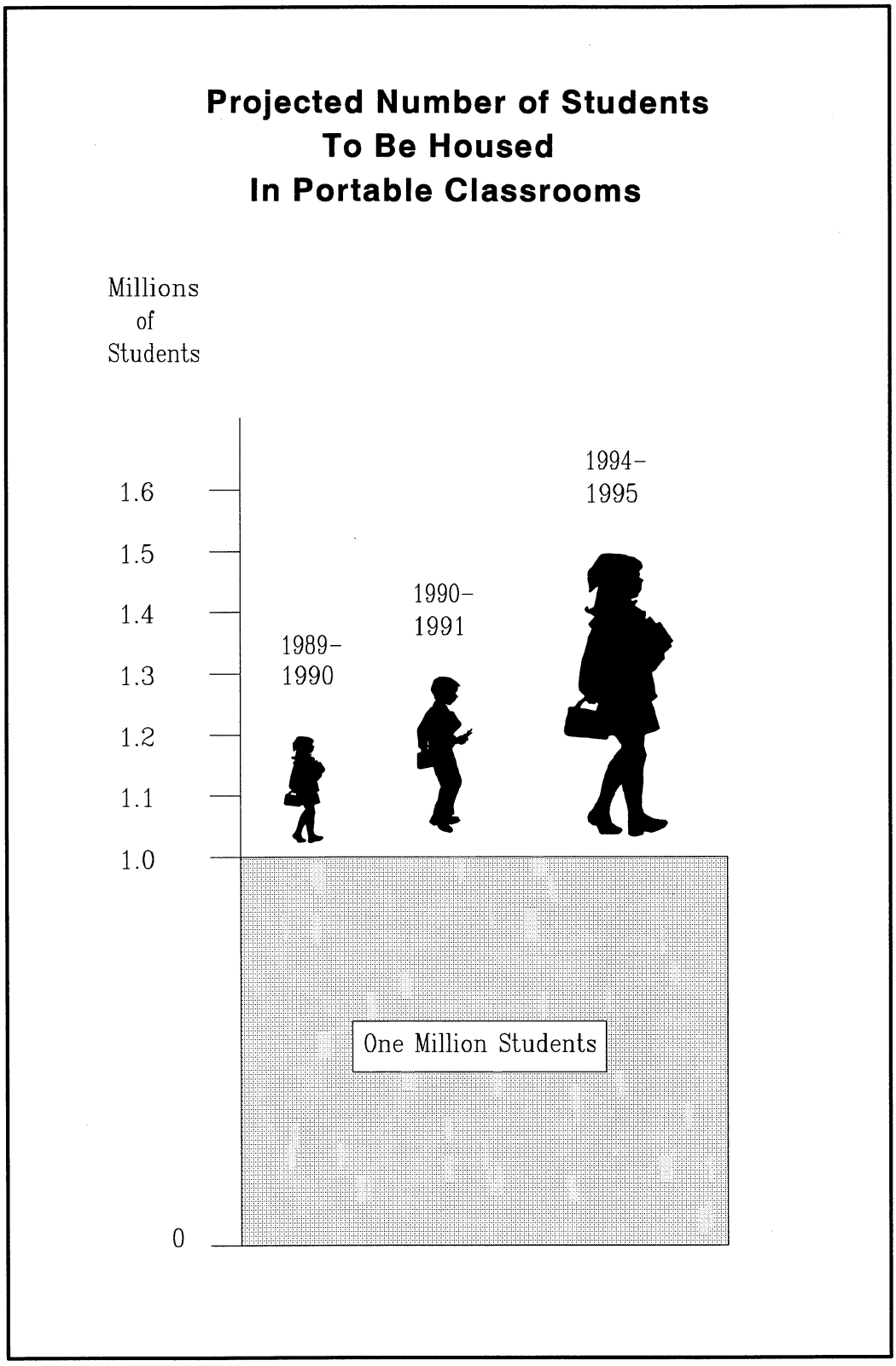

Projected Number of Students
To Be Housed
In Portable Classrooms
Millions
of
Students
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0
1989-
1990
1990-
1991
1994-
1995
One Million Students

Figure 10

Using the CDE's classroom size guidelines, we determined that, in fiscal year 1990-91, as many as 89,000 more students may be housed in new portable classrooms and that, in five years, 285,000 more students may be housed in new portable classrooms. If we assume that the average cost of a school district's purchase will be that of a mid-range portable classroom, then based on the average price of $59,700 for a mid-range model, school districts throughout the State will spend approximately $179 million on portable classrooms in fiscal year 1990-91 and $570 million in the five fiscal years 1990-91 through 1994-95. If school districts are able to combine their orders, they may be able to receive a volume discount of as much as 5.72 percent for every order of at least five units, for an estimated total savings of $32 million statewide in the next five fiscal years.

Chapter 3 California School Districts Acquire Portable Classrooms in a Variety of Ways and in Different Lengths of Time

