



Research Summary

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School Costs and the Foundation Program

Alaska's public school system today is a much different and costlier system than it was 20 years ago. The Alaska Legislature asked ISER to examine what has driven up costs of Alaska's schools, and to assess how the state's Public School Foundation Program could be more equitable for taxpayers and school districts.

Figure 1 makes it plain why these are important issues for the state government. Of the total \$1 billion school districts received in fiscal 1990, state money made up 65 percent, local money 22 percent, and federal money 13 percent. Total state aid to schools makes up roughly one quarter of the state's general fund spending, and the foundation program (which includes a small share of federal money) accounts for a big share of state aid.

Foundation payments are adjusted for local tax contributions and federal aid in each district. So it is chiefly through the foundation program that lawmakers have the chance to see that both taxpayers and students in richer and poorer districts are treated equitably.

Below we summarize our findings about school costs and the equity of the foundation program. We studied

changes in the major categories of school operating costs over the past two decades. Those costs recur year after year and account for most of total school district spending. They include costs of instruction and pupil support (libraries, for instance); general support (administrative functions); and operations and maintenance of school buildings.

We did not analyze capital costs, which normally make up a small part of total school costs and are different each year. Inadequate data also prevented us from analyzing changes in operating expenses funded with restricted revenues—pupil transportation, for instance. (Such expenses made up 17 percent of operating expenses in fiscal 1990).

Figure 2 shows real growth in major school operating costs per student between fiscal years 1971 and 1990. The costs are adjusted for the effects of inflation and growing enrollment over this period—which means that the growth shown is *in addition* to what could be attributed to rising prices and growing enrollment.

Real per student operating costs were twice as high in fiscal 1990 as in 1971. The fastest growth was in the late 1970s and early 1980s. Real costs peaked in fiscal 1986,

Figure 1. Total Revenues to School Districts FY1990

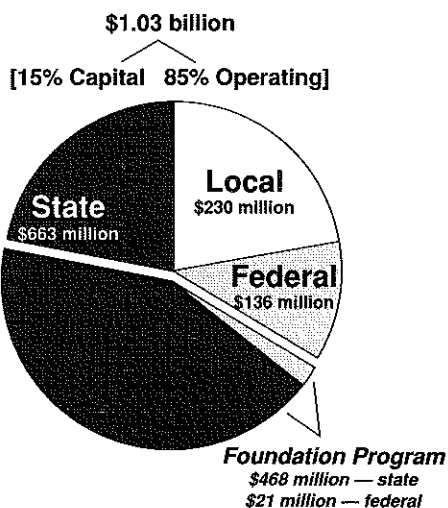
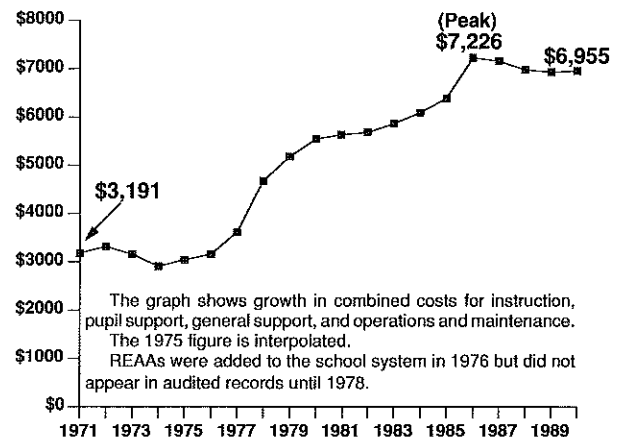


Figure 2. Real Growth in Major Operating Costs Per Student, FY 1971-1990 (In 1990 Dollars)



dropped between 1986 and 1988, and have been almost unchanged since then.

Forces of Change in Alaska's Schools

What caused Alaska's school costs to rise so much? First, it's important to keep in mind that school costs throughout the United States rose substantially in the most recent decades. From 1960 through 1987, real (adjusted for inflation) education costs per student rose an average of nearly 4 percent annually in the United States as a whole and 5 percent annually in Alaska.

Still, largely as a result of the state's generosity, Alaska spends more per student than any other state. But that does not mean that Alaska's local governments contribute less toward education than other local governments. As of 1987, Alaska ranked number 20 among the 50 states in local government contribution per student.

So school costs are not just a state but also a local concern. Two major factors, in addition to rising prices and growing enrollment, pushed up Alaska's school costs in the past 20 years. One factor—program changes—was common to all states, and the other—structural changes—was unique to Alaska.

Program Changes: In the 1970s and 1980s, the federal government required states to bring special education programs into the broader public school system and to add vocational and bilingual education programs. Such programs added to school costs because they required special teachers, equipment, and facilities; smaller special classes; and more administrators to set up and oversee them. School costs in all states, including Alaska, went up because of these required program changes.

