



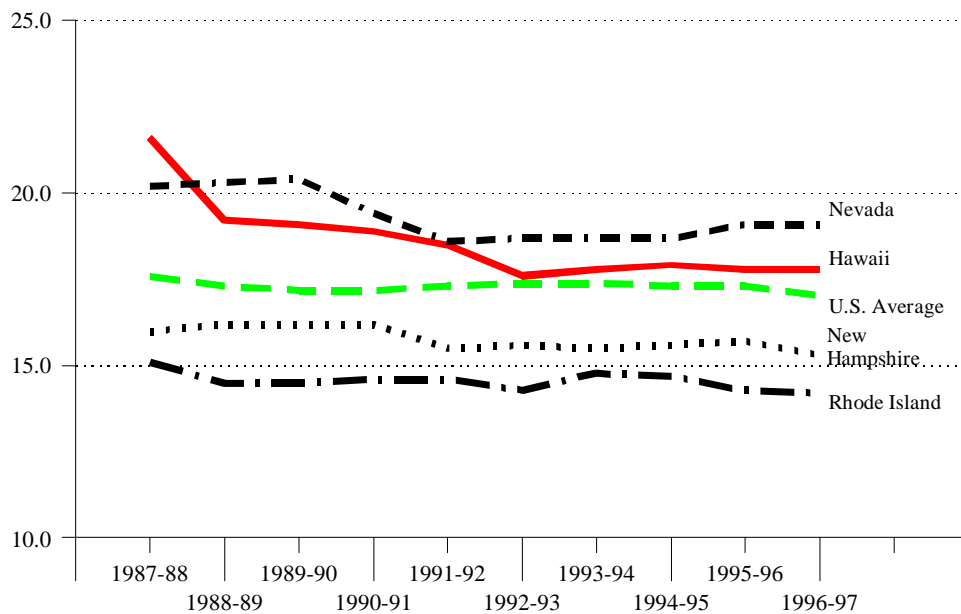
In 1996-97, there were 11,188 teachers in Hawaii’s public schools. Of these teachers:

**Staff
Teachers**

- # The average length of service was 12.3 years;
- # 61.7% had been teaching in their current schools for at least five years;
- # 71.5% were teaching subjects in the regular instructional program;
- # 15.5% taught in the supplementary program (remedial instruction, etc.);
- # 13.0% were teaching in special education; and
- # About 2% were assigned to school complexes or district offices to serve students in more than one school.

A widely used indicator of school or school system *process* is the ratio of pupils to teachers.⁶ The ratio for the system as a whole, as reported to the U.S. Department of Education, is shown and compared with those of comparable states and the United States average in **Figure 10**. Hawaii does not fare well on this indicator. Hawaii had improved its pupil to teacher ratio and its rank on this indicator in the early 1990s, but during the last four years Hawaii’s earlier gains have been slipping away.

Figure 10. Pupil to Teacher Ratios in Hawaii and Comparable States, 1987-88 to 1996-97



Hawaii’s pupil to teacher ratio has declined over the last decade, but it is still well above the United States average and is not improving.

In 1987-88, Hawaii ranked 48th among the 50 states in pupil to teacher ratio. By 1992-93, it had improved its rank to 35th, having lowered its pupil to teacher ratio from 21.6 to 17.6. That improvement was the result of both deliberate policy and major effort, but the relative gain was also partly the result of increasing enrollments and financial difficulties in other states. While mainland states have recovered from the recession of the early 1990s, Hawaii has not. Mostly as a consequence of financial strains, Hawaii’s pupil to teacher ratio has begun to rise; in 1996-97 it was 17.9, and Hawaii’s rank among the states was 39th.