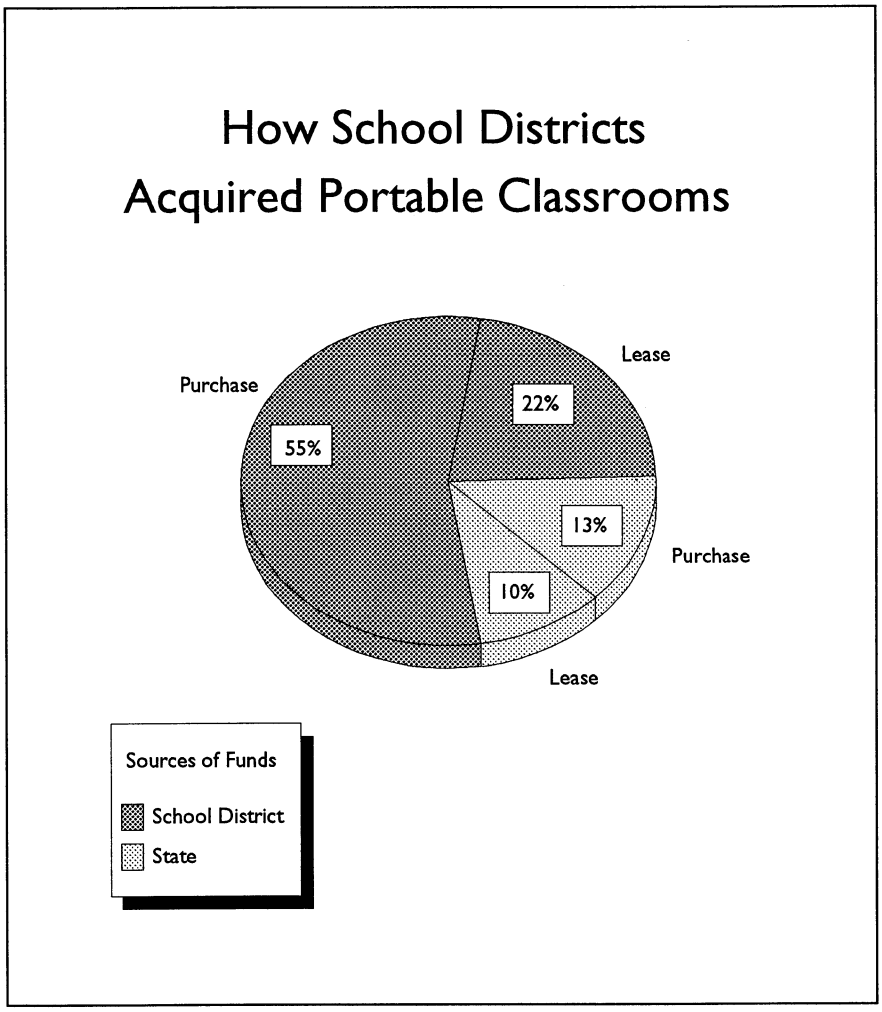
Chapter Summary

California school districts have acquired almost 80 percent of all portable classrooms using their own resources instead of state programs. It appears that school districts use their own resources to acquire portable classrooms because acquiring both portable and permanent structures through state programs can take substantially longer and because the State does not have sufficient funds to finance all of the current requests for projects.

The State Acquires Portable Classrooms in Various Ways

Figure 11 illustrates our projections of how school districts throughout the State have acquired portable classrooms. We estimate that school districts throughout the State have acquired almost 48,000 portable classrooms. Of these, as shown in the figure, the school districts purchased approximately 26,300 (55 percent) of the portable classrooms and leased approximately 10,400 (22 percent) of the portable classrooms with their own resources. More than 6,300 (13 percent) of the portable classrooms were purchased with state funding through the Leroy F. Greene State School Building Lease-Purchase Law of 1976. School districts have leased another approximately 4,900 (10 percent) of the portable classrooms from the State through the Emergency Portable Classroom Program and other state programs.

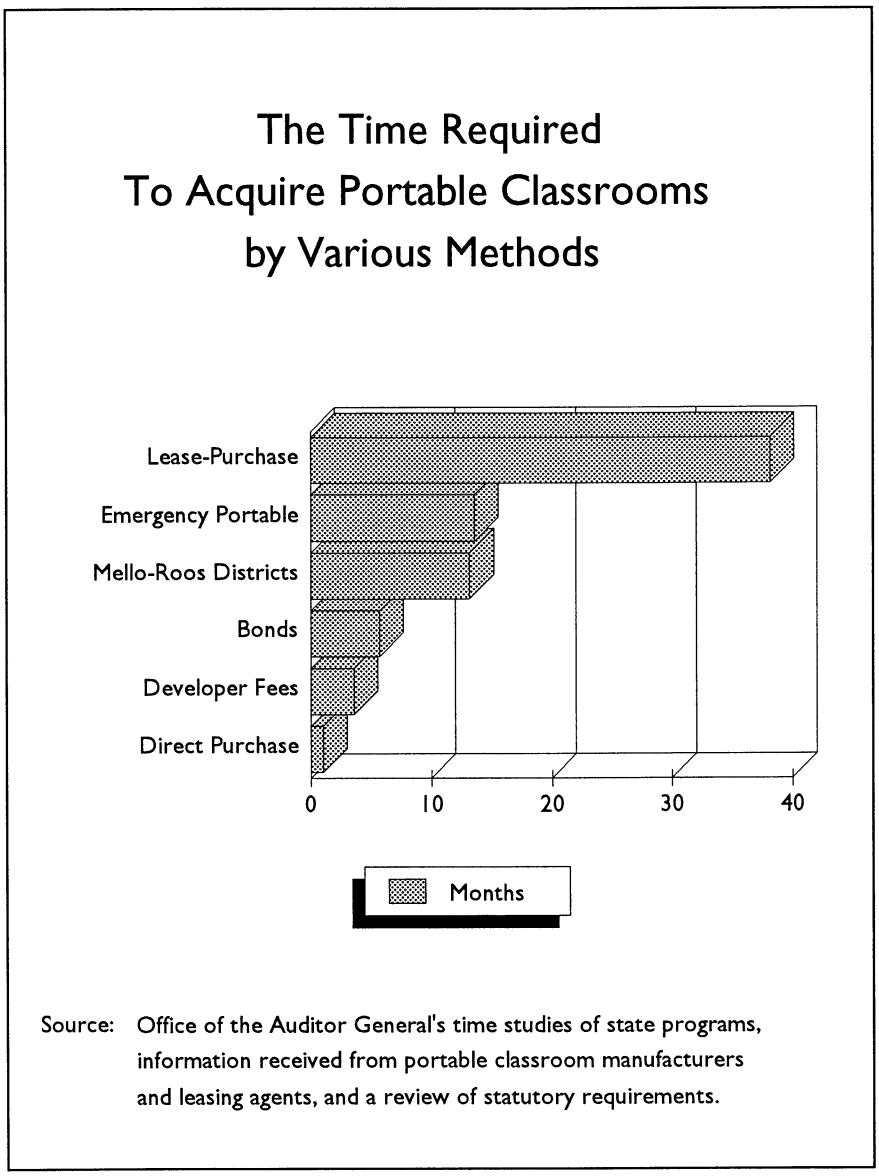
Figure 11



The Time Required To Acquire Portable Classrooms Varies

To determine the length of time necessary for school districts to acquire new school facilities, including portable classrooms, we conducted time studies of 20 state-funded projects, surveyed private manufacturers and leasing agents, and researched several methods of providing local financing for school facilities. As Figure 12 shows, we found that the time necessary to acquire portable classrooms and other school facilities varies based on the means the school districts use to acquire them.

