# School District Spending



February 1990

Program Evaluation Division
Office of the Legislative Auditor
State of Minnesota

# Program Evaluation Division

The Program Evaluation Division was established by the Legislature in 1975 as a center for management and policy research within the Office of the Legislative Auditor. The division's mission, as set forth in statute, is to determine the degree to which activities and programs entered into or funded by the state are accomplishing their goals and objectives and utilizing resources efficiently. Reports published by the division describe state programs, analyze management problems, evaluate outcomes, and recommend alternative means of reaching program goals. A list of past reports appears at the end of this document.

Topics for study are approved by the Legislative Audit Commission (LAC), a 16-member bipartisan oversight committee. The division's reports, however, are solely the responsibility of the Legislative Auditor and his staff. Findings, conclusions, and recommendations do not necessarily reflect the views of the LAC or any of its members.

The Office of the Legislative Auditor also includes a Financial Audit Division, which is responsible for auditing state financial activities.

## Professional Staff

James Nobles, *Legislative Auditor*

Roger Brooks, *Deputy Legislative Auditor*

Joel Alter
David Chein
Mary Guerriero
Marilyn Jackson-Beeck
Daniel Jacobson
Elliot Long
Kathleen Vanderwall
Jo Vos
Tom Walstrom
Deborah Woodworth
John Yunker

## Support Staff

Jean Barnhill
Mary Moser
Theresa Wagner

# SCHOOL DISTRICT SPENDING

**February 1990**

Second Printing

Program Evaluation Division
Office of the Legislative Auditor
State of Minnesota

Veterans Service Building, Saint Paul, Minnesota 55155 • 612/296-4708

Second printing, March 1990. Revisions:

Pages ix, 19, labels clarified in figure.
Page 3, note added to figure.
Page 81, sentence deleted and percentage changed from 1 to 50.

STATE OF MINNESOTA
OFFICE OF THE LEGISLATIVE AUDITOR
VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612/296-4708
JAMES R. NOBLES, LEGISLATIVE AUDITOR

February 22, 1990

Senator John Brandl, Chairman
Legislative Audit Commission

Dear Senator Brandl:

In June 1989, the Legislative Audit Commission directed the Program Evaluation Division to examine school district spending. Our evaluation has two parts. The first part reviews the quality of financial data submitted to the state by school districts. The second looks at patterns in education spending.

We found problems with the data, at least at the state level. The state's data collection system is too complex and difficult to use, and statewide summaries of education spending are unreliable for analysis and policymaking. We recommend ways to improve the quality of financial data on schools at the state level. We also make several suggestions on how more cost-effectiveness may be achieved in some school districts.

We are grateful for the assistance of the Department of Education, State Auditor's Office, and local school districts. We also thank numerous educators and administrators for their cooperation.

The report was researched and written by Marilyn Jackson-Beeck (project manager), Jo Vos, and Deborah Woodworth. Assistance was provided by Kathi Vanderwall, Jim Ahrens, and Lisa Griskey.

Sincerely yours,

James R. Nobles
Legislative Auditor

Roger Brooks
Deputy Legislative Auditor

# TABLE OF CONTENTS

# LIST OF TABLES AND FIGURES

TABLES

TABLES, continued



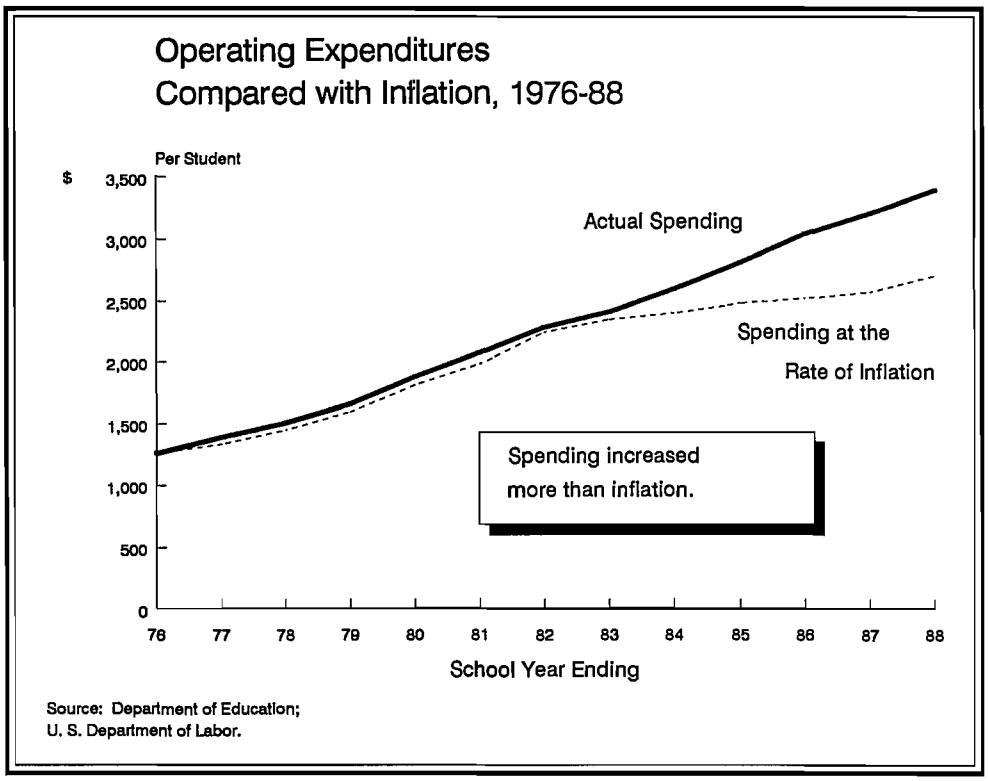
FIGURES

# SCHOOL DISTRICT SPENDING

## Executive Summary

Minnesota spends more for education than most states and has increased its financial commitment steadily over the past 15 years. Since the early 1980s, local school districts have spent more per student than inflation would demand. In addition, most of the revenue for education at the primary and secondary levels now comes from the state, not local sources.

**Education spending increased faster than inflation.**




Because of the state's dominant role in education funding, legislators have enacted measures which require all local school districts to use a set of uniform standards for their financial accounting. It has been hoped that comparable information on education spending would help to determine whether some school districts need extra money for particular programs, services, and activities. Whenever new legislation is proposed to improve education, legislators also need good information to determine whether school districts can afford to make the desired changes.

In 1989, the Legislative Audit Commission requested a study of education spending, focusing particularly on the quality of data which school districts provide to the state. In this evaluation, we asked:

- **What type of financial data is available from Minnesota school districts? How accurate is it? How could the reporting system be improved?**
- **How has Minnesota's education spending changed over time? How does spending and staffing compare nationally?**
- **How do districts spend their money? On the average, how much goes for regular instruction, administration, busing, meals, maintenance, and other services?**
- **What accounts for variations in spending from district to district? Why do some districts spend more than others?**

# BACKGROUND

**Districts report spending data each year through UFARS.**

Minnesota school districts routinely report their annual expenditures to the state and local communities. A 1976 law required school districts to follow uniform financial accounting and reporting standards (UFARS). In 1980, the Legislature required that districts maintain multi-dimensional accounting records and provide computerized financial data regularly to the Department of Education through regional computer centers.

Since the 1970s, the UFARS system has helped to reduce school administrators' burden of paperwork and enhanced the Department of Education's ability to monitor local financial conditions. Also, UFARS has become the state's primary source for comparative figures on school district spending.

Our evaluation is based mainly on a re-examination of data which the Minnesota Department of Education maintains on each local district's expenses for the 1987-88 school year (the most current complete information). Our report explains why Minnesota's education spending tends to be high compared with other states. In addition, we outline the laws, procedures, and agencies governing school administrators as they report expenditures to the Department of Education. Finally, using verified or new data, we describe school district spending and some of the reasons why costs vary from district to district.

# DATA QUALITY

State policymakers need accurate statewide information on school spending in order to assess the cost-effectiveness of various educational programs and management practices and to make funding decisions. For many years, policymakers have relied on the state's principal source of spending data, UFARS. While few question the usefulness of UFARS as a uniform accounting system, some claim that it does not yield valid and reliable statewide spending data.

We evaluated the accuracy of 107 items of information on school districts' expenditures for common programs, services, and activities during 1987-88. Administrators in our statewide sample of 97 school districts reviewed all the figures and told us whether each was accurate and defined according to the UFARS manual. When the figures were incorrect, the administrators often could estimate or tell us their actual expenditures. Also, they explained why the discrepancies occurred.

Our evaluation showed that:

- **Forty-five percent of the UFARS expenditure items we tested had been misreported to the Department of Education.**

**Only about half the items we tested were valid and reliable.**

Usually, the reason was simply that school district administrators were unable to report their expenditures in categories defined by the UFARS manual. Sometimes, the figures required adjustment up or down to become consistent with the definition in the manual. In addition, some administrators discovered that technical complexities of the computer system had produced results which they did not intend. For example, one business official learned that he had reported $11 million in a category of spending which should have been $1.5 million. Another had accidentally informed the department that his district spent $170,000 for a program which really cost less than $3,000. In general, we found that the UFARS system produced the best information on spending for tangible goods and simple transactions.

Also:

- **Some administrators reported their expenses in general categories, while others were inclined to use finer breakdowns.**

When administrators tried to classify expenditures at higher levels of abstraction or indicate the educational purpose which was served, they often faltered. For example, the data were unreliable for instructors' benefits although most UFARS administrators in our sample had correctly reported their total expenditures for employee benefits. In one case, UFARS indicated that teachers' benefits were $66,547, but the district administrator corrected that figure to $11,573,610.

Our verification report from UFARS administrators also revealed that:

- **Total expenses for regular instruction had been reported incorrectly in about one-third of the Minnesota school districts in 1987-88.**

For elementary instruction, about 60 percent of the districts in our sample reported their expenditures inaccurately. Kindergarten costs were misreported by 41 percent. UFARS has no category which is devoted solely to secondary education expenses, and when asked, 61 percent of the district administrators could not produce an accurate figure or reasonable estimate.

**Many administrators could not report accurate regular instruction figures by grade level or subject.**

One administrator in our sample could not fully determine her district's total operating expenditures, and two others were completely unable to verify any expenditures which had been made during the 1987-88 school year. In 14 percent of the districts we sampled, administrators found it necessary to amend their report of total operating expenses for the 1987-88 school year. Similarly, district administrators rarely could report their actual expenses for extra-, co-curricular, or athletic activities (which are defined as components of regular instruction in the UFARS system).

Despite obvious problems with UFARS data, the Department of Education publishes comparative figures each year in *School District Profiles* and distributes them to policymakers and the public. However, we found:

- **Only one of ten categories of expense (food service) in School District Profiles could be used reliably to compare expenditures from one district to another.**

## Reasons for Problems

Why are UFARS data so unreliable? Besides checking and correcting their district's expenditures, school district administrators completed a short survey which helped us pinpoint problems. Although 24 percent of the district personnel said that UFARS needs no improvement, most mentioned one or two problems. The single greatest problem, reported by 41 percent, was with the number or content of UFARS codes. We, too, observed that:

- **There are too many UFARS codes, and their definitions are unclear.**

In all, we found that the UFARS system included 1,364 codes which could be used to describe expenditures and revenues in more or less detail. Each code fits within one of several dimensions which are designed so that district administrators can compile expenses by program, purpose, or school organization within a district. Given these many options:

- **It was difficult for administrators to categorize their district's expenses consistently, especially without technical training or clear instructions.**

Second:

- **The UFARS manual is outdated, long, and complex.**

Most of its 400+ pages were written in 1985 or before. Three sections, including the introduction, were produced in 1974 or 1975. Since then, the department has sent sporadic memoranda which describe numerous new codes and changes which should be made. However,

- **Staff who needed current information on UFARS coding were not always the ones who received written instructions from the Department of Education.**

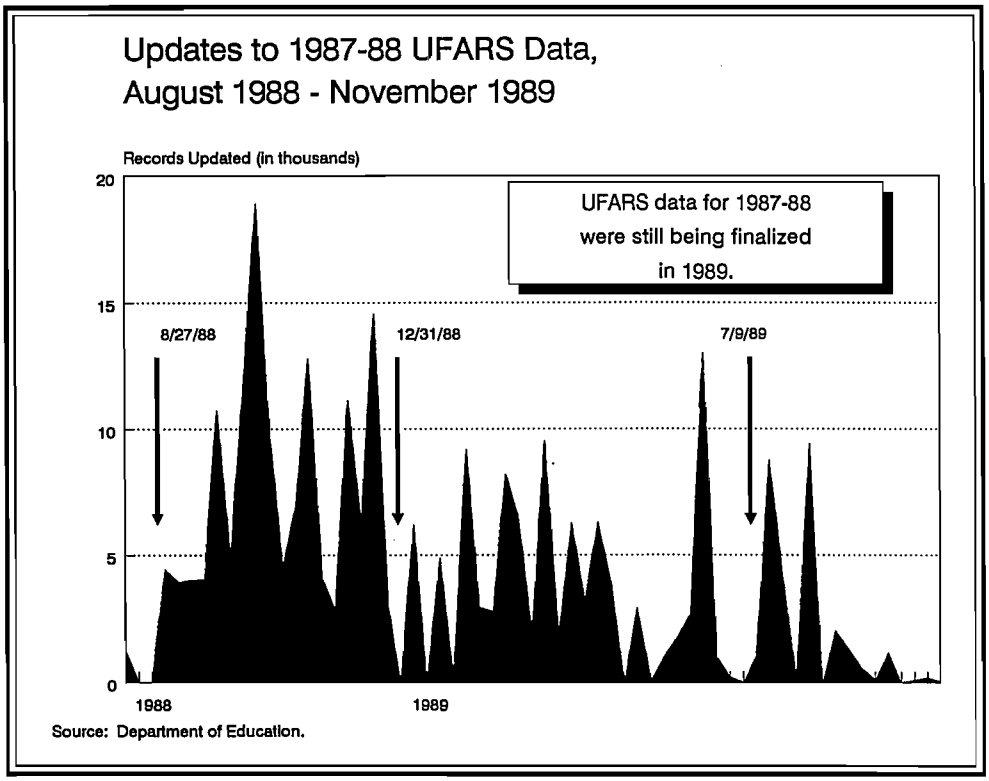
In general, we found that UFARS instructions are cumbersome, complex, and difficult to apply correctly. There are gaps and repetition between some categories of expense, and others are labeled in a misleading way. Under these circumstances, we concluded that local administrators face a difficult and time-consuming task in trying to report expenditures accurately and consistently.

**UFARS instructions are cumbersome, complex, and difficult to apply correctly.**

Third:

- **School district administrators locally determine how many and which type of categories to use in accounting for expenditures.**

Through our study, we learned that district administrators have no real use for many categories which the UFARS system provides and little incentive to code expenditures in the same way statewide. Instead, the UFARS manual encourages them to set up their own codes. Later, the data are reconstituted at regional computer centers so that (1) expenses fall only into the state's official



set of categories and (2) the Department of Education receives the information in a standard form and format, technically speaking, for computer processing.

Fourth, our evaluation revealed that districts made many changes in their official UFARS data over a period of 15 months.

- **School districts changed thousands of entries to the department's data base.**

As recently as November 1989, we found that department staff continued to modify data on school district spending which could have occurred as much as two years earlier, during the 1987-88 school year. Meantime, seven districts were at least three months late in submitting their unaudited expenditures to the Department of Education for 1988-89.

Fifth, the state has weakened UFARS by developing several separate data collection systems for the purpose of making aids payments. At least in these areas of expenditure--including special education, vocational education, and transportation--reimbursements are not based on UFARS data, and districts lack an incentive for reporting accurately through UFARS.

Sixth, we found that UFARS does not always include all funds spent by school districts:

- **School districts maintain separate, cash-based "student activity accounts" from which nearly $30 million was spent in 1987-88.**

**Some expenditures need not be reported to the state.**

Although these accounts represent perhaps less than one percent of total statewide educational expenditures, they contribute to a distorted picture of certain subcategories of spending. The accounts may be controlled by school principals, faculty advisors, and other employees rather than local school boards and thus may not be reported to the state through UFARS. Our review of a statewide sample of audited financial statements showed that the accounts include expenditures for activities such as student council and pep club, but the largest category is miscellaneous expenses (e.g., revolving accounts and petty cash). More importantly:

- **Student activity accounts included expenses for all types of educational programs, services, and activities--not just extra-curricular or student-related activities as the law permits.**

For example, some accounts were labeled hot-lunch labor, library, faculty, term life insurance, transportation, and Blue Cross/Blue Shield.

Finally, although several agencies help to oversee UFARS, our evaluation indicated that:

- **No state-level or regional entity is clearly responsible for ensuring that school districts provide spending figures which are complete, accurate, or comparable.**

The State Board of Education is statutorily responsible but has developed only a brief set of rules. Two councils advise the state board, but for the most part, one takes a technical, computer-oriented role, and the other authorizes the mechanical addition or deletion of codes which districts may use to report their expenditures.

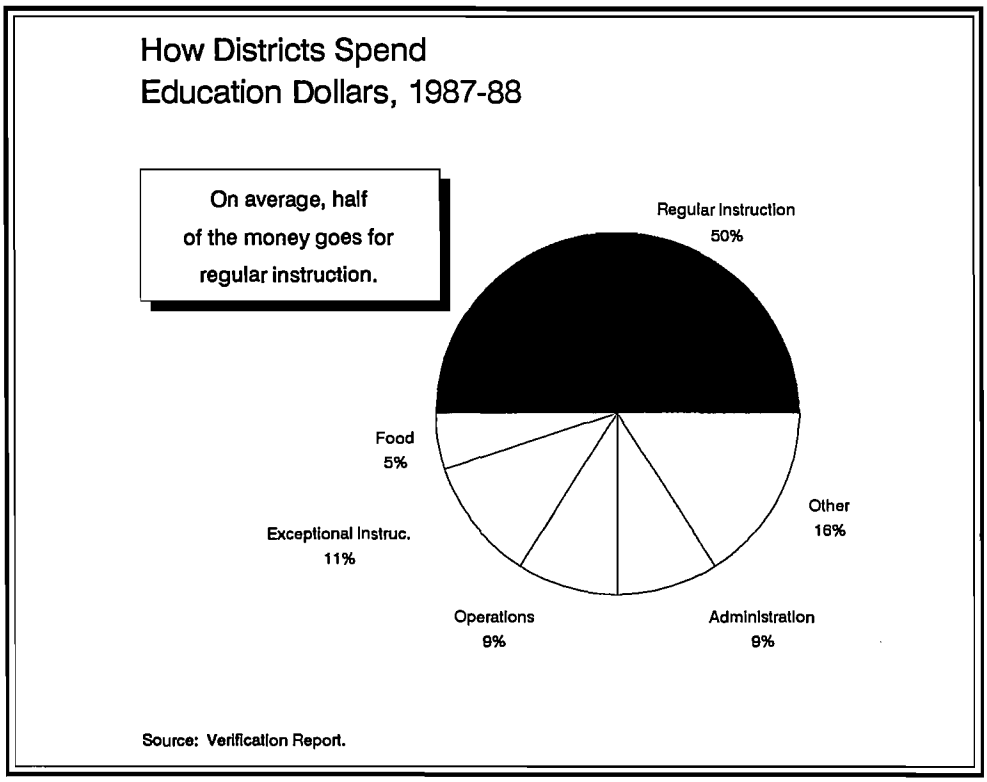
# SCHOOL DISTRICT SPENDING

Despite serious problems with UFARS data, there is some accurate information which can be used to describe educational expenditures in Minnesota. In some areas of spending, we found that UFARS data were satisfactory to analyze variations across the state. Through our study, we gathered new and corrected information which is otherwise unavailable. Also, state and national statistics can be used to compare total expenditures.

First, our evaluation disclosed that:

- **School districts spent about half of their resources ($1.6 billion) on regular instruction in 1987-88.**

**Districts spent more than $3.4 billion during 1987-88.**



Another 11 percent ($432 million) went for exceptional instruction, 9 percent ($221 million) for administration, 9 percent ($285 million) for operations and maintenance, and 5 percent ($127 million) for food service. The remaining 16 percent (about $549 million) of the education dollar bought assorted services including pupil transportation, vocational instruction, instructional support, pupil support services, and other items.

Second, we examined the main objects of expenditures. Results showed that that less than half (46 percent) of school districts' total operating expenses went for compensating teachers and aides who provided regular instruction to elementary and secondary students. Nine percent covered exceptional instructors' salaries and benefits, and eight percent was for administrators' compensation.

In total:

- **Seventy-eight percent of all operating expenses were for salaries and benefits, 13 percent for purchased services, and 9 percent for supplies and materials.**

## Total Operating Expenses

**On the average, it cost $4,243 per student to operate Minnesota's school districts.**

In our evaluation, we found that the cost to operate Minnesota's school districts was, on the average, $4,243 for each enrollee in 1987-88, excluding capital and debt service expenses. Statewide, 50 percent of all school districts spent less than $2.6 million for operating expenses, while the largest ten percent of districts each expended nearly $15 million.

Overall, we calculated that:

- **Total operating expenses per student were $23.75 on the average per day or about $3 per hour.**

However, expenses per student varied from district to district by as much as $8.60 daily or $1.32 hourly.

## Explanations for Variation

We focused on eight factors which might help to explain differences in expenditures. Three proved to be critical: local referendum levies, enrollment size, and districts' percentage of AFDC students. Usually, each of these factors was important in its own right, but local referendum levy dollars carried the most weight.

Partly because the majority of small districts have passed local referendum levies, we found that these districts had the greatest operating expenses per student in 1987-88. As the figure shows, where enrollment was lowest, ex-

penses for each student were fully $1,000 above the state average. In fact, we found that:

- **In districts where enrollment was very low, local referendum levies produced as much as twenty percent more money per student than the state disbursed.**

As one might expect, where the percentage of AFDC students was high, costs were also higher. However, the AFDC student population is concentrated in the two Twin Cities districts which are among those with the highest cost of living in the state.

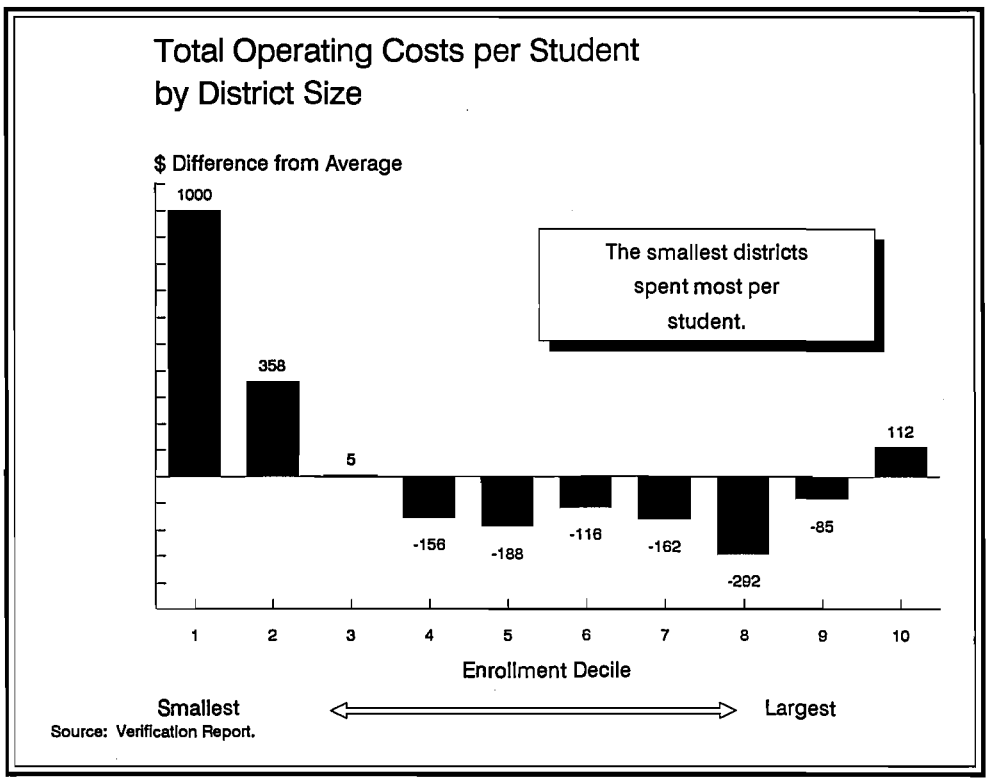
# Instruction

Regular instruction is the largest single category of expense for school districts, and of course, it represents the most basic function of public education. We found:

**Regular instruction is the largest single category of expense.**

- **The smallest school districts generally spent more per student for regular instruction than larger districts.**

One reason for this is simply that they have few students over which to spread the cost of staff and basic services. Second, as we mentioned above, the smallest districts typically received substantial amounts of unequalized revenue from local referendum levies. Third, the fraction of students whose families received AFDC benefits tended to be lower in districts with small enrollment.



On the average:

- **It cost about $12 a day or $1.50 an hour for districts to provide non-vocational, non-exceptional instruction, supplies, services, and activities.**

Half of the districts spent $1.4 million or less in total for regular instruction in 1987-88, but in the state's largest districts, expenses exceeded $7 million.

## Administration

Statewide, we found that:

- **On a daily basis, most districts spent $2.06 or less per student to administer educational programs, services, and activities in 1987-88.**

On the average, districts spent $325 per student to compensate administrators and related staff. However, in districts with the smallest two deciles of enrollment size, the average was more than $100 higher. Further, the largest amount of administrative compensation in the state's smallest districts went directly to the superintendent and local board members. In contrast, expenses for superintendents and board members were only a fraction of the total compensation for administrators in the state's largest school districts.

On the average, we found that districts paid $56,007 for superintendents' salaries and benefits in 1987-88. In addition, the superintendent's office and assistants cost an average of $17,518. However, our evaluation showed that costs were halved when districts shared the services of superintendents who may be employed part-time.

For school board members, districts paid nearly $4 million in compensation statewide during 1987-88. In half the districts, each board member received $925 or less, and each member's total costs were below $2,000. This included employee benefits such as group health insurance.

## Operations and Maintenance

We calculated the total cost of operations and maintenance per student and per square foot. Results showed that:

- **Statewide, the public school system provided more than the maximum desirable amount of space per student.**

On the average, there were 208 square feet of instructional space for each student. However, the Department of Education recommends a maximum of only 110 square feet for elementary pupils and 200 square feet for secondary students. Thus, we learned:

- **Most (76 percent) of the state's school districts maintained more instructional space than guidelines suggested.**

Statewide, these districts maintained an average of 28 percent more instructional space than state standards indicated was desirable. The amount of potentially unnecessary space was greatest in the state's smallest school districts which have fewer than 300 enrollees.

We calculated the cost per district to operate and maintain each square foot of excess instructional space, if any. The result was that:

- **School districts could have spent up to $34 million to maintain excess instructional space in 1987-88.**

# Food Service

During the 1987-88 school year, districts spent about $127 million on food service programs. About half of this total went to purchase supplies and materials, and half was for labor. On the average, each district spent $292,152, which amounted to $196 per student.

Again, enrollment size helped to explain variations in the cost of food service programs statewide. In general, smaller districts spent substantially more per student than larger districts.

Although nearly one-fourth of the state's school districts managed to cover the cost of hot lunches, we learned that 78 percent of the districts which provided hot lunch lost money on their programs. For the 338 districts which lost money, the average deficit was $25,252.

**A la carte programs help offset losses from hot lunch programs.**

One way school districts make up hot lunch losses is through a la carte and other programs. These may involve catering, producing meals for senior citizens, and serving salads, snacks, and sandwiches to students (aside from balanced meals). In addition, school districts can use reserves, if any, from previous years, or transfer money from the general fund.

We asked the administrators in our statewide sample to tell us what they did in 1987-88 and found:

- **About one-third of the state's districts transferred money from their general fund to make up for food service program losses.**

The transfers ranged from about $21,000 to $630,000 and totaled about $1.7 million statewide. In other words:

- **Food service losses took about the same amount of money from school districts' general funds as could have paid the salaries of about 61 teachers statewide for the year.**

## Transportation

**Simply moving students to and from school accounts for most transportation spending.**

In all, our statewide figures showed that districts spent about $177 million for pupil transportation during the 1987-88 school year. Most of the cost, about $111 million, was simply to move students back and forth from school. Transportation expenses varied among districts partly because they provide different types of service. Two factors which helped to explain why districts provided different levels of services were geographic location and enrollment size. Thus, most Twin Cities area districts provided at least six major transportation services. In the rest of the state, this was true for less than one-tenth of the districts.

On the average, districts spent $255,574 to bus students to and from school. Per mile, we found that the expenses averaged about $1.50 but were less than a dollar in some districts and nearly $2.25 elsewhere. In general, when districts provided regular pupil transportation with their own buses, it cost about 40 cents more per mile in the Twin Cities area than outstate.

# RECOMMENDATIONS

When analyzed, educational spending data suggest that school district expenses vary for many reasons, but in some areas, districts could operate more cost-effectively. We demonstrated several potential avenues of cost reduction in non-instructional areas, including administration, operations and maintenance, and food service. In particular, districts could save money by sharing superintendents, reducing compensation to school board members, pricing lunches so that costs are covered, and closing excess instructional space.

In all, we identified potential savings of several million dollars which might be realized by these measures. Furthermore, we found that:

- **Improved efficiency in some areas of non-instructional spending could free general fund resources which could be available for instruction.**

Most notably, school districts might avoid transferring money from the general fund to cover losses from food service programs and transportation. During 1987-88, we estimated, such transfers meant that:

- **School districts reduced the amount of revenue they might have used for instruction by about $5 million.**

In the area of regular instruction, it was clear that the state's smallest school districts spent most per student. However, our previous evaluation of high school curricula indicated that students in these districts have reduced access to courses and teachers, notwithstanding the additional resources which are spent for their benefit.[1] Thus, in our opinion, it would not only be economical but educationally desirable for the Legislature to further encourage the state's smallest districts to consolidate or combine with each other.

Based on accurate data from small districts which could tell us their expenditures, we estimated that:

- **By closing 85 school districts with the smallest enrollment, about $10 million statewide could have been saved from the cost of administration, operations and maintenance, and food service labor.**

This estimate assumes that transportation, instructional support, pupil support services, exceptional instructional, and regular instruction expenses all would remain as high as they were. In addition, we excluded those few districts (11 of 436) where high schools are more than 20 miles apart and rounded down the potential savings to offset some of the increased costs which neighboring districts might incur. Of course, the amount which might actually be saved would depend on the specific arrangements between neighboring districts.

We recognize that school district closures represent an extreme approach to cost control and curriculum improvement which would be difficult to achieve in the short run. However, we identified other measures which could yield lesser savings. In addition, we think there are probably many other ways to reduce school district spending while improving education, but the lack of comparable information impedes making detailed recommendations.

# Improved Data

In our opinion, the best way to ensure that education expenditures are wisely made in the future is to correct the problems which we found in the UFARS data collection system. Although this would take concentrated effort and strong leadership, we believe the results would return the initial investment.

As we showed, several agencies are jointly responsible for various aspects of UFARS. In our opinion, it would be more efficient if two of these agencies were combined and all concerned were focused on the substance of UFARS rather than the mechanical and technical aspects of computerized data processing. Therefore, we recommend that:

- **The Legislature should consolidate the UFARS and ESV councils into one advisory group.**

---

1 Office of the Legislative Auditor, *High School Education* (December 1988).

- **The Department of Education should take primary, clear responsibility and deploy resources to ensure the quality of UFARS data which it maintains.**

- **The State Board of Education should expand and clarify the rules and responsibilities of UFARS reporting by school districts.**

To determine which aspects of school district spending are of central interest to the state, our recommendation is that:

- **The Legislature should authorize an independent study of UFARS users' needs, existing data collection procedures, and districts' financial reporting capabilities.**

Perhaps under the direction of the Department of Administration's information policy office, such a study would help to ensure that UFARS data are trustworthy in the future. Based on our own study, we believe that:

- **UFARS should be simplified.**

Many of the state's UFARS categories should be dropped entirely. Our results can provide a starting point to identify categories of information which are redundant, inaccurate, rarely used, or apply only to a few districts.

Following the study, we think the Legislature, the State Board of Education, and the Department of Education all have a role to play in ensuring that the UFARS reporting system delivers a consistent core of financial information from each school district. Meantime, we believe that local districts should continue to use the system as they have been to meet local accounting, auditing, district management, and other needs.

Currently, in our opinion, the UFARS system represents a major technical accomplishment and an improvement in financial accounting. However, it unnecessarily wastes educational resources (time and money) for school districts, the Department of Education, and others. Therefore, in the future, we suggest that:

- **The Department of Education should establish clear, workable definitions for UFARS categories, update the manual once a year, and provide timely, accurate documentation and support directly to district personnel who are responsible for UFARS coding.**

It may be necessary to establish some negative consequences if districts fail to submit UFARS data on time and in accord with state specifications. However, to avoid this outcome, we believe:

- **The Legislature should clarify and strengthen the role of regional accounting coordinators to ensure the validity and reliability of**

**expenditures figures and expand the State Auditor's role to provide direction to local auditors of school districts.**

We believe that regional coordinators and local auditors are well positioned to help ensure that some centrally important financial data are reported consistently, comparably, and according to uniform standards.

Further, to ensure that districts report all their expenditures to the Department of Education, we recommend:

- **The Legislature should make local school boards responsible for all educational expenditures by their districts' employees and adopt the UFARS system for all financial accounting.**

This would mean that school districts in the future would be responsible for student activity funds which now may be overseen by school principals, advisors, and other employees.

# Other Suggestions

In our opinion, some of the UFARS information currently in *School District Profiles* could be replaced with better figures from existing non-UFARS data collection systems. Data for other comparisons might better be dropped. Also, expenditures should be reported per student, per meal, per mile, or per square foot, as appropriate to the services which districts provide. Thus, we believe:

- ***School District Profiles* should be redesigned and reduced in scope, not expanded.**

Similarly, we think that the Department of Education should reconsider its plan to model the data collection process for a new computer system (the integrated data base or IDB) on UFARS. In our opinion, UFARS represents an improvement in financial accounting and computerized data collection, but:

- **The substance or "output" of the UFARS system provides an unsound basis for comparing expenditures among school districts.**

Therefore:

- **The link between UFARS and other data in the Department of Education's integrated data base should be delayed unless or until a statewide source of reliable, consistent expenditures data is developed and tested.**

As we showed, some of the financial items that are earmarked for the IDB are inaccurate, incomplete, and not comparable from district to district. Linking these items with staff and student data could be misleading.

Most of the measures we recommend are basic steps which we believe will help school spending data become generally reliable and comparable in the future. Although UFARS may meet financial accounting and other needs of district administrators on a local level, we conclude that legislators, staff, educators, and the public should exercise caution when using the data statewide.

# INTRODUCTION

Policymakers and the public in Minnesota are firmly committed to public education and have backed their commitment with substantial funding. For example, compared with other states, Minnesota has long spent more on education than the national average. Expenditures per student and per teacher thus rank high, and student-teacher ratios low.

Over the past several years, Minnesota's spending has grown steadily beyond the local rate of inflation. The state's aid to school districts exceeded $3 billion in the 1988-89 biennium and consumed 27 percent of general fund expenditures. Compared with all other states, Minnesota ranked 16th in state funding for education during the 1987-88 school year and 31st in local funding.

In light of this large, growing investment of state money, the Legislature's need for information about school district spending has steadily increased. Policymakers want comparable information so that they can determine whether school districts can afford to make improvements which most agree are needed. Also, they wish to ensure that taxpayers' money is being spent fairly and wisely.

In 1987, concerns about rising expenditures prompted the Legislative Audit Commission to request an evaluation to determine whether administrative costs were contributing unduly to overall spending for education. That study, completed in March 1988, concluded that the cost increases were mainly attributable to teacher salaries and the state's high-level commitment to special education. However, serious questions about the quality and comparability of school district spending data limited the analysis to gross categories of expenditures.

Last year, the Legislative Audit Commission again requested a study of education expenditures, focusing particularly on what problems, if any, plagued the data which school districts provide to the Department of Education. In our evaluation, we asked:

- **How has Minnesota's education spending changed over time? How does spending and staffing compare nationally?**

- **What type of financial data is available from Minnesota school districts? How could the reporting systems be improved?**

- **How do districts spend their money? On the average, how much goes for regular instruction, administration, busing, meals, maintenance, and other services?**

- **What accounts for variations in spending from district to district? Why do some districts spend more than others?**

To answer these questions, we gathered data and spoke individually with administrators from more than 100 Minnesota school districts. We surveyed staff who were directly responsible for submitting spending data to the Department of Education and independently assessed the quality of their data. Further, we visited school districts and regional computer centers throughout the state to learn firsthand what problems have occurred in reporting educational expenditures. Finally, with the assistance of the State Auditor and Department of Education, we reviewed school districts' audited financial statements, general financial condition, and selected receipts of state aid.

As we evaluated educational expenditures, we scrutinized the validity and reliability of statewide information. Education constitutes the single largest portion of the state's budget, but most of the responsibility for spending rests with local districts. Further, the districts have wide discretion to spend money and report their expenditures as they see fit. This has contributed to a general shortage of comparable, reliable, statewide data on education spending. Our study helps to correct this situation for one year only by providing more reliable figures for some categories of expenditure.

Our evaluation is presented in the following four chapters. Chapter 1 presents an overview and trend analysis of educational resources in Minnesota and the nation. In Chapter 2, we review the legislation, rules, and agencies which govern the production of data on school district spending. Chapter 3 describes the quality of data and explains why some items are inappropriate for analyzing statewide expenditures for education. Finally, in Chapter 4, we present accurate statewide statistics on school district spending.

# STATEWIDE SPENDING TRENDS

## Chapter 1

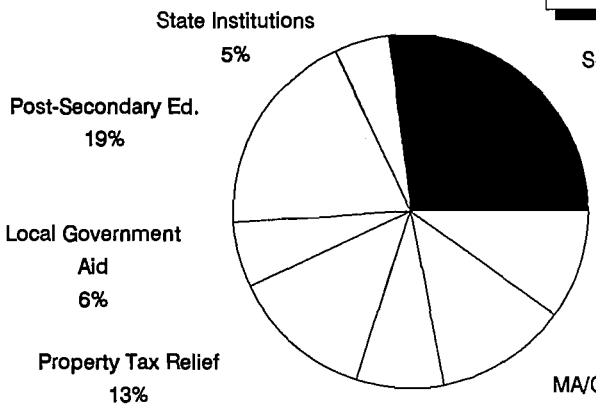
Today more than ever, how school districts spend their resources is a statewide concern. Previously, the Legislature focused mainly on questions of financial equity and aid distribution among school districts. For the most part, districts were free to allocate the resources they received with little oversight at the state level.

Interest in local education spending has grown since the 1970s as the state has increased its support for school districts. Although state aid as a percentage of total district revenues generally grew during the 1970s (peaking at 73 percent during the 1981-82 school year), it has since stabilized around 62 percent.[1] For the average district, the state has become the major source of revenue.