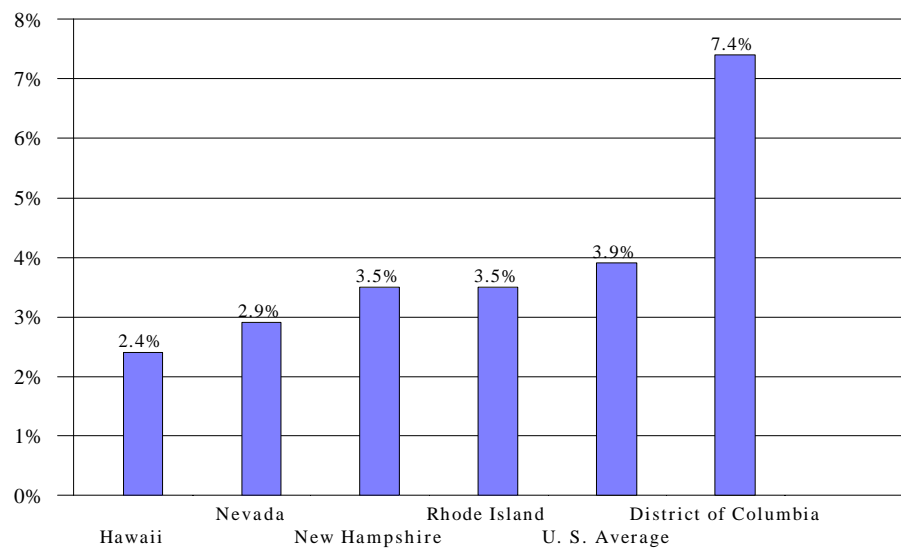


Administrators In 1996-97, there were 643.5 full-time equivalent school level administrative positions in Hawaii’s public schools, of which 469 were for principals or vice-principals. The remainder were for athletic directors, registrars, or student activity coordinators. If administrative responsibilities were evenly divided, this would mean that on average each principal or vice-principal in Hawaii was responsible for overseeing the education of just over 400 pupils and supervising 22.5 teachers—about 40 pupils and 2 teachers more than in 1995-96. This represents an increase in administrators’ load, erasing the gains that had been made over the previous four years. There is little doubt that this, too, is a result of the pressures on the state budget.

There is a common belief that public education in Hawaii is saddled with a huge bureaucracy, but the facts do not bear this out. The number of administrators as a percentage of the professional staff in Hawaii’s school system is actually smaller than in most school systems of similar size. **Figure 11** shows the 1995-96 percentages of professional staff performing district administrative functions in Hawaii and comparable jurisdictions. Hawaii’s percentage (2.4%) is the lowest of the group and is just over half the U.S. average. This is despite the fact that in Hawaii, alone among the states, the percentage includes *both* district and state administrators. The only other jurisdiction in which all levels of administration are included in the data, the District of Columbia, has 7.4% of its professional staff performing district administrative functions.⁷ This information was corroborated recently by a report, cited in the *Honolulu Advertiser*, noting that Hawaii spends less per student for administration than 46 other states and the District of Columbia. The article noted that in 1994-95, Hawaii spent only about \$45 per pupil on administration out of a total per pupil expenditure of \$5,597 (0.8%). The national averages for that year were \$126 out of \$5,497—or about 2.3%.⁸

Figure 11. Proportions of Professional Staff Performing District Administrative Functions, Hawaii and Comparable States

Hawaii’s administrative staff percentage is the lowest of the comparable states at just over half the U.S. average. Only Hawaii includes state administrators in its percentage.





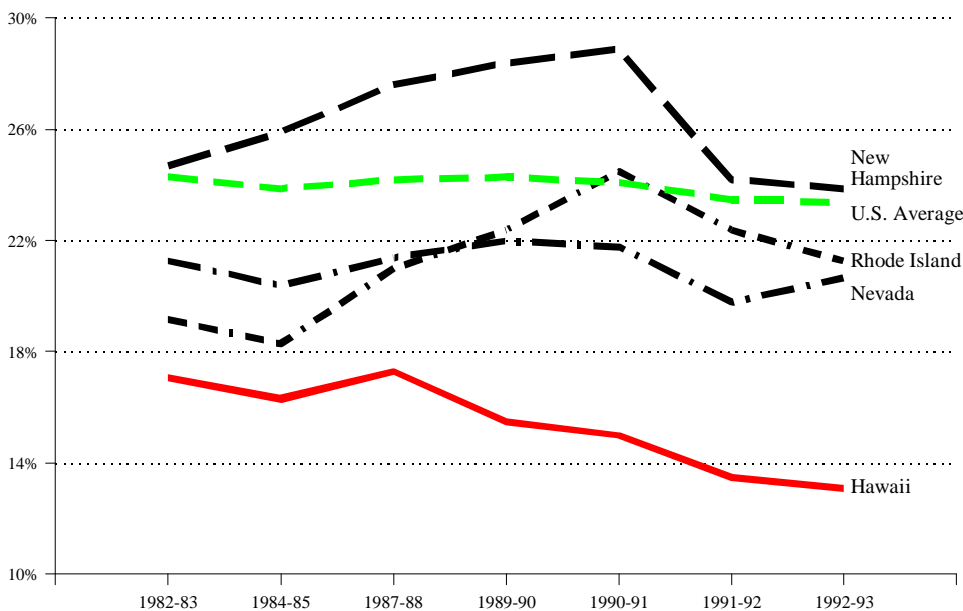
The stability of school level administration is an important indicator of school continuity and curricular direction, and there has been substantial improvement on this measure. In the past six years, the percentage of schools with three or more principals in five years has declined. In 1989-90 it was 38%; in 1996-97 it was only 10.6%. This represents notable progress toward providing schools with stable leadership.