Figure 12



Source: Office of the Auditor General's time studies of state programs, information received from portable classroom manufacturers and leasing agents, and a review of statutory requirements.

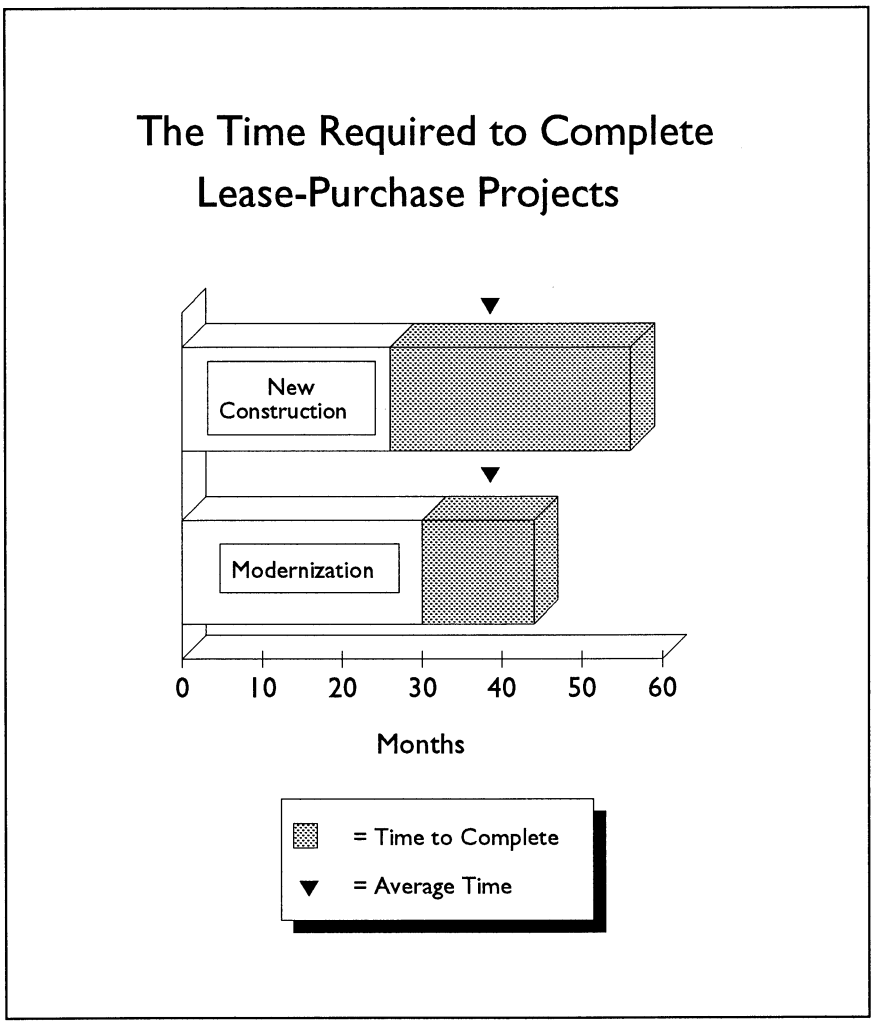
The Lease-Purchase Program

The Leroy F. Greene State School Building Lease-Purchase Law of 1976 (lease-purchase program), Chapter 1010, Statutes of 1976, provides state funds to school districts to reconstruct educationally inadequate permanent and portable buildings and to acquire new school sites and buildings for use as public schools. The lease-purchase program is divided into two major categories

of school facilities projects: new construction and modernization. New construction projects include the construction of new schools, additions to existing schools, and acquisitions of sites needed for construction. As a condition of approval for funding any new construction project, state law requires that at least 30 percent of the classrooms in the new project be portable. Modernization projects provide for updating permanent school facilities at least 30 years old and portable classrooms at least 20 years old.

For our lease-purchase project time study, we reviewed 5 of 228 new construction projects in the State's lease-purchase program and 5 of 110 modernization projects completed as of June 30, 1990. We found that the average lease-purchase project was ready for use about 38 months after the Office of Local Assistance (OLA) received the application from the school district. Figure 13 shows the number of months required for the projects we reviewed.

Figure 13



As Figure 13 shows, school districts took from about 26 to 56 months, almost five years, to complete new construction projects. According to the district whose construction project took 56 months to complete, the length of time was due to difficulties created by the contractor. Modernization projects took from 30 to 44 months to complete.

According to the OLA, the average processing time for lease-purchase projects in our study, about 38 months, appears reasonable. (A detailed description of each phase of this process is included

in the Appendix.) The OLA stated that a processing backlog does exist for the lease-purchase program and may be partially explained by several factors. For example, the lack of a continuous source of funding for projects often causes delays. According to OLA records, of the more than 5,000 lease-purchase applications received by the OLA as of June 30, 1990, 1,873 (37 percent) of the project applications have been approved but are awaiting construction funding. The OLA told us that other causes of the backlog include delays in receiving documents from school districts and other state agencies, the priorities established for processing work, and occasional staffing shortages.

The Emergency Portable Classroom Program

According to the California Education Code, the State's Emergency Portable Classroom Program aids school districts in providing classroom space by leasing portable classrooms to school districts experiencing excessive growth. The code recognizes that the greatest need of school construction is for classrooms, and the code is intended to satisfy this primary need to the greatest extent possible before providing other facilities.

Data from the OLA shows that between July 24, 1979, and August 24, 1990, the OLA received from school districts more than 1,700 applications for emergency portable classroom projects. For the 10 applications we reviewed, emergency portable classrooms were ready for use an average of 13 months after the OLA received the application from the school district. The most quickly completed project took 4 months and involved five portable classrooms. According to the OLA's records, funds were available for this project on the date it was approved, and the project proceeded through the State Allocation Board's (SAB) approval process in 15 days and through the Office of the State Architect's (OSA) plan review in 30 days. The slowest project took more than 28 months and involved one portable classroom. According to the OLA's records, lack of funds delayed approval for this project by nearly 7 months, and the OSA plan approval required an additional 8 months.