Structural Changes: After 1970, Alaska's growing oil wealth allowed it to make two kinds of structural changes in its public school system. It added a new type of rural district, and it expanded and improved urban schools.

In 1970, school districts existed only in areas with organized local governments. Native children in rural areas without local governments attended local elementary schools operated by the federal Bureau of Indian Affairs. The BIA also operated a handful of regional high schools. After 1970 the state government began taking over BIA schools, first establishing a system of state-operated schools but soon replacing that system with Regional Education Attendance Areas (REAs). These rural school districts were intended to give local residents more control over their schools. REAs were to be funded almost entirely with state and federal money.

At roughly the same time, as part of an out-of-court settlement in a suit brought by parents of rural students, the state agreed to build high schools in virtually all small villages in Alaska. The state constructed hundreds of rural school facilities. During the same period, it added new urban schools and improved the quality of existing schools.

The State of Alaska was able to pay for all or most of these school capital projects with its oil wealth. And it also used petroleum revenues to help increase the foundation program enough to cover the costs of the new programs and pay the growing operations and maintenance costs of more and better school facilities. The legislature may have increased foundation funding beyond what was necessary simply because it had the money and no one knew how much more was required to cover the costs of the new programs and the new facilities without harming existing programs.

Growth in Major Operating Costs, 1971-1990

Figure 2 and Table 1 show how program and structural changes translated into real growth in the major operating costs (instruction, pupil support, general support, and operations and maintenance) per student between fiscal 1971 and 1990. The school districts changed accounting systems several times during this period. We attempted to adjust our figures for all the resulting changes. Any changes we were unable to track would have little effect on our findings. We found:

- The higher real per student costs today in part reflect the state's earlier decision to increase education funding to cover the costs of new programs and facilities.
- The fastest growth in per student costs coincided with that brief period in the late 1970s and early 1980s when state oil wealth grew very rapidly, the REAs were created, and hundreds of school construction projects took place in both rural and urban areas.

Table 1. Per Student Operating Costs, FY 1971 and 1990
(In 1990 Dollars)

	1971	1990	Percent Change
Major Costs by Type			
Instruction & Pupil Support	\$2,445	\$4,562	+86%
General Support	245	1,127	+360%
Operations & Maintenance	501	1,266	+152%
Total	3,191	6,955	+117%
Major Costs by District			
Boroughs	3,113	6,135	+97%
Cities	4,159	8,229	+98%
REAs	N/A	12,036	N/A
All Districts	3,191	6,955	+117%

Note: Includes only those operating costs analyzed in study (83 percent of total operating costs in FY 90).

- Overall, real per student costs for major operating expenses stopped growing in 1986 and were slightly lower in 1990 than in 1986.

- Costs of general support (administration) per student were 360 percent higher in fiscal 1990 than in 1971. At least part of that growth is due to the increased administrative costs for the required new special programs. Administrative costs per student are also higher in small schools—of which there are many more now than 20 years ago.

- Costs of operating and maintaining Alaska's schools were more than 150 percent higher per student in fiscal 1990 than in 1971. Much of that growth occurred because the school system today includes more small rural schools and more and nicer urban schools than it did 20 years ago. Those small schools and better quality schools cost more to operate and maintain.

- Costs of instruction and pupil support were 86 percent higher per student in fiscal 1990 than in 1971. Those remain the largest operating costs, but they increased less than other kinds of costs in the past two decades. Some of the increase in instructional costs is certainly due to the addition of required new programs. And some is due the higher costs of staffing more small schools in rural areas.

- Costs of both city and borough schools were nearly twice as high in fiscal 1990 as they had been in 1971.

- Major operating costs per student vary sharply among the three kinds of districts, with costs in REAAs about twice as high as in boroughs and 50 percent higher than in cities. Small schools cost more per student than larger schools, and REAAs include many small schools.

Alaska's School System Then and Now

The major program and structural changes in Alaska's school districts made the system far different in 1990 from what it was in 1971. The number of Alaska school facilities (which are primarily schools, but which also include other school-related buildings) is almost three times larger—483 in fiscal 1990 compared with 168 in 1971. Most of the new schools were built in the brief period from the late 1970s through the early 1980s; about 180 of the new school facilities are in REAAs.

More than 104,000 students attended Alaska's public schools in fiscal 1990, with 8 out of 10 students enrolled in borough schools. There were 60 percent more Alaska students in fiscal 1990 than there were in 1971. Most of the enrollment growth was in borough schools, but some occurred because students shifted from BIA schools. The fastest growth in enrollment occurred in the late 1970s and early 1980s.