As Figure 1.1 shows, aid to local districts accounted for more than a quarter of the state's 1988-89 biennial budget. In light of this large, growing investment

Figure 1.1: General Fund Expenditures, 1988-89 Biennium

School district aid accounts for more than one-fourth of the budget.




Note: In addition, about half the money for property tax relief goes to school districts.

Source: Department of Finance.

1 Minnesota Senate Counsel and Research, *Percent State Support for Education* (November 1989).

of state money, the Legislature's need for information about school district spending steadily increased. A law enacted in 1976 (Minn. Stat. §121.90) required school districts to follow uniform financial accounting and reporting standards (UFARS). In 1980, the Legislature began to require that districts maintain multi-dimensional accounting records and provide computerized financial data regularly through regional computer centers.

To make informed decisions about educational funding, legislators wanted accurate and reliable information which they could use to compare spending from district to district. They wanted to know how state money was being spent, especially since research revealed that increases in education expenditures have exceeded the general rate of inflation.[2]

This chapter looks at the resources--both money and staff--which have been devoted to education in Minnesota over the years. First, we discuss statewide education expenditures and national trends. Second, we review changes in student-staff ratios and educators' salaries, the largest components of education spending. Finally, we review the state's role in education funding and examine the most recent information available on school districts' financial status.

Specifically, we asked:

- **How much does Minnesota spend for elementary and secondary education? How much have costs increased over time, and why?**
- **What is the level of staffing in Minnesota's schools? Are there enough teachers, and are they paid at competitive rates?**
- **What role does the state play as a source of funds for local school districts? How has this changed over time?**
- **How many school districts are in debt, and how many hold extra money in reserve? In general, are the school districts in sound financial shape?**

# MINNESOTA'S COMMITMENT TO EDUCATION

**Education spending was more than $3.4 billion in 1987-88.**

Minnesota has traditionally provided strong financial support to education. During the 1987-88 school year, school districts spent more than $3.4 billion to educate Minnesota's elementary and secondary children.

2 Office of the Legislative Auditor, *Trends in Education Expenditures* (March 1988).

Not all of this amount, however, was spent on public school students. As shown in Table 1.1, eight state and three federal programs provided financial aid and income tax deductions to defray some of the costs of nonpublic education in 1987-88. Nearly one percent of the state's education expenditures--almost $30 million--benefited students at private and parochial schools.[3]

## Table 1.1: Nonpublic Pupil Aid Programs, 1987-88

| | FY 1988 Funding Estimates (000's) |
|---|---|
| STATE PROGRAMS | |
| Nonpublic Pupil Aids | |
| Texts/instructional materials | $3,938.8 |
| Health services | 1,140.8 |
| Guidance/counseling services | 1,955.1 |
| Administration | 338.1 |
| Subtotal | $7,372.8 |
| Shared-time Program | 1,662.8 |
| Pupil Transportation | 13,790.6 |
| Limited English Proficiency | 60.0 |
| Chemical Dependency | 31.2 |
| Tobacco Use Prevention | 24.4 |
| School Lunch Program | 306.1 |
| State Income Tax Deduction[a] | 5,000.0 |
| State Total | $28,247.9 |
| FEDERAL PROGRAMS | |
| School Lunch Act and Child Nutrition Act | 2,977.5 |
| Federal Block Grant | 683.6 |
| Federal Teacher Inservice | 94.6 |
| Federal Total | $ 3,755.7 |
| Grand Total | $32,003.6 |
| Nonpublic Pupils | 85,043 |

Source: 1990-91 Proposed Biennial Budget.

[a]This is not a state funding estimate. Rather, it is an estimate of the amount of tax revenue that would be realized if the deduction for K-12 education expenses was not in effect.

3 In Chapter 3, we show major errors in some of the figures which the state uses to reimburse local districts for their service to nonpublic students.

# NATIONAL COMPARISONS

Using the most accurate, comparable data on education expenditures, we found that Minnesota has spent more than the national average by any measure.[4] Also, Minnesota has employed more licensed staff per student than most other states. Our analysis was based on data from three major sources: (1) Bureau of the Census, U.S. Department of Commerce, (2) National Education Association, and (3) the U.S. Department of Education.[5]

Table 1.2 compares Minnesota's education spending in 1987-88 with the national average on some popular measures: general expenditures per capita, general expenditures per $1,000 of personal income, current operating expenditures per student, and per capita expenditures for capital outlay. As we show in the following tables and figures, each measure of education spending indicates that:

**Education spending in Minnesota is above the national average.**

- **Minnesota spends more than average on education and has done so for at least the past 16 years.**

## Table 1.2: General Measures of U.S. and Minnesota Education Spending, 1986-87

| | U.S. | Minnesota | Percent Above U.S. Average |
|---|---|---|---|
| General expenditures per capita | $644.13 | $750.67 | 17% |
| General expenditures per $1,000 of personal income | 44.42 | 50.45 | 14% |
| Operating expenditures per student[a] | 3,987 | 4,150 | 4% |
| Per capita expenditures for capital outlay | 47.79 | 50.56 | 6% |

Sources: Bureau of the Census, U.S. Department of Commerce; National Education Association.

[a]1987-88.

Yet while Minnesota has traditionally outspent most states, we found some recent evidence that:

- **Minnesota's relative advantage over other states has declined somewhat over the years.**

*4* Currently states are not required to report education expenditures to the U.S. Department of Education although such a requirement is being formulated.

*5* Each national data source uses slightly different conventions. For example, the National Education Association reports operating expenditures, while the Bureau of the Census presents statistics on general (total) expenditures. The latter combines operating, capital, interest, and other non-operating expenses. Thus, comparisons of expenditures and rankings across data sources may not produce consistent results for any given year.

We believe this change in status is due mainly to the national attention which education reform began to receive in the early 1980s. Between 1982-83 and 1986-87, states increased aid to public schools by 41 percent, more than twice the rate of inflation.[6] Second, enrollment gains have been pronounced in some parts of the United States (particularly the South and West), while enrollment tended to decline in Minnesota. Third, teacher salaries have increased substantially in some states where they had been quite low. Salary increases in the South were particularly large--more than 60 percent in Georgia and Virginia. Nationwide, ten states increased salaries by at least 45 percent during the 1980s.

## General Expenditures Per Capita

One of the commonly cited comparisons of elementary-secondary education spending among states is based on expenditures per capita. These data, published by the Bureau of the Census and presented in Table 1.3, show that:

**In 1987, Minnesota spent 17 percent more per capita than the national average.**

### Table 1.3: General Per Capita Expenditures of State and Local Governments for Elementary and Secondary Education, 1971 through 1987

| Fiscal Year | U.S. Average | Minnesota | Minnesota Per Capita Rank | Percent Above U.S. Average |
|---|---|---|---|---|
| 1971 | $202.49 | $266.35 | 3 | 31% |
| 1972 | 219.27 | 283.43 | 6 | 29 |
| 1973 | 232.49 | 297.46 | 5 | 27 |
| 1974 | 251.00 | 299.20 | 6 | 19 |
| 1975 | 288.50 | 347.32 | 6 | 20 |
| 1976 | 315.26 | 372.80 | 6 | 18 |
| 1977 | 329.79 | 379.60 | 10 | 15 |
| 1978 | 351.73 | 403.21 | 8 | 15 |
| 1979 | 378.85 | 417.79 | 16 | 10 |
| 1980 | 410.28 | 460.40 | 14 | 12 |
| 1981 | 443.77 | 499.68 | 11 | 13 |
| 1982 | 468.34 | 572.77 | 6 | 22 |
| 1983 | 482.71 | 575.89 | 7 | 19 |
| 1984 | 511.93 | 608.35 | 8 | 19 |
| 1985 | 552.85 | 656.70 | 6 | 19 |
| 1986 | 601.93 | 703.29 | 7 | 17 |
| 1987 | 644.13 | 750.67 | 7 | 17 |

Note: Figures are not adjusted for inflation.

Source: Bureau of the Census, U.S. Department of Commerce.

6 U.S. Department of Education, *Results in Education* (Washington, 1988), 44.

- **In 1987, Minnesota spent 17 percent more per capita than the national average and ranked seventh among the 50 states.**

- **Minnesota's position among the 50 states has declined since 1971 when the state spent 31 percent more per capita than the national average and ranked third.**

**In 1987, Minnesota ranked seventh in per capita expenditures for education.**

However, these data also indicate that Minnesota's relative position has risen since 1979 after a period of decline. Between 1971 and 1979, per capita spending increased 57 percent in Minnesota compared with 87 percent nationally. Since then, Minnesota's spending has been nine percentage points above the national average--79 percent compared to 70 nationwide.

Minnesota's rank of seventh is now about the same as it was in 1972. However, it appears that the state's per capita spending has increased more slowly than the national average in recent years. National figures are several years old, but:

- **Since 1985, per capita education expenditures increased 17 percent across the nation compared with 14 percent in Minnesota.**

## Operating Expenditures Per Student

National comparisons of operating expenditures per pupil are available from the National Education Association. Table 1.4 presents these data for each year from 1971 through 1987.[7] The results show:

- **In 1987, Minnesota's operating expenses per pupil were four percent higher than the national average, and the state ranked 15th.**

Again, Minnesota's rate of increase and rank among states used to be higher. During the 1970s, state spending was about 10 percent above the national average.

## Ability to Pay

The Bureau of the Census also publishes general (total) spending comparisons for elementary and secondary education per $1,000 of personal income. This measure does not adjust for a state's population or its student enrollment, but it does take states' relative wealth into account.

Table 1.5 reveals that overall spending as a proportion of wealth has declined in the nation and in Minnesota. Also:

7 We report expenditures by average daily attendance because this type of enrollment figure appears to be used most consistently from state to state.

## Table 1.4: Current Operating Expenditures Per Student, 1971 through 1987

**Operating expenses per student were four percent above the national average in 1987.**

| Fiscal Year | U.S. Average | Minnesota | Minnesota Rank | Percent Above U.S. Average |
|---|---|---|---|---|
| 1971 | $ 868 | $ 878 | 18 | 1% |
| 1972 | 970 | 1,039 | 13 | 7 |
| 1973 | 1,035 | 1,160 | 10 | 12 |
| 1974 | 1,143 | 1,321 | 9 | 16 |
| 1975 | 1,286 | 1,452 | 12 | 13 |
| 1976 | 1,441 | 1,542 | 13 | 7 |
| 1977 | 1,594 | 1,822 | 10 | 14 |
| 1978 | 1,751 | 1,929 | 14 | 10 |
| 1979 | 1,971 | 2,253 | 12 | 14 |
| 1980 | 2,230 | 2,561 | 10 | 15 |
| 1981 | 2,464 | 2,857 | 11 | 16 |
| 1982 | 2,721 | 2,963 | 14 | 9 |
| 1983 | 2,960 | 3,136 | 17 | 6 |
| 1984 | 3,183 | 3,373 | 20 | 6 |
| 1985 | 3,457 | 3,671 | 17 | 6 |
| 1986 | 3,785 | 4,008 | 15 | 6 |
| 1987 | 3,987 | 4,150 | 15 | 4 |

Note: Figures are not adjusted for inflation.

Source: National Education Association.

## Table 1.5: State and Local Spending for Elementary and Secondary Education Per $1,000 of Personal Income, 1971 through 1987

**Minnesota's expenditures per $1,000 of personal income were 14 percent higher than the national average in 1987.**

| Fiscal Year | U.S. Average | Minnesota | Minnesota Rank | Percent Above U.S. Average |
|---|---|---|---|---|
| 1971 | $52.27 | $70.90 | 6 | 36% |
| 1976 | 53.82 | 64.85 | 7 | 20 |
| 1977 | 51.94 | 61.55 | 9 | 19 |
| 1978 | 50.52 | 57.03 | 8 | 13 |
| 1979 | 48.80 | 53.50 | 16 | 10 |
| 1980 | 48.13 | 52.15 | 15 | 8 |
| 1981 | 46.48 | 51.25 | 14 | 10 |
| 1982 | 44.11 | 52.96 | 9 | 20 |
| 1983 | 43.92 | 51.67 | 8 | 18 |
| 1984 | 44.22 | 51.28 | 11 | 16 |
| 1985 | 43.70 | 49.95 | 10 | 14 |
| 1986 | 43.83 | 50.17 | 13 | 14 |
| 1987 | 44.42 | 50.45 | 13 | 14 |

Note: Figures are not adjusted for inflation.

Source: Bureau of the Census, U.S. Department of Commerce.

- **In 1987, Minnesota's total expenditures per $1,000 of personal income were 14 percent above the national average, compared with 36 percent above in 1971. Minnesota ranked 13th in 1987 and 6th in 1971.**

# Capital Expenditures

Finally, national figures (Table 1.6) show that Minnesota's capital expenditures have consistently exceeded the national average for the past several years. The percentage has varied widely, but over the past 12 years:

- **Minnesota's per capita expenditures for educational capital outlay have exceeded the national average by about 20 percent.**

## Table 1.6: Per Capita Expenditures of State and Local Governments for Educational Capital Outlay, 1971 through 1987[a]

| Fiscal Year | U.S. Average | Minnesota | Percent Above U.S. Average |
|---|---|---|---|
| 1971 | $23.49 | $41.61 | 77% |
| 1976 | 30.50 | 42.30 | 39 |
| 1977 | 27.65 | 29.21 | 6 |
| 1978 | 26.18 | 32.34 | 24 |
| 1979 | 28.94 | 31.31 | 8 |
| 1980 | 32.50 | 40.84 | 26 |
| 1981 | 32.85 | 41.51 | 26 |
| 1982 | 30.63 | 36.92 | 21 |
| 1983 | 30.77 | 34.51 | 12 |
| 1984 | 30.73 | 36.30 | 18 |
| 1985 | 37.06 | 49.80 | 34 |
| 1986 | 42.62 | 51.94 | 22 |
| 1987 | 47.79 | 50.56 | 6 |

Note: Figures are not adjusted for inflation.

Source: Bureau of the Census, U.S. Department of Commerce.

[a]Capital outlay includes expenditures for equipment, land, new construction, and building additions.

Although national data for 1988 are not yet available, the Minnesota Department of Education has reported that local spending for construction is at a peak. Later, we review these and other data which help to explain why education spending has increased so much and so consistently.

# Staffing

One reason why expenditures are higher than other states is that Minnesota usually employs more licensed staff per student. It is difficult to obtain comparable national statistics, but our conclusions are based on data from two sound sources: the National Education Association and the U.S. Department of Education.

We compared staff-student ratios and staff salaries in Minnesota with those in other states for 1988. In general, we found that:

- **Minnesota has more staff per student than the national average, and teacher salaries are higher.**

As Table 1.7 shows, Minnesota employs fewer higher-paid educational administrators but more administrative support staff than the rest of the nation. In addition:

- **Minnesota has more teachers and fewer instructional support staff per 1,000 students than the national average.**

**Minnesota has more administrative support staff and teachers per student than the national average.**

## Table 1.7: Full-Time Equivalent Staff Per 1,000 Students, 1986-87

| | Staff Per 1,000 Students | | Percent Difference From |
|---|---|---|---|
| | U.S. Average | Minnesota | U.S. Average |
| District-Based Administrators | 1.87 | 2.24 | + 20% |
| School-Based Administrators | 3.31 | 2.18 | -34 |
| Subtotal | 5.18 | 4.41 | - 15% |
| Administrative Support Staff | 3.53 | 4.37 | +24% |
| School and Library Support Staff | 4.84 | 4.16 | - 14 |
| Subtotal | 8.37 | 8.54 | + 2% |
| Counselors | 1.72 | 1.21 | -30% |
| Librarians | 1.20 | 1.07 | -11 |
| Instructional Aides | 8.35 | 7.19 | -14 |
| Teachers | 56.31 | 57.59 | + 2 |
| Other Support Services Staff | 25.49 | 18.19 | -29 |
| Subtotal | 93.07 | 85.25 | - 8% |
| Total (Excluding Other Support Services Staff) | 67.58 | 67.06 | -1% |
| Total (Including Other Support Services Staff) | 106.62 | 98.20 | - 8% |

Source: Computed from staffing and enrollment data available from the U.S. Department of Education, Center for Education Statistics.

Table 1.8 displays the number of staff per student state by state for three categories: (1) classroom teachers, (2) other non-supervisory instructional staff such as counselors, librarians, psychologists, and curriculum consultants, and (3) principals and other instructional supervisors. We can see that:

- **Educational staff in Minnesota are somewhat more heavily concentrated in the classroom rather than in supervisory or support positions.**

The trend in student-teacher ratios by state is shown in Table 1.9.[8] These data show that since 1973, student-teacher ratios have fallen across the nation, and:

**Minnesota has more favorable student-teacher ratios than the national average, and teachers are paid more.**

- **In Minnesota, the number of students per teacher has fallen from 20 to 17 compared with a national decline of 22 to 18.**

Later in this chapter, we analyze the trend in student-teacher ratios in Minnesota for special education separately from regular instruction. As we will see, Minnesota's relative advantage over the rest of the nation is due mainly to the employment of more special education teachers than most other states.

Finally, we compared average teacher salaries in Minnesota with those in other states. Figure 1.2 shows that:

- **Salaries for teachers in Minnesota were above the national average during the 1987-88 school year.**

On the average, school districts in the state paid teachers $29,900 during the 1987-88 school year, seven percent more than the national average of $28,044.

# STATE SPENDING

Education spending is classified typically into two broad categories: operating and non-operating expenditures. As Figure 1.3 explains, operating expenditures include all ongoing annual costs for elementary and secondary education. Retirement and social security contributions for licensed staff covered by retirement funds now are considered current operating expenses. However, before the 1986-87 school year, these costs were excluded from school districts' operating expenditure data because the state paid the benefits directly (on behalf of districts).[9] Non-operating expenses have consistently included capital outlay, building, and debt service activities, costs which are incurred generally over the course of several years.

Most expenses for public education (88 percent) in Minnesota were classified as current operating expenditures (including retirement costs) during the

8 Student-teacher ratios do not measure class size.

9 Because of this change, we report retirement and social security costs for licensed staff separately when possible.

# Table 1.8: Estimated Average Number of Students Per Instructional Staff Member, 1987-88

| | Classroom Teachers | Other Non-Supervisory Instructional Staff[a] | Principals and Supervisors | Total Instructional Staff |
|---|---|---|---|---|
| **UNITED STATES** | **18** | **235** | **281** | **15** |
| Alabama | 20 | 334 | 261 | 18 |
| Alaska | 16 | 332 | 252 | 15 |
| Arizona | 20 | 250 | 400 | 18 |
| Arkansas | 17 | 187 | 329 | 15 |
| California | 23 | 502 | 373 | 21 |
| Colorado | 18 | 305 | 322 | 16 |
| Connecticut | 13 | 127 | 179 | 11 |
| Delaware | 16 | 239 | 234 | 14 |
| Dist. of Columbia | 16 | 121 | 313 | 13 |
| Florida | 17 | 185 | 299 | 15 |
| Georgia | 20 | – | 438 | 19 |
| Hawaii | 19 | 130 | 439 | 16 |
| Idaho | 21 | 374 | 332 | 19 |
| Illinois | 18 | 340 | 319 | 16 |
| Indiana | 18 | 353 | 274 | 16 |
| Iowa | 16 | 259 | 330 | 14 |
| Kansas | 15 | 200 | 250 | 14 |
| Kentucky | 18 | 309 | 291 | 16 |
| Louisiana | 18 | 206 | 378 | 16 |
| Maine | 15 | 175 | 146 | 13 |
| Maryland | 17 | 213 | 244 | 15 |
| Massachusetts | 14 | 166 | 232 | 12 |
| Michigan | 20 | 91 | 320 | 16 |
| **MINNESOTA** | **17** | **260** | **380** | **15** |
| Mississippi | 19 | 359 | 341 | 17 |
| Missouri | 16 | 186 | 227 | 14 |
| Montana | 16 | 165 | 313 | 14 |
| Nebraska | 15 | 231 | 234 | 13 |
| Nevada | 20 | 210 | 306 | 17 |
| New Hampshire | 16 | 117 | 293 | 13 |
| New Jersey | 14 | 113 | 170 | 12 |
| New Mexico | 18 | 195 | 380 | 16 |
| New York | 15 | 279 | 171 | 13 |
| North Carolina | 18 | 248 | 240 | 16 |
| North Dakota | 15 | 416 | 293 | 14 |
| Ohio | 18 | 261 | 271 | 16 |
| Oklahoma | 17 | 293 | 266 | 15 |
| Oregon | 18 | 211 | 224 | 16 |
| Pennsylvania | 16 | 198 | 320 | 14 |
| Rhode Island | 15 | 195 | 255 | 13 |
| South Carolina | 18 | 205 | 280 | 15 |
| South Dakota | 15 | 289 | 261 | 13 |
| Tennessee | 20 | 252 | 300 | 17 |
| Texas | 17 | 286 | 318 | 16 |
| Utah | 23 | 353 | 340 | 21 |
| Vermont | 15 | 123 | 210 | 12 |
| Virginia | 16 | 201 | 268 | 14 |
| Washington | 21 | 191 | 349 | 18 |
| West Virginia | 15 | 265 | 206 | 13 |
| Wisconsin | 16 | 254 | 319 | 15 |
| Wyoming | 13 | 169 | 238 | 12 |

[a]Other non-supervisory staff include consultants, counselors, librarians, and psychological staff.

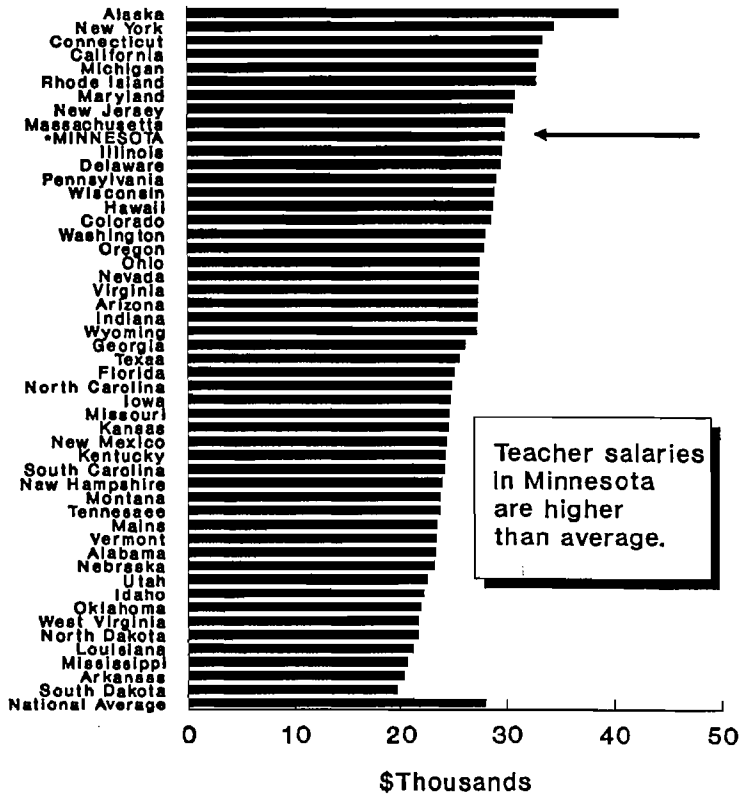
Source: Computed from selected data in the National Education Association, Estimates of School Statistics: 1987-88; (Washington, March 1988), 32, 35, 36.

# Table 1.9: Average Number of Students Per Teacher by State, 1972 through 1988

| State | ELEMENTARY | | | | SECONDARY | | | | TOTAL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1972-73 | 1982-83 | 1985-86 | 1987-88 | 1972-73 | 1982-83 | 1985-86 | 1987-88 | 1972-73 | 1982-83 | 1985-86 | 1987-88 |
| **United States** | **23** | **20** | **20** | **19** | **20** | **16** | **16** | **15** | **22** | **18** | **18** | **18** |
| Alabama | 24 | 19 | 21 | 21 | 22 | 17 | 19 | 19 | 23 | 18 | 20 | 20 |
| Alaska | 22 | 16 | 18 | 23 | 18 | 15 | 17 | 12 | 20 | 15 | 17 | 16 |
| Arizona | 25 | 19 | 24 | 19 | 24 | 18 | 24 | 23 | 24 | 19 | 24 | 20 |
| Arkansas | 24 | 20 | 20 | 19 | 20 | 17 | 16 | 15 | 22 | 19 | 18 | 17 |
| California | 24 | 26 | 26 | 23 | 24 | 19 | 21 | 22 | 24 | 23 | 24 | 23 |
| Colorado | 25 | 21 | 21 | 20 | 21 | 17 | 16 | 16 | 23 | 19 | 19 | 18 |
| Connecticut | 25 | 18 | 16 | 15 | 13 | 13 | 12 | 11 | 20 | 16 | 14 | 13 |
| Delaware | 26 | 19 | 18 | 18 | 18 | 16 | 14 | 14 | 22 | 17 | 16 | 16 |
| Dist. of Columbia | 22 | 17 | 16 | 15 | 20 | 19 | 18 | 16 | 21 | 18 | 17 | 16 |
| Florida | 26 | 17 | 17 | 17 | 23 | 19 | 18 | 17 | 25 | 18 | 17 | 17 |
| Georgia | 28 | 19 | 19 | 20 | 20 | 18 | 19 | 19 | 22 | 18 | 19 | 20 |
| Hawaii | 24 | 17 | 20 | 20 | 28 | 24 | 19 | 18 | 26 | 20 | 20 | 19 |
| Idaho | 24 | 22 | 22 | 23 | 21 | 18 | 19 | 19 | 23 | 20 | 21 | 21 |
| Illinois | 23 | 19 | 19 | 18 | 19 | 16 | 17 | 16 | 21 | 18 | 18 | 18 |
| Indiana | 25 | 21 | 20 | 19 | 22 | 19 | 19 | 18 | 23 | 20 | 19 | 18 |
| Iowa | 23 | 18 | 18 | 18 | 18 | 14 | 14 | 14 | 21 | 16 | 16 | 16 |
| Kansas | 21 | 17 | 17 | 17 | 17 | 14 | 13 | 13 | 19 | 15 | 15 | 15 |
| Kentucky | 23 | 21 | 20 | 18 | 22 | 20 | 18 | 17 | 23 | 20 | 19 | 18 |
| Louisiana | 24 | 23 | 21 | 20 | 18 | 12 | 15 | 16 | 21 | 18 | 19 | 18 |
| Maine | 26 | 19 | 17 | 17 | 16 | 14 | 14 | 13 | 22 | 17 | 16 | 15 |
| Maryland | 24 | 19 | 19 | 20 | 20 | 18 | 16 | 15 | 22 | 19 | 18 | 17 |
| Massachusetts | 23 | 28 | 26 | 24 | 18 | 10 | 8 | 8 | 21 | 18 | 15 | 14 |
| Michigan | 24 | 23 | 26 | 21 | 24 | 23 | 15 | 20 | 24 | 23 | 21 | 20 |
| **MINNESOTA** | **22** | **18** | **18** | **19** | **18** | **17** | **16** | **16** | **20** | **18** | **17** | **17** |
| Mississippi | 23 | 18 | 20 | 24 | 22 | 18 | 17 | 12 | 23 | 19 | 19 | 19 |
| Missouri | 30 | 23 | 22 | 22 | 13 | 10 | 11 | 10 | 22 | 17 | 17 | 16 |
| Montana | 23 | 22 | 16 | 16 | 16 | 11 | 15 | 14 | 20 | 17 | 15 | 16 |
| Nebraska | 19 | 18 | 16 | 16 | 18 | 14 | 14 | 14 | 19 | 16 | 15 | 15 |
| Nevada | 25 | 21 | 21 | 21 | 24 | 20 | 19 | 19 | 24 | 20 | 20 | 20 |
| New Hampshire | 22 | 18 | 15 | 16 | 18 | 14 | 15 | 16 | 20 | 16 | 15 | 16 |
| New Jersey | 23 | 17 | 17 | 16 | 15 | 14 | 13 | 12 | 19 | 16 | 15 | 14 |
| New Mexico | 22 | 22 | 17 | 16 | 24 | 16 | 19 | 23 | 23 | 19 | 18 | 18 |
| New York | 20 | 18 | 17 | 16 | 17 | 16 | 14 | 13 | 19 | 17 | 15 | 15 |
| North Carolina | 24 | 23 | 23 | 22 | 21 | 15 | 15 | 13 | 23 | 20 | 20 | 18 |
| North Dakota | 21 | 17 | 17 | 17 | 18 | 13 | 12 | 13 | 20 | 16 | 15 | 15 |
| Ohio | 26 | 21 | 21 | 20 | 19 | 18 | 15 | 15 | 23 | 20 | 18 | 18 |
| Oklahoma | 22 | 19 | 18 | 18 | 21 | 16 | 16 | 15 | 22 | 17 | 17 | 17 |
| Oregon | 23 | 18 | 19 | 20 | 20 | 18 | 16 | 16 | 22 | 18 | 18 | 18 |
| Pennsylvania | 23 | 19 | 17 | 17 | 20 | 16 | 16 | 15 | 21 | 17 | 17 | 16 |
| Rhode Island | 21 | 15 | 16 | 15 | 19 | 17 | 15 | 14 | 20 | 16 | 15 | 15 |
| South Carolina | 24 | 21 | 20 | 19 | 22 | 15 | 15 | 15 | 23 | 19 | 18 | 18 |
| South Dakota | 21 | 16 | 16 | 16 | 18 | 14 | 14 | 13 | 20 | 16 | 15 | 15 |
| Tennessee | 25 | 24 | 23 | 22 | 23 | 16 | 16 | 15 | 24 | 21 | 20 | 20 |
| Texas | 22 | 21 | 18 | 19 | 21 | 14 | 17 | 15 | 22 | 18 | 18 | 17 |
| Utah | 26 | 24 | 23 | 27 | 24 | 25 | 26 | 17 | 25 | 25 | 24 | 23 |
| Vermont | 20 | 16 | 17 | 19 | 14 | 12 | 12 | 11 | 18 | 14 | 14 | 15 |
| Virginia | 22 | 18 | 18 | 17 | 17 | 16 | 15 | 15 | 20 | 17 | 17 | 16 |
| Washington | 22 | 21 | 20 | 19 | 27 | 22 | 21 | 23 | 24 | 21 | 21 | 21 |
| West Virginia | 24 | 18 | 17 | 15 | 22 | 16 | 15 | 15 | 23 | 17 | 16 | 15 |
| Wisconsin | 21 | 15 | 17 | 17 | 18 | 14 | 16 | 15 | 20 | 15 | 17 | 16 |
| Wyoming | 20 | 15 | 12 | 12 | 18 | 13 | 19 | 16 | 19 | 14 | 14 | 13 |

Source: C. Emily Feistritzer, The Condition of Teaching,(Washington: Carnegie Foundation for the Advancement of Teaching, 1983), p. 31; and National Education Association, Estimates of School Statistics:1987-88, (Washington, March 1988), 32, 35, 36.

Figure 1.2: Average Teacher Salaries, 1987-88




Source: National Education Association.

1987-88 school year. As Figure 1.4 shows, the remaining expenditures were for capital outlay, building construction, and debt service. These expenditures accounted for 12 percent of expenditures during the 1987-88 school year.

**Education spending has increased faster than inflation.**

## Spending Trends

We reviewed how total expenditures have changed since 1980-81 and found that:

- **The state's education spending has kept well ahead of inflation.**

As Table 1.10 indicates, total education spending increased 62 percent since the beginning of the decade. Inflation is one reason for the increase, but we adjusted for it and found that there has been a 16 percent increase in constant

## Figure 1.3: Categories of Education Spending

### OPERATING EXPENSES:

**Current operating:** All expenditures incurred for the benefit of elementary and secondary education during the school year, except capital and debt service expenses. Included are costs associated with regular, vocational and exceptional instruction, instructional and student support, administration, operations and maintenance, food service, transportation, and miscellaneous services.

**Retirement:** Social security and retirement contributions for licensed staff covered by retirement funds. Until the 1986-87 school year, the state paid these costs rather than school districts, which now have the responsibility to do so.

### NON-OPERATING EXPENSES:

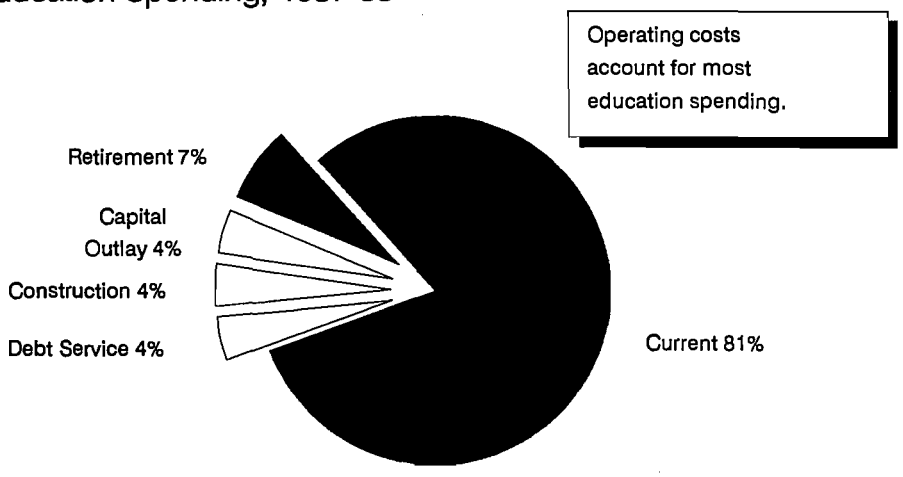
**Capital outlay:** Costs of acquiring or replacing assets that have benefits for more than one year. This includes buying land or equipment, remodeling buildings, and leasing.

**Building construction:** Costs for constructing new buildings or additions.

**Debt service:** Costs of repaying long term debt which include bonds and state loans.

Source: Minnesota Department of Education.

## Figure 1.4: Operating and Non-Operating Education Spending, 1987-88




Source: Department of Education.

## Table 1.10: Changes in Operating and Non-Operating Costs Per Student, 1980 through 1988

| | Percent Change | Percent Change In Constant Dollars |
|---|---|---|
| Operating | | |
| Current | 63% | 16% |
| Retirement | 84 | 31 |
| Subtotal | 64% | 17% |
| Non-Operating | | |
| Capital Outlay | 55% | 11% |
| Building Construction | 82 | 30 |
| Debt Service | 20 | -14 |
| Subtotal | 48% | 6% |
| Total | 62% | 16% |

Source: Minnesota Department of Education.

dollars.[10] In addition, local referendum levies and new state programs contribute partly to increased total spending.

The portion of resources spent on operating and non-operating activities has changed only slightly since the 1980-81 school year. However:

- **Expenditures for social security and retirement contributions for licensed staff have increased by 84 percent since 1980-81, and building construction has grown 82 percent.**

**Retirement and construction costs have increased markedly.**

Building construction expenditures have increased dramatically--152 percent--just in the last two years. Since the 1985-86 school year, the number of districts building new schools or adding to old ones increased 50 percent, from 54 districts to 81 in 1987-88.

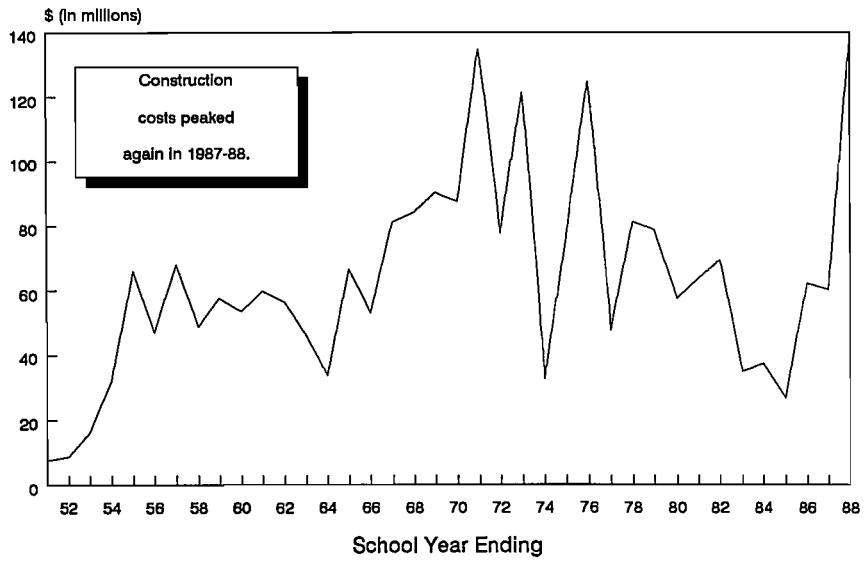
Construction costs recently reached their highest point since 1971. As shown in Figure 1.5, building costs have fluctuated considerably in the past 27 years but peaked in 1971 and again in 1988.

Construction expenditures may continue to increase. According to the Minnesota Department of Education, about 20 percent of the state's school buildings are dangerously out of compliance with fire and building codes and should be replaced.[11] Furthermore, the Legislature created financial incentives for new construction by appropriating funds for districts to band

*10* We used the Minneapolis-St. Paul composite Consumer Price Index (CPI) for wage earners because it is the best available measure of the purchasing power of education expenditures in Minnesota.

*11* Mary Jane Smetanka, "Unsafe Schools," *Star Tribune* (Minneapolis, October 22, 1989), 1A, 14A, 15A.

Figure 1.5: Minnesota Public School Construction Contract Costs, 1950-88




Source: Department of Education.

together and build regional high schools. The Cooperative Secondary Facilities Act authorizes three or more districts meeting certain standards to apply for state funds which pay as much as three-fourths of the cost of new buildings.[12]

Looking just at operating costs, we found that:

- **Operating expenditures have grown much faster than inflation in recent years.**

Figure 1.6 shows how operating expenditures (less retirement and social security contributions for licensed staff) have grown since the mid-1970s. Average district spending was close to the inflation rate until the 1983-84 school year when spending began to increase at a much faster rate.[13]

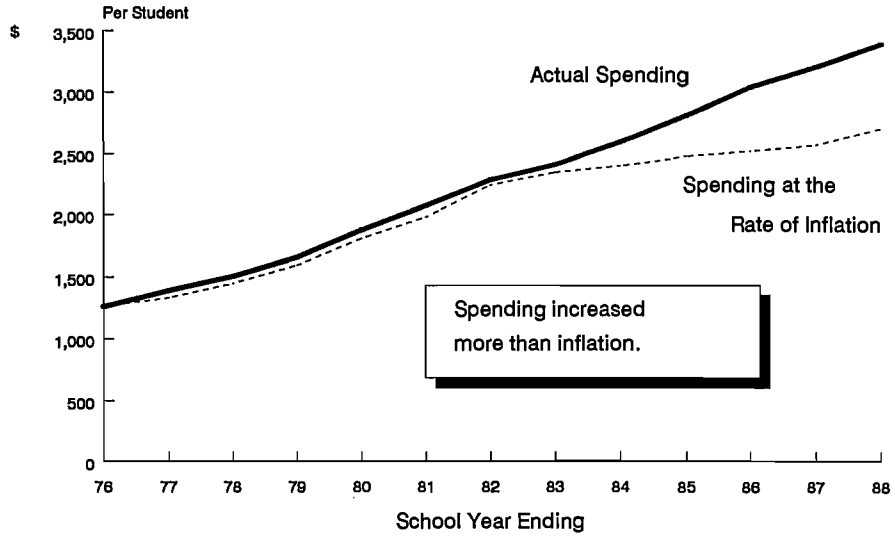
Table 1.11 shows how the main objects of school districts' operating expenditures have changed over time. We examined expenditures for salaries, benefits, purchased services, supplies and materials, and other miscellaneous items from 1980 through 1988.[14] These data indicate that the cost of benefits has increased at a faster rate than other categories. We found that:

*12* *Minn. Laws* (1987), Chapter 400, Section 33.