According to the OLA, there are no undue delays in the application processing time for the Emergency Portable Classroom Program. The OLA told us on January 7, 1991, that there were no projects of the highest priority awaiting funding in this program. The OLA also told us, however, that 26 other projects for 212 emergency portable classrooms were on the list of applications awaiting funding. Depending on the availability of funding and the priorities established by the SAB, according to the OLA, some applications remain on this list until the SAB receives additional funds to acquire buildings. The OLA stated that in some cases, lower priority projects have been on the waiting list for 48 months.

Use of District and Local Resources

State programs such as the lease-purchase program and the Emergency Portable Classroom Program help school districts provide portable classrooms for public school students. However, as the OLA told us, limited state funds often cause project delays, and districts may wait up to five years for their completed classrooms. Alternative means of financing allow districts to acquire portable classrooms more quickly. The New Schools Relief Act of 1979 (Chapter 1187, Statutes of 1979) provides opportunities for school districts, the State, and the private sector to cooperate in providing needed school facilities and to use innovative financing methods for new school construction needs. Means available for local financing include special taxes and bonds financed through Mello-Roos Community Facilities Districts, general obligation bonds, and developer fees. Based on our review of these programs, school districts can implement them in an average of 4 to 14 months. (A detailed description of these programs is contained in the Appendix.)

Based on information obtained from those who responded to our survey of portable classroom manufacturers, when local funds are available, a school district can acquire portable classrooms in an average of 25 to 35 days. Further, one leasing company indicated that it could provide a Department of Housing and Urban Development unit in one day and an OSA unit in 3 days, assuming that all state requirements for plan review and site

preparation had already been met by the school district. Factors that might influence the length of time it would take to deliver and install units include weather conditions and the availability of labor, transport trailers, and field inspectors. The time required for plan approval and site preparation for OSA-approved portable classrooms might also affect the time it takes to install a unit.

Chapter 4 Conclusions and Recommendations

Portable Classroom Safety

Although the scope of our review was limited, we determined that a substantial number of portable classrooms may not meet state safety requirements. The Office of the State Architect (OSA) does not have records that easily identify portable classrooms that have been inspected and certified. Of the 153 portable classrooms that both our office and the OSA reviewed, the OSA identified only 40 (26 percent) as having appropriate certification. Another 35 (23 percent) of the portable classrooms had never received final inspections or approval. The OSA could not determine if the remaining 78 (51 percent) met state structural, fire safety, or access requirements because it could not determine if the classrooms had been inspected. Furthermore, the OSA has no power to enforce compliance with state requirements. It cannot condemn buildings that are unsafe, and it cannot prevent unsafe occupancy. Consequently, there appears to be no mechanism for taking enforcement actions against school districts using portable classrooms that do not meet the State's safety standards.

The potential effect of not meeting the State's safety requirements is difficult to assess. The requirements were established in 1933 to protect students from harm resulting from earthquakes. As a result of the October 1989 Loma Prieta earthquake, portable classrooms in Bay Area counties received only limited and relatively minor damage, thus adhering to the stated purpose of the laws establishing the requirements. We do not know how the portable classrooms we determined did not meet state safety requirements would have fared in similar circumstances. Nevertheless, it is reasonable to expect that school districts ensure that all of their school buildings, including portable classrooms, meet the State's safety requirements.

Portable Classroom Use

Based on our estimates of the number of portable classrooms used in California, 27 percent of the State's public school students may be educated in portable classrooms. School districts of all sizes and locations use portable classrooms for all levels of education, from kindergarten through grade twelve. Moreover, the portable classrooms are not used only as temporary solutions to classroom overcrowding. One school district in our sample is still using at least one portable classroom acquired more than fifty years ago.

Demographic projections for California show a continuing growth in school enrollment. The new students must be housed, but current classrooms already appear overcrowded. We reviewed estimates generated by the Association of California School Administrators showing enrollment increasing in 48 of California's 58 counties. Data from the same agency shows that 60 percent of the schools surveyed are overcrowded and 55 percent have inadequate facilities. To alleviate these problems, portable classrooms are a practical alternative to permanent structures because of their versatility. The size and cost of portable classrooms allow school districts to build, replace, or refurbish school facilities incrementally, by adding only as much space as needed. A school district can add one or two portable classrooms at an existing school site or build entire schools of portable classrooms more easily than they can build new schools of permanent structures.

That school districts use portable classrooms to meet needs ranging from the addition of a single office to the construction of an entire school indicates that school districts view portable classrooms as practical substitutes for permanent school facilities. Portable classrooms are already an accepted and necessary part of school facilities planning. For example, the California Education Code requires that school districts use portable classrooms in the construction of new school facilities financed through the State's lease-purchase program. We believe that school districts will continue to use portable classrooms to alleviate the problems associated with the growth of enrollment, overcrowding, and inadequate facilities. Based on our survey of school districts, we

estimate that 30 percent of California's school districts will acquire portable classrooms in fiscal year 1990-91 and that more than 38 percent of California's school districts will acquire portable classrooms for the five fiscal years 1990-91 through 1994-95.

Portable Classroom Acquisition

We determined that approximately 11,200 (23 percent) of the 48,000 portable classrooms used at school districts were acquired through state programs, such as the Leroy F. Greene State School Building Lease-Purchase Law of 1976 (lease-purchase program) or the Emergency Portable Classroom Program. We estimate that almost 37,000 (77 percent) of the portable classrooms were acquired using the districts' own resources. Of these portable classrooms, approximately 26,300 (72 percent) were directly purchased by school districts and the remaining almost 10,400 (28 percent) were leased.

We could not determine why school districts relied so heavily on their own resources for the acquisition of portable classrooms. The factor that causes school districts to use their own resources instead of state resources may not be the cost of portable classrooms compared to permanent structures but rather the time it takes to obtain the classrooms through state programs. For example, the planning phases of the State's lease-purchase program can take up to 36 months to complete before the district can begin construction. Construction can add another 16 to 24 months to the project. Further, although districts may qualify for state funds to begin construction, state funds are limited. For example, the Office of Local Assistance told us that as of June 30, 1990, 1,873 projects have been approved but are awaiting construction funding. The total amount of funds requested for these projects is almost $4.5 billion.