In 1996 Hawaii ranked 11th among the states in personal income *per capita*, a decline of one rank from the previous year, probably reflecting the continuing stagnation of the state's economy. However, Hawaii still ranked **first** in total state tax collections *per capita*.⁹ Despite the state's economic woes, Hawaii remains a comparatively wealthy state. By contrast to its wealth, the economic effort that Hawaii has historically exerted on behalf of the children in its public schools has been less than mediocre.

An indicator of support for public education is the proportion of total state and local revenues that are allocated to the operation of public elementary and secondary schools. This indicator shows the priority that state policy makers give to public education by directly comparing school expenditures to total expenditures rather than showing school expenditures in isolation. This measure shows that Hawaii puts a decidedly low priority on funding its public education system. The proportions of state and local revenues allocated to public education by Hawaii and comparable states from 1982-83 to 1992-93 are presented in **Figure 12**. On this measure of support for public education, Hawaii has consistently ranked *last* among the states. Moreover, the index of education's priority in Hawaii has obviously declined substantially over the last decade.

General Revenues and Expenditures for Public Education

Figure 12. Percentage of State and Local Revenue Allocated to Public K-12 Education, Hawaii and Comparable States



Hawaii devotes the lowest percentage of its total state and local revenues to public K-12 education of any state in the U.S. Its allocation is barely over half the U.S. average.

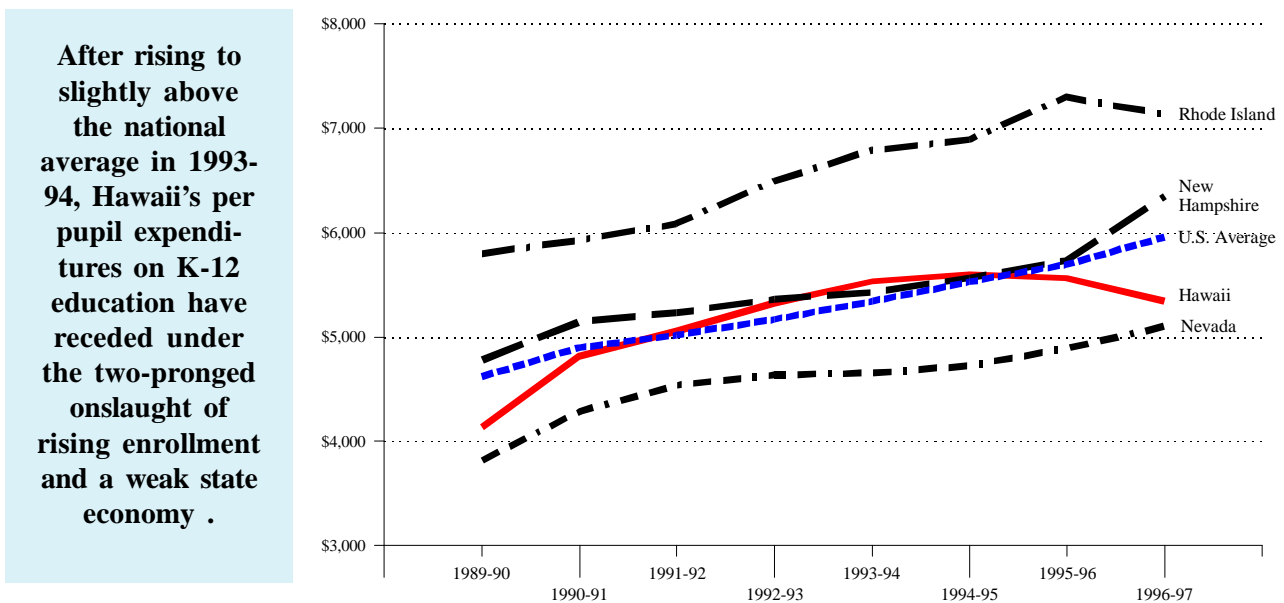


Current Expenditures per Pupil

The standard index of funding for public education (without regard to the state's ability to pay) is the operating expenditures per pupil, reported in either dollars per average daily member (ADM) or dollars per average daily attendance (ADA).¹⁰ Between 1980-81 and 1994-95, Hawaii's operating expenditures per pupil grew in parallel with the State's economy and somewhat in excess of tax revenues. During that period, Hawaii's economic base (measured as Gross State Product/ADM) expanded by 125%, State tax revenues increased by 97%, and operating expenditures per pupil increased by 134%. Expenditures per ADM reached a peak in 1994-95 and have since leveled off, currently (1996-97) at \$5,348, 123% over what they were in 1980-81. Current data on the Gross State Product and State tax revenues are not yet available.¹¹

Despite its wealth, Hawaii has never spent discernibly more per pupil than the national average on public education. Hawaii's per pupil spending has increased over the last four decades, as has educational spending throughout the nation. However, Hawaii's spending relative to the national average declined markedly between 1979-80 and 1989-90 and only gained relative to the national average between 1990 and 1993. Data documenting the State's per pupil expenditures over the three decades from 1959-60 to 1989-90 are given in the Appendix (Table 11). The trend since 1989-90—shown in **Figure 13**—was positive until 1994-95 and has retreated since.