*13* Using a national index specifically constructed for elementary and secondary education to measure inflation, real spending per pupil in Minnesota grew by more than one percent per year between 1981 and 1991. See Minnesota Senate Counsel and Research, *Percent State Support.*

*14* To make data comparable, we added state-paid retirement and social security taxes for licensed staff to the benefits category for 1980-81. Districts should have reported these costs in total for 1987-88.

Figure 1.6: Operating Expenditures Compared with Inflation, 1976-88




Source: Department of Education; U. S. Department of Labor.

- **Current operating expenditures increased 64 percent from 1980-81 to 1987-88, but expenditures for benefits increased 95 percent.**

The increase in benefits may be due more to the rising costs of locally negotiated health and insurance packages offered employees than to increases in retirement and social security payments for licensed staff. As we saw earlier in Table 1.10, these latter costs increased 84 percent since the 1980-81 school year. After subtracting licensed staff retirement contributions from benefit costs, remaining expenses increased 112 percent.

**Personnel benefit costs rose 95 percent since 1980.**

## Table 1.11: Trends in Objects of School District Spending, 1980 through 1988

| Objects of Spending | Percent Increase |
|---|---|
| Salaries | 66% |
| Benefits | 95 |
| Purchased Services | 66 |
| Supplies and Materials | 18 |
| Other | 52 |
| Total | 64% |

Source: Minnesota Department of Education.

# STAFFING TRENDS

As shown in Table 1.12, our study showed that staff compensation is the largest object of spending among districts. We examined the trend in licensed staff to help explain why these costs have increased in recent years.[15]

## Table 1.12: Main Objects of School District Spending

| | Average Percent of Total Operating Expenses |
|---|---|
| Staff Compensation for:[a] | |
| Regular Instruction | 46% |
| Exceptional Instruction | 9 |
| Administration | 8 |
| Operations and Maintenance | 4 |
| Food Service | 2 |
| Other | 9 |
| Purchased Services | 13 |
| Supplies and Materials | 9 |

Source: School District Spending Verification Report (sample).

[a]Compensation includes salaries plus benefits.

**Salaries and benefits account for most school district spending.**

During the 1987-88 school year, school districts employed a total of 48,220 licensed staff (FTEs). As Figure 1.7 shows, most (87 percent) were teachers, and they were assigned in nearly equal numbers to elementary and secondary instruction.

- **Administrators and their support staff made up a small portion of licensed staff--only 12 percent during the 1987-88 school year.**

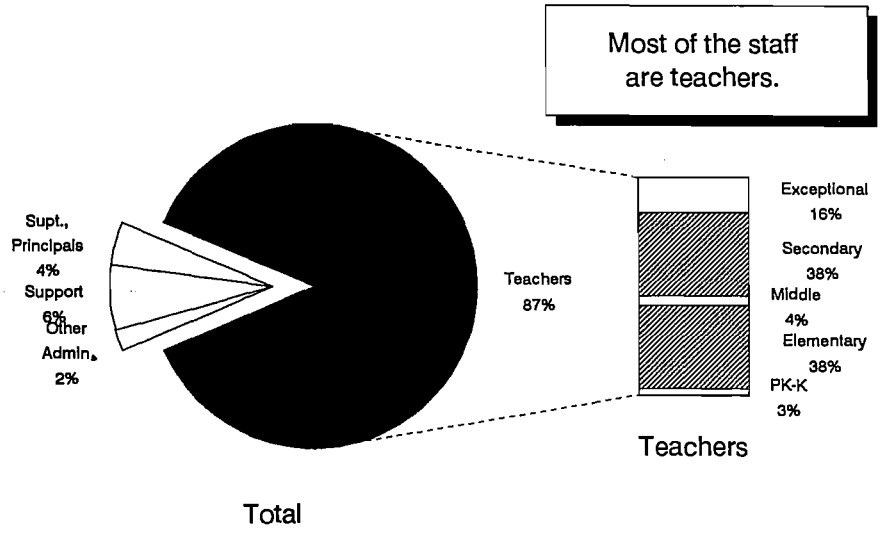
Also, districts generally employed a larger percentage of exceptional education teachers (16 percent) than administrators and support staff combined (12 percent).

We examined changes in staffing and student enrollment from 1975 through 1988. As Figure 1.8 shows:

- **Licensed staff changes have not kept pace with enrollment changes.**

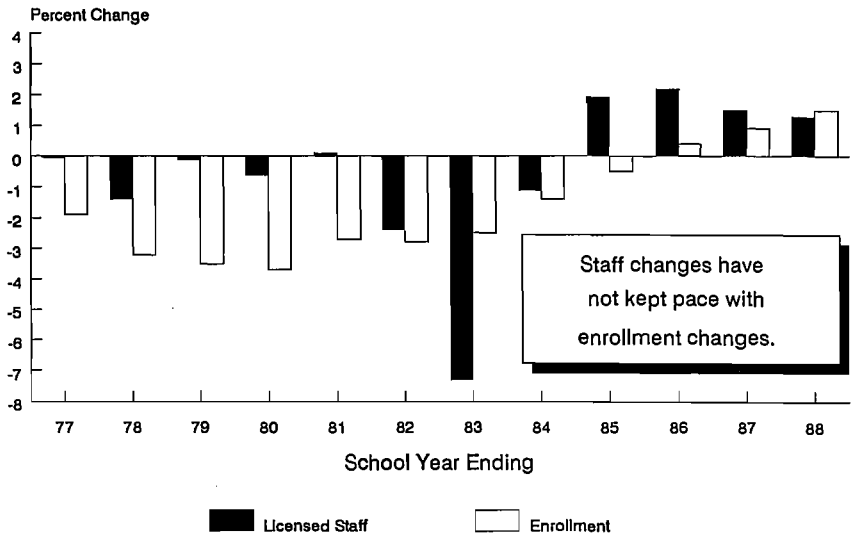
*15* We focused on licensed staff who receive most of the compensation from school districts. The Department of Education has no data on unlicensed staff, and its data on licensed staff are limited for three reasons. First, staff may perform duties other than those for which they are licensed. Second, districts may obtain staff services by contract. Third, the definition of full-time equivalent (FTE) differs by job title and district.

Figure 1.7: Licensed Staff Assignments, 1987-88




Source: Department of Education.

Figure 1.8: Percent Change in Licensed Staff and Enrollment, 1976-88




Source: Department of Education.

More specifically, Table 1.13 shows how the percentage of staff has changed by position since the mid-1970s. These data indicate that enrollment has dropped 18 percent since 1975, but the percentage of instructional staff fell only by 6 points, support staff by 8 points and administrators by 15 points. Thus, the ratio of students to total licensed staff decreased from 17.1 to 15.0 since 1975-76.

Likewise, we found that:

- **The number of students per teacher has declined considerably, due mainly to the large increase in special education teachers.**

As shown in Figure 1.9, the ratio of students to teachers dropped from 19.6 in 1975-76 to 17.1 in 1987-88. However, the ratio of students to special education teachers shrank faster than for regular teachers.

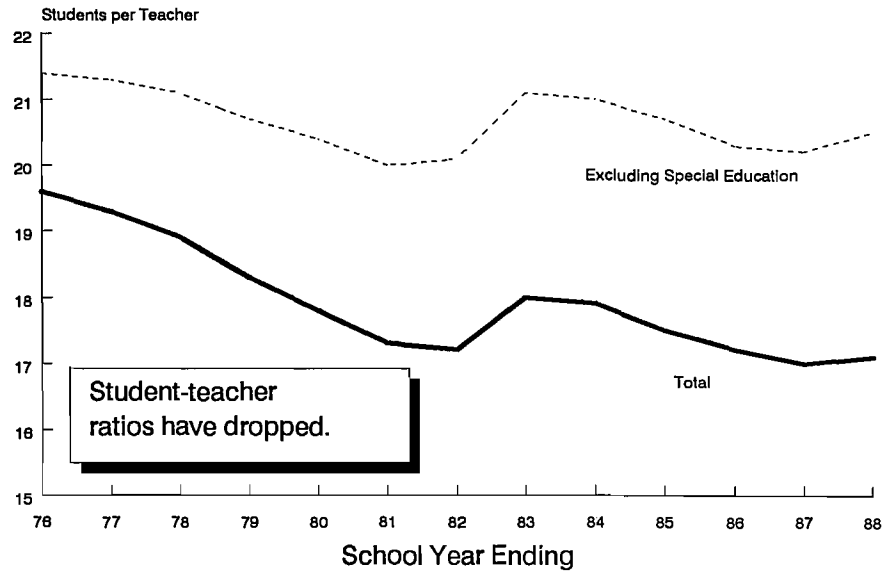
**The number of students per special education teacher dropped substantially.**

We also found that:

- **The number of special education teachers in Minnesota increased 87 percent since 1975-76, but school districts employed 14 percent fewer regular education teachers between 1975 and 1988.**

Similarly, the trend data showed an increase of 73 percent for special education administrators, but a decrease of 13 percent among other types of administrators. In fact, special education administrators were the only group of administrators which has grown since 1975-76.

Figure 1.9: Change in Student-Teacher Ratios, 1975-88




Source: Department of Education.

# Table 1.13: Licensed Elementary-Secondary Staff (in full-time equivalents), 1975 through 1988

| Assignment | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | Percent Change 1975-76 to 1987-88 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUPERINTENDENTS, PRINCIPALS, AND ASSISTANTS | | | | | | | | | | | | | | |
| Superintendents | 414 | 422 | 416 | 414 | 404 | 398 | 386 | 396 | 398 | 396 | 386 | 373 | 373 | -10% |
| Assistant Superintendents | 70 | 71 | 67 | 69 | 70 | 63 | 60 | 55 | 55 | 53 | 57 | 56 | 50 | -29 |
| Principals | 1,476 | 1,447 | 1,429 | 1,401 | 1,405 | 1,416 | 1,386 | 1,302 | 1,247 | 1,246 | 1,226 | 1,247 | 1,246 | -16 |
| Assistant Principals | 353 | 357 | 345 | 328 | 337 | 325 | 319 | 292 | 300 | 313 | 316 | 305 | 307 | -13 |
| TOTAL | 2,313 | 2,297 | 2,257 | 2,212 | 2,216 | 2,202 | 2,151 | 2,045 | 2,000 | 2,008 | 1,985 | 1,981 | 1,976 | -14% |
| OTHER ADMINISTRATORS | | | | | | | | | | | | | | |
| Special Education Administrators | 120 | 140 | 149 | 162 | 168 | 178 | 190 | 171 | 177 | 180 | 184 | 192 | 208 | +73% |
| Secondary Vocational Admin. | 76 | 78 | 68 | 65 | 50 | 88 | 122 | 67 | 66 | 62 | 58 | 58 | 49 | -36 |
| Other Administrators | 1,025 | 955 | 925 | 985 | 1,000 | 989 | 957 | 776 | 774 | 785 | 895 | 912 | 929 | -9 |
| TOTAL | 1,221 | 1,173 | 1,142 | 1,212 | 1,218 | 1,255 | 1,269 | 1,014 | 1,017 | 1,027 | 1,137 | 1,162 | 1,186 | -3% |
| SUPPORT STAFF | | | | | | | | | | | | | | |
| Counselors | 1,062 | 1,019 | 1,018 | 1,020 | 1,022 | 1,021 | 996 | 869 | 857 | 855 | 852 | 861 | 855 | -19% |
| Librarians/Media Generalists | 1,162 | 1,155 | 1,113 | 1,111 | 1,094 | 1,073 | 1,034 | 920 | 900 | 911 | 932 | 949 | 957 | -18 |
| Other Support Staff | 956 | 985 | 925 | 986 | 1,063 | 1,046 | 1,024 | 941 | 901 | 1,054 | 1,034 | 1,068 | 1,114 | +17 |
| TOTAL | 3,180 | 3,159 | 3,056 | 3,117 | 3,179 | 3,140 | 3,054 | 2,730 | 2,658 | 2,820 | 2,818 | 2,878 | 2,926 | -8% |
| TEACHERS | | | | | | | | | | | | | | |
| Prekindergarten | 31 | 26 | 48 | 80 | 50 | 54 | 35 | 31 | 27 | 21 | 50 | 27 | 29 | -6% |
| Kindergarten | 1,334 | 1,268 | 1,169 | 1,140 | 1,128 | 1,148 | 1,133 | 1,134 | 1,186 | 1,248 | 1,324 | 1,369 | 1,420 | +6 |
| Elementary | 16,995 | 16,555 | 16,347 | 16,077 | 16,039 | 15,880 | 15,356 | 14,168 | 13,978 | 14,298 | 14,862 | 15,349 | 15,994 | -6 |
| Middle School | 1,047 | 1,027 | 1,047 | 1,278 | 1,474 | 1,413 | 1,701 | 1,618 | 1,492 | 1,498 | 1,438 | 1,570 | 1,625 | +55 |
| Secondary | 21,739 | 21,605 | 20,920 | 20,299 | 19,385 | 19,181 | 18,321 | 17,019 | 16,862 | 16,814 | 16,844 | 16,558 | 16,203 | -25 |
| Special Education | 3,668 | 4,236 | 4,647 | 5,160 | 5,584 | 6,055 | 6,100 | 5,765 | 5,783 | 6,131 | 6,431 | 6,685 | 6,861 | +87 |
| TOTAL | 44,814 | 44,717 | 44,178 | 44,034 | 43,660 | 43,731 | 42,646 | 39,735 | 39,328 | 40,010 | 40,948 | 41,558 | 42,132 | -6% |
| TOTAL--ALL LICENSED STAFF | 51,528 | 51,346 | 50,633 | 50,575 | 50,273 | 50,328 | 49,120 | 45,524 | 45,003 | 45,865 | 46,888 | 47,579 | 48,220 | -6% |
| FALL ENROLLMENT | 879,128 | 862,076 | 834,566 | 805,076 | 775,629 | 754,915 | 733,738 | 715,221 | 705,238 | 701,697 | 704,436 | 711,084 | 721,455 | -18% |

Source: Minnesota Department of Education.

State aid for special education has increased.

State aid for special education has increased considerably during this period, from $111 million in 1980-81 to $157 million in 1987-88. We next examined how special education staffing has changed in relation to the students which they serve. As Table 1.14 shows:

- **The number of special education teachers has increased faster than the number of special education students.**

## Table 1.14: Special Education Students and Teachers, 1980 through 1988

| School Year | Number of Special Education Students | Number of Special Education Teachers | Student-Teacher Ratio |
|---|---|---|---|
| 1980-81 | 76,582 | 6,055 | 12.6 |
| 1981-82 | 73,755 | 6,100 | 12.1 |
| 1982-83 | 73,233 | 5,765 | 12.7 |
| 1983-84 | 74,297 | 5,783 | 12.8 |
| 1984-85 | 75,843 | 6,131 | 12.4 |
| 1985-86 | 76,863 | 6,431 | 12.0 |
| 1986-87 | 77,149 | 6,685 | 11.5 |
| 1987-88 | 77,382 | 6,861 | 11.3 |

Source: Minnesota Department of Education.

Since 1980, special education students have made up about 9 to 10 percent of total enrollment. The actual number of special education students decreased from 1980 through 1983, than began to rise again. In contrast, the number of special education teachers employed by districts has increased aside from a drop around 1983. Thus, the ratio of special education students to teachers fell from 12.6 in 1980-81 to 11.3 in 1987-88. Also, student-administrator ratios dropped from 430.2 to 372.0 during this same period.

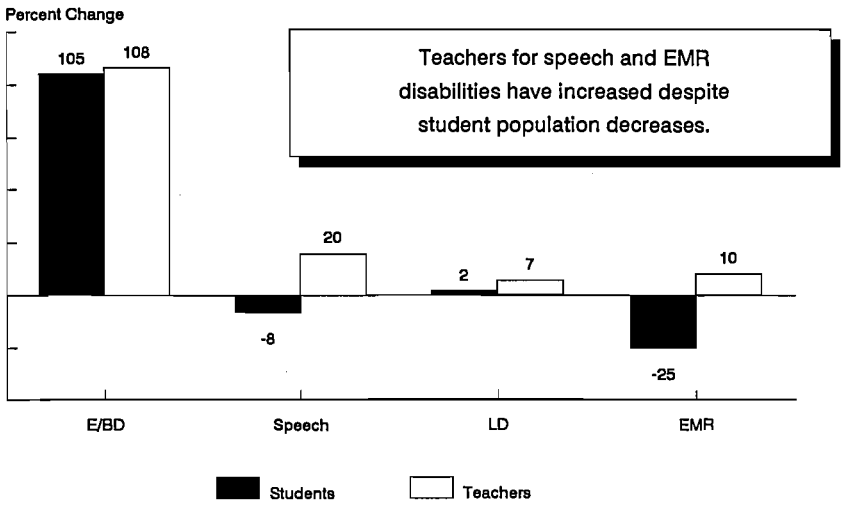
Figure 1.10 shows the number of special education students and staff for each of the four major disabilities since 1980. All these disability groups (learning disabled (LD), emotional/behavioral disorders (E/BD), mildly mentally handicapped (EMR), and speech) have enjoyed substantial increases in the number of teachers who are assigned to help affected students. However, the student population dropped in two of these four categories.

Salaries alone account for 61 percent of expenses.

# Salaries

As noted earlier, staff compensation is the largest object of school district expenditures. Based on our study, salaries alone make up 61 percent of school districts' expenditures statewide.

Figure 1.10: Changes in Special Education by Disability, 1981-88




Source: Department of Education.

Base salary figures are available from the Department of Education only for licensed staff. As Table 1.15 shows, the average salary among all licensed staff members during the 1987-88 school year was $29,593.[16]

Table 1.15 also shows the change in licensed staff salaries over time. Results indicate that:

- **Average salaries increased more than the rate of inflation during the 1980s.**

**Salaries have increased more than inflation.**

However, during the latter half of the 1970s, salaries had failed to keep up with inflation. On the average, salaries increased 41 percent between the 1975-76 school year and the 1979-80 school year, while the composite consumer price index (CPI) for the Minneapolis-St. Paul area rose 54 percent. In contrast, from 1979 through 1988, salaries increased by 77 percent compared to a 50 percent increase in the Minneapolis-St. Paul CPI. Overall, average salaries have increased about 150 percent since 1975. During the same period, the CPI rose 130 percent.

However, some types of staff fared better than others. Most notably, teachers' pay has improved. For example, the average salary of middle school

*16* Base salary figures exclude additional money which may be paid to staff for extra- or co-curricular duties. The Minnesota School Boards Association publishes supplementary salary information each year for licensed and unlicensed staff in most school districts in the following documents: *Licensed Salaries and Related Information, Non-Licensed Salaries and Related Information,* and *Administrative Salaries and Related Information.*

## Table 1.15: Average Licensed Staff Salaries, 1974 through 1988

| Assignment | 1974-75 | 1979-80 | 1987-88 | Percent Change 1974-75 to 1979-1980 | Percent Change 1979-80 to 1987-1988 | Percent Change 1974-75 to 1987-1988 |
|---|---|---|---|---|---|---|
| SUPERINTENDENTS, PRINCIPALS, AND ASSISTANTS | | | | | | |
| Superintendents | $23,068 | $31,778 | $50,230 | 38% | 58% | 118% |
| Elementary Principals | 18,664 | 26,776 | 44,889 | 43 | 68 | 141 |
| Middle School Principals | 17,925 | 28,076 | 47,410 | 57 | 69 | 164 |
| Secondary Principals | 19,545 | 27,613 | 46,478 | 41 | 68 | 139 |
| Total | $19,950 | $28,225 | $46,734 | 41% | 66% | 134% |
| OTHER ADMINISTRATORS | | | | | | |
| Special Education Administrators | $18,798 | $25,363 | $41,892 | 35% | 65% | 123% |
| Secondary Vocational Administrators | 17,535 | 23,805 | 43,090 | 36 | 81 | 146 |
| Other Administrators | 17,249 | 22,998 | 38,750 | 33 | 68 | 125 |
| Total | $17,388 | $23,357 | $39,480 | 34% | 69% | 127% |
| SUPPORT STAFF | | | | | | |
| Counselors | $15,136 | $20,461 | $34,785 | 35% | 70% | 130% |
| Librarians | 11,837 | 16,979 | 30,575 | 43 | 80 | 158 |
| Other Support Staff | 12,612 | 18,317 | 31,003 | 45 | 69 | 146 |
| Total | $13,137 | $18,546 | $31,947 | 41% | 72% | 143% |
| TEACHERS | | | | | | |
| Prekindergarten | $ 9,932 | $12,481 | $22,702 | 26% | 82% | 129% |
| Kindergarten | 10,681 | 15,087 | 26,701 | 41 | 77 | 150 |
| Elementary | 10,718 | 15,379 | 27,837 | 43 | 81 | 160 |
| Middle School | 10,629 | 16,168 | 29,633 | 52 | 83 | 179 |
| Secondary | 11,863 | 16,676 | 29,549 | 41 | 77 | 149 |
| Special Education | 9,904 | 13,994 | 26,820 | 41 | 92 | 171 |
| Total | $11,222 | $15,793 | $28,357 | 41% | 80% | 153% |
| Total Licensed Staff | $11,881 | $16,698 | $29,593 | 41% | 77% | 149% |
| Minneapolis-St. Paul Consumer Price Index-W (1967 = 100)[a] | 155.4 | 239.4 | 358.0 | 54% | 50% | 130.4% |

Source: Minnesota Department of Education.

[a]For 1974-75 through 1984-85, CPI figures are the average of the Minneapolis-St. Paul composite CPI-W for each October and the following April. Because indices for Minneapolis-St. Paul were no longer reported on a monthly basis as of January 1987, the 1987-88 CPI figure is for the first half of 1988.

and special education teachers rose more than 170 percent compared with 118 percent for superintendents.

However, these data should be interpreted cautiously. The figures simply show that total teacher salaries on the average were 153 percent greater in 1987-88 than they were in 1975-76. It is not clear from these data what pay the average teacher actually received during this period. Many teachers were

laid off--typically those who were lower paid and less experienced. At the same time, new special education teachers were being hired in considerable numbers. These staff often began at the low end of the salary scale.

# STATE ROLE

Minnesota's financial support for public education started as early as 1863, when the state distributed its first aid to schools. By 1915, categorical aids for vocational education, special education, and public transportation were already in place.[17] Initially, local property taxes provided most school district revenue, and state support was minimal. From 1900 through 1930, state aids provided about 20 percent of revenues. By 1960, state support had increased to 40 percent. However, reliance on local property taxes to fund most district activities led to considerable financial inequities since districts with low property valuations had fewer resources to draw upon than districts with higher property tax valuation.

Throughout the state's history, equity in education finance has played a prominent role in legislative deliberations. The state initiated equalization payments for operating expenditures as early as 1915, although these played only a minor role in district funding. Then, in 1957, the Legislature created the foundation aid program, which combined equalization aid and basic aid into one unified program. Foundation aid further established a guaranteed level of support per pupil unit which was funded both with state and local tax dollars.

**The state has gradually come to pay most of the average district's costs.**

Over time, however, foundation aid made up less of districts' operating costs. To compensate, districts relied on local property taxes which, in some cases, rose rapidly. In 1971, the Legislature devised a plan to reduce differences between districts' foundation aid and operating costs while placing restrictions on local property tax levies. This plan, sometimes called the "Minnesota Miracle," also increased the state's share of district revenues to about 63 percent.

The "miracle" lasted only a few years; financial inequities began to grow again in the late 1970s. In 1983, the Legislature introduced the "tiered" foundation aid program. Four years later, the Legislature replaced that program with the general education aid program, which was designed to increase equity among districts.

The general education aid program combined foundation aid, retirement aid, and eight categorical aids into one payment.[18] Three additional cost factors may increase state aid: percent of AFDC students served, staff training and education levels, and district sparsity.[19] While these cost factors were similar

*17* For a more thorough discussion, see Department of Education, *The ABC's of Minnesota School Finance: Paying for the Public Schools in 1987-88 and 1988-89* (November 1987).

*18* Subsequently, the categories were repealed.

*19* These factors are described in Figure 4.2 of Chapter 4.

to those in previous formulas, they were reduced in total dollars and focused on fewer districts.

Minnesota finances more of local education than most states. During 1989, state governments contributed 50 percent of the national education bill, local governments 43 percent, and the federal government 6 percent.[20] In contrast, Minnesota state government financed about 54 percent of its 1989 bill, local government 42 percent, and the federal government 4 percent.

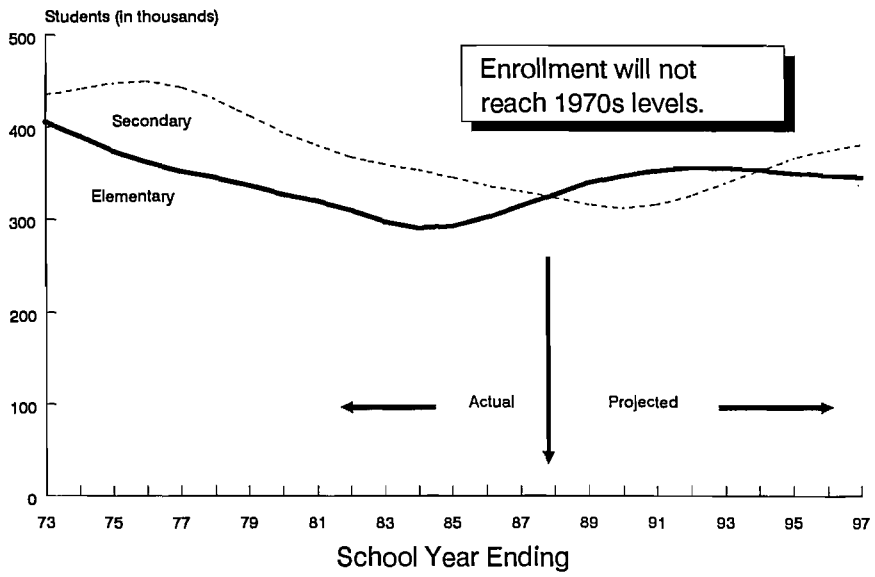
# Enrollment

Student enrollment is the key ingredient which determines how much state aids districts receive. When enrollment drops, so does revenue.

As Figure 1.11 shows:

- **Minnesota has undergone significant enrollment declines since the 1972-73 school year.**

Figure 1.11: Public School Enrollment Trends, 1972-97 (projected)




Source: Department of Education.

While elementary enrollment has increased since about 1984, secondary enrollment is not projected to increase again until around 1991. Together, elementary and secondary enrollment are not expected to reach 1970 levels in the foreseeable future.

*20* Georgina Fiordalisi, "Blow to Kentucky School Finance Method Sending Many States Back to Class," *City and State* (Chicago, August 28, 1989), 22.

During 1977-78, there were about 431,000 students in grades 7 through 12, and more than 68,000 graduated from public high schools. Ten years later, secondary enrollment was down by more than 100,000 students and only about 54,000 students graduated. During the 1990s, less than 50,000 graduates are expected each year.

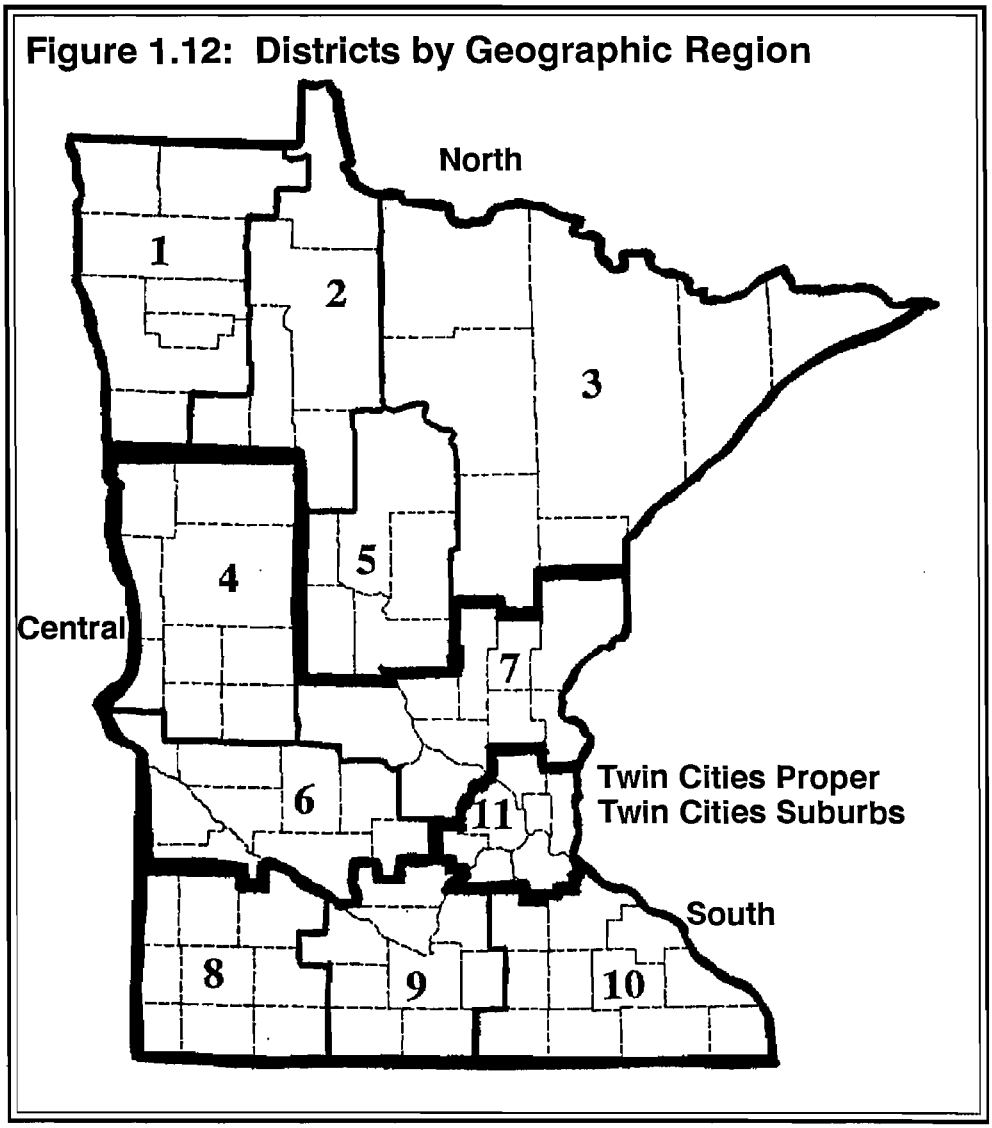
Furthermore, districts are not equally affected by these declines:

- **More than one-third of districts face projected enrollment declines of more than five percent.**

**Enrollment is predicted to fall most in northern and southern Minnesota.**

Districts in northern and southern Minnesota may be especially hard hit. (See Figure 1.12.) Enrollment in 53 percent of the districts in northern Minnesota and 40 percent of those in southern Minnesota is expected to drop by at least five percent.

**Figure 1.12: Districts by Geographic Region**



Although the general education aid formula is driven by enrollment, not all students receive the same amount of aid. Rather, funding is based largely upon "weighted pupil units" which currently define kindergarten students as 0.5 pupil units, handicapped kindergarten and regular elementary students as 1.0 pupil units, and secondary students as 1.35 pupil units. These weightings assume that half-day kindergarten requires about half the resources needed for a full day of instruction in grades 1 through 6, and that smaller, more specialized secondary elective courses plus additional support services require about 1.35 times more resources in grades 7 through 12.[21]

For the most part, kindergarten, handicapped kindergarten, and elementary pupil weighting factors have not changed since the early 1960s. The secondary weighting, however, has fluctuated. Originally, it was set at 1.5. The 1969 Legislature reduced it to 1.4 where it remained until 1987, when the Legislature reduced it to its present 1.35.[22]

Although districts receive funds on this basis, they are not required to spend accordingly. As a matter of fact, we found that:

- **District administrators often cannot isolate or estimate expenditures for regular instruction in total, much less by level of instruction.**

As we discuss in Chapters 3 and 4, we asked district administrators to report how much they spent on kindergarten, elementary (grades 1 through 6) and secondary (grades 7 through 12) regular education for the purposes of this study. Many administrators did not allocate district-wide expenses, salaries, benefits, supplies, and purchased services by program or function, and they were unable to do so when we asked. In addition, the districts defined which grade levels constitute secondary or elementary education in different ways.

# Local Referendum Levies

**Most districts use local referendum levies to help pay their operating expenses.**

Districts also are free to supplement state revenues by approving local referendum levies. The majority of Minnesota school districts now use this method of education finance.

- **During the 1988-89 school year, 239 of the state's 436 districts collected additional operating revenue through referendum levies, up from 216 two years earlier.[23]**

The trend toward increased reliance on local operating levies continued through the elections of Fall 1989. Nearly three-fourths of the 33 districts with referendum levies on the ballot received voters' approval.[24]

*21* Thirty-three states, including Minnesota, use either pupil units or instructional units as the basis for their foundation aid programs. See Deborah A. Verstegen, *School Finance at a Glance* (Charlottesville: University of Virginia, March 1988).

*22* The basis for the change is discussed in Chapter 3.

*23* We exclude capital and transportation levies.

*24* "Some Election Results," *Minnesota Journal* (Minneapolis, November 21, 1989), 7.

Districts with small student enrollments frequently rely on local referendum levies to produce operating revenue. Whereas 73 percent of the state's smallest districts have referendum levies in place, only 42 percent of the state's largest districts do.

Local referenda tend to offset the Legislature's work toward equalized funding. As shown in Table 1.16:

- **Local levies result in some districts having considerably more money to spend on education.**

## Table 1.16: Effect of Local Referendum Levies on Total Operating Expenses, 1987-88

| | Percent of Districts | |
|---|---|---|
| Operating Expenses Per Student | Including Levy Dollars | Excluding Levy Dollars |
| $3,500 or less | 7% | 14% |
| 3,500-3,999 | 41 | 46 |
| 4,000-4,499 | 29 | 28 |
| 4,500-4,999 | 14 | 7 |
| 5,000-5,999 | 7 | 4 |
| 6,000 or more | 3 | 1 |

Source: Minnesota Department of Education.

**On the average, districts with referendum levies spent about five percent more per student.**

On the average, districts with local referendum levies spent five percent more per student than districts without referendum levies during the 1987-88 school year. Without referendum levies, 60 percent of all districts would have had less than $4,000 to spend on each student. Only five percent would have had more than $5,000 to spend. However, because of referendum levies, expenses in only 48 percent of districts actually were less than $4,000 per student. In ten percent, actual operating expenses totaled more than $5,000 per student.

As Figure 1.13 shows, concern over equalized funding and the effects of local levies have led to lawsuits across the nation as well as in Minnesota. Litigators contend that state education finance systems result in some districts having disproportionately more money than others. To date, state supreme courts have declared education finance systems in nine states unconstitutional, while 13 systems have been declared constitutional.

The Kentucky Supreme Court decision is viewed by some experts as the most far-reaching of any thus far. In Kentucky, the state shared the total education bill with local government, but allowed them to supplement state funds with local property tax levies. Thus, rich districts could receive more money than poor districts. While the state tried to develop a formula that equalized

## Figure 1.13: State Supreme Court Decisions on Education Finance Systems

| Declared Unconstitutional | | Upheld | |
|---|---|---|---|
| State | Year of Decision | State | Year of Decision |
| Arkansas | 1973 | Arizona | 1973 |
| California | 1976 | Colorado | 1982 |
| Connecticut | 1982 | Georgia | 1981 |
| Kentucky | 1989 | Idaho | 1975 |
| New Jersey | 1987 | Maryland | 1983 |
| Montana | 1989 | Michigan | 1973 |
| Washington | 1978 | New York | 1982 |
| West Virginia | 1984 | Ohio | 1979 |
| Wyoming | 1980 | Oklahoma | 1987 |
| | | Oregon | 1976 |
| | | Pennsylvania | 1979 |
| | | Texas[a] | 1973 |
| | | Wisconsin | 1976 |

Source: Georgina Fiordalisi, "Blow to Kentucky School Finance Method Sending Many States Back to Class", City and State (Chicago, August 28, 1989), 11, 22.

[a]Case pending against Texas in state Supreme Court.

**Many state education finance systems have been challenged in court.**

spending between rich and poor districts, it did not follow through with appropriations of additional money for poor districts.

In Minnesota, 48 school districts have brought suit against the Department of Education and the State Board of Education.[25] The suit charges that levy referenda permit property-rich districts to provide better educational opportunities which violate the constitutional mandate for equal education.[26] The suit is expected to go to trial in 1990.

# SCHOOL DISTRICTS' GENERAL FINANCIAL CONDITION

The general health of school districts is indicated by their operating fund balances. These show how much money may be available for future use.

Statewide, we found that:

- **Overall, Minnesota school districts had a healthy fund balance of $275 million at the close of the 1987-88 fiscal year.**

25 Skeen, *et al.* v. State of Minnesota, *et al.*, No. C7-88-1954, Wright County District Court.

26 *Minn. Constitution*, Article XIII, Section 1.

In 1987-88, the statewide fund balance in the four operating funds (general, food, transportation, and community service) was 8.6 percent of school districts' total annual operating revenue. This amounted to about $384 per student.[27] Excluding the community service fund, there was $253 million, or 8 percent of annual operating revenue.

However, districts vary widely in their individual financial health. Table 1.17 shows how district financial conditions have changed over time. As these data indicate,

- **For 1987-88, 55 percent of the 435 districts reporting showed an increase in operating fund balances while the rest experienced a decrease.[28]**

## Table 1.17: Financial Condition Trends, 1982 through 1988

| | 1982-83 | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 |
|---|---|---|---|---|---|---|
| Number of districts on file | 437 | 437 | 437 | 436 | 435[a] | 435[a] |
| Districts increasing their fund balance | 211 | 278 | 174 | 177 | 248 | 239 |
| Districts decreasing their fund balance | 226 | 159 | 263 | 259 | 187 | 196 |
| Unreserved fund balance[b] | $244 | $306 | $284 | $261 | $268 | $275 |
| Number of districts exceeding expenditure limit | 26[c] | 33 | 24 | 27 | 19 | 22 |
| Number of districts with a negative fund balance | 55 | 38 | 33 | 45 | 40 | 37 |

Source: Minnesota Department of Education.

[a]Data from one district are missing.

[b]All dollar amounts are in millions.

[c]Five percent limit, other years 2.5 percent.