In contrast, school facilities can be acquired faster when the school district finances its facilities with its own resources, acquired by such mechanisms as developer fees, bonds, or the establishment of a Mello-Roos Community Facilities District. These mechanisms

can take from 4 to 14 months to implement and can be established before construction projects begin, so that construction can proceed without delay once local funds become available. Manufacturers stated that they could build most types of portable classrooms and deliver them to the district in an average of 25 to 35 days when funds are available and the school district has approved plans and a school site. A leasing agent stated that his firm could supply portable classrooms in as little as one day. The total time it takes to obtain a portable classroom using a locally funded project can be less than half of that using a state-funded project.

A school district cannot apply for state construction funds until it can show that in the next school year it will have growing enrollment or inadequate facilities to handle current enrollment. Consequently, because of the almost 60 months it might take to complete a project, the school district's first-grade students for the next school year may not be housed in a new state-funded project until they are in the sixth grade. A school district using its own resources for a new school can house the hypothetical first-grade students when they enroll. The ease of purchasing or leasing portable classrooms, the number and variety of options available, and the speed with which manufacturers can build the modules suggest that using portable classrooms is a practical alternative to using permanent structures.

Recommendations

Because the majority of school districts use their own financial resources to fund the acquisition of portable classrooms, the Legislature should consider ways to make it easier for all school districts to establish alternative mechanisms for funding school facilities. For example, school districts that make large dollar acquisitions of portable classrooms can take advantage of favorable financial terms to lease-purchase new portable classrooms through alternative leases. Similarly, school districts can house new student enrollment faster if they already have alternative funding mechanisms in place. Requiring that a state organization or agency help districts aggregate purchases to qualify for favorable financing or provide expertise in the development of alternative funding would aid many school districts.

To ensure that school districts have appropriate records showing that school buildings meet state safety requirements, the Legislature should take the following actions:

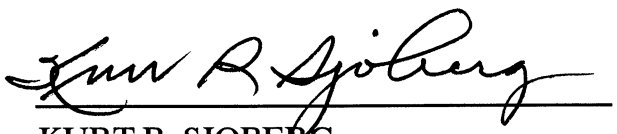
- Require that the Office of the State Architect inspect and certify each school building, including portable classrooms, separately instead of as a single project;

- Require that the OSA's certifications of final approval should state the type and location of the structure that has been approved; and

- Require that school districts maintain and post copies of certifications for each of their facilities at both school sites and district offices.

We conducted this review under the authority vested in the auditor general by Section 10500 et seq. of the California Government Code and according to generally accepted governmental auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,



KURT R. SJOBERG
Auditor General (acting)

Date: May 13, 1991

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Appendix An Overview of the Methods School Districts Use To Acquire Portable Classrooms

California school districts acquire portable buildings for various reasons. Such reasons include accommodating growing enrollment; handling the displacement of students, faculty, and staff while permanent facilities are under construction or renovation; fulfilling various state program requirements; and providing space for other purposes, such as administrative offices, faculty lounges, or rest rooms.

There are two types of portable buildings: portable classrooms, as defined by the California Education Code, which are subject to approvals and inspections required by the Office of the State Architect (OSA), and commercial coaches, which are used for noninstructional purposes and as portable classrooms. Commercial coaches are governed by the rules and regulations of the Department of Housing and Community Development (HCD). The California Health and Safety Code defines a commercial coach, in part, as a structure transportable in one or more sections, designed and equipped for human occupancy for industrial, professional, or commercial purposes. There are differences in the construction standards of the two types of buildings. Since 1971, the HCD units have been built according to standards established in Title 25 of the California Code of Regulations. The OSA units are constructed to meet the Field Act standards established in 1933 in the California Education Code and in Title 24 of the California Code of Regulations. Along with the differences in construction standards, there are also differences in inspection requirements. For the HCD units, for example, on-site installation inspection is not required.

State Processes for Acquiring Portable Classrooms

The Department of General Services' Office of Local Assistance (OLA) administers two programs that involve leasing or providing funding for the purchase of portable buildings. However, because these programs have insufficient funding to meet all of the school districts' demands, many school districts acquire portable buildings by purchasing or leasing them with their own resources.

Lease-Purchase Program

The Leroy F. Greene State School Building Lease-Purchase Law of 1976 (lease-purchase program), Chapter 1010, Statutes of 1976, provides state funds to school districts for reconstructing educationally inadequate permanent and portable buildings and acquiring new school sites and buildings for use as public schools. The modernization program provides for updating permanent school facilities at least 30 years old and portable classrooms at least 20 years old. New construction projects include constructing new schools, adding to existing schools, and acquiring sites needed for construction. Priority points are assigned to projects to ensure that the most urgently needed projects are approved and funded first.

Lease-purchase projects are subject to maximum building areas per pupil and to maximum costs for buildings, furniture, equipment, and general site development. For example, for grades seven and eight, a maximum of 75 square feet per student is allowed, and for standard elementary classrooms, the allowable base cost per square foot is approximately $37, although this second figure is adjusted for regional cost differences and other factors. Other project costs are subject to state administrative controls. Furthermore, as a condition of approval for the funding of any new construction, state law requires that at least 30 percent of the classrooms included in the project must be portable classrooms.

The lease-purchase program approval process consists of four phases. In the application phase (Phase A), the school district prepares and submits an application packet to the OLA which includes a five-year plan, enrollment projections, district maps, diagrams of existing facilities, and a document justifying the

project. Also required before the project can obtain approval from the State Allocation Board (SAB) and proceed to the next phase of the process are a property check and a review of the district's financial reports. The application phase takes about 12 months to complete.

During the feasibility phase (Phase I) of the lease-purchase approval process, the district and the architect enter into an agreement and the initial funds are released to the district. The district submits to the SAB preliminary plans, initial site acquisition documents, and an initial project cost estimate. The district enters into a lease-purchase agreement with the State and, unless specifically exempted, completes an environmental impact report. The feasibility phase normally lasts about 12 months. If the SAB determines that the project should proceed to develop construction plans and specifications, the design phase (Phase II) begins. In this phase, the OLA releases the remaining site and planning funds, the district submits a revised cost estimate, and any site purchase is finalized. The design phase lasts approximately 12 months.