Figure 13. Expenditures per Pupil, Hawaii and Comparable States



After rising to slightly above the national average in 1993-94, Hawaii's per pupil expenditures on K-12 education have receded under the two-pronged onslaught of rising enrollment and a weak state economy .

From 1989-90 through 1993-94, Hawaii's per pupil expenditures gained against the national average, rising from 31st among the states to 19th. Since then, the State's per pupil expenditures have declined by about \$500 per pupil, dropping Hawaii to 33rd among the states, 10.2% below the national average, in 1996-97.



Hawaii's rise to the median level among the states in its funding of public education was not long-lived. The difference between its ranking on tax revenues per capita (1st) and its ranking on expenditures per pupil (33rd) is striking.

The low state of Hawaii's fiscal priority for public education presented above is corroborated by the work of policy analysts elsewhere. A review of the education systems in all 50 states commissioned by the Pew Charitable Trusts gave Hawaii's school funding a grade of D- for adequacy, noting, as we have here, that the State ranks consistently last in the percentage of state and local funding allocated to public schools. They went on to note that Hawaii's fiscal policy makers lack incentive to do better by public school children because the children of the affluent and powerful are well served by the State's highly regarded private schools.¹² The follow-up to that report mentioned very favorably the equity of Hawaii's school funding, but reiterated the low rating of Hawaii's financial support of its public schools. The new report went on to address specifically the problems of Hawaii's urban schools stemming from years of inadequate funding for repair and maintenance of school facilities.¹³

School facilities, like other elements of infrastructure, are easily taken for granted but need sustained attention in the State's priorities. This is demonstrated quite poignantly by the condition and adequacy of school facilities. Foresight and commitment are needed to plan and build schools so that they will be ready **where** and **when** they are needed. It is equally important to maintain schools to be both useable and up-to-date for succeeding generations. In this domain, the low priority historically given to providing for Hawaii's public schools is evident. Hawaii's schools have some serious deficiencies.

Facilities

Well over one-third (92) of the 246 regular schools operating in 1996-97 had fewer classrooms than they need.¹⁴ The number of classrooms needed by a school is calculated from the number and types of teachers assigned to the school, and the formula allows for sharing rooms. The net excess or shortage of classrooms, by level, for the seven school districts is shown in **Figure 14**. Almost 1,300 "portable" classrooms are included in the inventory of available classrooms. Even with the portables, there is a substantial net shortage of classrooms. The most serious shortages appear, not surprisingly, in locations where there has been appreciable recent growth in the population of school-aged children. The State's school building program simply has not been able to keep up with the need.

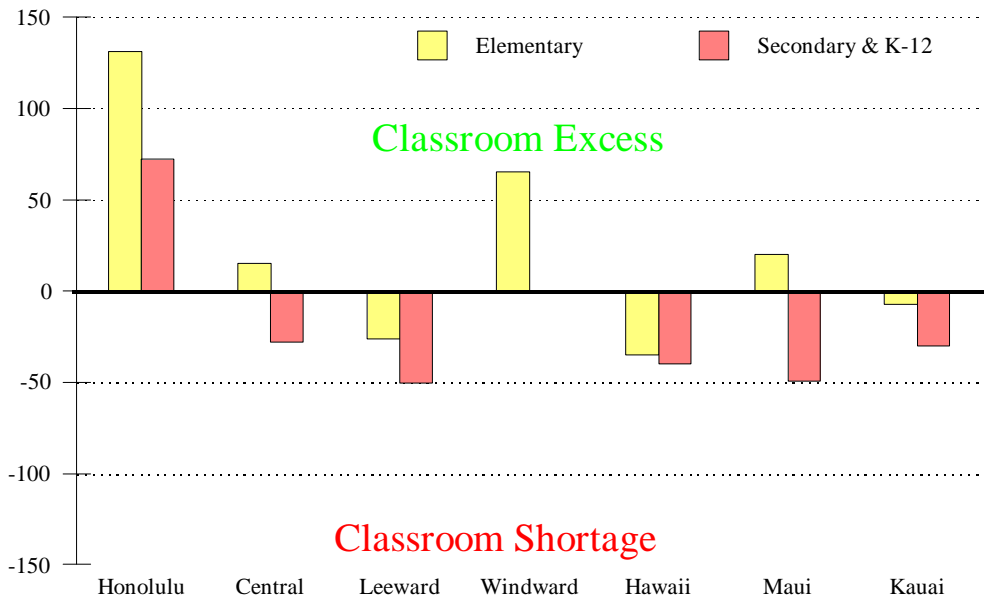
Classrooms

A second measure of the adequacy of school classrooms is the ratio of the school's enrollment to its rated capacity. Capacity is calculated by multiplying the number of classrooms by the State's standard for class size.¹⁵ This calculation, which allows for smaller classes for lower grades and special education, estimates an upper limit for a school's desirable enrollment. It is noteworthy that in 1996-97, 98 schools were operating at or above their rated capacity, 49 of which were operating at more than 10% over capacity. This represents a modest improvement over 1995-96, but the shortage of classrooms in Hawaii is real and it continues.