Minnesota statutes define operating debt as the net negative unappropriated fund balance on June 30 in all of a district's operating funds. As indicated by Table 1.17, 37 districts reported a negative fund balance at the close of 1987-88. These districts spent more than they received or had on hand during the year and were operating in debt.[29]

*27* Per pupil unit, the figure was $328.

*28* As we show in Chapter 3, school districts do not always comply with statutes requiring data on expenditures to be submitted to the Department of Education in a timely manner.

*29* Certain districts may also be in statutory operating debt, based on their fund balances on June 30, 1977. In these cases, districts were given levy authority specifically to eliminate their debt. For 1987-88, 13 districts were in this category. See Minn. Stat. §121.914.

## Some districts are in debt.

Statutes require that districts limit their negative operating debt to 2.5 percent of their current year's expenditures. Since 1977, the Commissioner of Education has determined the operating debt of each district, and districts exceeding the 2.5 percent limitation have submitted special operating plans for approval. If such plans are not approved, districts receive no state aid.

As shown in Table 1.17:

- **Of the 37 districts reporting negative fund balances in 1987-88, 22 exceeded the 2.5 percent expenditure limit.**

Districts exceeding the 2.5 percent expenditure limit had, on the average, 570 students although enrollment ranged from about 80 to 3,700 students. All but one were in outstate Minnesota.

We found that districts often rise above or fall below the 2.5 percent expenditure limit over the course of a few years. Six districts exceeding the 2.5 percent expenditure limit for 1986-87 did not exceed the limit for 1987-88, and nine districts were beyond the limit in 1987-88 but not in 1986-87. However, we found that:

- **Thirteen of the 22 districts also exceeded the expenditure limit during one to three of the preceding three years.**

Enrollment in these 13 districts averaged 450 students but ranged from about 140 to 1,100 students. These districts also were scattered throughout outstate Minnesota.

## Other districts have large fund balances.

At the other extreme, districts may have large fund balances at the close of the fiscal year. Districts with fund balances above $600 per pupil unit lose general education revenue dollar for dollar up to a limit of $150 per pupil unit. The 1987 Legislature increased the fund balance reserve from $500 to $600 per pupil unit effective with the 1988-89 school year.

We looked at districts which had more than $500 per pupil unit in the four operating funds at the close of 1987-88. We found that:

- **In 1987-88, 36 percent of districts had high fund balances which averaged around $900 per pupil unit.**

The fund balance in about one-fourth of these districts was more than $1,000 per pupil unit.

Enrollment in districts with high fund balances was about 1,000 students on the average, although it ranged from less than 100 to over 10,000. Almost all of the districts with high fund balances (95 percent) were located outside the Twin Cities metropolitan area. A plurality (40 percent) were located in southern Minnesota while the rest of the districts were rather evenly distributed throughout northern and central Minnesota.

# SUMMARY

Minnesota has traditionally made a strong financial commitment to education. Using national data, our study showed that:

- **Minnesota spends more for education on average than most states and has increased its financial commitment steadily over the past 16 years.**

In 1987, Minnesota spent 17 percent more per capita on education than the national average and ranked seventh among the 50 states. During the 1987-88 school year, operating expenses per pupil in Minnesota were four percent higher than the national average, and teacher salaries were seven percent higher.

While our relative advantage over the rest of nation has declined somewhat over the years, we believe that this is due more to improvements made in other states than to any real decline in Minnesota's commitment to education. Minnesota still has fewer students per staff and more favorable student-teacher ratios than most states.

Furthermore,

- **The state's education spending has kept well ahead of inflation.**

These types of statewide expenditures have increased markedly in recent years: building construction, social security and retirement contributions for licensed staff, teachers' salaries, and special education.

In addition, districts have turned increasingly to local referendum levies to supplement state revenue. During the 1987-88, school year, 239 of the state's 436 districts collected additional operating revenue through referendum levies, up from 216 two years earlier.

As we showed, however, referendum levies tend to offset the Legislature's work toward equalized funding:

- **Local levies result in some districts having considerably more money to spend on education.**

Most education revenue flows from the state with few restrictions on how that money is spent. Although districts receive most of their funds on the basis of kindergarten, elementary (grades 1 through 6), and secondary (grades 7 through 12) enrollment, they are not required to spent accordingly. As we found:

- **District administrators often cannot isolate or estimate expenditures for regular instruction in total, much less by level of instruction.**

As we explain in Chapter 2, the state has developed a uniform system of financial accounting and requires each school district to use this system to track district spending. However, in Chapter 3, we explain in detail the system's data limitations. Chapter 4 concludes with an analysis of sound data on school district spending which we were able to verify or independently obtain.

# DATA COLLECTION

## Chapter 2

Minnesota school districts routinely report their annual expenditures to the state and local communities. By law, the State Auditor or independent certified public accountants must review districts' accounts and present the results in writing each year to local boards of education. Subsequently, local school boards send audited financial statements to the State Auditor and the Department of Education.

This chapter explains how school district administrators develop and transmit spending figures which are the basis for statewide data maintained by the Department of Education. We address the following questions:

- **What information does the state collect on school district spending? What is the legislative and historical background of the statewide system for collecting district spending information?**

- **Which state and regional agencies are responsible for administering the Uniform Financial and Reporting Standards (UFARS) system of financial reporting? How do these agencies handle the data?**

- **How do administrators use the UFARS system to report school district expenditures? What is the reporting process?**

For this chapter, we interviewed Department of Education and State Auditor staff, former Department of Education employees who had helped to develop the UFARS system, ESV regional computer center staff, and school district administrators primarily responsible for UFARS reporting. We also examined financial statements for a sample of school districts; attended meetings of organizations concerned with UFARS; and reviewed legislation, research, and other documents relating to the historical development, current structure, and future uses of the UFARS system.

# FINANCIAL DATA SUBMITTED TO THE STATE

Each year the State Auditor and local financial auditors examine school districts' financial statements to ensure that districts' expenditures are accurate and in compliance with state and federal regulations. District administrators correct errors and submit revised figures to the Department of Education, where staff use the information to monitor districts' financial conditions and disburse aids.

**Districts must send audited financial data to the state each year.**

Each year by July 1, school districts must send revenue and expenditure budgets to the Minnesota Department of Education.[1] District staff report financial information through Elementary Secondary Vocational Computer Regions (ESVs), using a standard format, called the Uniform Financial Accounting and Reporting Standards system (UFARS). By August 15, districts must submit their unaudited financial statements (their actual expenditures) for the previous year to the Department of Education, the State Board of Education, and the State Auditor.[2] By December 31, after districts' financial statements have been audited, districts must submit to the Department of Education and the State Auditor corrected revenue and expenditure data for the previous school year.[3] Throughout this period, the department periodically updates the statewide financial data in response to changes made locally.

## Department Uses

The Department of Education uses audited and unaudited school district spending data primarily to disburse state aids and to identify districts with serious financial problems. Staff calculate how much to reimburse districts for some purchases and programs. They also produce statewide reports with district-specific financial information for legislators, researchers, and the general public.

Local educational activities funded at least partly by the state include pupil transportation, community education, early childhood family education, school lunch, and nonpublic student services. Department staff use the districts' spending figures, often in combination with other reports, to determine the amount of aid due for providing such services. For example, they use districts' secondary vocational education expense figures to determine reimbursements for state and federally funded programs.

The department depends on districts' reported expenditures to make direct reimbursements for federally funded programs such as those for educationally deprived children (Title I) and students at risk (Chapter 2 block grants). For instance, to be reimbursed for Title I and Chapter 2 block grant programs, ex-

1 *Minn. Stat.* §121.908 subd. 3a.

2 *Minn. Stat.* §121.908 subd. 2.

3 *Minn. Stat.* §121.908 subd. 3.

penditures reported in UFARS must match the amount budgeted and stated on application forms. Department administrators require that errors be corrected before authorizing payment.

As discussed in Chapter 1, Department of Education staff also use spending figures to identify districts with serious financial problems and to monitor debt and fund balances. If operating debts exceed 2.5 percent of operating fund expenditures, the district must submit a special operating plan.[4] Department staff use audited financial statements to corroborate figures reported through the UFARS system, and they collect other data to determine the impact of districts' financial problems.

Finally, the department converts local districts' data into statewide reports for the Legislature, departments of state government, education organizations, researchers, and others. Each year since the early 1970s, the department has published *School District Profiles*, which contains selected spending figures and descriptive information for each operating school district. The Minnesota Bookstore sells hundreds of copies of *School District Profiles* at $5 each. The State Planning Agency also makes these data available through a computerized data bank.[5]

**The Department of Education publishes UFARS data which compare spending district by district.**

# Local Uses

As Table 2.1 shows, in a statewide survey last fall of 97 districts, we found that:

- **Almost all district staff used the UFARS system for basic accounting and financial auditing.**

## Table 2.1: How School District Administrators Use UFARS

| | Percent of Districts |
|---|---|
| Basic accounting and financial auditing | 95% |
| Budgeting or projecting future expenses | 90 |
| Simply informing the public about the cost of activities, programs, and services | 61 |
| Deciding how to allocate money among schools or programs | 59 |
| Comparing expenses in this district against other districts | 44 |
| Lobbying or persuading others to increase funding | 20 |

Source: UFARS Administrator Survey (n = 97).

4 *Minn. Stat.* §121.914.

5 Minnesota State Planning Agency, "School District Rankings," Datanet Online Information.

Ninety percent said they used it also for budgeting and projecting expenditures. Further, about 60 percent said they relied on UFARS to inform the general public about educational costs and to allocate money among schools or programs. Several administrators we spoke with also said that they wished UFARS would provide more comparative information to help them make management decisions.

## State Auditor's Report

**The State Auditor found accounting problems in most districts.**

The State Auditor reviews audited financial statements and publishes a report which shows, among other things, whether each school district's audit report was complete and acceptable. Staff also check the financial statements for compliance with the terms of federal grants and identify general accounting problems.[6]

For 1987-88, the State Auditor received financial statements from all but five school districts and found:

- **Ninety-nine percent of school districts' audited reports were complete and acceptable.**

However, most districts (64 percent) were cited for at least one minor problem such as inadequate segregation of duties.[7]

According to the State Auditor, 276 of the state's 436 districts had at least one "cross-cutting" finding, that is, an accounting or management problem that involved more than one program. Statewide, 42 percent of the districts had only one problem, but nearly a quarter (22 percent) had two or more. One district had nine findings.

We reviewed the audited financial statements of 20 districts where auditors noted three or more cross-cutting findings in 1987-88.[8] Figure 2.1 shows a range of problems which were cited. Some of these problems were minor, but several represent careless business practices and unlawful expenditures. Other problems, such as account code errors and improper handling of cash, could damage the accuracy of statewide spending information if not corrected.

---

*6* Office of the State Auditor, Federally Assisted Programs of Subrecipients of the State of Minnesota (1989).

*7* A district with inadequate segregation of duties might assign the same person to receive money and pay bills. In this situation, there are few controls yet opportunities for mistakes or fraud. Inadequate segregation of duties is a common problem in small school districts with few staff.

*8* All but one of these districts were identified in the State Auditor's 1989 report.

## Figure 2.1: Examples of the Range of Problems Cited by Auditors in Twenty School Districts

- In two districts, group insurance had not been bid every four years as required by statute.
- Paid bills were inadequately documented in several districts.
- Coding errors were made in accounting records, in one case causing late reimbursements.
- In one district, there was no reconciliation of athletic event tickets sold with cash received.
- Monies from fundraisers and athletic banquets under board control were not accounted for in the general fund by one district.
- Contract employees were paid before services were performed in one district.
- One district issued free passes to athletic events (a district may not legally make gifts).
- Some invoices were improperly documented.
- A district awarded bus contracts without requesting quotes by public notice.
- Property was sold to an employee without following statutory procedures.
- A school board did not adopt and approve a line-item budget, only budget totals.
- Some travel expense claims in one district were filed and paid without lodging invoices or reason for travel.
- There were no controls or accounting of monies at a district swimming pool.
- In one district, deposits were not adequately collateralized by as much as $2.5 million.[1]
- A district was unable to reconcile its general ledger on a timely basis.
- Purchase orders were initiated after orders were made in one district.
- A state check in excess of $19,000 was not deposited for six months.
- In one district, a first bid was revealed to a second bidder, who then submitted a lower bid.
- One district's student activities fund had six accounts with deficit balances.

[1]Funds on deposit were insufficiently insured, as required by statute.

# UNIFORM FINANCIAL ACCOUNTING AND REPORTING

The Uniform Financial Accounting and Reporting Standards (UFARS) system is the state's major source of district spending data. UFARS represents a statewide computer system for school district financial reporting, consistent with generally accepted accounting principles and practices. The system is de-

signed to show districts' annual expenditures and revenues in considerable detail.

UFARS was mandated by the 1976 Legislature and went into effect on June 30, 1977. The original legislation required districts to use a modified accrual-based, rather than a cash-based, accounting system, so that their financial conditions could be monitored more effectively than was possible before.

**Districts started using uniform financial accounting and reporting standards more than 10 years ago.**

In cash-based accounting, the simplest form of accounting, cash is recorded when it is received, and expenses are recorded when they are paid in cash. The procedure does not accurately reflect a district's financial condition since it does not allow administrators to predict the effects of revenues before they are collected or expenses before they are paid.

In accrual-based accounting, on the other hand, revenues are recorded when they are earned, regardless of whether they have been collected yet, and expenses are recorded as soon as they are incurred, not when they are paid. Accrual-based accounting gives administrators a more accurate, longer-range view of district financial conditions, and presents a more complete disclosure of district financial condition in terms that could be compared with other districts in the state.[9]

The 1976 legislation also ordered the State Board of Education to adopt and maintain uniform financial accounting and reporting standards for school districts. These were meant to ensure that all districts (1) would similarly adhere to generally accepted accounting principles and (2) report their expenditures and revenues through a common set of categories. The 13-member UFARS Advisory Council (Figure 2.2) was created to recommend these standards to the board.[10]

However, we found that:

- **The law allows local boards to make expenditures for extra-curricular activities through cash funds, often called student activities funds, which are not always reported to the Department of Education.**[11]

**School boards do not control all expenses.**

The local boards are free to decide whether they wish to control most extra-curricular spending but must, by law, report expenses for extra-curricular salaries and co-curricular activities through UFARS.[12] If they decide not to control extra-curricular expenditures, the district may delegate responsibility for the cash accounts to school principals, faculty advisors, and other employees.

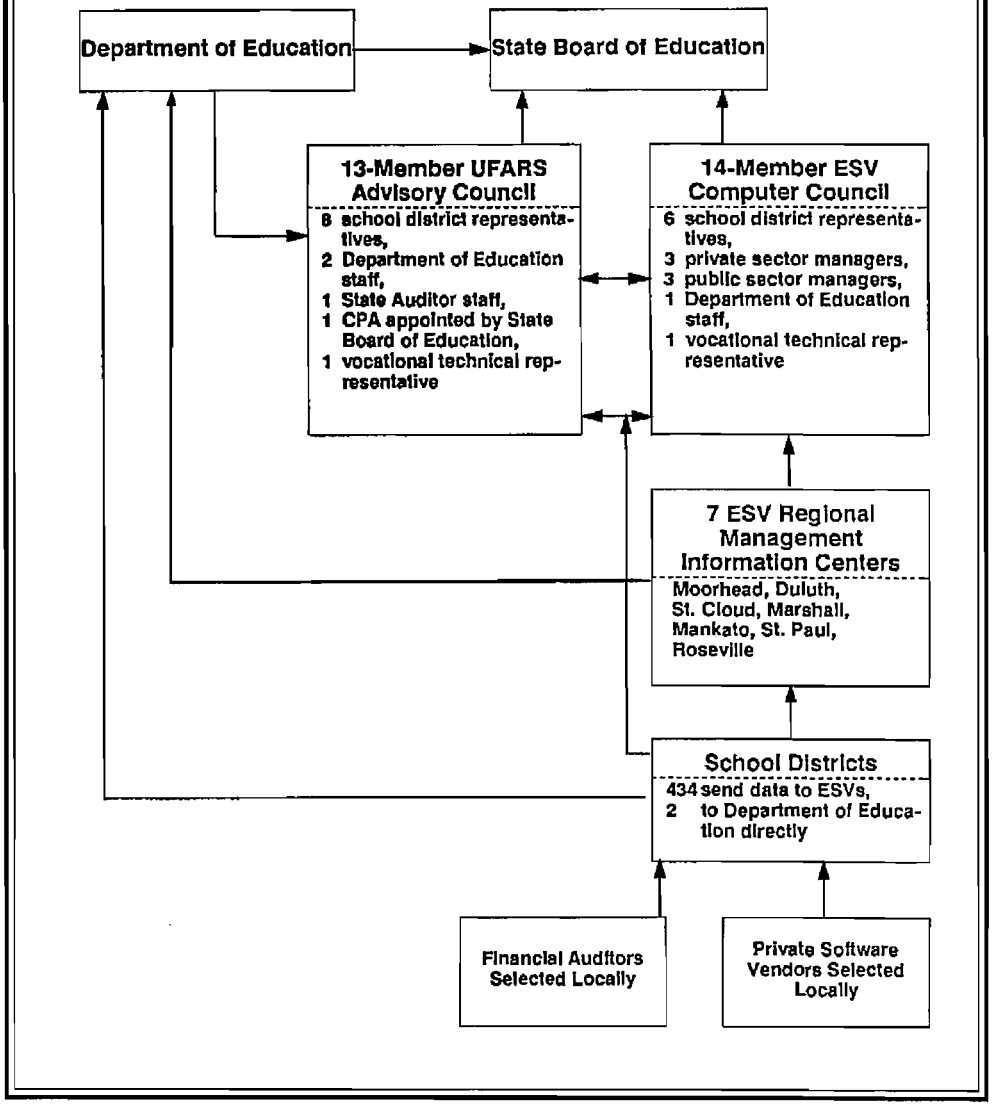
9 Further information is contained in Section II of the UFARS Manual.

10 *Minn. Stat.* §121.902 subd. 1-2.

11 *Minn. Stat.* §123.38 subd. 2b.

12 The main difference between the two types of expense is that extra-curricular activities generally occur after school and outside classrooms, while co-curricular activities are conducted during school hours, in environments similar to those where students earn academic credit. However, the statute provides for exceptions which, in practice, blur the distinction.

Figure 2.2: How UFARS Reporting is Governed




Though we found that local auditors often examine financial records for student activity accounts, the continued existence of cash accounts means that for some districts the shift to accrual-based accounting remains incomplete. Moreover, as we discuss in Chapter 3, financial auditors have identified problems with local school boards' control of cash accounts, and we found that the two separate bases for accounting caused some errors in UFARS data.

**UFARS was to provide comparative information, decrease paperwork, and monitor district finances.**

# UFARS Historical Development

Minnesota's financial reporting system developed for three main reasons: increasing legislative need for information, an unwieldy burden of paperwork

for districts, and serious financial difficulties in some Minnesota school districts.[13]

Before the initial UFARS legislation of 1976, the state's need for information had produced a plethora of forms which demanded completion by school district administrators. The Department of Education's data acquisition calendar listed 241 separate forms which district administrators were required to complete and return in writing. At the same time, increasing federal aid to state and local governments required additional information. The emergence of the Twin Cities as a center of the computer industry that developed after World War II and grant money generated by the U.S. Elementary and Secondary Education Act of 1965 combined to offer a solution--to computerize the process of information collection.

**Districts began computerizing in the 1960s.**

The St. Paul and Minneapolis school districts began the process in the early 1960s by installing computers for payroll, financial accounts, and student records. In 1967, 17 Twin Cities metropolitan area districts spent about $1 million in planning and operating grants to jointly form an organization known as TIES (Total Information for Education Systems). TIES staff provided member districts with technical expertise, computer services, and training. The organization still exists today as one of the seven ESVs, located in Roseville with 49 members, 80 staff (FTEs), and a 1989-90 budget of more than $6 million.

In July 1970, the State Board of Education formally adopted a policy goal of computerizing the state elementary-secondary education information system. The policy was intended to reduce the districts' paperwork burden and provide timely, comparable financial and other district data for the state. To implement this policy, the first strategy was to convert TIES into a statewide educational management information system. However, that effort failed, and a second strategy led to the development of the Minnesota Education Computer Consortium (MECC), organized in 1973.

MECC's primary mission was to provide computer time-sharing services for elementary-secondary and post-secondary education organizations. Its secondary objective was to develop a statewide management information system which the education organizations could use. In 1974, MECC focused on establishing regional computer centers (the ESVs), purchasing large computers, and shepherding the development of computer programs. To process districts' financial data, MECC oversaw the development of the Elementary-Secondary-Vocational Finance System (ESV-FIN).

In the meantime, some Minnesota districts were experiencing financial crises. They faced declining enrollments and rising costs--factors that called for sophisticated budget planning and strong fiscal management. The UFARS system, enacted by the 1976 Legislature, was to establish accounting standards and shift the school districts away from cash-based accounting to modified accrual-based accounting for governmental funds.

*13* In this chapter, we summarize UFARS history according to a revised draft of Charles H. Sederberg's manuscript entitled, "Computerization of the State Elementary-Secondary Education Information Infrastructure in Minnesota: A Case Study" (1989).

In recent years, district staff have gained knowledge about computers, and some have changed to micro- or mini-computers with financial software provided by independent vendors rather than ESV-FIN. However, many small school districts now are dependent on the services they have received from ESVs.[14]

## Subsequent Legislation

The 1980 Legislature computerized the statewide school district reporting system for financial information.[15] Statutes also created the statewide Elementary, Secondary and Vocational education (ESV) Computer Council, which, with the State Board of Education, governs the seven ESV computer centers which now exist, as shown in Figure 2.2. These centers, formed by joint powers agreements among districts, are also called ESV "regions" or regional management information centers. Each school district must belong to an ESV and, with a few exceptions, send financial data through it to the Department of Education.

**UFARS data most usually flow through regional computer centers to the Department of Education.**

The 1980 Legislature also permitted district administrators under some circumstances to use different computer software and hardware for financial accounting and management information. If districts choose this alternative and gain approval from the ESV council, they are required only to send UFARS data to their ESV in summary form. Normally, ESV staff would have access to the districts' detailed financial data.

In 1987, the Legislature further required school districts to begin providing "essential data elements" about each pupil, licensed and non-licensed staff member, and educational program. The department intends to link these elements with UFARS data in an integrated data base (IDB) one of whose major objectives is to produce detailed information about the cost of public education.[16]

The department's experience with computerizing data through UFARS now is being applied to the development of the IDB. In other words:

- **The Department of Education has modeled the IDB's data collection process on the UFARS system.**

We reviewed plans for the IDB by consultants and department staff, and we learned that these assume that the UFARS system now yields reasonably use-

*14* Grant Thornton, *Analysis of ESV Regional Structure* (Minneapolis, November 1989), 110.

*15* *Minn. Stat.* §§121.93 to 121.937. Statutes also provide for computerization and standardization of non-financial information on students, personnel, and property.

*16* See, for example, the Minnesota Department of Education's brochure, *The Integrated Data Base*, and task force report, *Implementing an Integrated Data Base System in Minnesota* (February 1987).

ful financial information.[17] However, as we point out in Chapter 3, many of the figures reported through UFARS are unreliable, and legislation passed in 1989 is requiring the Department of Education now to re-assess its plans.[18]

# ADMINISTRATION AND GOVERNANCE

In this section, we examine the inter-relationships, responsibilities, and recent activities of the agencies which are responsible for governing the UFARS system.

As shown in Figure 2.2, we found that UFARS data generally flow from the districts through the ESVs to the Department of Education. The districts are represented on both the UFARS and ESV councils which are responsible to the State Board of Education. The ESVs are membership organizations whose staff directly serve superintendants and UFARS administrators. Ultimately, the State Board of Education has authority.

However, despite the involvement of so many people and agencies:

- **No state-level or regional entity has taken clear responsibility for ensuring that UFARS data are complete, accurate, and coded consistently statewide.**

**No one ensures that school districts similarly report their expenses.**

Although the ESV staff see to it that UFARS data fall into a pre-determined set of categories, this is the extent of their official involvement. They do not ensure that district administrators classify their expenditures in similar ways or in similar detail. In fact, as we show below, the UFARS system is designed to maximize flexibility for school administrators.

## State Board of Education

The State Board of Education has statutory authority over the UFARS system and is advised and assisted by the ESV council and the UFARS Advisory Council.[19] Also, by law, the State Auditor cooperates with the board to establish and carry into effect a uniform system of accounting by public school officers. The Department of Education advises the board as well and sends representatives to serve and staff both councils.

---

*17* Richard Olson, *A New Data Concept, A Discussion of a New Approach to Data that Describes the Operations of a School District and Its Methods of Collection* (Burnsville, MN: Information Systems Support, Inc., January 5, 1985), 2-1; Minnesota Department of Education, internal memorandum from John Butterfield to Charles Coskran (April 4, 1989).

*18* *Minn. Laws* (1989), Ch. 329, Section 9.

*19* *Minn. Stat.* §§121.11, subd. 5; 121.902; 121.931, subd. 6.

The board's rules regarding UFARS are brief. They specify that district administrators must use the UFARS manual and submit budgets plus unaudited and audited financial statements by certain deadlines to the Department of Education through an ESV.[20] The board's rules refer to the UFARS manual for details and definitions, making it important that the manual be accurate and up to date.

In our study, we examined the role of the State Board of Education in maintaining the quality of the UFARS data. We found:

- **There was no evidence that any recent board activities would affect the quality or uniformity of UFARS data.**

**The State Board of Education ultimately governs districts' financial reporting.**

We examined the meeting minutes and agenda of the state board for 1988 and most of 1989, and these showed that the state board's main role has been to consider requests from school districts to switch ESV regions and transfer money from one fund to another. Overall, our discussions with district administrators indicated that they associated the UFARS system with the Legislature and the Department of Education--not with the State Board of Education.

## Department of Education

The Department of Education receives UFARS figures from school districts and maintains the information in a major computer system called SDE-FIN. Staff also perform a number of services related to UFARS. Besides serving on the ESV and UFARS councils, they provide information and instructions to school districts, analyze the results, write reports based on UFARS data, and monitor districts' financial conditions. Further, the staff respond to questions from ESVs and distribute written instructions.

In all, we found:

- **About 2.4 FTEs at the Department of Education were assigned to support the UFARS system during 1989.**

We also found that .5 FTE from the department staff the ESV Council. However, of the 2.4 regular FTEs which the department assigns to UFARS, one position (FTE) was vacant half of the year. Only one employee of the department worked full time with UFARS, and his job rarely concerned the quality of information which the system generates statewide. However, staff indicated to us that they believe some effort toward data consistency should be made by the department in the future.

Currently, department staff send a document to each district annually and ask administrators to compare selected revenue and expenditure figures from

20 *Minn. Rules* Ch. 3545.1100.

SDE-FIN with local records. These figures become the basis for a report on the districts' financial conditions.[21] Though district administrators are asked to correct the figures and send new data to their ESV, if necessary, the department does not require that they return the document or standardize figures according to the UFARS manual.

## ESV Computer Council

The ESV Computer Council was created in 1980 to advise and assist the State Board of Education in matters pertaining to ESVs and district management information systems.[22] Our analysis revealed that:

- **The ESV council has primarily played a technical, supporting role toward UFARS.**

For example, the council assists the state board with:

- a long-range plan and systems architecture,
- alternative management information systems,
- ESV regional computing centers' plans and budgets, and
- district information systems software.

**Two advisory councils have shown concern about the adequacy of UFARS data.**

Statutes require that the council must monitor and enforce compliance with data standards. Also, it must review UFARS and other state reporting standards for consistency. However, in our opinion, these tasks have often been carried out in a technical sense. Most notably, data flow successfully into and out of the UFARS system because each district's expenditures are encoded in the same 17-digit format. The meaning of the information may not be uniform, as we show later. Last year, the council explored the possibility of a study to determine whether the UFARS system now meets the requirements which were originally specified, but plans were postponed pending our evaluation.[23]

## UFARS Advisory Council

State law requires the UFARS Advisory Council to make recommendations to the State Board of Education on changes to and maintenance of the UFARS system.[24] For the most part, we found:

21 Minnesota Department of Education, Memorandum from Norm Chaffee to district superintendents or directors (December 14, 1989).

22 *Minn. Stat.* §121.934.

23 ESV Computer Council meeting minutes (July 27, 1989).

24 *Minn. Stat.* §121.902.

- **The UFARS council's primary role has been to add and drop codes in response to specific legislation or problems.**

Currently the council is working with the Department of Education and ESV staff to develop a chapter for the UFARS manual, which members hope will define differences among commonly used accounts and thereby increase uniformity of usage among districts.[25]

# ESV Computer Regions

The seven ESV regions have been formed under joint powers agreements among school districts.[26] Transmitting their members' financial data to the Department of Education is just one of several services which they perform.[27] However, ESV staff convert the districts' individual reports to a common format, send the results to the Department of Education, and often check the data and resolve technical errors.

As ESV directors have explained, two types of edits are performed at regional computing centers: system and staff edits.[28] System edits are integrated into the ESVs' software and may differ among ESVs. ESV accounting coordinators perform staff edits when they perceive errors in the data and inform district administrators of the problems. However, the position of ESV staff is that they cannot force districts to make corrections because financial data belong to districts.

Districts can and do change ESV memberships, and they may belong to an ESV in any geographic region of the state. As Table 2.2 shows, the ESVs vary widely in membership, staff size, and budgets. The two Twin Cities metropolitan area ESVs serve member districts with half the state's elementary and secondary student population.

Overall, the ESVs employ a staff of about 200 FTEs, but we found that:

- **Only about 15 percent of ESV staff (roughly 31 FTEs) provide assistance with UFARS directly to member districts.**

Most often, this assistance comes from written instructions and regional accounting coordinators who are employed specifically to help district administrators with accounting procedures. In addition, some ESVs provide access to shared accountants who work at various school districts several days at a time each month.

---

*25* See UFARS Advisory Council meeting minutes (October 13, 1989). The chapter is in process, and staff are preparing a computer program which will check districts' compliance with these standards in the future.

*26* *Minn. Stat.* §121.935.

*27* ESVs often run district payroll systems as well.

*28* Gordon L. Gibbs to Mark Misukanis, Minnesota Senate Counsel and Research, September 27, 1989, letter summarizing the joint response of ESV Directors to questions about UFARS editing by ESVs.

## Table 2.2: ESV Regional Statistics

| ESV Number | Location | Districts Number | Districts Percent | K-12 Students Number | K-12 Students Percent | FY 90 Budget | Total FTEs | FTEs Providing Direct UFARS Support | Financial Accounting System Use - Number of K-12 Districts: ESV-FIN System | Financial Accounting System Use - Number of K-12 Districts: Alternatives |
|---|---|---|---|---|---|---|---|---|---|---|
| I | Moorhead | 91 | 21% | 62,914 | 9% | $1,184,968 | 18.00 | 10.00 | 85 | 6 |
| II | Duluth | 34 | 8 | 54,075 | 7 | 1,258,917 | 17.00 | 5.50 | 34 | 0 |
| III | St. Cloud | 71 | 16 | 97,642 | 13 | 1,210,658 | 17.75 | 2.00 | 55 | 16 |
| IV | Marshall | 87 | 20 | 49,430 | 7 | 1,132,059 | 17.50 | 1.50 | 73 | 14 |
| V | Mankato | 98 | 23 | 99,604 | 14 | 1,120,280 | 18.70 | 4.50 | 97 | 1 |
| VI | St. Paul | 6 | 1 | 117,104 | 16 | 4,273,565 | 40.00[a] | 3.17[b] | 6 | 0 |
| VII | Roseville | 49 | 11 | 247,093 | 34 | 6,293,039 | 80.00 | 4.00 | 48 | 1 |
| Total | | 436 | | 727,862 | | $16,473,486 | 208.95 | 30.67 | 398 | 38 |

Source: Minnesota Department of Education, September 1989; Office of the Legislative Auditor.

[a]Total includes seven FTEs who support the state's computer system, under contract with the Minnesota Department of Education.

[b]Total includes 2.5 FTEs who help to maintain the ESV-FIN system through the Department of Education.

As shown by Tables 2.3 and 2.4, most districts rely on ESV staff for management information systems support. With few exceptions, the districts judge their services satisfactory or better.

In fact, a recent study of ESVs' structure and services showed that smaller districts rely heavily on the ESV staff. Among other reasons, declining enrollment and revenues have decreased these districts' options. [29] The researchers also found, as did we, that:

**Noncomparable data from UFARS could harm another effort to computerize paper reports from school districts.**

- **ESVs did not emphasize the importance of comparability in UFARS coding among districts.**

The study further suggested that noncomparable UFARS data could undermine the IDB. It recommended that the Department of Education should support the ESV council's desire to establish statewide standards for UFARS coding.

As is true of the ESV council, we generally noted that:

- **The ESVs' concern toward UFARS tended to be technical and administrative.**

ESV staff conveyed to us their strong interest in the suitability and accuracy of computer programs for member districts, hardware compatibility, technical support, and the technical aspects of converting districts' data into the state's UFARS categories.

29 Grant Thornton, *Analysis of ESV Region Structure*, 7.

## Table 2.3: Evaluation of ESV Regions by District Size

| Superintendents' Agreement/Strong Agreement | Enrollment 0-999 Small | 1000-4999 Medium | 5000 + Large | Statewide |
|---|---|---|---|---|
| ESV provides cost effective data processing service | 80% | 82% | 91% | 81% |
| ESV software is effective and supports needs | 84 | 79 | 73 | 82 |
| Financial accounting system meets district needs | 90 | 77 | 64 | 84 |
| Payroll system meets district needs | 83 | 74 | 41 | 77 |
| Student accounting system meets district needs | 25 | 33 | 50 | 29 |
| Staff are a broad resource for management information | 85 | 82 | 77 | 84 |
| Range of services meets our changing needs | 86 | 82 | 68 | 84 |
| Quality of service is satisfactory | 90 | 84 | 82 | 90 |
| ESV has fostered inter-district co-operation | 46 | 47 | 68 | 47 |
| ESV provides adequate opportunity to participate in developing policies | 66 | 72 | 73 | 69 |
| Administrative structure meets district needs | 78 | 81 | 77 | 79 |
| Benefits of ESV participation outweigh shortcomings | 86 | 81 | 82 | 84 |

Source: Grant Thornton, November 1989.

# Private Vendors

As an alternative to processing financial data through the ESVs' large computers, at least five private vendors have developed mini- and micro-computer software and sold the product to school districts.[30]

We visited several districts where such alternative computer systems are in use and found:

*30* Minnesota Department of Education, *Long Range Plan for the Elementary-Secondary-Vocational (ESV) Information System* (December 1988), 24-25. In 1989, the department reported that 38 districts were using alternative systems. See Memorandum from Charles Coskran to ESV Computer Council (September 6, 1989).

## Table 2.4: Use of ESV Services by District Size

| | Enrollment | | | |
|---|---|---|---|---|
| | 0-999 Small | 1000-4999 Medium | 5000+ Large | Statewide |
| Financial accounting | 76% | 83% | 86% | 79% |
| Payroll | 77 | 82 | 82 | 79 |
| Student accounting | 21 | 42 | 68 | 31 |
| Training/support for regional systems | 75 | 85 | 91 | 79 |
| Training/support for alternative systems | 37 | 28 | 32 | 34 |
| Training/support for micro systems | 30 | 41 | 64 | 36 |
| Instructional management | 18 | 23 | 36 | 21 |
| Purchasing | 7 | 21 | 41 | 13 |
| Other | 1 | 0 | 0 | 1 |

Source: Grant Thornton, November 1989.

- **Micro-computer systems produced and transmitted less detailed financial data for the ESVs.**

Ordinarily, ESV staff are in a position to review and correct errors which they may see after school districts submit financial data for computer processing. When their member districts choose to process financial transactions on their own, through an alternative system, ESV staff told us they were often concerned about the comparability and accuracy of results.

Alternative financial data processing systems are initially approved by the State Board of Education and the ESV Computer Council, but ESV staff said these systems may fall out of compliance with state standards if not checked periodically.

# Local Auditors

Auditors may establish some of their own conventions for reporting school district expenditures. As a result, we found that figures in audited financial statements did not fully compare with UFARS data.

Our study showed that the figures quite often matched to the penny or were adjusted specifically because the auditors suggested some changes which were not yet transmitted to the Department of Education. However, one administrator could not explain why her district's general administrative support expenditures had been reported to the department as nearly $21,000, while the audited financial statement showed the figure to be $290.

We also observed:

- **School districts' audited financial statements differ dramatically from each other in length, format, and content.**

Local auditors often report expenditures in categories which are similar to those in *School District Profiles* (e.g., regular instruction, pupil support, and district administration). Others also may identify expenditures by type of purchase (e.g., salaries, benefits, services, supplies, subjects, meals.) Some of the statements are highly detailed while others are brief. School administrators sometimes indicated that their auditors provide more data from UFARS than they feel is necessary, but the decision is not theirs to make.

# UFARS STRUCTURE AND THE PROCESS OF REPORTING

**UFARS requires a 17-digit code for each school district expense.**

UFARS has a multi-dimensional structure that is designed to provide several different "cuts" of information on revenues and expenditures. For example, the organization dimension can be used to indicate school buildings where money was spent, while the fund dimension might describe some of the educational activity at various schools within a district.

The system has six dimensions which identify the nature of expenditures. Each dimension is indicated by two or three digits. Together, this means that:

- **District personnel must describe each expenditure with a 17-digit code.**

The dimensions and codes are described in the Manual for the Uniform Financial Accounting and Reporting System for Minnesota Schools, also called the UFARS manual or colloquially, the "blue Bible."

The six dimensions relevant to expenditures are fund, organization, program, finance, object, and course.[31] Within each dimension, the manual shows a variety of codes that district administrators can use to describe expenditures in more or less detail. They may also develop and use their own unique codes but must indicate how UFARS categories are related.

Figure 2.3 describes the fund dimension. Its main purpose is to account for resources meant to be spent on particular school district activities, such as food or transportation. Otherwise, most expenses are from the general fund.

There are two basic types of funds: operating or non-operating. As we discussed in Chapter 1, operating funds are used for ongoing expenses. These include the general fund, food service fund, and pupil transportation fund. Non-operating funds include capital expenditures, building construction, and debt redemption.

*31* See UFARS Manual, Sections IVB through G.

## Figure 2.3: UFARS Fund Dimension (examples)

Fund

1 **General:** The general fund is composed of a set of accounts used to show all operations of a school district which do not have to be accounted for in another fund.

2 **Food Service:** This fund must be established in a district which maintains a food service program for pupils. Food services are those activities which have as their purpose the preparation and serving of regular and incidental meals, lunches, and snacks in connection with school activities.

3 **Pupil Transportation:** This fund must be established in a district that provides a pupil transportation program. All authorized expenditures for transportation shall be entered in the transportation fund. It includes the prorated share of the salaries of the superintendent and other administrative personnel for services rendered in administrative duties in the field of pupil transportation.

4 **Community Service:** This fund must be established in a district that provides services to residents in recreation, civic activities, early childhood programs, or similar services.

5 **Capital Expenditure:** This fund must be established for districts that make capital expenditure levies, receive capital expenditure aid, or make expenditures for capital purposes.