At the beginning of the final phase of the process (Phase III), the district submits final plans and specifications to the OSA, the California Department of Education (CDE), and the OLA, which also receives from the district an estimated project cost detail. If the plans are approved and the project's priority points permit, the SAB apportions funds for construction and other remaining project costs. The remainder of this phase comprises preparing for bids, approving the low bid, and constructing the buildings. During the construction period of the final phase, the OSA inspects the production of the portable classrooms with progress reports completed by architects or engineers and by plant visits of inspectors acceptable to the OSA. This phase can last from 16 months for small projects to more than 24 months for large projects.

Figure A-1 illustrates the expected duration of specific tasks within each phase of a lease-purchase project. The expected duration of a lease-purchase project is from 52 to 60 months, approximately four to five years.

Timeline for State-Funded Lease-Purchase Projects

Phase A (Application Phase) Months 1-12	Phase I (Feasibility Phase) Months 13-24	Phase II (Design Phase) Months 25-36	Phase III (Construction Phase) Months 37-52 (smaller projects) Months 37-60 (larger projects)
• Development of master plan	• Selection of architect	• Fund release (25 percent of total)	• Office of the State Architect's approval of plans
• Educational specifications	• Levying of developer fees	• Acquisition of site	• Authorization to bid
• Enrollment certification to the county and the Office of Local Assistance	• Lease and architect agreements	• Preparation of working drawings and specifications	• Advertisement for bids
• Diagram of existing facilities to be reconstructed sent to the OLA	• Fund release (3 percent of total)	• Preparation of furniture and equipment specifications	• OLA bid approval
• OLA property check	• Site selection	• Final plan approval	• Signing of contracts
• OLA/California Department of Education approvals of justification document and five-year plan	• Seismic, soil, and environmental quality assessments	• Construction apportionment	• Fund release (22 percent of total)
• Phase I State Allocation Board approval	• CDE site approval	• Phase III SAB approval	• Construction
	• Appraisals of site		• OLA approval of furniture and equipment bid
	• Preliminary plan preparation		• Furniture and equipment bid
	• Phase II SAB approval		• Fund release (22 percent of total)
			• Delivery of furniture and equipment
			• Notice of completion
			• Contract change orders and audits
			• Occupation
			• Final fund release (28 percent of total)

Source: The Office of Local Assistance

Note: The timelines can vary with a project's size, scope, and individual complexities.

Figure A-1

Emergency Portable Classroom Program

The eligibility formula for emergency portable projects is determined by using classroom loading standards based on the number of square feet per pupil and the one-year projected average daily attendance. The OLA determines the number of emergency portable classrooms needed based on these projections. All applications for emergency portable classrooms with the exception of those of high school districts must also contain a report addressing the feasibility of the district's switching to a year-round calendar, and, unless exempted, an environmental impact report. The OLA reviews the application before it is submitted to the SAB. Once an application is approved, the district selects an architect, who prepares the plans and submits them to the OSA and the OLA. The OLA assigns the portable classrooms and sends the lease agreement to the district. The OSA requires plan approval before construction begins, requires in-plant inspection of portable classrooms during construction, and requires inspection during the school-site installation.

Use of District and Local Resources To Finance Portable Classrooms

State programs such as the lease-purchase program and the Emergency Portable Classroom Program help school districts provide portable classrooms for public school students. However, as the OLA told us, limited state funds often cause project delays and districts may wait up to five years to obtain completed classrooms. In contrast, alternative methods of financing the construction of portable classrooms allow districts to acquire portable classrooms more quickly. School districts may fund the construction of portable classrooms using local instead of state resources. The New Schools Relief Act of 1979 (Chapter 1187, Statutes of 1979) provides opportunities for school districts, the State, and the private sector to cooperate to provide needed school facilities and to use innovative financing methods for school construction. Means of local financing available to school districts include bonds financed through Mello-Roos Community Facilities Districts, general obligation bonds, and developer fees.

Mello-Roos Community Facilities Districts

The Mello-Roos Community Facilities Act of 1982 (Chapter 1451, Statutes of 1982) provides for the establishment of community facilities districts by local agencies for the purpose of financing certain facilities and services, including elementary and secondary school sites. For example, a school district or districts can form a community facilities district to finance portable classroom construction at schools with increasing enrollment through special voter-approved taxes or bonds. A community facilities district may also finance the planning and design work directly related to such projects. Using this method, selected areas of a school district can be incorporated into the community facilities district without the entire district assuming the financial responsibility. Figure A-2 illustrates the process for creating a community facilities district from the initial proposal to the election date.