Because the number of schools grew even faster than enrollment, the number of students per facility is nearly

50 percent smaller today—215 in fiscal 1990 compared with 383 in fiscal 1971. That drop reflects in large part the state's decision to use part of its oil wealth to build many small schools.

The number of students per certified employee was about 25 percent smaller (19 compared with 14) in fiscal 1990 as in 1971. However, the available evidence suggests that average classroom size in regular school programs may not have changed much. "Certified employees" include not only teachers but also administrators, counselors, and some others who do not teach. The drop more likely reflects changes associated with the addition of special programs, which involve smaller classes and more administrators and other certified employees outside the classroom.

Equity of the Foundation Formula

We found that the Public School Foundation Program awards state funds to school districts with a reasonable degree of both education and taxpayer equity. Education equity is achieved when every district has the same access to funds for its schools, regardless of the local tax base. Taxpayer equity means that households contribute tax revenue for education based on their ability to pay (rather than according to where they live). Program changes in fiscal 1988 substantially increased both types of equity. Nonetheless, there is room for improvement.

Broadly speaking, the foundation formula distributes money to each school district based on how many classrooms it needs. The legislature decides how much it will pay to operate a classroom, and then determines the "basic need" of a given district based on how many regular and special classrooms it operates. The formula also adjusts payments based on regional differences in the cost of living.

City and borough districts are required to contribute a portion of basic need in property taxes—currently set at 4 mills on the full value of property, up to 35 percent of basic need. Valdez and the North Slope Borough, because they have such valuable petroleum property, easily reach the 35 percent limit by paying only one or two mills. REAAs have no local governments and make no local tax contribution.

Education Equity: The existing formula provides reasonable education equity in a number of ways:

- The formula awards more money to small schools, which is equitable, because providing education in small schools is more expensive.

- The formula does not, however, provide extra money to small school districts with only one or two schools, which is also equitable. There is little evidence that providing education in small districts is significantly more expensive than it is in districts with more schools.

And if the state in fact paid more to very small districts with high administrative costs, it might encourage formation of less efficient districts.

- The area cost differentials adopted in fiscal 1988 more accurately reflect regional variations in costs of providing education than did previous differentials, and achieve a more equitable distribution of funds among the districts.

Despite the provisions cited above that increase education equity, the formula could be made more equitable for school districts:

- More accurate area cost differentials than the ones adopted in 1988 are available.

- Some larger districts in which most schools are accessible by road also have some remote, inaccessible schools. The current foundation formula does not provide additional funds for remote schools within larger districts. Providing additional funds for these schools might improve education equity.

- The formula allows districts with property tax bases to raise more funds for their schools by increasing tax contributions above the required amount. Without a provision to equalize contributions beyond basic need, inequities are created because some districts have much larger tax bases than others, and can contribute a lot of extra money with a small additional tax.

- Some districts are entitled to more Federal Impact Aid (PL 81-874) than others. The state deducts 90 percent of these funds to help finance foundation grants, but allows districts to keep the remaining 10 percent—which is inequitable. The state could deduct the entire PL 81-874 money. However, if the state did not allow districts to keep any of these federal grants, districts might not bother to apply for them—and the state's foundation costs might rise as much as \$60 million per year.

Taxpayer Equity: The foundation program provides reasonable taxpayer equity, because it requires most cities and boroughs to collect the equivalent of a 4-mill property tax. But it could be improved:

- By capping the required local effort at 35 percent of basic need, the formula creates inequity, because households in wealthy districts—specifically the North Slope Borough and Valdez—pay a much smaller fraction of their income in school taxes than do households in other places. Removing the cap and requiring residents of wealthy districts to pay the same in school taxes as other Alaskans would create greater taxpayer equity.

- Residents of REAAs currently pay no property taxes at all. Taxpayer equity would increase if all Alaskans were required to make tax contributions to local schools.

- Both of the inequities cited above would be eliminated if the state government itself levied the 4-mill property tax and paid rebates to boroughs and cities already raising 4 mills for schools.

- An individual income tax would achieve even greater equity among taxpayers than does a property tax, but local governments in Alaska can't levy income taxes.

- Local governments currently have no incentive to cut spending below the generous level the state defines as "basic need," because they would still have to contribute 4 mills in local taxes even if they could provide the same level of service for less. This disincentive would be removed if the foundation formula were turned into a matching grant program in which the state provided a certain percentage (or multiple) of each dollar spent on education in the district. Districts could then increase or decrease budgets above or below basic need with an accompanying proportional change in the state contribution. The state's share might be close to 100 percent for the poor districts, but very small for the richest districts. This type of matching grant formula—in use in several other states—would improve both education equity and taxpayer equity.

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E. Lee Gorsuch, Director
Institute of Social and Economic Research
University of Alaska Anchorage
3211 Providence Drive
Anchorage, Alaska 99508
(907) 786-7710

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