Figure 14. Net Classroom Shortage or Excess, by District

Hawaii's classroom shortages are unevenly distributed. There are excess classrooms in Honolulu, but there are shortages in each of the districts with growing populations.

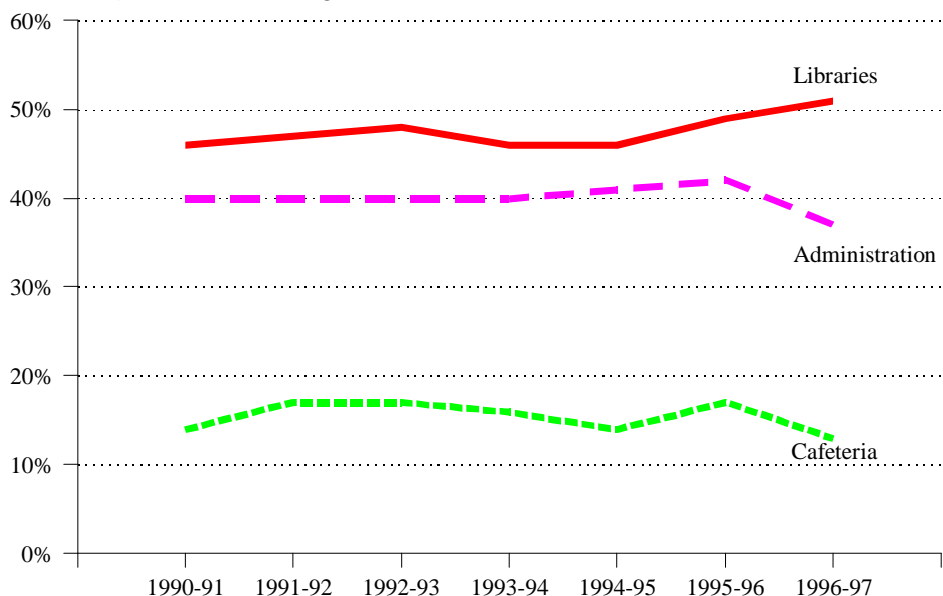


Other Facilities

Our schools' ancillary facilities remain underdeveloped. In 1996-97, media attention to this problem and the efforts of schools, the department, and the leadership of state government have begun to produce results. The proportions of schools with inadequate space for cafeterias or administrative facilities declined. However, the percentage of schools with inadequate library space continued to increase; over 50% of all schools still lack adequate libraries. The proportions of schools with library, cafeteria, or administrative facilities that are less than 70% of the State standard for schools of their size over the period from 1990-91 to the present are displayed in Figure 15.

The proportions of schools with less than adequate administrative and cafeteria facilities declined in 1996-97. However, over half our schools still lack adequate space for libraries.