6 **Building Construction:** This fund must be established where building construction has been authorized by a bond issue.

9 **Trust and Agency**

**Each expenditure can be classified in one or more dimensions of UFARS.**

In addition, the UFARS manual classifies expenditures as restricted or unrestricted. Restricted funds refer to expenditures for federal programs, funds restricted by statute or rule, and some entitlements which are based on actual expenditures. For example, child nutrition codes are restricted because services often are federally funded, as explained in Chapter 4.

The organization dimension, shown in Figure 2.4, is designed to identify district-wide spending and receipts per school building or educational level. For example, district administrators may identify all expenditures relating to an elementary school through an organization code.

The program dimension (Figure 2.5) can be used to record expenditures by type of instruction or nature of the service. Usually, the program indicates a rather general category of activity, such as the superintendent's office or data processing.

## Figure 2.4: UFARS Organization Dimension (examples)

| Code Series | |
|---|---|
| 005 | District-wide or otherwise unidentified expenses, as for district administration, debt redemption, bus barns, warehouses, and nonpublic schools. |
| 100 | Elementary school services (one code per district). |
| 200 | Elementary/secondary school services: includes combined elementary-secondary activities that cannot be assigned to elementary or secondary schools. |
| 300 | Secondary school services (one code per district). |
| 400 | Post-secondary services. |
| 500 | Community services includes pre-kindergarten and other activities related to instruction that should not be associated with an elementary, secondary, or post-secondary level, or district-wide expenses. |

## Figure 2.5: UFARS Program Dimension (examples)

| Code Series | |
|---|---|
| 000 | **District Administration:** Expenditures for the school board and for the office of the superintendent, principals, and other administrators who supervise staff. |
| 100 | **District Support:** Expenditures for central office administration which are not directly related to instruction, pupil support, or community services. Examples: business services, data processing, legal services, personnel office, printing, and the school census. |
| 200 | **Regular Instruction:** Expenditures for elementary and secondary classroom instruction, excluding vocational and exceptional instruction, and for co-curricular and extra-curricular activities. Examples: teacher salaries, aides, coaches, classroom supplies, and textbooks. |
| 300 | **Vocational Instruction:** Expenditures in secondary schools for instruction related to job skills and career exploration. Examples: home economics, industrial, business, agriculture, and distributive education. |
| 400 | **Exceptional Instruction:** Expenditures for instruction of students who, because of atypical characteristics or conditions, are provided educational programs different from regular instructional programs. Examples: emotionally handicapped, gifted and talented, mentally retarded, physically impaired, and special learning or behavior problems. |
| 600 | **Instructional Support:** Expenditures for activities which help teachers provide instruction, excluding principals or superintendents. Examples: assistant principals, curriculum development, libraries, audio-visual support, staff development, and computer-assisted instruction. |
| 700 | **Pupil Support:** Expenditures for all other student services, including transportation for instructional purposes and food. Examples: counseling, guidance, health services, psychological services, attendance and social work services. |
| 810 | **Operations and Maintenance:** Expenditures for operation, maintenance, and repair of the district's buildings, grounds, and equipment. Examples: custodians, fuel for buildings, electricity, telephones, and repairs. |

Finance codes, some of which are described in Figure 2.6, may be used to record expenditures of funds from local, federal, or state sources, such as federal block grants. The codes may link revenues with actual expenditures.

## Figure 2.6: UFARS Finance Dimension (examples)

| Code Series | |
|---|---|
| 300 | **State supported programs:** Expenditures for projects or duties including motorcycle safety, arts education, English proficiency, tobacco use prevention, and energy conservation. |
| 400 | **Federal program aid through the state:** Expenditures for projects or duties including education of handicapped children in state-operated or state-supported schools and emergency immigrant education assistance. |
| 500 | **Federal aid received directly:** Expenditures for projects or duties such as civil rights, adult Indian education, training, and bilingual education. |
| 700 | **Child nutrition, transportation, and special education:** Examples: school lunch pattern meals, breakfast, noon kindergarten transportation, and special education tuition at residential facilities. |
| 800 | **Vocational:** Projects and duties such as state-funded secondary vocational programs, secondary vocational handicapped programs, vocational administration, and veterans training. |

The object dimension, described in Figure 2.7, can and must be used only for expenditures. It identifies or provides detail about the service or tangible commodity which was purchased. For example, school districts can use object codes to indicate salaries, postage, and milk. As shown in Figure 2.8, every expenditure must be coded or at least identified within the object dimension if not within other dimensions as well.

The course dimension is designed to give a more detailed description of an activity within some other dimension. Currently, the main use for the course dimension by school districts is to report the costs of specific vocational education classes, such as consumer homemaking.

As of August 1989, we found that:

- **1,364 active categories of expenditures and revenues could be recorded in the entire UFARS system (Table 2.5).**

Some of these codes were only for revenues and accounting needs, and we did not study them further. We attempted to study expenditures in the course dimension (647 codes) but found the state's use of this dimension does not extend to regular instruction. Further, there were few districts which taught the same secondary vocational course, so course expenditures could not be studied statewide.

## Figure 2.7: UFARS Object Dimension (examples)

| Code Series | |
|---|---|
| 100 | **Salaries and Wages:** Expenditures related to all full and part-time employees (not including independent contractors or self-employed) of the district. Examples: executive, managerial, and professional salaries, non-licensed instructional, sabbatical leave. |
| 200 | **Employee Benefits:** Details of employer contributions for employee fringe benefits. Examples: group hospitalization insurance, FICA, TRA (teacher retirement). |
| 300 | **Purchased Services:** Expenditures related to personal services rendered by personnel not on the payroll and other services purchased. Examples: school board per diem, transportation contracts with private operators, travel. |
| 400 | **Supplies and Materials:** Expenditures related to tangible items of an expendable nature. Examples: custodial supplies, fuel for buildings, food, newspapers. |
| 500 | **Capital Expenditures:** Expenditures related to the acquisition of, additions to, or improvement of sites, buildings, or equipment. Examples: buildings acquisition or construction, library books (initial acquisitions), bus equipment. |
| 700 | **Debt Service:** Expenditures for the reduction of principal, interest, and service charges for bonds and long, short-term, or current loans. Examples: loan interest, bond interest. |
| 800 | **Other Expense:** Expenditures not otherwise classified. Examples: dues and memberships, regional membership dues, regional service fees. |

**Object codes are most specific.**

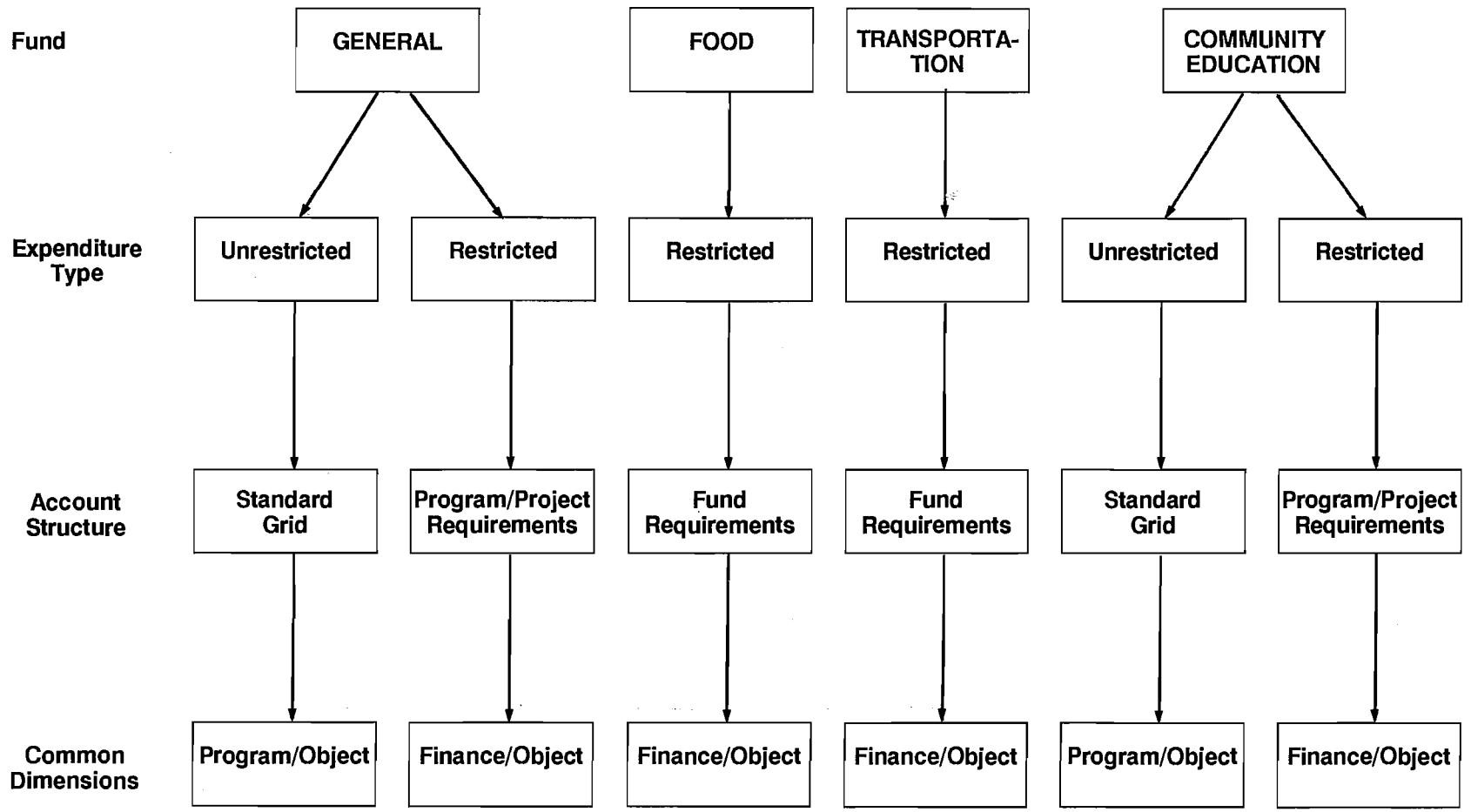
# Assignment of Codes

School district staff decide how many and which type of accounts they need, using their own and neighboring districts' guidelines or those provided by sources including the UFARS manual, local auditors, ESV regional accounting coordinators, and staff from the Department of Education. How they assign expenditures or "code" accounts is critical because this determines how much and what type of information can be retrieved for later analysis.

Depending on the district administrators' preferences, we found:

- **Administrators may classify their district's expenditures by using all six dimensions or only a few.**

## Figure 2.8: UFARS Operating Fund Expenditure Accounts




Source: Minnesota Department of Education.

## Table 2.5: Active Codes by Dimension of the UFARS Reporting System, Fall 1989

| Dimension | Active Codes |
|---|---|
| Fund | 8 |
| Organization | 188 |
| Program | 107 |
| Finance | 177 |
| Object | 121 |
| Source | 104 |
| Course | 647 |
| Balance Sheet | 12 |
| Total | 1,364 |

Source: Minnesota Department of Education.

**UFARS includes codes for more than a thousand categories of expense.**

In general, district staff are free to decide how they will assign codes for expenditures and revenues. They are rarely required to use identical sets of dimensions and codes to describe particular items. For example, some administrators who received an invoice for travel expenses might record it as a cost to the general fund (Fund 1) for a high school (Organization 300) teacher traveling for professional development (Object 367), and put zeroes in the spaces for the finance, course, and program dimensions. Other administrators might take a similar invoice and give it the same fund and organization codes but call it travel (Object 366) specifically for state-supported staff development (Finance 316) to assist with the district's program for gifted and talented students (Program 415).

# Cross-walking

When setting up an account, we also learned that:

- **District personnel may use unique codes which provide additional levels of detail, depending on local needs.**

**Local districts can make up their own codes if desired.**

However, any unique codes must be different from the ones listed in the UFARS manual because the ESVs must consolidate and re-format any such data before transmission to the Department of Education. The UFARS manual illustrates and describes this practice as "cross-walking." Figure 2.9 represents an example of cross-walking in which a district administrator might use unique codes to record custodian overtime expense for a high school building. If this expenditure were transmitted to the ESV, a conversion table, already established by the district, would move expenses from the unique category and compile the figures within an official UFARS category. In other words, the expenditures would be re-classified by the computer for the De-

## Figure 2.9: Example of Cross-Walking District-Defined Codes to UFARS Codes

**DISTRICT-DEFINED CODES**

| FUND | ORGANIZATION | PROGRAM | FINANCE | OBJECT | COURSE |
|---|---|---|---|---|---|
| 01 | 325 | 810 | 000 | 175 | 000 |
| General Fund | Bradbury High School | Operations and Maintenance | N/A | Custodian Overtime | N/A |

**DISTRICT-DEFINED CODES CROSS-WALKED TO UFARS CODES**

| FUND | ORGANIZATION | PROGRAM | FINANCE | OBJECT | COURSE |
|---|---|---|---|---|---|
| 01 | 325 | 810 | 000 | 175 | 000 |
| 01 | 300 | 810 | 000 | 170 | 000 |

Source: Minnesota Department of Education.

partment of Education, while the local districts continued to enjoy the system's flexibility.

ESV staff require that their member districts show through a cross-walk table how they wish to link unique codes with the state's existing UFARS codes, but beyond that:

- **ESV staff require only that districts link their expenditures to some valid UFARS codes.**

In other words, district staff alone may determine whether the UFARS codes they have chosen accurately describe their original expenditures. As we show in Chapter 3, this does not always occur as anticipated.

## Instructions

**The UFARS manual is hard to follow.**

Although each school district received a UFARS manual in the 1970s and subsequent replacement chapters, in Fall 1989 we found that:

- **Administrators had difficulty using the manual and following guidelines set by the Department of Education.**

Further, we learned that the original UFARS system has changed in several important ways, but UFARS administrators have not been systematically retrained, and the manual has not kept pace (as we show in more detail in Chapter 3).

First, the number and content of official UFARS codes have fluctuated. The number of course codes, for instance, increased by about 200 between August and October 1989. As we show in Chapter 3, this rate of change causes problems because the manual becomes outdated. Also, the state's adoption of course codes has limited district administrators' freedom. We noticed that they established "course" codes often for competitive athletics. Now, if a district's code would match one that was subsequently claimed by the state, it would be necessary to change accounts and resubmit data.

On the other hand, records at the Department of Education indicated that 166 codes were deactivated on July 1, 1988. We found that most of these (66 percent) had been used for finance and categorical aids which were discontinued. However:

- **Department staff may reuse the same code numbers after three years.**

**The department and UFARS council have changed codes without retraining administrators.**

Again, in the meantime, district administrators might be confused and find that they need to redo their accounts. In several cases, they told us that the figures which we found at the Department of Education must have been remnants of bygone usage.

Over time, we also saw that some important codes have been defined more loosely, and their content now can overlap. Most notably, when we compared the 1975 and 1985 instructions for coding regular education expenditures, it was clear that:

- **Elementary education expenditures now can be combined with secondary expenses.**

According to the initial instructions, elementary instruction expenses were to be included in one general code, while secondary instruction expenses were to be assigned to subject areas when possible. In 1985, however, the manual allowed district administrators to code expenditures by subject, such as English and music, for both elementary and secondary education, using the same codes. In our experience, indeed, this happened quite often.[32]

We also found that:

- **In some cases, new codes have been added which blur the distinctions between categories.**

For example, a code for travel for professional development, created in 1987-88, caused confusion among some administrators who were unsure how to

*32* The 1975 coding instructions were in the so-called the "grey manual" which was in effect before UFARS was mandated but became the basis for the current manual.

distinguish it from the general travel category. We also found that driver's education instruction was originally captured in one code but now requires two--one each for classroom instruction and behind-the-wheel training. Among our sample of 97 districts, administrators often told us they did not actually separate their driver's education expenses in this way.

# Data Transmission

After district administrators have determined how they wish to classify their expenditures, they transmit the information to be processed by computers. Often, this entails the transfer of a computer file with a batch of transactions to ESVs, but data may also be shipped on magnetic tape or diskettes. In addition, school districts often send or receive computer reports from ESVs on paper, as shown in Table 2.6.

## Table 2.6: Data Submittal Procedures to ESVs by District Size, 1988-89

| | Enrollment | | | |
|---|---|---|---|---|
| | 0-999 Small | 1000-4999 Medium | 5000 + Large | Statewide |
| Pre-printed forms | 49% | 45% | 14% | 45% |
| Computer diskette | 40 | 25 | 14 | 34 |
| Paper report by PC | 12 | 6 | 5 | 10 |
| Magnetic tape | 2 | 3 | 18 | 3 |
| Terminal to ESV | 33 | 53 | 77 | 42 |
| File transfer to ESV | 13 | 25 | 32 | 18 |
| Other | 2 | 2 | 5 | 3 |

Note: Figures do not total 100 because districts use more than one procedure to submit data.

Source: Grant Thornton, November 1989.

**Regional computer centers often handle districts' payrolls too.**

As mentioned above, ESVs have other computer systems which perform important functions besides financial accounting for school districts. Table 2.4 shows that most districts in the state look to their ESVs to process payrolls. In addition, many use the ESVs' student accounting systems.

Just to report UFARS data, a recent study showed:

- **Superintendents estimated that it cost each district more than $50,000 on the average to report UFARS data during the 1988-89 school year.**[33]

Statewide we estimated that the districts' total cost to report UFARS data in 1988-89 was $22.7 million. Per district, the two greatest costs were for staff

33 Grant Thornton, *Analysis of ESV Regional Structure.*, work papers.

(ranging from $9,864 to $115,407, or about $24,000 on the average) and ESV systems support (ranging from $3,497 to $182,680, or about $21,000 on the average). Additional costs were for hardware, software, telecommunications, regional charges, and other miscellaneous items. Of course, the total cost varied with the district's size. (See Table 2.7.)

## Table 2.7: Average Cost of UFARS Reporting by District Size, 1988-89

| | Enrollment | | | |
|---|---|---|---|---|
| | 0-999 Small | 1000-4999 Medium | 5000 + Large | Statewide |
| Hardware/software | $1,374 | $5,161 | $23,618 | $4,067 |
| Staff | 9,864 | 32,954 | 115,407 | 24,157 |
| Telecommunications | 236 | 844 | 2,301 | 562 |
| Regional systems support | 3,497 | 20,563 | 182,680 | 21,231 |
| Other region charges | 260 | 839 | 9,091 | 1,058 |
| Other | 420 | 1,529 | 5,395 | 1,100 |
| | $15,651 | $61,890 | $338,492 | $52,175 |

Source: Grant Thornton, November 1989. The question was: "Please itemize your annual district costs incurred for UFARS reporting in FY 1988-89."

# Staff

**Some personnel responsible for UFARS reporting lack relevant certification or education.**

The personnel who are responsible for classifying educational expenditures vary among districts. For example, in some districts all coding occurs in a central location such as the business office or the superintendent's office. In other districts, one secretary at each school building may be responsible for much of the work.

Among administrators who participated in our statewide survey last fall, results show:

- **The training and titles of school districts' UFARS administrators varied from low-level to advanced.**

The amount of training ranged from none (19 percent) to graduate degrees or CPA status (15 percent). In most districts, business managers, bookkeepers, or accountants administered UFARS coding, but in a few districts, clerical staff and superintendents were primarily responsible.[34]

*34* See Appendix A.

# SUMMARY

As shown by Figure 2.1, several agencies are officially responsible and work jointly on various aspects of UFARS. However, we found that no one agency is responsible for the quality or content of data in UFARS.

In our opinion, it would be more efficient if some of these agencies were combined and directed to the substance of UFARS as well as the mechanics and technical aspects of data processing. Therefore, we recommend that:

- **The Department of Education should take primary, clear responsibility and allocate resources to monitor the content of UFARS data.**

**The Department of Education should take responsibility.**

We believe that the Department of Education is a logical choice for this task because it maintains the statewide data and distributes reports based on the information. However, the department might enlist the ESVs' regional accounting coordinators to help ensure the quality and comparability of financial data from school districts throughout the state.

Further, we believe that the structure of UFARS governance and the process of reporting are cumbersome. Therefore, we recommend that:

- **UFARS governance and reporting should be streamlined.**

For instance, the Legislature should consider consolidating the UFARS and ESV councils into one advisory group which we believe could work more efficiently. The Department of Education might also consolidate and standardize its staff procedures for collecting expenditures data.

Finally, we recommend that:

- **The Legislature should mandate that educational expenditures be controlled by local school boards and accounted for in the UFARS system.**

As we discuss in greater detail in Chapter 3, the cash-based student activities accounts maintained by some school employees have interfered with the accuracy and completeness of UFARS figures. The Legislature should close this gap in *Minn. Stat.* §123.38 and re-examine the definitions it provides for extra- and co-curricular activities. In our experience, it is fruitless for district administrators to attempt such fine distinctions.

Chapter 3 shows how district administrators use some specific categories of expenditures which the UFARS manual defines. We determine which figures are reliable and valid, and we apply the information later in Chapter 4.

# SCHOOL DISTRICT SPENDING DATA QUALITY

## Chapter 3

Statewide figures on school district expenditures are available primarily through the state's UFARS system. Yet there are questions about the data's usefulness for tracking and comparing expenditures over time or among districts. In this chapter we examine the timeliness, accuracy, and comparability of school district spending figures maintained by the Department of Education. Our evaluation addressed the following questions:

- **How valid and reliable are UFARS data? How useful are the figures on school district spending which are routinely published for use by policymakers?**

- **How accurate are data collected through UFARS compared with other sources?**

- **How much confidence can we place in the capacity of existing data to describe accurately school district spending around the state? What accounts for problems? Do some types of school districts provide figures more reliably than others?**

In general, we found that:

- **The UFARS system yields a core of useful information, but almost half the items we evaluated were inaccurate, incomplete, and not comparable among districts.**

To make our evaluation, we used standard techniques and asked if the goal of the ESV Council had been met--that is, to establish "a financial information system capable of accurate, timely, and comparable reporting on K-12 education."[1] Specifically, we evaluated the validity and reliability of more than 100 items of information on 1987-88 school district spending in 97 school districts.[2] In addition, we reviewed the results of others' efforts to collect accurate data on school district spending in Minnesota.

---

1 Minnesota Department of Education, *Long-Range Plan for the Elementary-Secondary-Vocational (ESV) Information System* (December 1988), 3.

2 Audited data for 1988-89 were not due to the department until the end of our study.

# VALIDITY AND RELIABILITY

A valid technique for data collection captures the information it is designed to obtain. With respect to school district spending, we asked:

- **Does the information provided by UFARS genuinely reflect how much school districts spent for common programs, activities, and services?**

For example, we asked if school districts' actual expenditures matched the figures we received from the Department of Education. We judged that the information collected through UFARS lacks validity if it contained major mistakes or if expenditures were systematically misclassified.

We also determined whether the categories of expenditures which are contained in the UFARS manual are complete and appropriate for districts' use. If information collected through UFARS were valid, the categories in the manual would be labeled accurately and convey the true nature of expenditures which were reported. District administrators likewise would report all of their expenditures through UFARS.

Reliability is easier to determine than validity. It generally refers to the certainty and uniformity with which data are produced. For example, a reliable item of information would be one that was provided identically by different staff or by the same person at different points in time.

To examine reliability, we asked school district administrators in 1989 to verify that the figures maintained by the Department of Education were produced accurately in 1988 and met the specifications in the UFARS manual. If not, we asked administrators to provide the correct figures and explain discrepancies.[3] Reliable UFARS figures would be ones that administrators found no reason to change or changed only slightly.

# OTHERS' EXPERIENCE WITH UFARS DATA

**UFARS problems have been noted for over 10 years.**

Since the 1977-78 school year, when UFARS went into effect, staff at the Department of Education and others have noted problems with the data's accuracy and comparability among districts. Most educators and department staff we spoke with believed that the data had gradually improved because district personnel have grown familiar with the system over time. However, despite the passage of at least ten years, several efforts to use UFARS data have revealed serious shortcomings.

For example, we found:

3 Appendix A includes an example page from the verification report which administrators returned for our evaluation.

- ***School District Profiles*** **showed zero secondary vocational spending in a large suburban district during the 1986-87 school year and double the actual spending for all categories of spending in an outstate district during 1987-88.**[4]

Staff at the Department of Education told us that they have knowingly published such errors in the hope that district administrators will be motivated to standardize data after seeing odd comparisons in print. However, inconsistencies have stymied the Department of Education's recent efforts to expand the amount of information which is publicly reported through *School District Profiles*.

**Some errors and inconsistencies are obvious.**

After reseachers at the University of Minnesota used UFARS data to study the effects of inflation, enrollment fluctuation, and plant capacity on school district spending, they concluded, among other things, that expenditures per pupil unit generally should not be used to compare districts or do trend analysis or policy research.[5] The University of Minnesota researchers compared the results of two methods for ranking expenditures by school districts. First they divided expenditures by weighted pupil units as in *School District Profiles*. Second, they divided expenses by units of service such as the number of meals that districts served. They found that the two approaches often yielded different results. The researchers further suggested that it would be helpful to know how much districts spend by level of instruction (that is, kindergarten, grades 1 through 6, and grades 7 through 12). Then, as now, the UFARS system failed to provide statewide information on these expenses.

During the 1987 legislative session, House of Representatives staff asked the Department of Education for a comparison of costs for secondary and elementary regular instruction in Minnesota. They needed to know whether the state's funding formula should be revised. The Department of Education replied that the 1985-86 UFARS data had two major problems: (1) 58 districts with middle schools had to be dropped from the analysis since the system classifies those expenditures as both secondary and elementary, and (2) 30 other districts were excluded because cost ratios were extremely high or low, and there was a strong possibility that the data were miscoded.[6]

4 Minnesota Department of Education, *School District Profiles 1986-87*, 26-27 and *1987-88*, 42-43.

5 Charles H. Sederberg and Vernon L. Hendrix, "Correlations of Weighted Pupil Unit Expenditures and Service Unit Costs," *Journal of Education Finance* 14 (Fall 1988): 248.

6 Minnesota Department of Education, memorandum to the Office of the Legislative Auditor (June 13, 1989). Ultimately, the House decided to reduce the secondary pupil weighting factor to 1.3, based in part on the department's analysis, while the Senate would have left the weighting factor at 1.4. A conference committee split the difference and set the secondary pupil weighting factor at 1.35, as described in Chapter 1.

## Substitutes for UFARS

We found that UFARS weaknesses have prompted the development of several major data collection systems which are designed to capture some information that should already be available through UFARS. Most notably, the Department of Education last year requested $5.15 million to develop a system which, among other things, is designed to estimate the cost of instruction. Partly because of UFARS shortcomings, a consultant to the department concluded that the actual cost of instructional activities could not be determined directly but could be estimated through a separate coding system and additional computer programs.[7]

The Department of Education now is planning to use teacher salary information alone or in combination with UFARS data to estimate how much of the course-related expenses reported by school districts should be in categories such as salaries, fringe benefits, and overhead. Such expenses vary a great deal by subject matter and teacher, so staff told us that it will take several years to develop sound methods of estimation. The department also has retained consultants to help estimate school spending.[8]

**UFARS has caused overpayments, underpayments, and late payments to school districts.**

Several data reporting systems already have been implemented by the Department of Education because financial auditors discovered that the data in UFARS caused errors when staff used it to make aids payments. For example, the Legislative Auditor's Financial Audit Division reported errors in the recording of 1986-87 expenditures for the Secondary Vocational Education Handicapped Program. The underpayments amounted to $25,197, and overpayments totalled $10,823.[9] The report traced these errors to (1) staff communication problems and (2) the Department of Education's lack of procedures to verify the accuracy of UFARS data. Secondary vocational education staff also attempted to use the 1985-86 UFARS spending data to make aids payments, but they found that about 85 percent of the payments would have required adjustments.[10]

Similarly, financial auditors have reported that 1986-87 aid payments for nonpublic pupils arrived late, in violation of statutory requirements.[11] In Fall 1989, we spoke with a staff member who uses UFARS data to make payments for nonpublic instruction aids, including books, materials, tests, health services, and guidance and counseling. He told us that payments were delayed

7 Richard Olson, Information Systems Support, Inc., *A Discussion of a New Approach to Data that Describes the Operations of a School District and Its Methods of Collection* (Burnsville, MN: Information Systems Support, Inc., January 5, 1985).

8 One approach to cost estimation is described in an August 17, 1988, paper: *Program Based Cost Model*, by Gary Farland, Robert Eliasen, and Robert Porter, Minnesota Department of Education.

9 Office of the Legislative Auditor, Financial Audit Division, *Department of Education Financial Compliance Audit for the Years Ended June 30, 1987 and 1988* (March 1989), 2.

10 Office of the Legislative Auditor, Financial Audit Division, *Management Letter Fiscal Year 1986* (March 1987), 3.

11 Office of the Legislative Auditor, *Financial and Compliance Audit for 1987 and 1988*, 4; *Minn. Stat.* §124.195 subd. 11.

because districts must return a written report on these and related expenditures for lack of an appropriate category in UFARS. Many of the reports arrived late from districts. Also, he withheld payments while waiting for districts to correct erroneous UFARS data.

The nonpublic aid form currently sent to school districts says: "It is not possible for the state to obtain the nonpublic administrative costs from the UFARS system, since it cannot be isolated. Therefore, this form is necessary to obtain this data."[12]

# REASONS FOR PROBLEMS

During our research we identified a number of reasons for some of the obvious problems with UFARS data. The first, most basic shortcoming is simply that:

- **Individual school districts have weak incentives and rare need to code their expenditures so that direct comparisons can be made with other districts.**

**Some UFARS problems are due to administrative short-comings and technical weaknesses.**

As we explained in Chapter 2, districts are free to establish accounts which reflect expenses in various detail, and they may use unique local codes. Further, no agency is clearly responsible for ensuring that school district expenses are coded in similar fashion throughout the state.

In addition, we found several administrative shortcomings and technical weaknesses which help to explain inconsistencies and inaccuracies in statewide UFARS data. Of these, it is important to note that:

- **The instructions contained in the UFARS manual and updates often are complex, outdated, and unclear.**

Department of Education staff originally provided each school district with a UFARS coding manual in the late 1970s (when the accounting system first began). Since then, staff have periodically updated some of the manual's sections and mailed notices of changes through financial accounting instructions (FAIs). Some district staff have integrated the FAIs into a ring binder with the initial instructions.

Unfortunately, we found that some of the district staff who are primarily responsible for UFARS coding did not receive instructions through the FAIs. Moreover, the FAIs arrived sporadically and could not easily be incorporated into the proper portion of the manual. We also noticed that many different advisory messages typically are mailed together in the mixed format of a memorandum. A typical FAI may contain descriptions of new UFARS council

*12* Department of Education, *Nonpublic Student Aid Program Reimbursement Computation Summary, School Year 1988-89* (November 1989). In April 1989, the UFARS council approved the addition of an appropriate UFARS category.

appointees, corrections to previous FAIs, and job announcements, in addition to coding instructions.

Overall, we found that the UFARS manual is long and complex. It covers more than 400 pages and has 24 sections. As of Fall 1989, Table 3.1 shows that parts of the manual have not been updated for as many as 15 years. The forward is dated 1974, and telephone numbers for a committee are dated 1975. Thirty-eight percent of the sections were updated in 1988, but 16 percent have not been revised since 1980, including chapters on revenue and expenditure reporting, UFARS standards, generally accepted accounting principles, and indirect costs relating to federal grants and contracts. In actuality, the course dimension has changed extensively in the past few years, yet the section dealing with it is dated 1985.

**The UFARS manual is outdated, long, and complex.**

## Table 3.1: Age of Sections in the UFARS Manual, Fall 1989

| Last Year Updated | Number of Sections | Percent of Sections |
|---|---|---|
| 1974 | 2[a] | 8% |
| 1975 | 1[b] | 4 |
| 1976 | 0 | -- |
| 1977 | 0 | -- |
| 1978 | 0 | -- |
| 1979 | 0 | -- |
| 1980 | 1 | 4 |
| 1981 | 2 | 8 |
| 1982 | 0 | -- |
| 1983 | 0 | -- |
| 1984 | 0 | -- |
| 1985 | 7 | 29 |
| 1986 | 0 | -- |
| 1987 | 1 | 4 |
| 1988[c] | 9 | 38 |
| Undated | 1 (glossary) | 4 |
| Total | 24 | 99% |

[a]Includes the forward and introduction.

[b]Includes the acknowledgement, committee members, and mailing list.

[c]The Department of Education issued new summary lists in April 1989, and January 1990, but these were not included in the manual we evaluated.

Note: Figures do not total 100 percent due to rounding.

During our review of the manual, we also discovered that one category of expenditures was included with no explanation that administrators should not begin using it until the following year. Another category had been deleted although districts were allowed to use it. Staff development (Finance 316) was in the manual in 1987-88, and showed data from 10 percent of districts, but an

FAI said that this category was not to be used until the next year, beginning in 1988-89.[13] On the other hand, transportation for cooperative academic classes (Finance 729) was missing from the manual but was still authorized for active use in 1987-88. Staff told us they dropped it from the manual because they anticipated that the category would be deactivated (which it was in July 1988).

## UFARS Problems Noted by District Administrators

Most of the staff (76 percent) we interviewed who are primarily responsible for UFARS reporting said they have experienced difficulty with the system. When we surveyed a representative sample of 97 administrators, we asked: "In your opinion, which of the following areas pose problems in your UFARS reporting?" The responses are shown in Table 3.2. On the average, administrators mentioned two problems from a list of six, and many wrote in additional problems. Although 24 percent of the district personnel in our sample felt that UFARS needs no improvement,

**Most UFARS administrators have one or more problems with the reporting system.**

- **Forty-one percent said they had problems with the content or number of UFARS codes.**

### Table 3.2: UFARS Problems Cited by School District Administrators

| | Percent of Districts |
|---|---|
| Content or number of UFARS codes | 41% |
| UFARS manual, written instructions, and advisories | 27 |
| Training or re-training process | 23 |
| Department of Education's assistance with coding questions | 14 |
| Technical aspects of data transmission | 10 |
| ESV's assistance with coding questions | 7 |
| Other | 15 |
| No areas need improvement | 24 |

Note: Some administrators cited multiple problems; others cited none.

Source: UFARS Administrator Survey (n = 97).

Based on our discussions with the administrators, they indicated that the state has established too many categories in UFARS, and the desired content of these categories is unclear. In fact, 18 percent of the UFARS administrators wrote detailed comments about the complexity and lack of clarity in UFARS categories. Seven administrators specifically stated that these problems en-

*13* Department of Education, Financial Accounting Instruction #72.3 (1987).

courage the inconsistent use of categories among districts. For example, one business manager wrote: "If there were more detailed explanations in the UFARS manual, I feel more districts would be coding more consistently." Others requested clarifications in directions, such as the following: "It would be easier if we were just told [how to set up codes]."

In our survey, 27 percent of the administrators also cited problems with the UFARS manual and instructions, such as the lack of a current manual, and 23 percent said problems were related to the training or re-training process. Several administrators suggested that the Department of Education could update its training materials and slides, which are more than ten years old. A few noted that they had received money from the state before any UFARS category was assigned to show how the aid was spent.

Only seven percent faulted their ESV's assistance with coding, but 14 percent criticized the Department of Education's assistance in this area. Fifteen percent of the administrators described other problems which were not specifically listed on our questionnaire. Often, they said it was hard for them to adapt to changes which occur too quickly and irregularly throughout the school year.

# Completeness

As we discussed above, UFARS figures would provide a complete, clear, and unchanging account of school district spending if they were valid and reliable. However, we found that:

- **School district expenditures data for the 1987-88 school year remained incomplete late in 1989.**

**Statewide, UFARS data are incomplete.**

We identified two reasons why the information is incomplete: (1) Some districts fail to control cash transactions through student activities accounts which are not included in UFARS, and (2) District administrators continue to change their reports to the Department of Education.

As Chapter 2 explains, state law allows school boards to control all or only some expenditures for extra-curricular activities.[14] In fact, the UFARS manual encourages local school boards to avoid controlling extra-curricular expenditures and instead maintain an accounting system apart from the regular district finance system (UFARS).[15]

In our sample of 97 districts, we found that 67 reported cash expenses and revenues for student activities in their audited financial statements. Projecting results to the state as a whole, this suggests:

14 *Minn. Stat.* §123.38 subd. 2b.

15 *UFARS Manual,* Appendix C, III-1.

- **During 1987-88, districts spent nearly $29 million and maintained balances of more than $6 million in student activity funds, only some of which was reported to the Department of Education.**

On the average, districts spent about $130 per student through cash accounts for all manner of items--not just extra-curricular activities as statutes require. As shown in Figure 3.1, many of the items reported in extra-curricular activities accounts appear identical to expenses normally considered educational and reported by school districts through UFARS, such as insurance, community education, gifted and talented education, summer school, and driver's education.

## Figure 3.1: Selected "Student Activity" Expense Items

Miscellaneous, general, revolving, rotating
Petty cash, imprest, flow thru, in and out
Blue Cross/Blue Shield, PERA life insurance, term life insurance, shelter annuity
Faculty, staff activity, student/staff
Hot lunch, concessions, pop, popcorn
Band, chorus, music, string music, uniforms
Community education, community fund
Employees' association, workers' fund
Speech, drama, musicals, forensics, debate
Scholarships, memorials, hospitality
School/community health team
Advanced placement, teacher's fund
Library, magazines, student council
Athletics, cheerleaders, jackets, booster clubs
Home economics, computer curriculum, math, science, industrial arts
Gifted program, Mexico trip, educational enrichment
Transportation, tickets
Art supplies, student supplies
Just Say No, "I Can" Class, alternative school
Yearbook, prom, class of (year)
High school operating, middle school electives, grade school welfare fund
Summer school
Behind the wheel (driver's education)

Source: School District Audited Financial Statements (cash receipts and disbursements).

Based on our discussions with district administrators and the financial statements we reviewed, we suspect that UFARS figures reported to the Department of Education are incomplete for numerous categories of expenses, in addition to extra-curricular activities. Also, districts' use of cash-based accounts for a wide range of educational expenses suggests that their transition to accrual-based accounting is incomplete.

In 1989, one school district's cash accounts were misused.[16] Also, last fall, one administrater told us that his district's elementary school had raised several hundred dollars that were not audited and were apparently taken by a former principal for his own use. Although we found that local auditors often examined activities accounts, this was not always the case. In some cases, funds were raised by students or others for a specific purpose yet were not subject to audit at all.