Process for Creating a Mello-Roos Community Facilities District

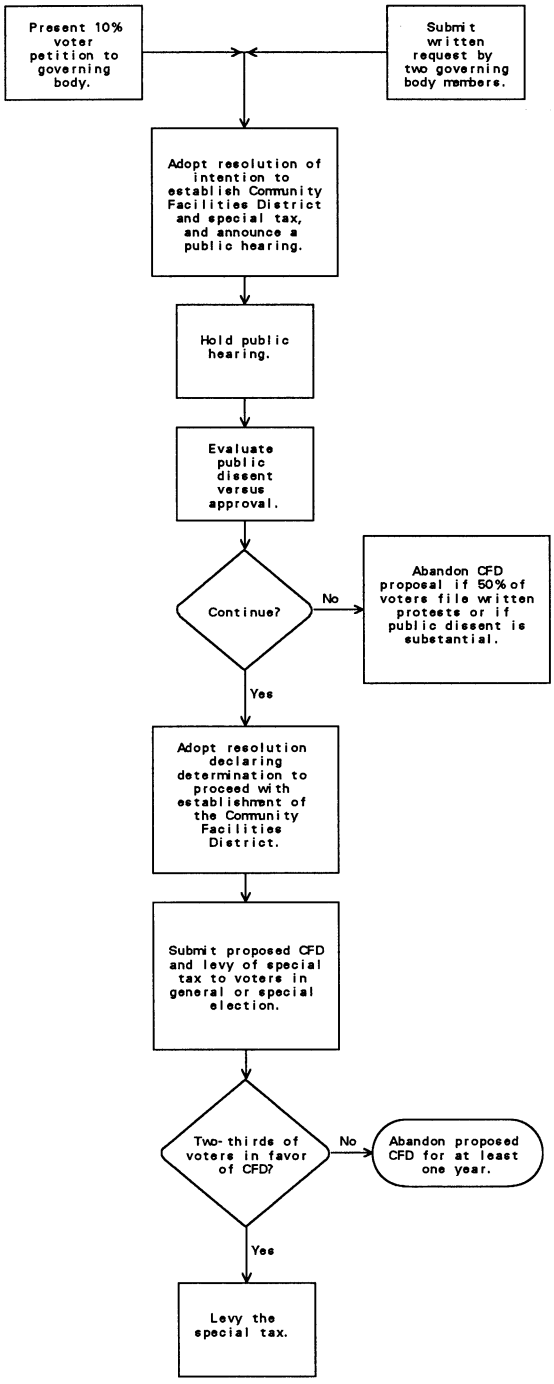


Figure A-2

The process for creating a Mello-Roos Community Facilities District requires at least 7 months and may take 17 months or longer. The process consists of the submission of a written request or voter petition to the governing body of the local agency creating the community facilities district; a resolution of intention to establish the community facilities district; a public hearing; a "resolution of formation," document declaring the determination to proceed with establishing the community facilities district; and an election requiring two-thirds voter approval. The public hearing should be completed within one month unless the complexity of the community facilities district or the need for public participation requires additional time. However, the period of the public hearing can last a maximum of six months. The community facilities district proposal is presented to the voters in the next general election or in a special election held a maximum of six months following adoption of the resolution of formation. The district receives bids for the sale of bonds, the bonds are sold, and the proceeds are deposited with the county treasurer.

General Obligation Bonds

Another way to provide local financing of school facilities projects is by issuing general obligation bonds. A general obligation bond is a bond for capital outlay, financed through taxes. School districts have the authority to order the county superintendent of schools to call an election to determine whether bonds should be issued for school facilities financing. Districts must pass a resolution calling for the election of a measure to authorize the sale of bonds secured by the tax base. The county registrar of voters must have the resolution five months before the election. Two-thirds voter approval is required before districts may issue the general obligation bonds.

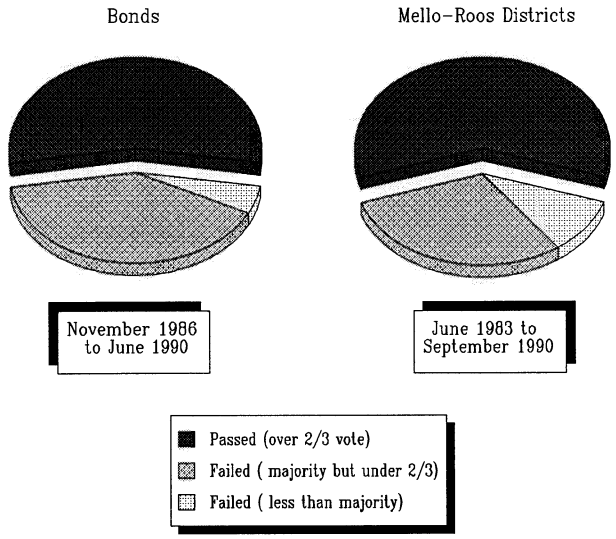
Developer Fees

For the purpose of funding the construction or reconstruction of school facilities, school districts are also authorized to levy developer fees against any development project within the boundaries of the districts. Developer fees are based on a specified charge per square foot of new residential and commercial construction within the district. Voter approval is not required when fees do not exceed the cost of the project, but the board of the school district must hold a formal public hearing. Fourteen days before the hearing, the board must send written notice of the hearing to anyone who has filed a written request to receive such notice.

Not every school district that wishes to establish an alternative funding mechanism succeeds in doing so. Figure A-3 illustrates the proportion of Mello-Roos and general obligation bond elections which passed with a two-thirds vote and allowed for a new funding mechanism, those which achieved a majority vote but did not pass, and those which did not achieve a majority vote.

Figure A-3

Results of Local School Financing Ballot Measures in California



Source: "California's K-12 School Financing System," EdSource Publications.

Of the 46 Mello-Roos elections held from June 1983 through September 1990, 27 (59 percent) passed with a two-thirds vote. Sixty-four (55 percent) of the 117 general obligation bond elections held from November 1986 through June 1990 were successful in acquiring a two-thirds vote.

Alternative Leasing Options

In addition to the various local financing options available, school districts may finance portable classroom acquisitions by using municipal leasing arrangements, which function in a manner similar to tax-exempt municipal bonds. These leasing arrangements use lower interest rates than conventional arrangements, usually slightly higher than the tax-free municipal bond rate, to calculate lease payments. The interest portion of the lease yields tax-exempt income for the individual or organization providing the financing. One leasing agent told us that the exact interest rate charged to the school district depends upon the credit history and credit worthiness of the school district, the amount of the lease transaction, and the current tax-exempt bond rate on the date of the transaction. At the time of our survey, the municipal lease rates generally ranged from 7.75 to 8.35 percent compared to conventional rates of 12.2 percent. The leasing agents offer municipal lease terms generally for three, five, seven, or ten years.

According to information provided by the leasing agents who responded to our survey, school districts can arrange their municipal leasing options in several ways. The district can obtain bids from manufacturers for the cash purchase price of the portable buildings. The district then contacts leasing or financing agents to find out about arranging a municipal lease. Also, the school district must qualify for the municipal leasing option by obtaining approval from the school district board. The leasing agents further stated that school districts must certify the official use of the portable buildings and obtain a bond counsel's opinion. When the district qualifies for the municipal leasing option, the financing or leasing agent will provide the cash to the school district to purchase the units. The agent becomes the lessor of the property. At the end of the lease term, the leasing agent will sell the portable buildings to the district for a nominal amount.