Figure 15. Percentages of Substandard Facilities, 1990-91 to 1996-97



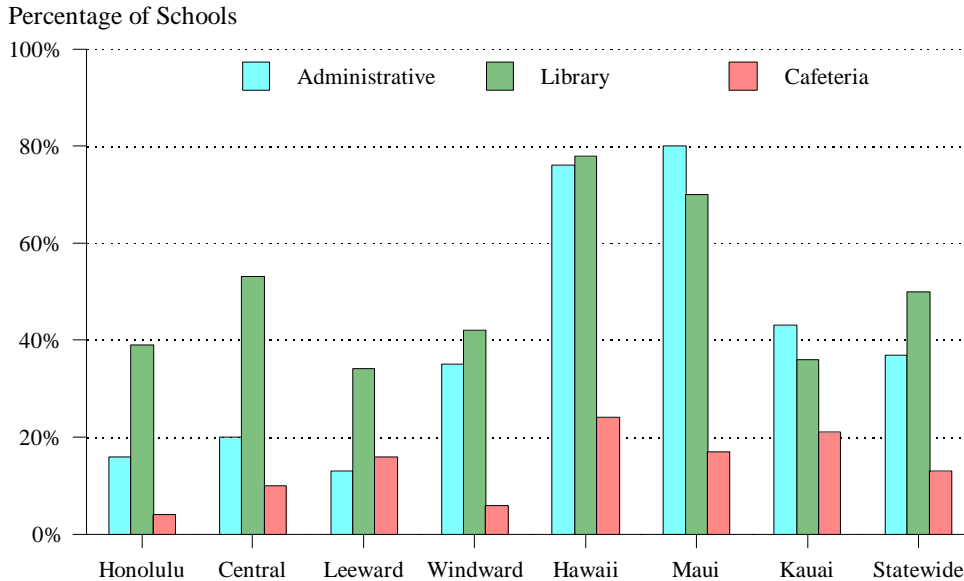


It should be noted that this problem is widespread and of long standing. A recent U.S. General Accounting Office document reported that similar problems affect all states.¹⁶ In Hawaii as elsewhere, the problem resulted from years of under investment in school facilities. It will take a long time and much effort to correct. In 1992, the Office of Business Services estimated that it would take more than two billion dollars spent over ten years to bring all of Hawaii’s public schools up to the state’s standards. The investment thus far proposed and appropriated has been far short of that.

Hawaii’s problem with school facilities affects all levels of schools. Roughly half of all schools, 86 of 165 elementary schools, 15 of 26 multi-grade schools, and 24 of 55 secondary schools have less than 70% of the library space required by State standards. However, the distribution of facility shortfalls is not evenly distributed geographically; the shortfalls affect some districts much more than others.

The distribution of facility shortfalls by district is shown in **Figure 16**. In Honolulu District, with a nominal excess of classrooms and stable enrollments, 39% of schools have inadequate library space. In Hawaii District, the ratio is 78%. As with libraries, Hawaii and Maui Districts show the most severe shortages of administrative space (offices, workrooms, storage, etc.).

Figure 16. Percentages of Schools with Substandard Facilities, by District



The shortages of ancillary facilities are also unevenly distributed. The shortage of library and administrative space is most acute for the schools in Hawaii and Maui Districts.

The percentage of schools with inadequate cafeteria space (less than 70% of State standard) is lower than with libraries and administrative space—“only” 31 schools remain without adequate eating facilities. Substantial progress has been made in recent years to reduce the shortfall in this area.

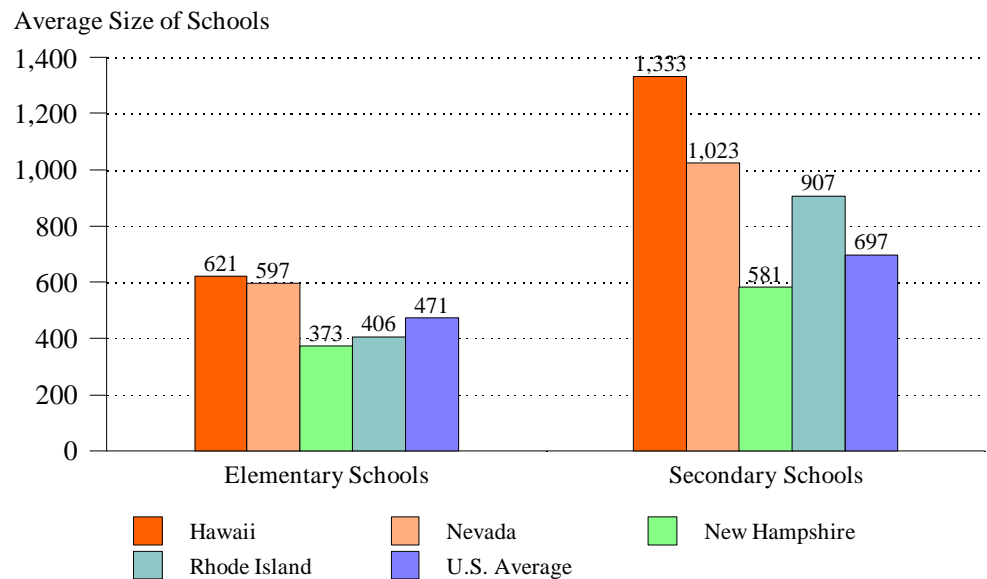


School Size There is a perennial belief among some fiscal policy makers that schools ought to be like factories in organization, management, and size. At the core of this belief is the notion that education is subject to “economies of scale,” i.e., that larger schools can achieve the same educational results as smaller ones at lower cost per pupil. Research on cost economies is inconclusive, but studies of school size have shown clearly that smaller schools have better student attendance, satisfaction, and extracurricular participation than larger schools. Definitive research has shown also that small classes (13 to 17) have substantial and lasting benefits for children in early grades, and that they have greater benefits for disadvantaged children—about double—than for those from advantaged backgrounds.¹⁷

In previous reports, we have noted that Hawaii has uncommonly large schools. Hawaii’s regular secondary schools have the second largest average size in the nation—smaller on average only than those in Florida, but still almost 90% larger than the national average. The State’s regular elementary schools, averaging 630 pupils, ranked third largest in the nation behind those of Florida and Georgia, and are more than 30% larger than the national average.¹⁸ The average sizes of elementary and secondary schools in Hawaii and comparable states are shown in **Figure 17**.