Another reason we believe UFARS data are incomplete is that:

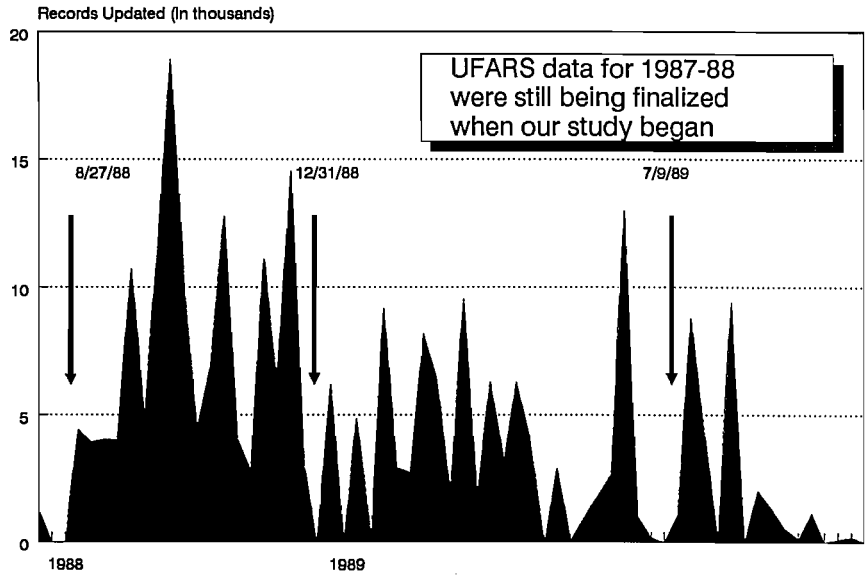
- **District administrators continued filing hundreds of changes to the 1987-88 UFARS data in 1989.**

As Figure 3.2 shows, 1987-88 data continued to evolve throughout most of the past year. Eleven months after the December 31 deadline for district administrators to submit audited and unaudited UFARS figures, the Department of Education had processed nearly 126,000 changes to the figures. Reasons for changes included error corrections, budget changes, addition of audited information, completion of partially submitted data, responses to notices of discrepancies from the department, and account conversions, which may occur when codes are created or deleted. Furthermore, early in November 1989, we learned that:

**In 1989, UFARS data for 1987-88 continued to change, and some of the past year's data were overdue.**

- **Seven districts had not submitted UFARS data which should have showed their unaudited expenditures for the 1988-89 school year.**

Figure 3.2: Updates to 1987-88 UFARS Data, August 1988-November 1989




Source: Department of Education.

*16* Early in 1989 the State Auditor's Office reported that a St. Paul school district assistant athletic director had diverted nearly $11,000 in athletic funds to his own use. Anthony Lonetree, "Audit Says St. Paul Educator Diverted $11,000," *Star Tribune*, May 26, 1989, 1A.

By law, the department should have received this information nearly three months earlier. Among the districts whose data were missing from the department's files were several large ones whose enrollment is well over 1,000 students.

# Problems with the UFARS Manual

Although district staff often reported that there are too many categories, we also found gaps and repetition among those that have been established. Under these circumstances, in our opinion, it would be difficult to code expenditures accurately and consistently despite strenuous efforts. In fact, we found:

- **Most UFARS administrators said they strive to classify their district's expenses correctly.**

As shown in Table 3.3, 58 percent of the district administrators in our sample said they put forth a strong effort to select appropriate categories, and 61 percent to correct identified errors. However, about 40 percent invested no more than moderate effort, which may dilute the effect of others' work.

## Table 3.3: Effort School District Administrators Devote to UFARS Coding Issues

| | Percent Who Said They Gave | | |
|---|---|---|---|
| | Little to Some Effort | Moderate Effort | Strong Effort |
| Selecting which code is most appropriate to expenses | 17 | 23 | 58 |
| Correcting identified coding errors | 14 | 23 | 61 |
| Training staff to code accurately and consistently | 17 | 22 | 43 |
| Seeking advice or assistance with coding questions from sources outside the district | 27 | 27 | 43 |

Source: UFARS Administrator Survey (n = 97).

In addition, we learned that:

- **Less than half of the administrators said they gave strong effort to seeking advice or assistance with coding questions from sources outside their district.**

However, about half (54 percent) of administrators said that they exerted little to moderate effort to obtain guidance from external sources. In our

opinion, this may represent some disinterest in seeking help and may compound errors created by manual instructions that are unclear and outdated.

Another complication is that:

- **The UFARS manual defines some categories of expense in such a way that they can be recorded in one or more equally acceptable fashions.**

## The definitions for some UFARS codes overlap with others.

For instance, two codes can be used to report expenses for the identical program, namely gifted and talented instruction. The manual says that the category in the program dimension should be used to record spending for "special learning experiences for an individual who is capable of high performance."[17] Elsewhere, the manual also says that a code in the finance dimension is for "expenditures to provide programs for gifted and talented pupils."[18]

In practice, we found that district administrators sometimes used the finance code to record only the portion of gifted and talented instruction that was state-funded. Others split their expenses between the two categories or, as we show later in this chapter, reported no expenditures in the finance dimension despite the fact that they received money from the Department of Education specifically for gifted and talented programs.

We also found that:

- **Some of the instructions in the manual are inadequate for districts that share services and activities.**

We spoke with several administrators whose districts shared services or activities with other districts, often in a cooperative arrangement. Most were confused about how to report their expenditures correctly through UFARS. Staff at the Department of Education also told us this is a problem. Some ESV staff told us, in the meantime, that districts set up unique, formal and informal systems for accounting when they share staff or services.

## Cooperating districts often lack information to report expenses through UFARS.

The manual seems to assume that district administrators have all the information they might need to report their expenses fully and accurately. However, we noticed:

- **Some districts obtain special education, vocational, and instructional services through cooperative arrangements and pay on the basis of a pre-determined formula or lump sum.**

Another problem we found with the UFARS manual is that:

---

*17 UFARS Manual,* Section IV, IVC-13.

*18 UFARS Manual,* Section IV, IVD-6.

- **Some of the labels given to categories are misleading.**

For example, one category label includes both attendance activities and social work, an inappropriate linking that confused many districts.[19] Another category, regional membership dues, is really designed only for ESV dues.[20] (In any event, we found that administrators often paid lump sums to their ESV and were unaware of the precise portion that was earmarked for membership dues.) Another category is called fuel for buildings, but we found when we read the definition in the manual that the category includes only heating fuel expenditures, not air conditioning.[21] As a consequence of these confusing labels, district administrators who consult only the summary list of code titles may misclassify expenditures.

# Evidence of UFARS Data Inconsistencies

We found a number of additional reasons to question whether staff responsible were classifying expenditures in a consistent manner from district to district. For instance, we found that:

- **District administrators sometimes changed their coding practices when they reviewed the situation.**

Sometimes this happened because our study required administrators to verify the spending figures they had previously submitted. Other times, new staff just beginning to work with a district's accounting system discovered errors or simply felt a different UFARS code was more appropriate than the one in use. We learned that one administrator unknowingly informed the Department of Education that his district spent more than $170,000 for a tobacco use prevention program. The actual figure was $2,853, and the difference was due to inclusion of nonrelated expenses. Another was surprised to find $11 million in a category of spending which should have contained only $1.5 million. Through a cross-walk error, elementary education expenses had been included in the category designated middle school and elementary-secondary.

Quite often, we also found that:

- **Some district administrators relied upon the most general UFARS categories, while others provided detailed data on spending for specific activities and services.**

For instance, some administrators divided their district's special education and secondary regular instruction costs into specific program costs, such as learn-

---

*19* Program 740.

*20* Object 821.

*21* Object 440.

ing disabled or mathematics instruction, while others simply used the general category for special education or secondary education.[22] Some staff carefully identified their district's kindergarten, elementary, and secondary regular instruction costs, while others classified many expenditures as "district-wide" and reported them in one category which is also assigned for middle school expenses.

Some district staff were less specific than others because they broadly interpreted definitions in the UFARS manual. For example, we often found that staff made no distinctions between co-curricular and extra-curricular activities and felt free to combine non-athletic expenses in one category or the other. In the area of regular instruction, some district staff avoided the category for computer science and instead combined all computer science instruction with mathematics. Others, we found, used the computer science instruction category for some of the district's computer expenses, including repairs and supplies.

# DATA FROM INDEPENDENT SYSTEMS

We obtained data from several independent data collection systems which have emerged at the Department of Education, and we compared the information with figures that should have been recorded identically in UFARS. While data from the independent systems may also contain some inaccuracies, individuals are specifically assigned to correct errors and monitor data accuracy, which is not the case with UFARS. Moreover, the data from other, independent data collection systems become the final basis for aids payment--rarely the UFARS data.

In general, when we compared spending figures collected through UFARS with data from other systems:

- **We found differences between some UFARS expenditures reported to the state and parallel data collected separately.**

The differences were especially large in the area of special education (total salaries) and supplies for learning disabled instruction. In contrast, selected pupil transportation and secondary vocational education expenses were quite similar. Results for each of our three comparisons are described below, as well as comparative information on categorical aids paid by the Department of Education and sometimes reported through UFARS.

22 In the area of regular instruction, the general secondary education code is meant for expenses that cannot be classified by subject matter. Similarly, the general special education category is meant for activities that cannot be classified by particular handicap education program.

# Special Education

The special education staff in the Department of Education need more detailed information than UFARS provides, particularly about individual teachers, their qualifications, and assignments. To obtain this information, 1.32 FTEs maintain a computerized, interactive reporting system which categorizes expenditures in some of the same ways as UFARS. However, these special education data are edited as they are entered at school districts, and, if necessary, recalculated weekly, so that districts receive direct feedback about reporting errors as well as reimbursements.

**The department collects data on special education expenses through a separate system.**

We calculated the dollar and percentage differences between UFARS data submitted to the Department of Education and some of the data collected by the department's special education staff. Both sets of figures were for the same four objects--salaries and supplies for (1) learning disabled programs and (2) all students with disabilities who received special education.

As Table 3.4 shows, we found that:

- **On the average, the total special education salary expenditures were 37 percent lower when collected directly by the department, rather than through UFARS.**

## Table 3.4: Special Education Expenses Reported to the Department of Education Compared with UFARS

| Average of | Dollar Difference[a] | Percentage Difference |
|---|---|---|
| Total Salaries | - $239,867 | - 37% |
| Total Supplies | - 1,273 | - 11 |
| Learning Disabled Salaries | 4,779 | 3 |
| Learning Disabled Supplies | 783 | 33 |

Source: Minnesota Department of Education.

[a]A negative dollar and percentage difference means that the UFARS average was higher than the average reported to Department of Education staff.

Statewide, we found that the dollar difference for this comparison was $10.5 million in 1987-88. Also:

- **Learning disabled program expenditures for supplies were higher by 33 percent when collected by the Department of Education rather than through UFARS.**

These findings suggest several possibilities. First, in our experience, district staff have been over-using the general code for special education. The system

does not require them to allocate salaries to specific special education programs, and obviously the UFARS data have no consequences for reimbursement. Second, district staff may include non-salary expenditures in the salary category.

## Secondary Vocational Education

In order to make accurate aids payments, the department's secondary vocational education staff (1.3 FTEs) need to know how much districts spent for reimbursable secondary vocational expenditures, such as salaries for licensed secondary vocational instructors. Since the use of UFARS data caused payment errors in the past, the staff send separate paper forms for districts to report the previous year's expenditures. These reports must arrive at the department by August 15, after which the results are compared with UFARS data, which should be identical. Where they are not, the staff send districts a report showing the difference and requesting a resolution of the discrepancy. If the district does not resolve the mismatch, secondary vocational staff pay only on the basis of the smaller amount. As of April 1989, this comparison showed that there were unresolved discrepancies which totalled $320,109 between UFARS and separately collected data for 12 districts' 1987-88 expenses.[23]

**In April 1989, errors remained in UFARS figures for secondary vocational education expenses during the 1987-88 school year.**

We calculated the average dollar amount and percentage differences in the secondary vocational education spending which districts reported for salaries, travel, total expenses, and net expenses in UFARS compared with the department's independent data collection system.

As Table 3.5 shows, travel figures reported through UFARS were 12 percent higher on the average than figures for the same ostensible purpose when collected by the department's secondary vocational staff. However, the figures were quite similar for salaries, total expenses, and net expenses.

### Table 3.5: Secondary Vocational Expenses Reported to the Department of Education Compared with UFARS

| Average of | Dollar Difference[a] | Percentage Difference |
|---|---|---|
| Salaries | -$1,430 | -1% |
| Travel | -178 | -12 |
| Total Expense | -1,602 | -1 |
| Net Expense | -1,633 | -1 |

Source: Minnesota Department of Education.

[a]A negative dollar and percentage difference means that the UFARS average was higher than the average reported to Department of Education staff.

23 Janet Christenson to Don Pfiffner, Department of Education internal memorandum (April 10, 1989).

In our own study, described in more detail later in this chapter, we noted that district staff sometimes misreported secondary vocational spending through UFARS because they included only the expenses that qualify for reimbursement by the Department of Education. As a result, both sets of figures may be incomplete pictures of secondary vocational education costs.

# Pupil Transportation

Other staff at the Department of Education need to know how much districts spent to properly determine how much transportation aid they should remit. The department's district financial management and transportation staff therefore compare UFARS data with transportation data, which they require administrators to report on a paper form entitled "Pupil Transportation Annual Report." On this form, district staff must report some expenses along with mileage and pupil information that is not included in UFARS.

About .68 FTEs at the Department of Education work to produce a separate data base which starts from UFARS but often reflects the annual report instead. Although the revised information becomes the basis for payment, staff alert district administrators to whatever errors they discover in their review process.

In December 1988, department staff sent error notices to 292 of the state's 436 districts concerning discrepancies between their 1987-88 UFARS and transportation annual report figures. After the error notices were sent to districts, the department told us:

- **Error notices resulted in no more than 50 percent improvement in the UFARS transportation figures maintained by the Department of Education.**

**District staff have little reason to correct UFARS pupil transportation figures.**

In our opinion, administrators may have little motivation to correct their UFARS data since payment is based on figures revised by department staff.

We also selected six major types of transportation for which expenditures are reported through both channels and calculated dollar and percentage differences between the two sets of figures. The expenses were for (1) regular transportation to and from school, (2) handicapped students, (3) half-day kindergarten, (4) late activities, (5) secondary students who live 2 miles or less from school, and (6) students who would face unusual traffic hazards by walking.

As Table 3.6 shows, several types of pupil transportation expenditures recorded in UFARS were similar to the figures collected by the Department of Education, but:

- **Average expenses reported through UFARS for the major category of regular transportation to and from school were lower by 8 percent or $19,192.**

## Table 3.6: Pupil Transportation Expenses Reported to the Department of Education Compared with UFARS

| Average of | Dollar Difference[a] | Percentage Difference |
|---|---|---|
| Regular To - From School | $19,192 | 8% |
| Handicapped | -93 | <-1 |
| Noon Kindergarten | 564 | 4 |
| Late Activities | 128 | 2 |
| Secondary 1-2 Miles | 84 | < 1 |
| Extra Traffic Hazards | 5 | < 1 |

Source: Minnesota Department of Education.

[a]A negative dollar and percentage difference means that the UFARS average was higher than the average reported to Department of Education staff.

The cost to bus kindergartners in mid-day was only four percent lower in UFARS than in the department's separate transportation data base. Spending for handicapped transportation, late activities, secondary 1-2 miles, and transportation to compensate for traffic hazards differed by no more than two percent.

As we explain below, our study showed that district administrators often have a hard time reporting pupil transportation expenditures correctly through UFARS.

# Categorical Program Expenditures

During 1987-88, many districts received state aids for gifted and talented instruction, chemical dependency prevention, tobacco use prevention, and arts education programs.[24] The UFARS manual provided specific finance codes which district staff could use to report how much state aid actually was spent on these programs. By comparing the amount that districts reported spending for categorical aids programs against actual payments the state made, we tested the extent to which district administrators actually used the codes provided in the manual.

Results show that:

- **As many as 45 percent of the districts that received categorical aids neglected to report their expenditures through the specially designated codes.**

*24* As of 1988-89, all these aids except tobacco use prevention were combined and became part of the basic general education revenue. See Minnesota House of Representatives Research Department, *Minnesota School Finance: A Guide for Legislators* (December 1988), 64.

As Table 3.7 shows, 45 percent of the districts that received tobacco use prevention aid reported no tobacco use prevention program expenses through UFARS in 1987-88. Of districts receiving other categorical aids payments, 24 percent failed to use the code for gifted and talented program expenditures, 30 percent reported no chemical dependency program expenses, and 35 percent neglected to record arts education expenses. However, we emphasize that the districts suffer no consequences or penalties from their use of the UFARS codes. Staff at the Department of Education told us their role was to provide program resources, not to check that expenditures were spent and recorded appropriately.

## Table 3.7: Categorical Aids Program Expenditures Reported by Districts, Compared with State Payment Records

| | UFARS | | MDE Payment Records, 1987-88 | | |
|---|---|---|---|---|---|
| Finance Codes | Total Number of Districts Paid But Not Using Code | Percent Of Districts Paid But Not Using Code | Number of Districts Paid | Average Dollar Difference[a] | Average Percent Difference[a] |
| Gifted and Talented | 101 | 24% | 421 | -$9,423 | -74% |
| Chemical Use Prevention | 130 | 30 | 428 | - 1,403 | -38 |
| Tobacco Use Prevention | 189 | 45 | 416 | - 1,139 | -43 |
| Arts Education | 152 | 35 | 435 | -2,074 | -46 |

Note: The UFARS manual says that district administrators may use the finance codes to establish the link between revenues and expenditures.

Source: Minnesota Department of Education.

[a]A negative dollar and percentage difference means that the UFARS average was higher than the average amount paid by the Department of Education.

District staff who did use the special codes to report categorical aids expenditures showed expenses that exceeded aid payments by as much as 74 percent. We found a difference of at least 38 percent among the four categories we studied. Generally, administrators told us that they had included in these UFARS categories additional program expenses that were not paid by the state.

# DISTRICT VERIFICATION OF UFARS DATA

**We asked district staff to verify or correct selected UFARS figures.**

We asked administrators from a statewide sample of school districts to correct, if necessary, a selection of spending figures they had submitted to the Department of Education through the UFARS system for 1987-88. Because UFARS data were not yet completed for 1988-89, we had to restrict our analysis to 1987-88 figures as of July 1989. We also asked for some spending information which is otherwise not reported and learned how the administrators viewed the UFARS system.

The staff primarily responsible for UFARS coding reviewed each figure in our verification report and certified that they had properly included all expenses for activities, programs, and services as specified by the UFARS manual.[25] Ninety-seven of 112 sampled districts returned their reports within the study period of August 21 to October 17, 1989.

Our sample of school districts was chosen randomly by computer for six of the state's seven ESVs. In the seventh ESV, we sampled all six districts, which include Minneapolis and St. Paul. We used ESVs as the basis for our sampling because we believed ESV support staff's assistance to member districts might help to explain variations in the accuracy and comparability of UFARS figures. Furthermore, the ESVs are directly responsible for transmitting data to the Department of Education in proper form and format.

Of the 15 districts that were sampled but not included in our study, five sent verification reports too late for processing, and superintendents in two said they were entirely unable to verify that any of their UFARS data were accurate for 1987-88. Eight did not respond for various other reasons. Time was an important consideration, as it took many district staff as much as one week each to verify or correct the items of information they had submitted to the Department of Education.

As Appendix A shows, our sample of districts was quite similar in enrollment size, location, and other characteristics compared with the entire group of 436 Minnesota school districts. Because of this similarity and the manner in which districts were sampled, we were able to project the spending figures from the group of 97 to all Minnesota school districts.[26]

Because some district staff lacked access to a UFARS manual, we enclosed a copy of the instructions for each type of spending figure we sought. In addition, we reprinted some of the most important specifications and asked district staff to indicate in writing whether each figure in our study met the standards. At the end, district staff certified the accuracy of their work, and

---

*25* We made an exception for the textbooks and workbooks object code (460), which the manual says should exclude workbooks for teachers, binding costs, and textbook repairs. We found that few district administrators in our sample excluded these items which are only a small portion of the total for textbooks and workbooks.

*26* The projection process was based on simple arithmetic which multiplied or "weighted" spending figures by factors which reflected the difference between the number of districts in our sample and the true number of districts in an ESV.

we followed up with a phone call to all 97 sampled districts, checking figures in further detail.

Where district staff could not provide exact spending figures despite their previous report, we asked them to make an estimate. If the administrators felt that their estimates were reasonably precise, we substituted those for the original figures maintained by the Department of Education. Otherwise, we indicated that the spending figure could not be reported.

**Administrators sometimes could estimate their districts' expenses if not provide exact figures.**

We used three criteria to select the figures in our data test. First, each item represents an activity, program, or service that almost all districts provide. Second, the activity, program, or service is defined by the UFARS manual in reasonably straightforward English. Third, each item involves an aspect of school district spending that is routinely reported in *School District Profiles* or is of substantive interest to educators and policymakers.

Besides the items of UFARS information, school district administrators also were asked to report how much they spent for these and other items: regular secondary instruction, superintendent's total compensation, and school board members' compensation.

The UFARS manual allows districts to mix elementary and secondary regular instruction costs throughout subject areas such as music and English. There are specific categories for kindergarten and regular elementary (1 through 6) education, but not for secondary education.

Total compensation figures for superintendents and school board members are not currently available through UFARS. The manual instructs district administrators to report all expenses, including salaries, for the office of the superintendent, but no separate category exists for recording the superintendent's salary and benefits. Complete information on school board compensation also is lacking because the UFARS manual offers only a category for school board member per diems. These we found were paid in 58 percent of school districts. In other districts, board members receive salaries and sometimes benefits, as we show in Chapter 4.

# Evaluation Criteria

We selected a total of 117 UFARS categories that would allow us to test the data and gain useful information on school district spending. Of these, 107 represented common district services and activities. The remaining ten were regular instruction subject areas, such as English, which we asked district administrators to restrict to secondary instruction expenses for our evaluation.

To determine how much confidence it is prudent to invest in the UFARS data, we established the following evaluation criteria:

- **UFARS figures should be substantially similar to figures collected by other systems for the same expenditures.**

- **At least 90 percent of district administrators should be able to report how much they spent for selected programs, activities, and services.**
- **We should find that no more than 15 percent of school district administrators submitted erroneous data to the Department of Education.**
- **The types of expenditures that district administrators classify in particular codes should be similar statewide.**

# Results

As shown by Table 3.8, some district administrators were unable to identify or estimate how much they spent for kindergarten, elementary, and secondary regular instruction. Thirteen percent of administrators were unable to report their kindergarten expenses, and 28 percent revised their original figures when we asked them to check for accuracy. Seventeen percent of district administrators simply could not estimate or report their elementary (1 through 6) education expenses. Another 46 percent revised the figures they had reported to the Department of Education.

## Table 3.8: Reliability of Regular Instruction Expense Figures

| | Percent of Districts | | |
|---|---|---|---|
| | Unable To Report | Initially In Error | Percent Unreliable |
| Kindergarten | 13 | 28 | 41% |
| Elementary 1-6 | 17 | 46 | 63 |
| Secondary 7-12 | 12 | 49 | 61 |
| Total Regular | 6 | 28 | 34% |

Source: UFARS Administrator Survey (n = 97).

**Regular instruction expenses were unreliable by grade level and subject.**

As shown in Table 3.9, we also found that districts often were unable to identify secondary regular instruction costs in topic areas such as music or English when we asked them to do so for purposes of our study. Sometimes the problem was that they could not separate elementary from secondary expenses by subject. Other times, administrators knew how much they had spent on substitute teachers or benefits in total, but they did not record such expenses by subject. Often, however, the administrators simply did not keep records of expense at this level of detail.

For 107 items that administrators routinely report through UFARS, we determined what percentage (1) could not be estimated or reported accurately and

## Table 3.9: Secondary Subject Expenses Tested Separately

| | Percent Unable to Report Correctly |
|---|---|
| Regular Instruction - Secondary Only | |
| Art | 33% |
| Business | 33 |
| English (Language Arts) | 33 |
| Foreign Language | 33 |
| Health and Safety, Physical Education, and Recreation | 32 |
| Mathematics | 34 |
| Computer Science | 62 |
| Music | 33 |
| Natural Sciences | 33 |
| Social Sciences, Social Studies | 34 |
| Average | 36% |

Source: UFARS Administrator Survey (n = 97).

(2) were initially erroneous. If more than ten percent of the districts actually could not provide the figure by any means, we concluded that it was invalid. In addition, we combined the two percentages above and estimated the extent to which selected UFARS figures were unreliable. If the combined total was more than 15 percent, we determined that the item was inadequate for general use.[27]

Based on our sample of 97 school districts, results indicate:

- **The majority (55 percent) of tested items were reliable for statistical analysis and inter-district comparisons.**

**Of 107 items tested, 48 were unreliable.**

We focused our analysis on the items which proved to be reliable as well as valid. As shown in Table 3.10, of 107 items we tested, 59 items met our criterion for reliability, that is, at least 85 percent of sampled districts could and did report accurate figures to the Department of Education. However, another 48 items were unreliable and could not be used with confidence. For 26 of these unreliable items, only 7 to 69 percent of district administrators could and did report accurate figures to the Department of Education.

As shown in Tables 3.11 to 3.14, many categories are unreliable in large part because they are invalid. That is, administrators put various items in these categories or do not really use these categories as defined in the UFARS manual. Many of the problems we identified with the UFARS manual are at the root of invalidity. Administrators have difficulty classifying expenditures completely and correctly when procedures and definitions are unclear.

27 Others might wish to use stricter or more lenient standards for estimating validity and reliability and may do so by consulting Tables 3.11 through 3.14.

## Table 3.10: Results of UFARS Item Testing

| | Percent of Districts Reporting Unreliably | Tested Items (n = 107) Number | Percent |
|---|---|---|---|
| Reliable | 0-5% | 24 | 22% |
| | 6-10 | 21 | 20 |
| | 11-15 | 14 | 14 |
| | | 59 | 55% |
| Unreliable | 16-20% | 6 | 6% |
| | 21-25 | 11 | 10 |
| | 26-30 | 4 | 4 |
| | 31-34 | 7 | 6 |
| | 36-40 | 3 | 3 |
| | 41-45 | 4 | 4 |
| | 46-50 | 4 | 4 |
| | 51-60 | 3 | 3 |
| | 61-70 | 2 | 2 |
| | 71-80 | 0 | 0 |
| | 81-90 | 2 | 2 |
| | 91-100 | 1 | 1 |
| | | 48[a] | 45% |

Source: UFARS Administrator Survey (n = 97).

[a]Includes one item that fell within the cut-off for reliability but was invalid.

## Table 3.11: Reliability and Validity of Selected UFARS Fund Items

| | Percent of Districts Unable to Report Correctly | Reporting Initially in Error | Combined Reporting Unreliability |
|---|---|---|---|
| Food Service* | 2% | 5% | 7% |
| Pupil Transportation | 23 | 7 | 30 |
| General, Food Service, Pupil Transportation, Trust and Agency Combined* | 1 | 14 | 15 |
| Average | 9% | 9% | 17% |

*Categories that are valid and reliable. The combined category reflects total operating expenses as defined in School District Profiles.

## Table 3.12: Reliability and Validity of Selected UFARS Program Items

| | Percent of Districts | | |
|---|---|---|---|
| | Unable to Report Correctly | Reporting Initially in Error | Combined Reporting Unreliability |
| Gifted and Talented | 7% | 20% | 27% |
| Staff Development | 31 | 14 | 45 |
| Office of the Superintendent* | 6 | 7 | 13 |
| General Administrative Support* | 4 | 8 | 12 |
| Board of Education* | 0 | 5 | 5 |
| Elementary Education--Kindergarten | 13 | 28 | 41 |
| Elementary Education (grades 1-6) | 17 | 46 | 63 |
| Driver Education-Classroom | 46 | 15 | 61 |
| Driver Education-Laboratory | 42 | 16 | 58 |
| Co-curricular Activities | 79 | 11 | 90 |
| Boys and Girls Athletics | 42 | 5 | 47 |
| Boys Athletics | 42 | 6 | 48 |
| Girls Athletics | 42 | 6 | 48 |
| Extra-curricular Activities | 80 | 13 | 93 |
| Mildly Mentally Handicapped | 31 | 9 | 40 |
| Moderately Mentally Handicapped | 34 | 4 | 38 |
| Special Learning Disability | 22 | 9 | 31 |
| Counseling and Guidance | 18 | 7 | 25 |
| Health Services* | 12 | 3 | 15 |
| Psychological Services | 44 | 11 | 55 |
| Attendance and Social Work Services | 73 | 14 | 87 |
| Program Totals | | | |
| District and School Administration | 19 | 26 | 45 |
| District Support | 18 | 25 | 43 |
| Regular Instruction | 6 | 28 | 34 |
| Secondary Vocational Education | 25 | 33 | 58 |
| Exceptional Education | 6 | 18 | 24 |
| Instructional Support | 11 | 21 | 32 |
| Pupil Support | 18 | 20 | 38 |
| Operations and Maintenance | 8 | 15 | 23 |
| Average | 27% | 15% | 43% |

*Categories that are valid and reliable.

## Table 3.13: Reliability and Validity of Selected UFARS Finance Items

| | Percent of Districts | | |
|---|---|---|---|
| | Unable to Report Correctly | Reporting Initially in Error | Combined Reporting Unreliability |
| Categorical Aid Programs | | | |
| Chemical Dependency | 18% | 5% | 23% |
| Tobacco Use Prevention | 27 | 6 | 33 |
| Pupil Transportation | | | |
| Noon Kindergarten* | 1 | 1 | 2 |
| Cooperative Academic Class* | 0 | 0 | 0 |
| Regular To - From School* | 1 | 5 | 6 |
| Nutrition | | | |
| School Lunch Pattern Meals* | 2 | 1 | 3 |
| Average | 8% | 4% | 11% |

*Categories that are valid and reliable.

## Table 3.14: Reliability and Validity of Selected UFARS Object Items

| | Percent of Districts | | |
|---|---|---|---|
| | Unable to Report Correctly | Reporting Initially in Error | Combined Reporting Unreliability |
| Group Hospitalization Insurance* | 0% | 2% | 2% |
| Group Dental Insurance* | 2 | 2 | 4 |
| Travel* | 8 | 3 | 11 |
| Travel for Professional Development | 21 | 4 | 25 |
| Dues and Memberships (excluding ESVs) | 6 | 12 | 18 |
| School Board Per Diem* | 5 | 8 | 13 |
| Textbooks and Workbooks* | 8 | 1 | 9 |
| Standardized Tests | 17 | 6 | 23 |
| Library Books | 20 | 11 | 31 |
| Custodial Supplies* | 7 | 6 | 13 |
| Repair Supplies | 10 | 10 | 20 |
| Fuel for Buildings* | 6 | 6 | 12 |
| Utility Services | 8 | 8 | 16 |
| Food* | 2 | 4 | 6 |
| Food Service | | | |
| Salaries* | 2 | 1 | 3 |
| Employee Benefits* | 2 | 0 | 2 |
| Purchased Services* | 2 | 0 | 2 |
| Supplies* | 2 | 4 | 6 |
| Other Expenditures* | 2 | 0 | 2 |

Table 3.14, continued

| | Percent of Districts | | |
|---|---|---|---|
| | Unable to Report Correctly | Reporting Initially in Error | Combined Reporting Unreliability |
| Pupil Transportation | | | |
| Salaries* | 8 | 0 | 8 |
| Employee Benefits* | 9 | 0 | 9 |
| Purchased Services* | 10 | 1 | 11 |
| Supplies* | 9 | 3 | 12 |
| Other Expenditures* | 1 | 1 | 2 |
| District and School Administration | | | |
| Salaries* | 0 | 2 | 2 |
| Employee Benefits | 3 | 14 | 17 |
| Purchased Services* | 1 | 2 | 3 |
| Supplies | 16 | 14 | 30 |
| Other Expenditures* | 0 | 5 | 5 |
| District Support | | | |
| Salaries* | 8 | 1 | 9 |
| Employee Benefits | 7 | 17 | 24 |
| Purchased Services* | 5 | 1 | 6 |
| Supplies | 17 | 7 | 24 |
| Other Expenditures* | 4 | 1 | 5 |
| Regular Instruction | | | |
| Salaries* | 2 | 5 | 7 |
| Employee Benefits | 3 | 18 | 21 |
| Purchased Services* | 2 | 7 | 9 |
| Supplies* | 3 | 7 | 10 |
| Other Expenditures* | 5 | 3 | 8 |
| Secondary Vocational Education | | | |
| Salaries | 19 | 9 | 28 |
| Employee Benefits | 24 | 24 | 48 |
| Purchased Services* | 8 | 7 | 15 |
| Supplies | 21 | 12 | 33 |
| Other Expenditures | 18 | 0 | 18 |
| Exceptional Education | | | |
| Salaries* | 2 | 3 | 5 |
| Employee Benefits | 5 | 16 | 21 |
| Purchased Services* | 1 | 1 | 2 |
| Supplies* | 1 | 1 | 2 |
| Other Expenditures* | 2 | 1 | 3 |
| Instructional Support | | | |
| Salaries* | 6 | 2 | 8 |
| Employee Benefits | 9 | 16 | 25 |
| Purchased Services* | 6 | 3 | 9 |
| Supplies* | 7 | 5 | 12 |
| Other Expenditures* | 8 | 2 | 10 |

Table 3.14, continued

| | Percent of Districts | | |
|---|---|---|---|
| | Unable to Report Correctly | Reporting Initially in Error | Combined Reporting Unreliability |
| Pupil Support | | | |
| Salaries | 11 | 1 | 12 |
| Employee Benefits | 17 | 17 | 34 |
| Purchased Services* | 6 | 1 | 7 |
| Supplies* | 11 | 0 | 11 |
| Other Expenditures* | 11 | 0 | 11 |
| Operations and Maintenance | | | |
| Salaries* | 3 | 0 | 3 |
| Benefits | 5 | 13 | 18 |
| Purchased Services* | 2 | 4 | 6 |
| Supplies* | 3 | 4 | 7 |
| Other Expenditures* | 4 | 3 | 7 |
| Districtwide Total Operating Expenditures | | | |
| Salaries* | 0 | 3 | 3 |
| Benefits* | 1 | 3 | 4 |
| Purchased Services* | 0 | 3 | 3 |
| Supplies* | 0 | 9 | 9 |
| Other Expenditures* | 0 | 3 | 3 |
| Average | 7% | 5% | 12% |

*Categories that are valid and reliable.

Using 15 percent unreliability as a guideline, we analyzed the average unreliability for selected items in each of four dimensions in the UFARS system. Tables 3.15 through 3.18 show additional results. Since we tested only a sample of commonly used or easily identifiable codes, these averages might be different if all codes in a dimension were tested.

## Table 3.15: Difference in Expenses Due to Verification of UFARS Fund Items

| | Dollar Difference Due to Verification | Percent Difference Due to Verification | Percent Districts Able to Report |
|---|---|---|---|
| Food Service | $187,062 | < 1% | 98% |
| Pupil Transportation | 385,117 | < 1 | 76 |
| General, Food Service, Pupil Transportation, Trust and Agency Combined | -859,743 | < -1 | 99 |
| Average | -$95,855 | < 1% | 91% |

## Table 3.16: Difference in Expenses Due to Verification of UFARS Program Items

| | Dollar Difference Due To Verification | Percent Difference Due To Verification | Percent Districts Able to Report |
|---|---|---|---|
| Gifted and Talented | $774,494 | 7% | 93% |
| Staff Development | - 226,582 | - 1 | 69 |
| Office of the Superintendent | - 689,076 | - 2 | 94 |
| General Administrative Support | - 2,842,373 | - 23 | 96 |
| Board of Education | - 95,891 | - 1 | 100 |
| Elementary Education-Kindergarten | 5,241,762 | 10 | 87 |
| Elementary Education (grades1-6) | 53,894,854 | 10 | 83 |
| Driver Education-Classroom | - 2,708 | < - 1 | 54 |
| Driver Education-Laboratory | 260,569 | 9 | 58 |
| Co-curricular Activities | 150,482 | 1 | 21 |
| Boys and Girls Athletics | - 1,136,583 | - 6 | 58 |
| Boys Athletics | 276,938 | 1 | 58 |
| Girls Athletics | 244,838 | 1 | 58 |
| Extra-curricular Activities | 213,280 | 3 | 20 |
| Mildly Mentally Handicapped | 1,428,753 | 4 | 69 |
| Moderately Mentally Handicapped | 457,038 | 1 | 66 |
| Special Learning Disability | 3,208,261 | 3 | 78 |
| Counseling and Guidance | 1,209,360 | 3 | 81 |
| Health Services | 522,455 | 3 | 88 |
| Psychological Services | 399,282 | 4 | 56 |
| Attendance and Social Work Services | 115,560 | 6 | 27 |
| Program Totals | | | |
| District and School Administration | 12,118,724 | 6 | 81 |
| District Support | 3,904,529 | 4 | 82 |
| Regular Instruction | 115,412,254 | 8 | 94 |
| Secondary Vocational Education | 613,303 | 1 | 75 |
| Exceptional Education | 20,066,574 | 5 | 94 |
| Instructional Support | 7,571,067 | 5 | 88 |
| Pupil Support | 6,708,707 | 7 | 82 |
| Operations and Maintenance | 11,004,473 | 4 | 92 |
| Average | $8,303,595 | 2% | 72% |

## Table 3.17: Difference in Expenses Due to Verification of UFARS Finance Items

| | Dollar Difference Due to Verification | Percent Difference Due to Verification | Percent Districts Able to Report |
|---|---|---|---|
| Categorical Aid Programs | | | |
| Chemical Dependency | $713,718 | 68% | 82% |
| Tobacco Use Prevention | 89,584 | 32 | 73 |
| Pupil Transportation | | | |
| Noon Kindergarten | - 62,955 | - 1 | 99 |
| Cooperative Academic Class | 0 | 0 | 100 |
| Regular To - From School | - 106,387 | < - 1 | 99 |
| Nutrition | | | |
| School Lunch Pattern Meals | - 1,808 | 0 | 98 |
| Average | $105,359 | 16% | 92% |

## Table 3.18: Difference in Expenses Due to Verification of UFARS Object Items

| | Dollar Difference Due to Verification | Percent Difference After Verification | Percent Districts Able to Report |
|---|---|---|---|
| Group Hospitalization Insurance | -$ 646,588 | < - 1% | 100% |
| Group Dental Insurance | 1,201,074 | 11 | 98 |
| Travel | - 131,873 | - 1 | 92 |
| Travel for Professional Development | 30,195 | 82 | 79 |
| Dues and Memberships (excluding ESVs) | 178,331 | 5 | 94 |
| School Board Per Diem | - 13,131 | - 1 | 95 |
| Textbooks and Workbooks | 311,091 | 1 | 92 |
| Standardized Tests | 52,039 | - 1,072 | 83 |
| Library Books | 234,581 | 5 | 80 |
| Custodial Supplies | 101,955 | 1 | 93 |
| Repair Supplies | 483,711 | 4 | 90 |
| Fuel for Buildings | - 448,048 | - 1 | 93 |
| Utility Services | 222,729 | 1,064 | 91 |
| Food | - 21,981 | 99 | 98 |
| Food Service | | | |
| Salaries | 93,296 | < 1 | 98 |
| Employee Benefits | 0 | 0 | 98 |
| Purchased Services | 0 | 0 | 98 |
| Supplies | 89,388 | < 1 | 98 |
| Other Expenditures | 69,884 | 8 | 98 |

Table 3.18, continued

| | Dollar Difference Due to Verification | Percent Difference Due to Verification | Percent Districts Able to Report |
|---|---|---|---|
| Pupil Transportation | | | |
| Salaries | 0 | 0 | 92 |
| Employee Benefits | 0 | 0 | 91 |
| Purchased Services | 68,924 | < 1 | 90 |
| Supplies | 221,747 | 2 | 91 |
| Other Expenditures | 66,085 | 11 | 99 |
| District and School Administration | | | |
| Salaries | - 340,178 | < - 1 | 100 |
| Employee Benefits | 12,616,223 | 72 | 97 |
| Purchased Services | - 296,442 | - 3 | 99 |
| Supplies | 333,599 | 9 | 83 |
| Other Expenditures | - 223,622 | - 6 | 100 |
| District Support | | | |
| Salaries | 17,103 | < 1 | 92 |
| Employee Benefits | 4,945,758 | 90 | 93 |
| Purchased Services | 430,410 | 2 | 95 |
| Supplies | 38,624 | 1 | 83 |
| Other Expenditures | - 19,746 | < - 1 | 96 |
| Regular Instruction | | | |
| Salaries | 2,399,587 | < 1 | 98 |
| Employee Benefits | 112,659,601 | 78 | 97 |
| Purchased Services | 191,238 | 1 | 98 |
| Supplies | 90,734 | < 1 | 97 |
| Other Expenditures | 91,638 | 1 | 95 |
| Secondary Vocational Education | | | |
| Salaries | - 2,397,643 | - 4 | 81 |
| Employee Benefits | 4,151,845 | 53 | 76 |
| Purchased Services | 250,097 | 5 | 92 |
| Supplies | - 171,730 | - 5 | 79 |
| Other Expenditures | 0 | 0 | 82 |
| Exceptional Education | | | |
| Salaries | 73,227 | < 1 | 98 |
| Employee Benefits | 24,461,662 | 58 | 95 |
| Purchased Services | 12,363 | < 1 | 99 |
| Supplies | 365 | < 1 | 99 |
| Other Expenditures | 23,498 | 4 | 98 |
| Instructional Support | | | |
| Salaries | - 690,383 | - 1 | 94 |
| Employee Benefits | 8,614,650 | 92 | 91 |
| Purchased Services | - 204,459 | - 1 | 94 |
| Supplies | 33,022 | < 1 | 93 |
| Other Expenditures | - 149,379 | - 8 | 92 |

Table 3.18, continued

| | Dollar Difference Due to Verification | Percent Difference Due to Verification | Percent Districts Able to Report |
|---|---|---|---|
| Pupil Support | | | |
| Salaries | 115,560 | < 1 | 89 |
| Employee Benefits | 6,192,086 | 76 | 83 |
| Purchased Services | 43,814 | 1 | 94 |
| Supplies | 0 | 0 | 89 |
| Other Expenditures | 0 | 0 | 89 |
| Operations and Maintenance | | | |
| Salaries | 0 | 0 | 97 |
| Benefits | 11,409,122 | 65 | 95 |
| Purchased Services | 4,947,674 | 7 | 98 |
| Supplies | - 63,281 | <- 1 | 97 |
| Other Expenditures | - 29,023 | - 1 | 96 |
| Districtwide Total Operating Expenditures | | | |
| Salaries | - 184,061 | <- 1 | 100 |
| Benefits | - 353,579 | <- 1 | 99 |
| Purchased Services | 302,206 | < 1 | 100 |
| Supplies | - 85,225 | <- 1 | 100 |
| Other Expenditures | - 36,333 | <- 1 | 100 |
| Average | $2,846,374 | 12% | 93% |

Our study revealed that:

- **Data from the object and finance dimensions were more reliable and valid than the fund and program dimensions.**

- **The program dimension, which is of greatest interest to policymakers and the public, is least reliable and valid.**

# Reliability by Fund

When we examined individual items within the fund dimension, we found that:

- **Reports of total operating costs, as originally submitted to the department, were inaccurate for 15 percent of districts.**

In other words, the general fund (combined) category is just reliable enough, by our evaluation standards, to allow comparisons of school districts' total operating expenses as reported in *School District Profiles*. In one district, the

UFARS administrator was missing information on fringe benefit payments, and that prevented a full determination of the district's total operating expenditures for 1987-88.[28] In 14 percent of the other districts we sampled, administrators found it necessary to amend their earlier report of total operating expenses. In addition:

- **Almost one-fourth (23 percent) of the districts were unable to estimate or provide an accurate spending figure for pupil transportation.**

In our study, we found several reasons why district administrators may have difficulty reporting pupil transportation expenditures through UFARS. Some contract for the service and do not maintain detailed information. Others neglect to identify all costs associated with the administration of transportation services. In some districts, parents are paid directly to transport handicapped youngsters. In addition, as we discuss in Chapter 4, districts may provide a number of different transportation services, and these must be accounted for separately.