Another way school districts can arrange their municipal leasing options, based on the response to our survey of leasing agents, is through a vendor financing arrangement, which is similar to financing a car through the dealer or manufacturer. The manufacturer generally has an arrangement with the leasing

or financing agents to set up the municipal lease. The manufacturer becomes the lessor and then assigns the lease to the financing source. The annual leasing costs vary depending upon the term and the amount of the lease.

For example, the leasing costs for a $100,000 municipal lease may range from approximately $14,000 to $36,000 per year and the cost for a $500,000 municipal lease may range from approximately $74,300 to $179,300 per year, both depending on the lease term and the interest rate. As the municipal interest rate decreases, the cost savings school districts will receive by arranging a municipal leasing option as opposed to a commercial loan from a bank will increase. For example, for a three-year $500,000 municipal lease at 8.4 percent, a school district may be able to save approximately $17,700 compared to what it would have spent on a commercial loan. At 7.75 percent, the school district may be able to save approximately $20,800 in the same period.

State of California

State and Consumer Services Agency

Memorandum

To: Kurt R. Sjoberg
Acting Auditor General
660 J Street, Suite 300
Sacramento, CA 95814

Date: May 3, 1991

From: Office of the Secretary
(916) 323-9493
ATSS 473-9493

Subject: RESPONSE TO AUDITOR GENERAL REPORT NO. P-977

Thank you for the opportunity to respond to your Report P-977 entitled "Portable Classrooms in California School Districts; Their Safety, Uses, Costs And The Time It Takes To Acquire Them". The attached response from the Department of General Services addresses each of your recommendations.

If you need further information or assistance on this issue, you may wish to have your staff contact John Lockwood, Director, Department of General Services, at 445-3441.

Best Regards,

Porter Meaney

PORTER L. MERONEY
Undersecretary

PLM::mb

cc: John Lockwood, Director,
Department of General Services

Rick Gillam, Audit Coordinator
Department of General Services

State of California State and Consumer Services Agency

MEMORANDUM

Date: May 1, 1991 File No: P-977

To: Dr. Bonnie Guiton, Secretary
State and Consumer Services Agency
915 Capitol Mall, Room 200
Sacramento, CA 95814

From: **Executive Office**
Department of General Services

Subject: **COMMENTS ON AUDITOR GENERAL REPORT NO. P-977 -- PORTABLE CLASSROOMS IN CALIFORNIA SCHOOL DISTRICTS: THEIR SAFETY, USES, COSTS, AND THE TIME IT TAKES TO ACQUIRE THEM**

Thank you for the opportunity to respond to Office of the Auditor General (OAG) Report No. P-977 which provides information on portable classroom programs administered in part by the Department of General Services' (DGS) Office of Local Assistance (OLA) and Office of the State Architect (OSA). Even though the report's recommendations are directed towards the Legislature, because of the recommendations potential impact on DGS' operations, the OAG requested that the DGS comment on the report.

OVERVIEW OF REPORT

The DGS has reviewed the findings, conclusions, and recommendations presented in Report No. P-977. Because of the length of the report, and the extensive level of detail provided, the DGS will not attempt to respond to the factual accuracy of all of the reported information. However, the DGS believes the report provides relevant information which can be used in future policy discussions related to the safety, use, cost, and acquisition of portable classrooms used by California's school districts. While further study is necessary to determine the feasibility of implementing the report's recommendations, the DGS believes the overall goals addressed by the recommendations have merit. The following response addresses each of the recommendations.

RECOMMENDATION: "The Legislature should require a state-level office to aid school districts in the acquisition of portable classrooms by innovative financing and lease programs."

DGS COMMENTS: The DGS is willing to participate in discussions related to providing aid to school districts in financing acquisitions of portable classrooms. While believing that to allow comparability of the timelines needed to acquire portable classrooms through the use of State or school district funds requires further analysis than that presented in the report, OLA agrees that the implementation of programs to improve the timelines and reduce the costs of acquiring these classrooms is desirable. Currently, the State Allocation Board which administers the Lease Purchase Program and the State Emergency Portable Classroom Program has specified criteria for acquisition and financing of portable classrooms acquired through those programs. Expansion of these criteria

may be beneficial to those districts not participating in the State programs. For example, the State, using established financing and purchasing processes, recently awarded a contract for the manufacture and installation of 800 portable classrooms for an average cost of $22,750 each. This is significantly less then the average cost noted in the report of $35,000 that a district pays to purchase a portable on its own.

In addition, the OLA would point out that the creation of a single State agency to aid in the portable classroom acquisition process may be seen by districts as adversely affecting their independent procurement process and, therefore, may be resisted.

"To ensure that school districts have appropriate records showing that school buildings meet state safety requirements, the Legislature should take the following actions:"

RECOMMENDATIONS: "Require that the Office of the State Architect inspect and certify each school building, including portable classrooms, separately instead of as a single project; and, require that the OSA's certifications of final approval state the type and location of the structure that has been approved."

DGS COMMENTS: The legal enforcement requirements of OSA extend to the approval of the plans and specifications for a public school building project and the certification of the compliance of the work and materials of construction. As part of this process, each school building included in the project is identified in the plans and covered by the certification. However, each building is not separately identified on the final certification letter sent to the school district. If the Legislature deems it necessary that final certifications identify each building that has been approved, OSA's planned automated Project Tracking/Certification System will be able to assist in this process. This system should be on-line by the Summer of 1992. Without this system, the administrative costs involved in manually identifying potentially hundreds of structures on a certification letter would be prohibitive.

RECOMMENDATION: "Require that school districts maintain and post copies of certifications for each of the district's facilities at school sites and district offices."

DGS COMMENTS: Upon development of its automated Project Tracking/Certification System, OSA will have an improved capability of providing certificates for posting by school districts. While rarely requested in recent years, in the past, upon the request of a school district, OSA has provided certificates for posting.

CONCLUSION

The DGS appreciates the constructive and professional manner in which the review was conducted. DGS staff will be available to discuss the report's conclusions and recommendations with interested parties. Further, the DGS will comply with any actions ultimately taken by the Legislature to address the issues presented in the report.

If you need further assistance or information on this issue, please call me at 445-3441.

JOHN LOCKWOOD, Director
Department of General Services

JL:RG:kg

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