Figure 17. Average Size of Schools, Hawaii and Comparable States

Hawaii’s regular secondary schools are the second largest, on average, in the nation--almost 90% larger than the U.S. average. Its elementary schools are 30% larger than the U.S. average.



Recognizing this, the Board of Education in 1997 adopted a policy setting standards for school size. This policy set desired enrollment limits of 550 students for elementary schools, 600 students for middle or intermediate schools, and 1,000 students for high schools.¹⁹ The Board’s recognition of the desirability of smaller schools is only a small first step toward improving this aspect of Hawaii’s public school system. In 1996-97, 74 of 165 elementary schools (45%), 12 of 39 middle or intermediate schools (31%), and 7 of 36 high or intermediate/high schools (19%) met those standards. To bring Hawaii’s **average** school size into compliance with the new policy would require 17 new elementary schools, 13 middle schools, and 20 high



schools. Even if these were created from existing school facilities (through organizing “schools within schools”), the staffing demands and organizational effort required would be formidable. The problem of excessively large schools was created over decades by Territorial and State policy. It will take sustained attention over many years to correct it.

Schooling requires time: time for exposure to ideas, time for thought and work, and time devoted to acquiring the skills and attitudes required for life in modern society. In past reports we focused on two aspects of instructional time, the State mandated school year and students’ attendance. The last available comparative data, that for 1990-91 indicated that Hawaii lagged considerably behind other states in the length of its school year. Since then, however, Hawaii has moved to lengthen its school year, and in 1998-99 will add seven days to the school calendar.

Attendance

While Hawaii has been faulted for having a short school year, Hawaii’s students add to their disadvantage by the use they make of the time they have. Attendance rates for all schools average over 90%, but this still means that Hawaii’s average student misses *over 12 days* of school per year. As might be expected, the rates of absence vary with the level of the school.

The average number of days absent from school by school type for the last four years is shown in **Figure 18**. It is disturbing that students in high schools and multi-grade schools (K-8, K-12, or 7-12) miss, on average, over three weeks (16 days) of school per year. In 1996-97 there were 16 schools whose average rates of absence exceeded 20 days per year.

Figure 18. Mean Number of Days Absent by School Type



Students in Hawaii’s high schools and multi-grade schools miss, on average, over three weeks of school each year.



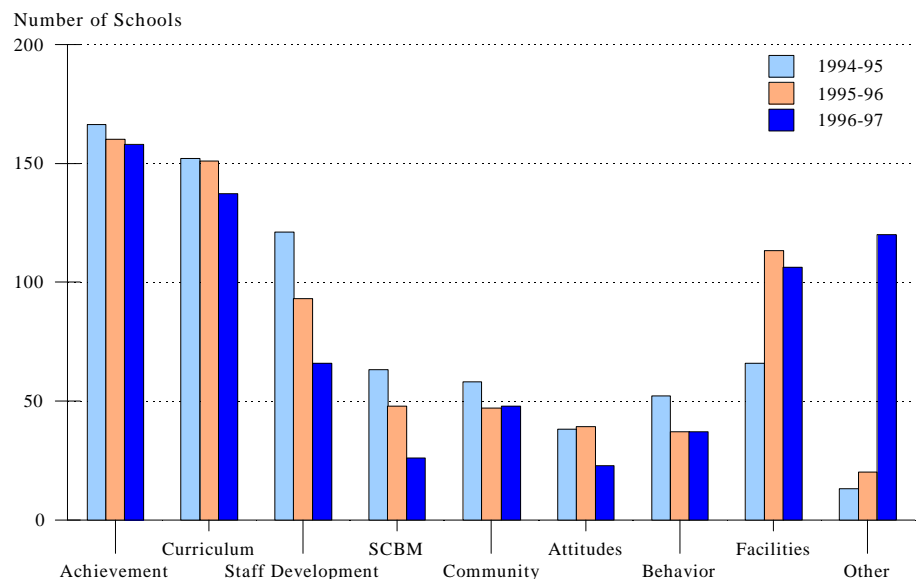
There have been sharp increases in reported absence rates in high schools and multi-grade schools since 1994-95. These have probably resulted from changes in attendance accounting rather than changes in underlying attendance rates. Prior to 1994-95, attendance procedures had been quite varied, with many smaller schools reporting only the results of once daily manual counts. Since then, the adoption of new school management software has made possible standardization of attendance counting. Standard procedures for attendance, based on computer counting, are being implemented in the 1998-99 school year. These changes in procedure will result in declines in reported attendance rates that we should not misinterpret as signs of deterioration. That said, we need to improve students' attendance substantially; and to do so, we shall need to find out what causes our students to miss so much school.