## Reliability by Program

Among the program codes we tested, unreliability ranged from 5 percent to 93 percent. Some of the least useful categories were related to extra- and co-curricular student activities which UFARS defines as components of regular instruction. For instance, we found that:

- **80 percent of districts in our sample were unable to say what they spent for extra-curricular activities, and 79 percent could not recount their expenditures for co-curricular activities.**[29]

These items were particularly troublesome for several reasons. As discussed earlier, many districts maintain cash-based student activities accounts, and only some of these expenditures may be reported through UFARS. Further, many of the district staff in our sample were uncertain and unconcerned about the distinction between co- and extra-curricular activities. Often, they put non-athletic activity expenses in one or the other category. Likewise:

- **About 60 percent of district administrators reported inaccurate figures or were unable to say what they spent for either of two aspects of driver education: classroom instruction and behind-the-wheel training.**[30]

---

*28* As mentioned above, two districts could not verify any expenditures for 1987-88, including their total operating costs.

*29* Extra-curricular activities generally occur after school and outside classrooms, while co-curricular activities are conducted during school hours, in environments similar to those where students earn academic credit.

*30* As explained in Chapter 2, UFARS now has two separate codes for driver's education, not one.

Many district administrators told us that they could not separate driver education expenditures into these two categories as the UFARS manual specifies. However, in several districts, these figures were easy to report because there was simply no such spending. Driver education in these cases was dropped from the curriculum because private companies could provide the instruction to students more economically than district staff.

The total spent by districts for broader categories of instruction was easier to report than student activities, but we found that most of these programmatic expenses were invalid (that is, less than 90 percent of the districts could report or estimate spending). In fact:

- **Only one of the 10 categories of expenses (food service) reported in *School District Profiles* was both valid and reliable.**

As shown in Table 3.11, we found that ninety-eight percent of administrators could report expenses for food service, and only 5 percent of administrators corrected errors in the food service expense figures they had reported to the Department of Education. As Table 3.15 shows, these corrections amounted to $187,062, which is less than one percent of the total original dollar amount.

The additional categories presented in *School District Profiles* were invalid and unreliable, often because administrators had not or could not identify expenses for these key components: benefits, supplies, and purchased services. The nine program categories include district and school administration, district support services, regular instruction, secondary vocational instruction, exceptional instruction, instructional support services, pupil support services, pupil transportation, and operations and maintenance. Sometimes, we found, administrators allocated their total expenses only to some of these categories or mixed expenses among programs which the UFARS manual defines separately.

As shown in Table 3.12, unreliability for the nine program categories ranged from 23 to 58 percent. For example, 25 percent of district administrators did not know and could not estimate what they had spent for secondary vocational education, while 33 percent had submitted incorrect figures to the state through UFARS. The main reason for this problem was that districts often contract for secondary vocational instruction or share services with other districts. In some cases, they either traded services or paid an unitemized amount per student, with the result that they lacked specific information about spending.

**Most of the program items we tested were invalid and unreliable.**

As we show in Table 3.14, district administrators often could identify some aspects of expenditures within program categories. However, this left the program totals incomplete and non-comparable. Also, the cumulative effect of missing or erroneous information on salaries, benefits, supplies, purchased services, and other items diminished the accuracy of total program expenses.

## Reliability and Validity in Finance Categories

Within the finance dimension, two specific categories of expenditure that were checked or used by Department of Education staff, pupil transportation and nutrition, were clearly the most reliable and valid. As shown in Table 3.13, the pupil transportation and nutrition categories that we tested were reported accurately by at least 98 percent of district administrators. Categorical aids items, which were not checked or used routinely, were much less reliable.

## Reliability and Validity by Object

In general, districts were able to report what they spent for items through the object dimension, which is quite specific and represents tangible goods or transactions. For example, as shown in Table 3.14, we found that:

- **All districts could report what they spent for group hospitalization insurance, and only 2 percent of districts corrected their figures as a result of the verification process.**

**Object-level information was better but still contained errors.**

Though we found in the program dimension that district administrators had difficulty identifying total expenditures for programs such as regular instruction, we found in the object categories that administrators often could report how much they spent for salaries and other items within program categories. However, as shown in Table 3.18, administrators changed the expenses they reported for benefits more than other object categories. For example, benefits reported for instructional support employees increased by about $8.6 million or 92 percent. Some administrators told us that they planned to identify employee benefits by program area beginning in the 1988-89 school year. The benefits categories might have been more reliable had we been able to evaluate 1988-89 UFARS data.[31]

## Effect of District and Staff Characteristics

We analyzed several possible explanations for the quality of UFARS data besides the factors mentioned above.

In general, we found that:

- **Districts are more likely to be able to submit accurate, complete data when they have larger enrollment, professional business staff, and operate independently.**

We found several indications that administrators best able to correct their inaccurate UFARS figures represented larger districts. These districts had larger average daily memberships, higher projected enrollment for 1986-1991,

*31* FAI #74.3 indicates that fringe benefits must be allocated by program by 1989-90.

and greater total operating expenditures. This type of district was also more likely to have a business manager or staff with relevant certification, such as a Certified Public Accountant, and ten or more years of experience using the UFARS system.

**In cooperating districts, 94 percent of UFARS administrators said they had problems with the reporting system.**

Conversely, we found that districts least able to provide us with valid spending figures often were cooperating with other districts to obtain major programs such as regular instruction or secondary vocational education. These tend to have small enrollment and few specialized staff to categorize expenditures. Among such districts engaged in inter-district cooperation agreements, 94 percent of the UFARS administrators mentioned problems with the reporting system, compared with 76 percent statewide.

At the beginning of our study, we expected that ESV computer centers' various levels of staff support to member districts might show a direct effect on the quality of UFARS data. However, our results showed no clear evidence that this was true. That is, districts which belong to ESVs providing the most direct support did not seem to have more valid data than others. In retrospect, we believe this is because the main explanation for UFARS problems is lack of information at the district--not lack of assistance.

# RECOMMENDATIONS

In our opinion, it is possible for the state to collect valid and reliable information on expenditures in the future through the UFARS system, but to do this, the agencies which govern the system must make major changes.

First, we recommend that:

- **UFARS should be simplified.**

We believe that the Legislature and the Department of Education should unburden the system by limiting and defining the number of spending categories which are of enduring, central interest. Instead of UFARS, in some cases, one-time studies could provide descriptive, comparable information on expenditures. In other cases, the school districts themselves lack information to report expenditures as defined in the UFARS manual.

As an unfortunate result, the UFARS system now represents a considerable waste of educational resources (time and money) for school districts and the Department of Education. The department cannot make accurate payments of state aid without separate, independent data collection systems and cannot use the information with confidence to compare district spending or monitor trends. Legislators' and staff time also is being wasted in attempts to apply UFARS data in policy development and funding decisions. Moreover, the public lacks detailed, comparable information on one of the state's major

areas of spending--education. School districts generally cannot be held responsible for the way they are spending state taxpayers' money.

Policymakers need to reconsider some basic questions regarding UFARS. For example, what are its most important state and local functions? How can its information become more useful to compare school district expenditures throughout Minnesota? What items of financial information are necessary for the Department of Education, legislators, and the public? Would other methods of data collection be more efficient?

**A study should be done to determine what the state must know about school district spending.**

To answer these questions, we recommend that:

- **The Legislature should authorize an independent study of its own and others' needs, existing data collection procedures, and districts' reporting capabilities.**

Perhaps under the direction of the Department of Administration's information policy office, such a study would help to ensure that UFARS data in the future are timely, accurate, consistent, and useful. Moreover, based on such a study, the Legislature could amend Minn. Stat. §121.932 to include some specific expenditures as essential data. Currently, the statute specifies only that the Department of Education shall maintain a list of essential data elements about pupils, licensed staff, and educational programs.

Based on our own study, we believe that:

- **One goal of a UFARS user study should be to drop many of the state's UFARS categories entirely.**

We found that the rapid creation and deletion of UFARS codes is inefficient, confusing, and leads to unrelaible statewide reporting. Our results can provide a starting point to identify categories of information which are redundant, inaccurate, rarely used, or apply only to a few districts.

**Inaccurate or non-essential UFARS categories should be dropped.**

Following the study, we think the Legislature, the state board, and the department all have a role to play in ensuring that the UFARS reporting system delivers a consistent core of financial information from each school district. Meantime, local districts should continue to use the system as they have been to meet local accounting, auditing, and other needs.

We also recommend that:

- **The department should establish clear, workable definitions for UFARS categories, update the manual once a year, and provide timely, accurate documentation and support directly to district personnel who are primarily responsible for UFARS coding.**

These changes require that the Department of Education take responsibility for the quality of the UFARS data. But for the department to do this:

- **The State Board of Education should rewrite and clarify its rules regarding school districts' responsibilities to report UFARS data.**

The board must grant the department clear authority to require consistent and accurate spending figures from districts. In addition:

- **The department should establish a required training program so that personnel who code school district expenditures are properly informed and able to meet the state's need for information.**

Likewise, to alleviate the confusion experienced by districts purchasing or sharing services:

- **The Department of Education should encourage providers to bill their charges to districts in categories which are determined to be important to the state.**

This requirement could affect cooperating districts, ESVs, education districts, intermediate districts, special education cooperatives, vocational education cooperatives, and counties. Generally, achieving such a standard would require the department to establish accounting procedures for districts involved in inter-district cooperative arrangements, which include interactive television networks.

**The Legislature, State Board of Education, and Department of Education all have a role to play.**

We also recommend that:

- **The Department of Education should ultimately stop collecting expenditures data outside of UFARS, relying instead on one high-quality system.**

In our opinion, the department staff who currently maintain separate data collection systems should at least coordinate their efforts and consult regularly with UFARS staff to ensure that all use similar instructions and procedures. Then, as UFARS is simplified and improved, the department should require districts to correct UFARS data before staff make final payments.

Also, we believe that:

- **The Legislature should clarify and strengthen the role of regional accounting coordinators to ensure that expenditure figures are reliable and valid.**

We found that ESV staff have established relationships with districts and have the professional expertise to ensure that administrators classify district expenditures consistently and accurately. The ESVs' role in the future should include monitoring districts' cross-walk procedures so that resulting data are complete, accurate, and comparable statewide.

We recommend further that:

## Regional accounting coordinators and the State Auditor could help.

- **The Legislature should expand the State Auditor's responsibilities for monitoring reports by local auditors who review school districts' financial statements.**

With direction from the State Auditor, we believe the local auditors are well positioned to help ensure that some centrally important financial data are reported consistently, comparably, and according to uniform standards.

Finally, to ensure valid and reliable figures, we recommend that:

- **The Department of Education should develop and maintain final data checking procedures and enforce compliance with state requirements.**

The department must have the authority to reject erroneous or inconsistent data from the state's data base before the information is used.

In the short-term, some waste and confusion also could be stopped by the following actions. We suggest:

- **The Department of Education should excise inaccurate spending data from *School District Profiles*.**

Some items, such as transportation and special education figures, can be replaced with better figures from existing non-UFARS systems. Further, the department should change its plan to expand *School District Profiles* with more detailed UFARS information beginning this year. We believe that:

- ***School District Profiles* should be redesigned and reduced in scope--not expanded.**

Based on our research, we additionally recommend that:

- **The link between financial data in UFARS and other data in the integrated data base (IDB) should be delayed unless or until a statewide source of reliable, consistent expenditures data is developed and tested.**

As we show, some of the financial items that are earmarked for the IDB are inaccurate, incomplete, and not comparable from district to district. Linking these items with staff and student data could lead to erroneous conclusions. Furthermore, given these fundamental problems, it would be unwise to continue using the current system of UFARS data collection as a model for the IDB.

Finally, to encourage timely data:

- **Districts and the Department of Education should stop updating UFARS computer files after August 15 (about 15 months after the end of given school years).**

For example, the department could stop updating UFARS figures for the 1988-89 school year by August 15, 1990.

In conclusion, we believe that legislators, staff, and the public should be cautious when using UFARS data for any purpose. For example, some inaccurate comparative information is contained in reports legislators have received including those showing districts' financial conditions and expenditures for categorical aids programs.[32]

# SUMMARY

In this chapter, we assessed the quality--measured by reliability and validity--of selected spending figures that district UFARS administrators routinely submit to the Department of Education. We tested more than 100 UFARS codes and identified types of districts in which UFARS administrators are most likely to produce valid figures. As a result of our analysis, we reached the following general conclusions:

- **UFARS spending data are incomplete because of late submissions, continuing changes, and expenditures that are not reported in the UFARS system.**

- **Many 1987-88 UFARS spending figures are invalid and unreliable due to lack of information, problems with instructions, and the absence of incentives for accuracy.**

- **Many UFARS spending figures are not comparable among districts because district administrators apply categories variously and code expenditures in various levels of detail.**

Despite problems we found with the timeliness, accuracy, and comparability of the UFARS data, we were able to isolate a core of information that was reliable and valid in the department's data base or that district administrators could supply. We use these figures and other data in Chapter 4 to analyze school spending.

32 Minnesota Department of Education, *Financial Condition of Minnesota School Districts* (January 3, 1989); Minnesota Department of Education, *General Education Revenue*, Categorical Programs (January 3, 1989).

# SCHOOL DISTRICT SPENDING

## Chapter 4

Although many items of UFARS data are unreliable, we found that some information is adequate for policy analysis and general use. In the process of making this determination, we obtained accurate, revised figures when necessary and gathered information which is otherwise unavailable from the UFARS system. In this chapter, we use a combination of existing and new data to describe how Minnesota school districts spend money.

Our analysis addressed these questions:

- **How much do districts spend for instruction compared with administration, operations and maintenance, food service, and pupil transportation?**

- **How much goes to pay teachers, bus students to and from school, serve meals, heat school buildings, and buy supplies, among other things?**

- **What factors help to explain differences in spending for typical programs, services, and activities?**

- **How might school district administrators save money or increase the cost effectiveness of their future expenditures?**

Our analysis is based mainly on a representative sample of 97 Minnesota school districts, shown in Appendix A. For our analysis of food service, transportation, and other expenses, we relied on statewide UFARS data which proved reliable and non-UFARS data described in Appendix B. Spending figures from districts in our sample have been projected to produce statewide estimates of spending by all 436 school districts in Minnesota during the 1987-88 school year. Regardless of the data source, we emphasize that school spending data are imperfect. For some items, true spending may differ among as many as 15 percent of school districts.

In addition, we must caution that, while we found some UFARS data reliable for the 1987-88 school year, they may not provide accurate indications of spending for other years. As discussed in Chapter 2, UFARS codes change frequently, but we evaluated results in only one year. Furthermore, most of the spending estimates presented here are based on only a sample of school

districts where administrators could verify, revise, or estimate their 1987-88 expenditures.

# TOTAL OPERATING EXPENSES

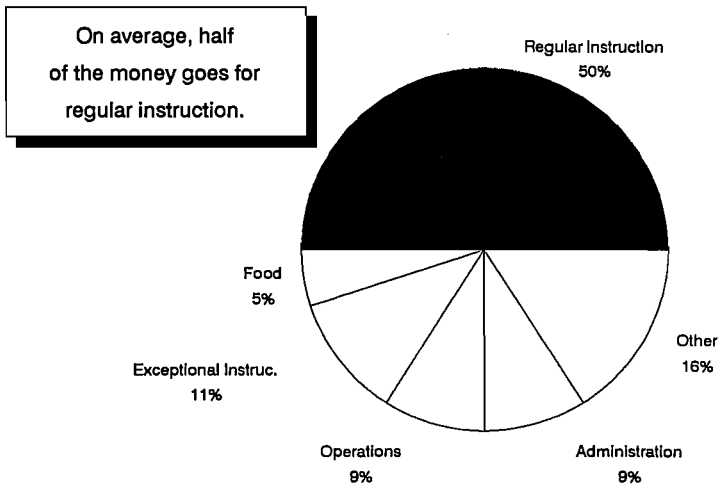
**Districts spent more than $3.4 billion during 1987-88.**

During the 1987-88 school year, Minnesota districts spent more than $3.4 billion on elementary and secondary education. Based on our sample, we found that:

- **School district administrators on the average devoted half of their resources ($1.6 billion) to regular instruction in 1987-88.**

As shown in Figure 4.1, another 11 percent ($432 million) went for exceptional instruction, 9 percent ($221 million) for administration, 9 percent ($285 million) for operations and maintenance, and 5 percent ($127 million) for food service. The remaining 16 percent ($549 million) bought assorted services including pupil transportation, vocational instruction, instructional and pupil support, and other services.

Figure 4.1: How Districts Spend Education Dollars, 1987-88




Source: Verification Report.

Although policymakers may be accustomed to seeing more detailed spending figures for some of the services which Figure 4.1 combines in the category of "other," we found that these data often were unreliable. As Chapter 3 explains, district administrators often lacked information or failed to isolate expenses for some major programs. In other cases, we learned that they inter-

changed expenses for one program with another, especially when two programs were functionally alike.

By talking individually with district administrators who prepare UFARS data, we discovered that they commonly mixed expenses for two categories which the UFARS manual defines separately: (1) district and school administration and (2) district support services. In our opinion, and in practice, these are so closely related that combined data are likely to be reliable although expenses reported for each category often were not. The new category of "administration" in Figure 4.1 reflects our decision to combine the data into a single type of expenditure.

**Salaries and benefits accounted for 78 percent of costs.**

Through our study, we also found that district administrators, when specifically asked, often could determine how much they paid for benefits as well as salaries for some programs. As we showed earlier in Chapter 1, staff compensation was the largest single object of school district spending. In total, 78 percent of all operating expenses were for salaries and benefits in 1987-88, compared with 13 percent for purchased services and 9 percent for supplies and materials.

Further, we found that compensation for staff who provide regular instruction (mainly teachers) accounted for slightly less than half of all operating costs. Nine percent of all operating expenses went to compensate instructors for exceptional students, and eight percent for administrative personnel. By comparison, compensation for food service and operations and maintenance staff represented minor expenses.

In our evaluation, we found that the cost to operate Minnesota's school districts was, on the average, $4,243 for each enrollee in 1987-88, excluding capital and debt service expenses. Statewide, half of all school districts spent less than $2.6 million for operating expenses, while the largest ten percent of districts each spent nearly $15 million.

We calculated that:

- **On the average, total operating expenses per student were $23.75 per day or about $3 per hour during the 1987-88 school year.**

However, expenses per student varied from district to district by as much as $8.60 daily or $1.32 hourly. (See Appendix B.)

# Explanations for Variation

Why does total spending differ so much from district to district? In our analysis, we focused on eight factors which might help to explain variations. These factors are described in Figure 4.2.

One important factor is that school districts can start with unequal revenues. Because half had passed local referendum levies which were effective in 1987-

## Figure 4.2: Factors Which Might Help to Explain School District Spending Variations

| Factor | Description | Data Source |
|---|---|---|
| Local Referendum Levy | Dollars, if any, levied by local school districts, as approved by voters in a referendum. Does not include levies for capital projects. | Minnesota Department of Education. |
| Enrollment Size Decile | School districts categorized in increments of ten percent based on total number of students served (average daily membership) during 1987-88. | Minnesota Department of Education. |
| Percent AFDC | Percent of total enrollees whose families benefited from the Aid to Families with Dependent Children program, used as the basis for special aid payment. | Minnesota Department of Education. |
| Projected Enrollment | Percentage difference between enrollment in 1986-87 and projection for 1991. | Minnesota Department of Education. |
| Teachers' Training and Experience Index | Index of teachers' educational achievement and years of service, used as the basis for special aid payment. | Minnesota Department of Education. |
| Density Index | Average number of students per square mile. | Minnesota Department of Education. |
| Inter-district Cooperation Agreement | Formal agreement among districts to delegate responsibility for instruction of students in one or more grades. | Minnesota Department of Education. |
| Teacher Days | Instructional and non-instructional days of employment for teaching staff, excluding summer sessions, if any. | Minnesota School Boards Association. |

**Districts can start with unequal revenue.**

88, some school districts received considerably more money than the state provided. With some exceptions, the state's funding formula is designed to produce equal revenue per student.[1] In contrast, referendum levies are not equalized and vary at the discretion of local school officials and voters.

1 For an explanation of the state's funding formula and procedures, see Minnesota Department of Education, *The ABCs of Minnesota School Finance: Paying for the Public Schools in 1987-88 and 1988-89* (November 1987).

A second factor that may explain spending variations is the size of a district's enrollment. State aids are keyed to the number of students, and the magnitude of spending naturally rises with increasing population. In addition, enrollment size may constrain districts' ability to spend money efficiently. Where enrollment is low, few students are present to share the basic cost of teachers, administrators, services, and instructional technology.

A third factor that may explain spending differences is the percentage of enrollees from families receiving financial assistance through the Aid to Families with Dependent Children (AFDC) program. When six percent or more of districts' students are in this category, the state's funding formula provides compensatory revenue. Quite likely, the students who benefited at home from AFDC also needed special assistance at school.

Another possible factor behind spending variations is the districts' projected future enrollment. The Department of Education estimates that enrollment will increase more than five percent between 1986 and 1991 in about one-fourth of the state's school districts. Conversely, enrollment is projected to decline more than five percent in 37 percent of the districts. When enrollment is growing, so are revenues. But when enrollment falls, school administrators are financially pressed.

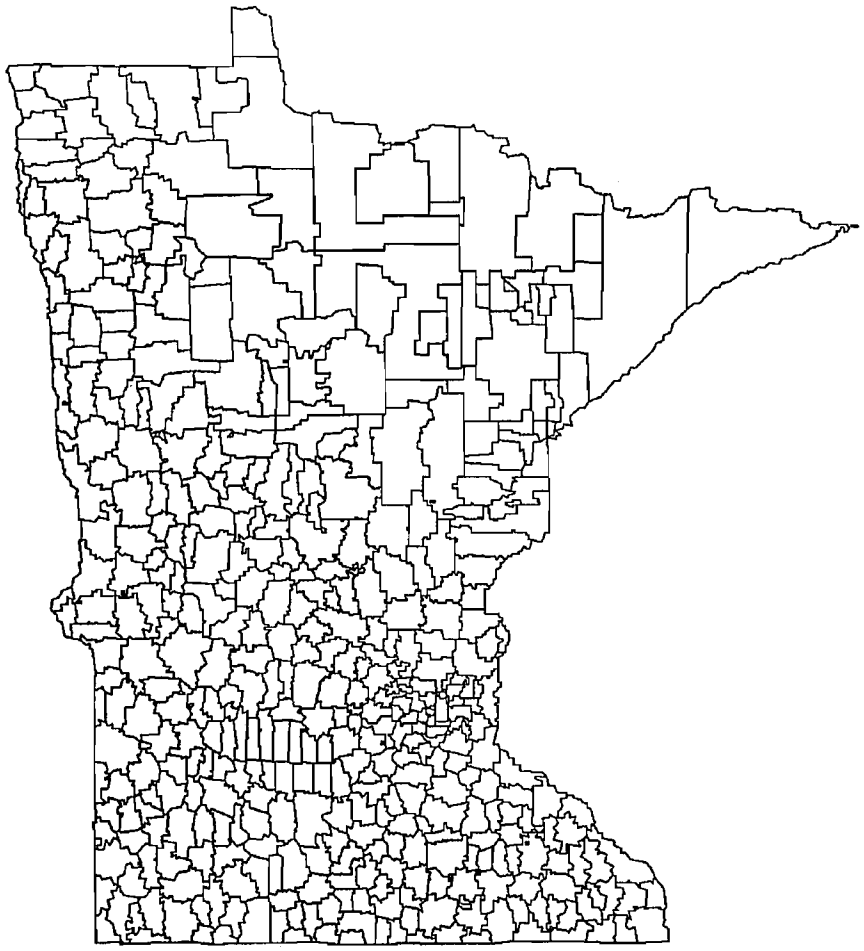
In districts with declining enrollment, the teachers who remain often have seniority and earn above average salaries. However, the state aid formula recognizes this situation and awards special revenue to help retain highly trained, experienced staff. Since teachers' salaries are a major portion of school districts' total budgets, spending logically would increase along with the index of training and experience which the Department of Education calculates.

School districts also may bear unusual costs if they serve students in sparsely populated regions of the state. Further, the districts' geographic size may be an economic burden or a blessing. As Figure 4.3 shows, northern districts cover vast, sparsely populated areas while southern districts are more compressed. The state's largest district includes two separate regions which together cover 2,714 square miles. In contrast, the smallest district occupies a compact site of 1.8 square miles. In another district, there is less than one student (0.2) per square mile compared with hundreds in the Twin Cities.

Adjacent school districts increasingly have made formal agreements to share responsibility for providing regular instruction. For example, one district might send all its secondary students to another district in exchange for elementary pupils. Superintendents who work under these arrangements were interviewed in 1988 and said that cost control was one of four main reasons for their districts' involvement.[2] In total, 16 percent of Minnesota school districts were joined through formal cooperative agreements for regular instruction during our study period, the 1987-88 school year.

2 Minnesota House of Representatives Research Department, *District Cooperation: Policy Issues and Implications,* (October 1988), 5.

**Figure 4.3: Minnesota School Districts**



**Districts' geographic size varies considerably.**

Finally, the length of districts' school year may explain some of the variation in spending. To help reduce costs, a few districts operate fewer than 170 days a year, four days per week (but for more than six hours daily). At the other extreme, about a third of Minnesota's districts pay teachers to work more than 180 days a year. When the Department of Education reviewed the possibility of lengthening the school year in 1984-85, it reported that each day could cost as much as $12.6 million statewide.[3]

# Patterns of Variation

Using verified data from our sample, we checked to see which of the factors listed in Figure 4.2 were most useful in understanding differences in the amount school districts spent per student in 1987-88. Of the eight factors, we found that three were critical:

3 Minnesota Department of Education, *Report on Extending the School Year* (November 1983).

- **Local referendum levies, enrollment size, and districts' percentage of AFDC students accounted for the largest differences in spending per student.**

While each of these factors was important in its own right, local referendum levy dollars carried the most weight. In addition, depending on the type of spending, other factors shown in Figure 4.2 often contributed to spending differences. In other words, our results showed that spending variations were rooted simultaneously in different causes. No single explanation was usually sufficient.

**On the average, districts with local referendum levies spent about five percent more per student.**

In Chapter 1, we illustrated the great difference in expenditures which can be attributed to local referendum levies. Without the additional money, 60 percent of all districts would have had less than $4,000 per student on the average to spend in 1987-88. Five percent would have had more than $5,000. However, expenses in only 48 percent of the districts actually were less than $4,000 per student. In 10 percent, actual operating expenses totaled more than $5,000. On the average, districts with local referendum levies spent about five percent more per student than districts without referendum levies during the 1987-88 school year.[4]

Partly because the majority of small districts passed local referendum levies, we found that these districts had the greatest operating expenses per student in 1987-88. Where enrollment was lowest, expenses for each student were fully $1,000 above the state average. In the next decile of student enrollment, the average cost per student was $4,601 compared with the state average of $4,243. In districts with larger numbers of students, average costs were within a few hundred dollars of the norm. (See Figure 4.4.)

In fact, we found that:

- **In districts where enrollment was very low, local referendum levies produced as much as 20 percent more money than the state disbursed.**

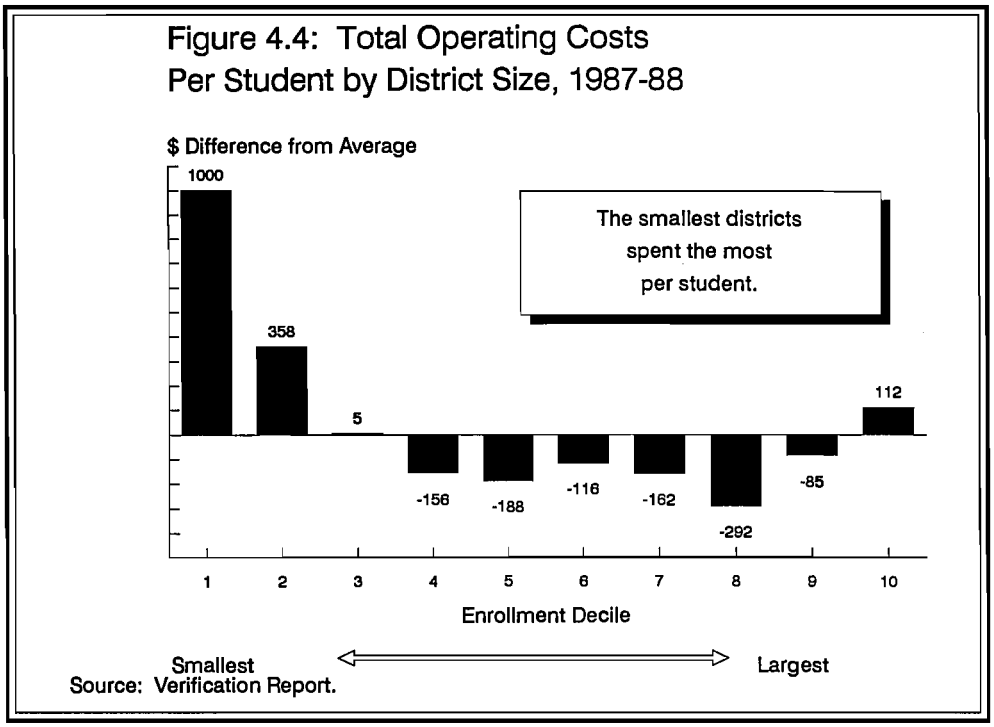
In the smallest two deciles of enrollment, where 75 to 90 percent of the school districts drew upon resources from such levies, the dividend was $511 to $805. In larger districts, we found that the gain from local referendum levies at most was 9 percent or $368 per student.

As expected, the percentage of AFDC students did affect school district spending. Where the percentage of AFDC students was high, costs were elevated not only for exceptional instruction but also for regular education. However, AFDC students were concentrated in the two Twin Cities districts which are among those with the highest cost of living in Minnesota.[5]

---

4 Throughout this chapter, we report how much districts spent per student, in terms of average daily membership. In other sources, school districts' expenditures often are divided by weighted pupil units. Our own and others' research shows that division by pupil units distorts and diminishes true differences in spending among school districts. See Charles H. Sederberg and Vernon L. Hendrix, "Correlations of Weighted Pupil Unit Expenditures and Service Unit Costs," *Journal of Education Finance* 14 (1988): 248.

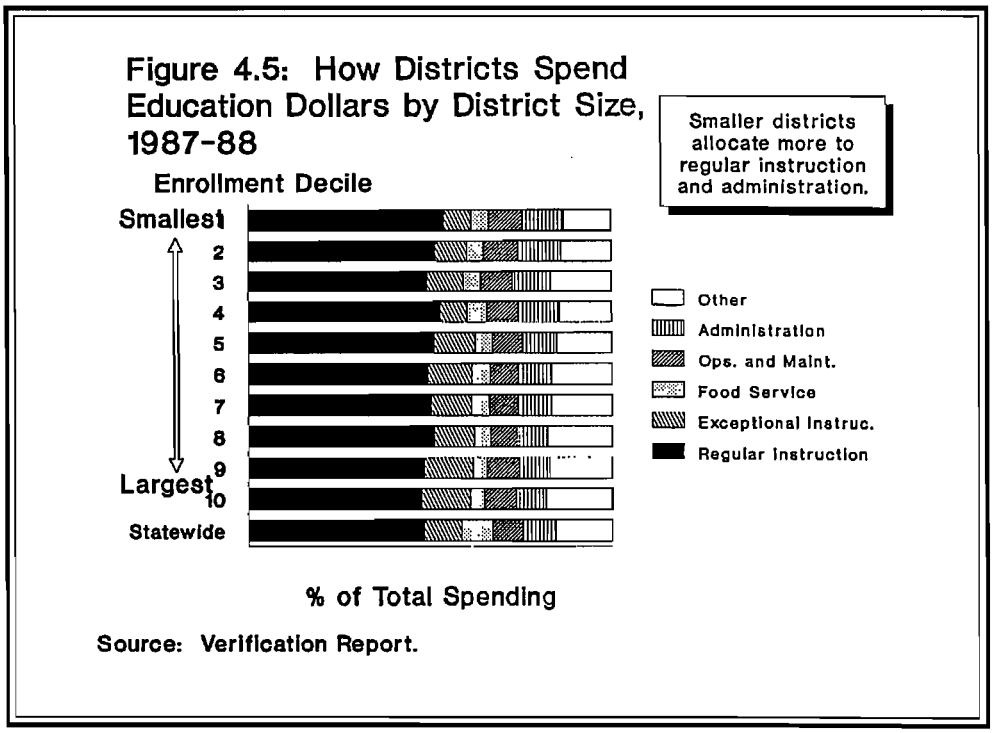
5 See Office of the Legislative Auditor, *Statewide Cost of Living Differences* (January 1989).




In addition, we found that:

- **Local referendum levies, enrollment size, and the AFDC student population influenced the way in which school district administrators distributed their resources.**

As shown by Figure 4.5, districts with few students spent disproportionately more of their budget on regular instruction and district administration. In con-



trast, the larger districts in the top deciles of student enrollment devoted somewhat greater percentages to exceptional instruction and less to administration.

Outside the areas of instruction and administration, our analysis revealed that two areas of spending attracted similar percentages of school districts' resources: (1) food service and (2) operations and maintenance. Regardless of enrollment size, districts dedicated about the same proportions of their resources for these services. However, in the school districts which worked cooperatively with their neighbors in 1987-88, we found that food service and operations and maintenance expenses consumed a smaller percentage of revenues.

# INSTRUCTION

Regular instruction is the largest single category of expense for school districts, and of course it represents the most basic function of public education. Policymakers have indicated a strong desire to know more about school district spending especially in this area.

**Some district administrators could not break out costs by level of instruction.**

In our study, we obtained corrected information on districts' total spending for regular instruction.[6] We also asked specifically how much was spent for kindergarten, elementary grades 1 through 6, and secondary grades 7 through 12. We found that the figures on total spending for regular instruction which had been submitted to the Department of Education for 1987-88 often were wrong. When asked, 94 percent of district administrators could provide correct, comparable figures for our study. However, they were not able to reliably break down costs by level of instruction.

We found:

- **The smallest school districts generally spent more per student for regular instruction than larger districts.**

One reason for this is simply that they have few students over which to spread the cost of staff and basic services. Second, as we mentioned earlier, the smallest districts typically received additional, unequalized revenue from local referendum levies. Third, the fraction of students whose families received AFDC benefits tended to be lower in districts with small enrollment.