**School Improvement
Priorities**

Among the more important elements of school process are the priorities that school staff and leaders use to guide their efforts over the year. In the *School Status and Improvement Reports*, school leaders identify and describe their school improvement priorities and efforts. The categories of concerns expressed in these short-term improvement priorities for 1994-95 through 1996-97 are presented in **Figure 19**. Since 1991-92, student achievement and curriculum have dominated the list. The recent growth of concern about facilities in school improvement priorities reflects mainly the pressing need to bring schools up-to-date technologically, specifically with electrical service, computers, and telecommunication networks. This need is clearly related to both curriculum and student achievement in its focus on student's access to 21st century information technology, but it is also limited in duration. Once school facilities are brought up-to-date, concern with facilities is likely to fade and be supplanted by the continuing concerns of curriculum content made available by the new facilities and the achievement resulting from students' exposure to the new resources.

Student achievement and curriculum are the top priorities for school improvement. Facilities have come into focus recently with the national and state emphasis on getting schools "on line."

Figure 19. Improvement Priorities of Hawaii's Public Schools





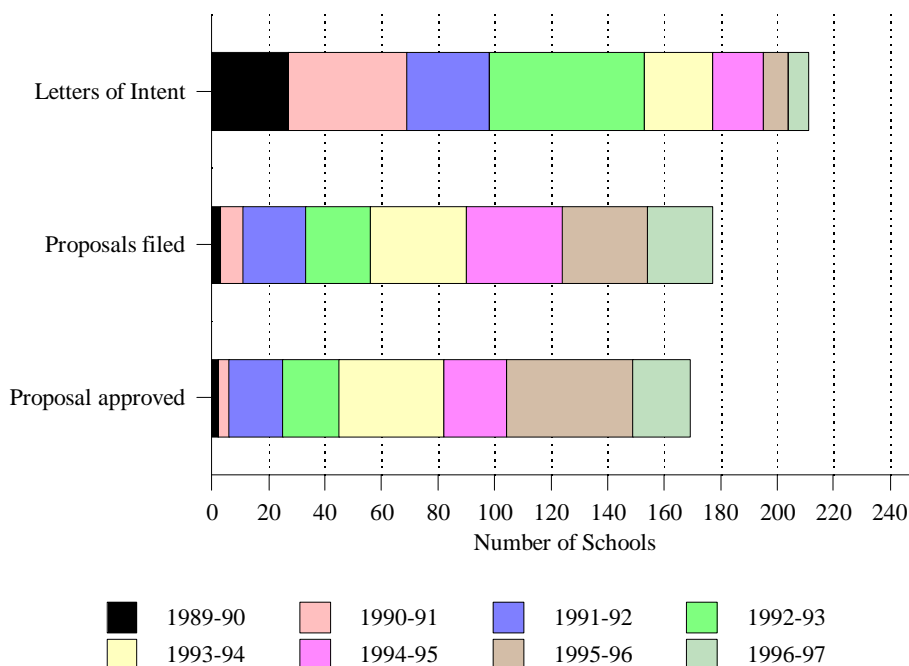
All of the components identified here are elements of schooling that leaders at the school level believe need their attention and are within their power to change. The specific descriptions given on the *School Status and Improvement Reports* of school improvement priorities and activities are highly individual and particular to school situations and needs.

Probably the most important effort at school reform in Hawaii over the last dozen years has been the movement to School/Community-Based Management (SCBM). SCBM represents a major shift in the form of school governance intended to decentralize decision making and involve the entire school community. It was initiated by Board action and legislation in 1989, with the intent of using governance to focus entire school communities on school improvement. The process of becoming an SCBM school involves organizing the constituent groups, submitting a letter of intent to become an SCBM school, developing and submitting a proposal to implement SCBM (frequently including requests for waivers of department regulations or exceptions to provisions of State labor contracts), and approval by the Board of Education.

SCBM

The progress made toward statewide implementation of SCBM is illustrated in **Figure 20**. In view of the degree of change that SCBM represents from centralized State control and the amount of organization required for participation, it is impressive that by the end of 1996-97 86% of public schools had initiated participation in SCBM and over 71% were implementing the reform. This represents remarkable speed for the adoption of a major innovation in the operation of organizations as inherently conservative as public schools.

Figure 20. School/Community-Based Management Implementation



By the end of 1996-97 86% of public schools had initiated participation in SCBM and over 71% were implementing the reform.



Implementing SCBM is not a simple or easy process. Most of the schools that had filed letters of intent to participate in SCBM but had not proceeded to implementation had filed their letters of intent more than two years earlier. This suggests that the changes that SCBM requires involve more than technical implementation, they require major philosophical change. Change of that type and magnitude can be slow and difficult.