Statewide statistics on expenditures for regular instruction are included in Appendix B. On the average, we found that:

---

*6* In the UFARS system, this includes compensation for teachers, coaches, and aides, as well as textbooks, purchased services, instructional, athletic, musical, and other supplies. As explained in Chapter 3, district staff generally were unable to isolate expenses for co-curricular, extra-curricular, and athletic activities from the total for regular instruction.

- **It cost about $12 a day per student, or $1.50 per hour, for districts to provide non-vocational, non-exceptional instruction, supplies, services, and activities.**

Half the districts spent $1.4 million or less in total for regular instruction in 1987-88, but in the state's largest districts, expenses exceeded $7 million.

Textbooks are a small but important part of regular instruction. During the 1987-88 school year, districts spent about $26 million statewide on students' textbooks and workbooks. On the average, texts cost about $61,000 per district or $39 per student (Appendix B). Some districts spent almost three times more on textbooks than other districts in 1987-88, but we found that this variation was only minimally related to enrollment size, local referendum levies, and other factors.

**Spending for gifted and talented programs varied considerably.**

Quite often, district administrators could provide accurate data on their total spending for exceptional instruction and for one of its smaller components, gifted and talented instruction. As Appendix B shows, exceptional instruction, mainly special education, cost an average of $1.1 million per district in 1987-88. The Department of Education has no figures on the total number of exceptional students who benefited from these expenditures, but we calculated an average cost of $454 among all enrollees. At the low end, districts' costs averaged about $300 per student, and at the high end, nearly $700.

Expenditures for gifted and talented instruction, which totaled about $11 million in 1987-88, varied widely among districts. Half the districts spent $2.53 or less per student, and in one district we learned that the entire instructional program cost only $20 in 1987-88.[7] In 10 percent of districts, expenditures were $.37 or less per student, but elsewhere, it was as much as $19.29 per student.

- **In total, half the districts spent less than $2,000 for gifted and talented instruction.**

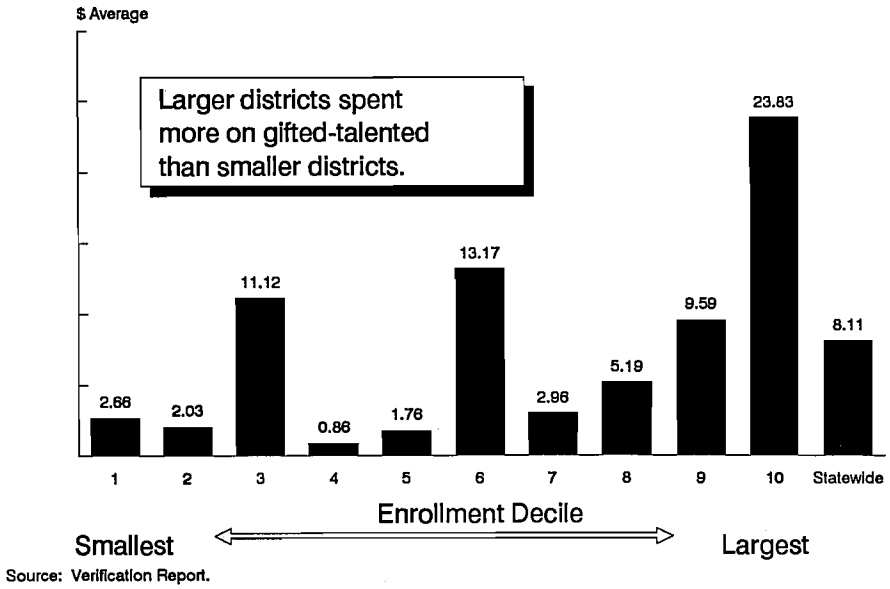
As shown by Figure 4.6, the smaller districts spent least per student on the average. Among school districts in the Twin Cities and metropolitan suburbs, our study showed that the allocation for gifted and talented students was high, averaging almost $15 per student (among all enrollees). Other regions spent considerably less: northern Minnesota, $11; the southern region, $7; and central Minnesota, $4.

# ADMINISTRATION

In general, nine percent of the education dollar goes to administer school districts and school buildings. Although this is a relatively small portion of

7 Again, the actual number of students who benefited is unknown. However, statutes (subsequently repealed) specified that school districts could receive the categorical aid only for a maximum of five percent of their students.

Figure 4.6: Gifted-Talented Expenses Per Student by District Size, 1987-88




Source: Verification Report.

education spending, policymakers question whether administrative costs have grown at the expense of student instruction. However, our earlier study of education expenditures found no evidence to support this view.[8]

Statewide, on an daily basis, we found that:

- **Most districts spent $2.06 or less per student to administer educational programs, services, and activities in 1987-88.**

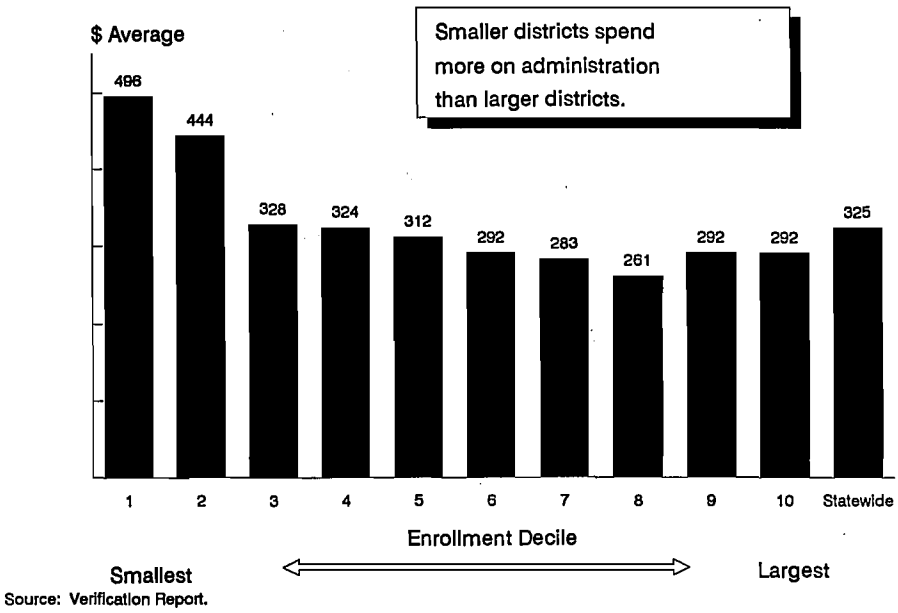
At the least, districts paid about $114,000 for administrative costs. At the most, some large districts each spent more than $1.35 million. Most of this money went for staff salaries and benefits which we analyzed in detail.

Statewide, districts spent about $32 million to compensate administrative staff. As shown in Figure 4.7, districts spent an average of $325 per student to compensate administrators and related staff in 1987-88. However, in the smallest two deciles of enrollment size, the average was more than $100 higher: that is, $444 to $496 per student. In the third and fourth deciles, districts spent only about as much as the state average. In all remaining deciles of enrollment, the cost per student to pay administrators was lower.

In the state's smallest districts, we saw further that the largest amount of administrative compensation went directly to the superintendent and local board members (Figure 4.8). In contrast, pay for superintendents and board mem-

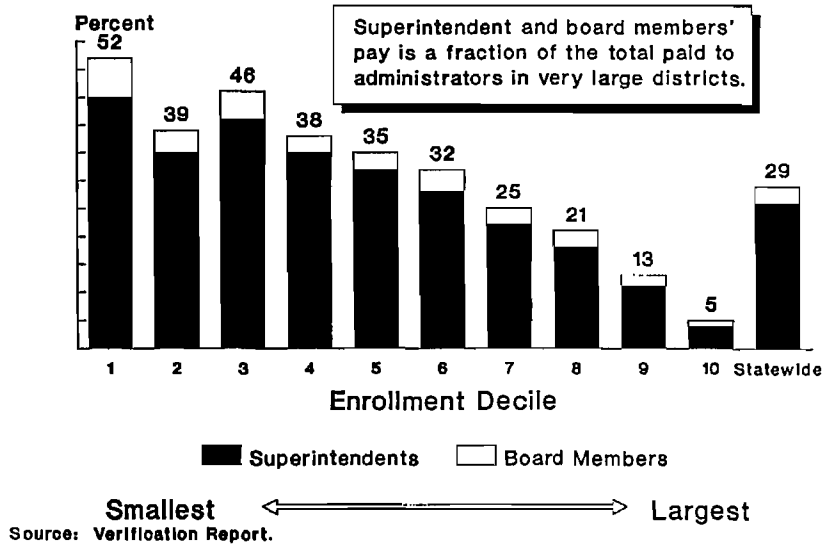
8 Office of the Legislative Auditor, *Trends in Education Expenditures* (March 1988).

## Figure 4.7: Administration Expenses Per Student by District Size, 1987-88




Source: Verification Report.

## Figure 4.8: Percent of Administrators' Pay to Superintendent and Board, 1987-88




Source: Verification Report.

bers constituted only a fraction of the total compensation for administrators in the state's largest school districts.

The UFARS system lacks categories to identify districts' compensation to superintendents and school board members, but we obtained this information directly from administrators in our sample of 97 school districts.[9] The resulting statistics show that it cost about $23 million statewide to compensate superintendents. As shown in Appendix B, districts spent an average of about $85 per student to pay superintendents in 1987-88. At the least, school districts paid a total of $31,962 or $23.37 per student. At the most, they spent more than $80,000 or $154.09 per student.[10]

Statewide, districts' payments to superintendents' for salaries and benefits averaged $56,007 in 1987-88. In addition, the superintendent's office and assistants cost $17,518 or an average of about $23 more per student. However, we discovered that:

- **Superintendent salary costs were halved when districts shared the services of superintendents who may be employed part-time, and superintendents' office costs were cut by one-fourth.**

Some districts provide superintendents with free housing and automobiles, the cost of which is included in the above figures. About one-fifth of the state's districts provided superintendents with district-owned automobiles, and another fifth provided intra-district mileage allowances. In addition, about 4 percent of the districts, almost all of them small districts in western Minnesota, provided superintendents with free housing.[11]

School board members' compensation from school districts came to nearly $4 million statewide during 1987-88. These costs ranged from less than $3 per student to nearly $20, but the average was about $10. In half the districts, compensation payments per board member were $925 or less, and each member's total cost was below $2,000.

## Some districts provided benefits to school board members.

We found that some board members received employee benefits such as group health insurance from school districts.

- **About one-fifth of the districts provided benefits to local school board members, which totaled about $250,000 statewide for the 1987-88 school year.**

---

*9* Most administrators could provide these figures when asked. Also, they indicated that the UFARS data on total expenses for school boards and superintendents' offices were generally reliable.

*10* *Minn. Stat.* §43A.17, subd. 9 limit school district salaries to 95 percent of the governor's salary. Legislation adopted in 1988 includes deferred compensation and annuity costs as salary. See *Minn. Laws* (1988) Chapter 667, Section 8.

*11* Minnesota School Boards Association, *Administrative Salaries and Related Information, 1987-1988* (St. Peter: undated).

The average amount of benefits provided to board members was $2,573 and ranged from $14 to almost $24,000. Half of the districts providing benefits to board members spent less than $47 while half spent more.

Through our study, we also learned that districts statewide spent $105 million for employees' health insurance, $12 million for dental insurance, and $13 million for travel for board members and staff.[12] Appendix B indicates that the benefit of group hospitalization insurance cost as much as $212 per student in some districts in 1987-88. The total cost of this type of insurance for a district ranged from $25,859 at the 10th percentile to $584,376 at the highest. Similarly, group dental insurance cost some districts less than $3,000 but other districts nearly a quarter of a million dollars. Insurance expenses per student were notably high in the larger districts.

The cost per student for board and staff to travel averaged $26.04 and was lowest among districts in the Twin Cities metropolitan area. As one would expect, the data showed that districts in sparsely populated areas of the state spent larger amounts per student for this activity.

# OPERATIONS AND MAINTENANCE

Operations and maintenance accounted for nine percent of school districts' total spending in 1987-88. This is not a major drain on the budget in most cases, but it represents one of the few types of education spending where costs may be reduced without directly affecting instruction. Through the Department of Public Service, school districts can participate in energy audits and obtain special loans for energy conservation projects. The department surveys school districts annually and distributes a report which shows how much it cost to heat public school buildings throughout the state.[13]

We calculated the total cost of operations and maintenance per student and also obtained data from administrators in our sample so that we could calculate the cost per square foot.[14] Aside from staff compensation, these expenditures are for supplies and materials to make repairs, maintain buildings and grounds, pay for utilities, buy fuel for buildings, remove wastes, and the like.

Results show that Minnesota school districts maintained an average of about 313,000 square feet of instructional space in 1987-88 plus 20,000 square feet for other purposes (such as bus barns and field houses). We divided the total

*12* We based our estimate of travel expenses on two object codes which school administrators told us were accurate in combination.

*13* Minnesota Department of Public Service, *Public School Building Energy Use for the 1987-88 Heating Season* (July 1989).

*14* The Department of Education did not collect data on districts' square footage during our study period. The Department of Public Service maintains information on the size of only some school buildings.

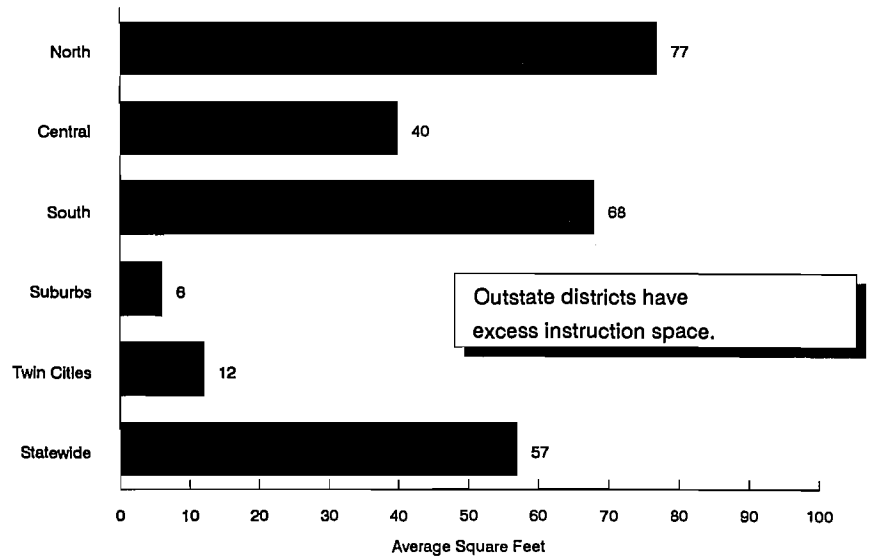
instructional square footage by the student population and found that the education system provides an average of 208 square feet per student statewide. However, the Department of Education recommends a maximum of only 110 square feet for elementary pupils and 200 square feet for secondary students.[15] Thus, we learned:

- **Most (76 percent) of the state's school districts maintained more instructional space than maximum guidelines suggested.**

**Most districts have more instructional space than they need.**

Statewide, these districts maintained an average of 28 percent more instructional space than the maximum amount which state standards indicated was desirable. The amount of potentially unnecessary space was greatest in northern and southern Minnesota where enrollment has declined sharply over the past 15 years. (See Figure 4.9.) Also, the surfeit was particularly great in school districts with less than 300 enrollees.

Figure 4.9: Excess Instruction Space Per Student by Geographic Region, 1987-88

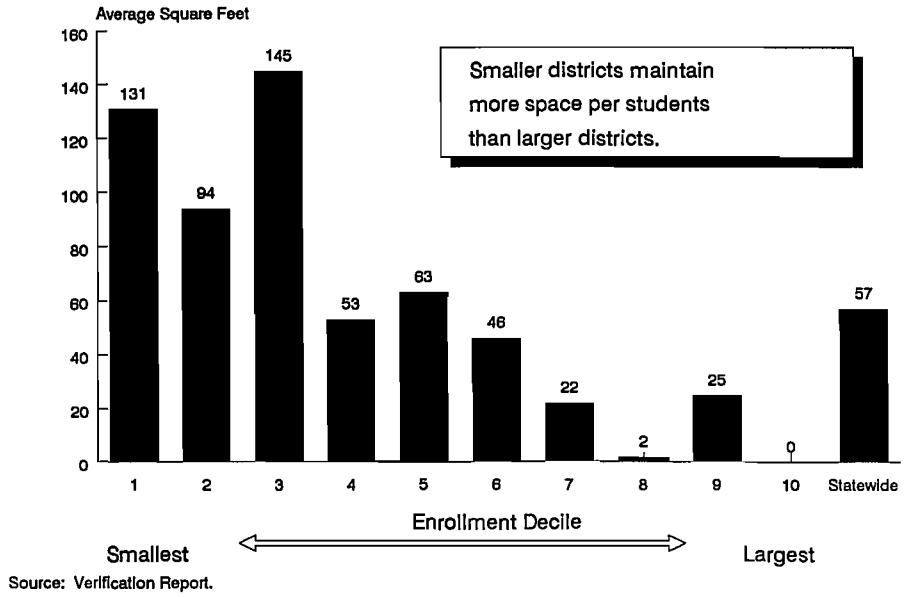



Source: Verification Report.

Figure 4.10 indicates that districts in the smallest three deciles of enrollment maintained 100 or more extra square feet for each of the students who they served during the 1987-88 school year. The larger metropolitan and suburban districts also tended to have excess capacity, but the amount per student was small by comparison. Further, enrollment is projected to grow or remain stable in the Twin Cities region.

*15* Minnesota Department of Education, *Guide for Planning New and Improved School Facilities in Minnesota* (July 1988), 39, 57. The guidelines show a range of 100 to 110 square feet for elementary pupils and 120 to 200 square feet for secondary students.

Figure 4.10: Excess Instruction Space Per Student by District Size, 1987-88




Source: Verification Report.

For each district with excess space, we calculated the cost of operations and maintenance per square foot and multiplied by the number of excess square feet. Statewide, this meant that:

- **School districts could have spent as much as $34 million to maintain excess instructional space in 1987-88.**

**Excess space could have cost more than $30 million to operate and maintain.**

Students were crowded in about one-fourth of the school districts, so that there were nominal cost savings for operations and maintenance in some cases. However, as we discussed in Chapter 1, building construction now is booming, and the cost to operate and maintain older buildings is a serious concern.

During the 1987-88 school year, districts spent nearly $32 million statewide for heating fuel, $50 million for utilities, $10 million for custodial supplies and $13 million for repair supplies. Appendix B shows how much Minnesota's school districts varied in their expenses for these items in 1987-88, the most recent year for which data are available.

# FOOD SERVICE

During the 1987-88 school year, districts spent a total of $127 million statewide on food service programs. Of this amount:

- **About one-half of all food service expenses went to purchase food and other supplies needed to produce meals and snacks.**

Districts bought almost $64 million worth of food and related supplies during the 1987-88 school year. The rest of the money was used to pay staff: $49 million for salaries plus about $8.5 million for benefits.

Each district spent an average of $292,152 for its food service program in 1987-88. Expenditures varied widely among districts, with some spending $44,389 while, at the highest decile, others spent $620,323. (See Appendix B.)

Statewide, food service programs cost an average of $196 per student although, again, this varied considerably. The lowest cost districts spent $149 per student while costs in the highest decile were about $244.

One reason for the difference in cost is districts' enrollment size. In general, smaller districts spent substantially more per student than larger districts. In addition, costs varied because of the number of programs which districts provided. During the 1987-88 school year, districts could have participated in four out of five different food programs: national school lunch, a la carte/other, breakfast, split-session milk, and special milk.

The federally-sponsored national school lunch program is the one most often associated with public schools. Of the state's 436 school districts, 431 contracted with the Minnesota Department of Education to participate in the program in 1987-88. This made them eligible to receive donated food from the federal government and be reimbursed for student meals by the state and federal government.

Districts which accept aid for their hot lunch programs must offer free lunches or reduced-price lunches to students who apply and meet certain eligibility guidelines. The federal government set separate reimbursement rates of $.0135 for each full price, $1.005 for each reduced-price, and $1.405 for each free meal served to students in 1987-88. In addition, the state provided $.075 to districts for each full price lunch served to students.

The national school lunch program is designed to provide nutritious, well-balanced meals with about one-third of the recommended daily allowance of vitamins and minerals. For districts to receive federal reimbursement, each lunch must include one serving each of meat or a meat alternate, milk, bread or a bread alternate, and two servings of fruit or vegetables. However, students in grades 10 through 12 can refuse two of the required five items without jeopardizing meal reimbursement. Students in grades 1 through 9 may, at the discretion of the district, also refuse one or two of the required food items.

The federally sponsored school breakfast program provides one serving each of milk and fruit or vegetable, and two servings of bread or meat (or one serving of each). The federal government reimbursed districts $.1350 for each full price breakfast, $.4625 for each reduced-price breakfast and $.7625 for each

free breakfast. During the 1987-88 school year, 37 districts participated in this program. In general, these large districts were clustered in the Twin Cities metropolitan area and northern Minnesota.

Districts currently need not provide food service through any program. However, beginning in September 1991, districts must offer breakfast in every school building where at least 40 percent of the lunches were free or reduced in price during the 1989-90 school year.[16] Districts must also survey parents and offer breakfast in schools where at least 15 percent of the students would, according to their parents, participate. However, if fewer than 25 students are expected to participate, districts would not have to offer breakfast.

Based simply on the number of free and reduced meals served during 1987-88, we estimate that approximately 130 districts, or about 30 percent of all districts, could be required to provide breakfast in 1991-92.[17] Although 37 districts provided breakfast during the 1987-88 school year, only 19 of these districts could be required to do so in 1991. Thus, most of the districts that could be required to provide breakfast in 1991 did not do so during 1987-88.

The split-session milk program provides milk to students attending half-day kindergarten programs who do not have other food programs available to them. While 160 districts had half-day kindergarten programs during 1987-88, only 62 received milk under this program. Participating districts most often were larger districts located in central and southern Minnesota.

The special milk program provides milk to students in districts which do not receive aid for any other federal program for child nutrition. Only three districts took part in this program in 1987-88. They received $.095 for each half pint of milk served to non-needy children and the average cost of each half pint served to needy children.

A la carte/other programs are locally designed and largely unregulated.[18] They are quite diverse and range from simple vending machines to delicatessen-like restaurants. For example, salad bars, sandwiches, and yogurt machines are popular at large districts while small districts might just sell milk or ice cream during the noon hour. Other districts may provide meals to senior citizen sites or Head Start programs. At least 372 districts offered some type of a la carte program during 1987-88.

**Most districts offer at least two food service programs.**

District participation in the different food programs varied during the 1987-88 school year. Almost all districts took part in the national school lunch or "hot lunch" program and an a la carte program. In fact, 68 percent of districts provided two types of food service programs, usually hot lunch and a la carte. Statewide, 17 percent of districts participated in three of the five programs which were described above.

*16* *Minn. Laws* (1989), Chapter 329, Article 8, Section 5.

*17* Of course, district survey results and expected participation rates may affect the number of districts required to offer breakfast.

*18* A la carte/other programs (abbreviated as a la carte) include food programs which are not directed at students but may help to support student food programs, such as providing meals for teacher banquets or senior citizens.

# Hot Lunch

We analyzed costs for school districts' hot lunch programs in detail because it is the state's major food program for public students. It is also a program over which district administrators have considerable control. In addition, we focused on a la carte programs which are popular. Together these two programs account for 98 percent of districts' food service expenditures.

Table 4.1 shows how the number of student lunches served has changed in recent years. We found that:

- **More hot lunches have been served since 1982-83, especially full price meals.**

## Table 4.1: Meals Served in the National Hot Lunch Program, 1981 through 1988

| Year[a] | Enrollment | Total Student Meals | Full Price Meals | Free Meals | Reduced Meals |
|---|---|---|---|---|---|
| 1981-82 | 799,644 | 74,122,302 | 53,698,348 | 15,198,025 | 5,225,929 |
| 1982-83 | 749,672 | 71,546,202 | 49,413,476 | 17,236,298 | 4,896,428 |
| 1983-84 | 726,261 | 72,490,423 | 49,688,798 | 17,835,859 | 4,965,766 |
| 1984-85 | 737,913 | 73,636,445 | 51,258,542 | 17,592,696 | 4,785,207 |
| 1985-86 | 728,685 | 73,330,849 | 50,514,453 | 18,003,398 | 4,812,998 |
| 1986-87 | 732,529 | 74,681,626 | 51,461,776 | 18,208,834 | 5,011,016 |
| 1987-88 | 737,158 | 75,354,584 | 52,884,407 | 17,455,181 | 5,013,996 |

Source: Minnesota Department of Education.

[a]Figures are for July 1 through June 30 of each year.

Student enrollment dropped about two percent from 1982 to 1988, but the total number of student meals increased five percent. The number of full price meals increased seven percent during this period, while the number of free and reduced price meals increased about 2 percent.

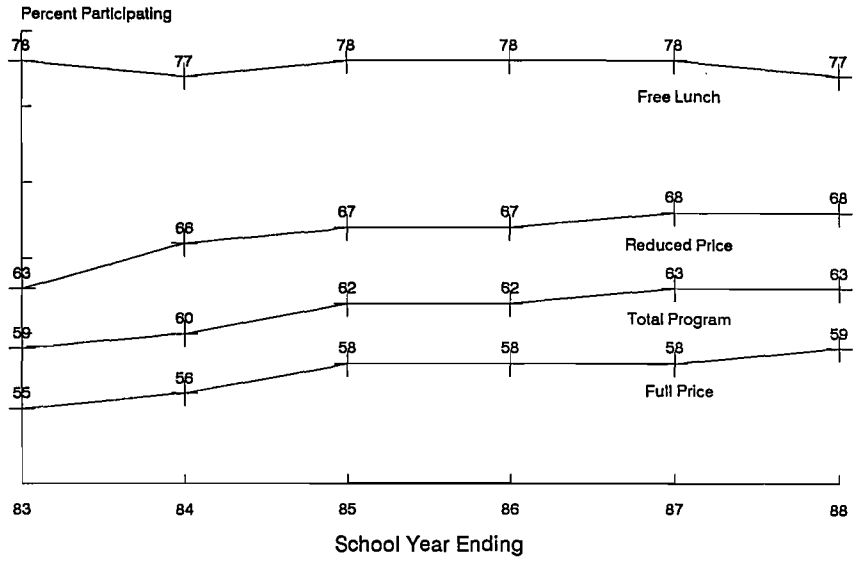
Figure 4.11 shows how student participation (the percent of students taking hot lunch) has changed over time. As these data indicate,

- **Overall student participation in the hot lunch program has increased nearly four percent between 1982 and 1988.**

During the 1987-88 school year, we found that on the average 59 percent of students bought hot lunch daily. While the participation rate for free lunch has remained fairly stable over the last five years, both reduced and full price participation increased about five percent despite declining enrollment.

**More students are participating in districts' hot lunch programs.**

Figure 4.11: Hot Lunch Participation, 1982 through 1988




Source: Department of Education.

One reason for increasing participation is that elementary enrollment has risen while secondary enrollment has declined. Elementary students have fewer noon-hour alternatives and may feel less peer pressure about their choice of dining sites. Thus, they may eat hot lunch more often than older students. In contrast, secondary students often are permitted to drive off-campus to fast-food establishments. They are also more likely to eat salads or snacks instead of balanced meals in the lunchroom.

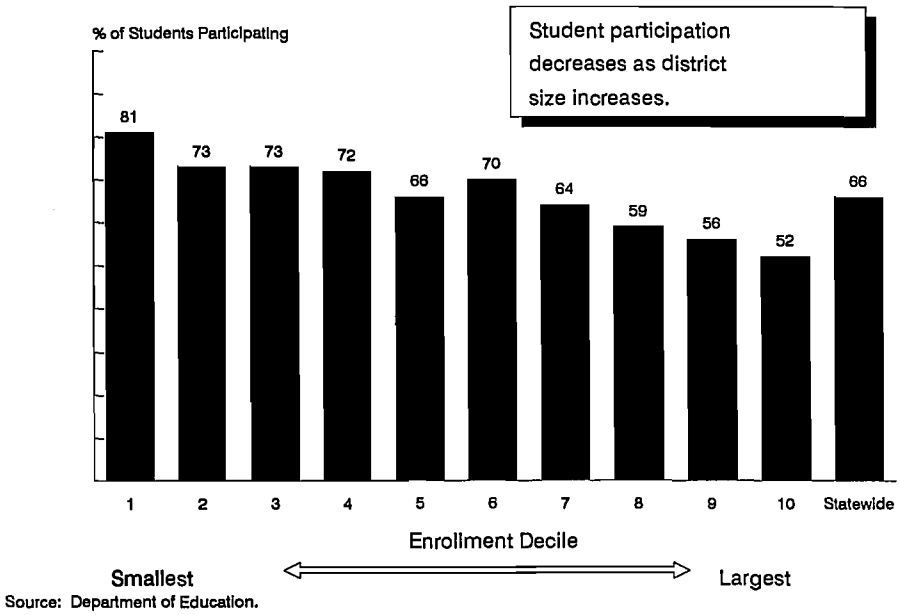
The Department of Education has no information on the number of hot lunches served separately to elementary and secondary students. However, we examined data combined by grade level and found that student participation varied both by geographic region and enrollment size. In general,

- **Participation was lowest in the Twin Cities metropolitan area where enrollment size is greatest.**

As is shown in Figure 4.12, student participation tends to drop as enrollment increases. While 81 percent of students in the state's smallest districts ate hot lunch, only 52 percent of the students in the largest districts did.

Of course there are many more youth-oriented restaurants in the Twin Cities metropolitan area where most of the larger districts are located than there are in outstate Minnesota. In addition, these larger Twin Cities area districts are more likely to provide elaborate a la carte food service programs which may substitute for some students' hot lunch. Finally, it may be more convenient for students in metropolitan area districts simply to go home for lunch.

Figure 4.12: Hot Lunch Participation by District Size, 1987-88




Source: Department of Education.

# Student Meal Production Costs

Meal costs are mainly for food, milk, and labor. As Figure 4.13 shows, labor costs were the largest component of hot lunch programs in 1987-88.

**Labor costs now account for most food service expenses.**

- **Labor comprised 53 percent of hot lunch costs while food supplies represented 30 percent and milk and other costs 9 and 8 percent of the total.**

However, labor costs only recently predominated. We found that:

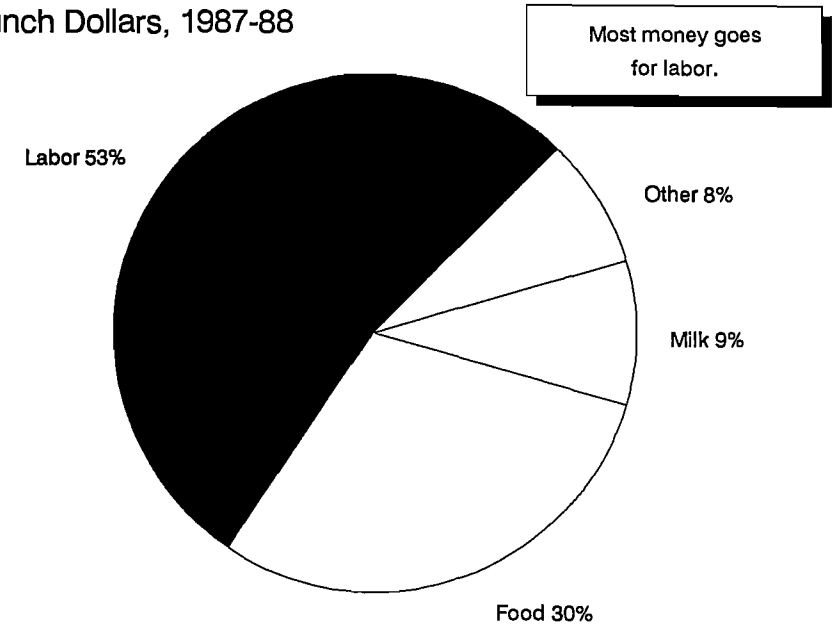
- **From 1979 through 1988, labor's share of meal production costs increased about 10 percentage points.**

Food service workers may have benefited from recent legislation requiring districts to implement pay equity plans, but it may be too early to attribute rising labor costs to the new law.[19] According to a 1989 study of 91 Minnesota school districts, 91 percent of the districts studied had not achieved pay equity.[20] However, a 1987-88 survey by the Department of Education found that districts were just beginning to implement pay equity increases in 1987-

19 *Minn. Laws* (1984), Chapter 651.

20 Minnesota Service Employees International Union, *It's Time to Make a Good Law Better* (February 1989).

Figure 4.13: How Districts Spend Hot Lunch Dollars, 1987-88




Source: Department of Education.

88. Districts reported that pay equity increases ranging from 0 to 150 percent were being implemented over a four year period.[21]

On the average, districts spent $1.42 to produce lunch for each student participant, but these costs varied substantially by geographic region and district enrollment size. As Table 4.2 shows,

- **The cost to produce student lunches was lowest in Minneapolis-St. Paul and highest in northern Minnesota.**

## Table 4.2: Cost Per Student Meal by Geographic Area, 1987-88

| Geographic Area | Food | Milk | Labor | Other | Total |
|---|---|---|---|---|---|
| Northern | $.42 | $.14 | $.79 | $.11 | $1.46 |
| Central | .43 | .13 | .71 | .11 | 1.39 |
| Southern | .43 | .12 | .74 | .11 | 1.41 |
| Metropolitan Suburbs | .40 | .11 | .80 | .13 | 1.44 |
| Minneapolis-St. Paul | .37 | .10 | .72 | .17 | 1.37 |
| Statewide Average | $.43 | $.13 | $.75 | $.11 | $1.42 |

Source: Minnesota Department of Education.

21 Minnesota Department of Education, memorandum to the Office of the Legislative Auditor (February 1, 1990).

Because food and milk costs were lower than average in the urban schools, student meals there cost $1.37, 5 cents less than the statewide average. Conversely, labor was costly in northern Minnesota, and there meal costs were 4 cents higher than the state average.

**Meal production costs per student are the highest in the smallest districts.**

District size and student participation rates also affected meal costs. In general, the smallest districts in the state spent the most to produce hot lunches for students.

- **The average cost to produce student lunches in the smallest districts was 7 to 11 cents above the statewide average of $1.42. Meal preparation costs in the largest districts were about 5 cents higher.**

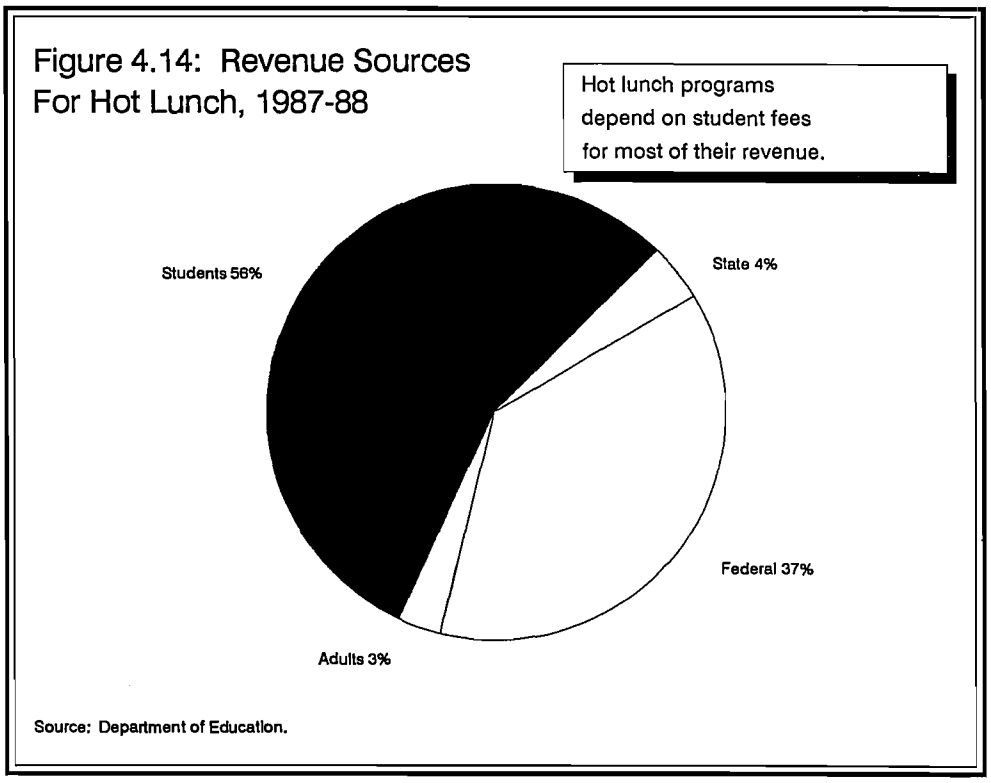
While diseconomies of scale help to explain why meal preparation costs were higher than average in the state's smallest districts, lower student participation rates in large districts help to explain their higher costs. In general, student meal costs increase as student participation in the hot lunch program decreases.

# Hot Lunch Prices

Students are the most important source of revenue for districts' hot lunch programs. As Figure 4.14 shows,

- **Statewide, students contributed about 55 percent of districts' hot lunch revenues during the 1987-88 school year.**

Figure 4.14: Revenue Sources For Hot Lunch, 1987-88




Source: Department of Education.

Therefore, appropriately set student lunch prices are helpful to school districts' economic well-being. Although federal regulations require food service programs to be non-profit, it makes good business sense to operate food services programs without losing money.

We found that local districts establish various prices for students and adults.[22] During the 1987-88 school year, elementary prices ranged from $.40 to $1.25 and averaged $.89 statewide. Secondary charges, in keeping with larger portions, were slightly higher. The regular prices for secondary students ranged from $.50 to $1.60 and averaged $.99. Districts charged adults an average of $1.66, but the price was less than $1.00 in a few districts and $2.50 elsewhere.[23]

**Hot lunch prices varied considerably but averaged about $1 for secondary students.**

District lunch prices varied considerably by geographic area. Prices were lowest in northern Minnesota and highest in the Twin Cities metropolitan area where the cost of living is also the highest. As Table 4.3 shows,

- **Elementary and secondary charges averaged $.84 and $.95 respectively in northern Minnesota while charges in the Twin Cities area were about $.95 and $1.12.**

## Table 4.3: Hot Lunch Prices by Geographic Area, 1987-88

| Geographic Area | Elementary | Secondary | Adult |
|---|---|---|---|
| Northern | $.84 | $.95 | $1.67 |
| Central | .87 | .97 | 1.67 |
| Southern | .93 | 1.02 | 1.63 |
| Metropolitan Suburbs | .97 | 1.08 | 1.74 |
| Minneapolis-St. Paul | .92 | 1.15 | 1.82 |
| Statewide Average | $.89 | $.99 | $1.66 |

Source: Minnesota Department of Education.

We found that the larger districts charged about 5 to 7 cents more than the statewide average for elementary lunches and 4 to 8 cents more for secondary lunches.

Unlike student charges, we found that adult meal prices were unaffected by enrollment. Instead they varied directly with the local cost of living. Thus,

- **Adult prices were highest in the Twin Cities area and lowest in southern Minnesota.**

22 Almost all districts charged $.40 for reduced-price meals.

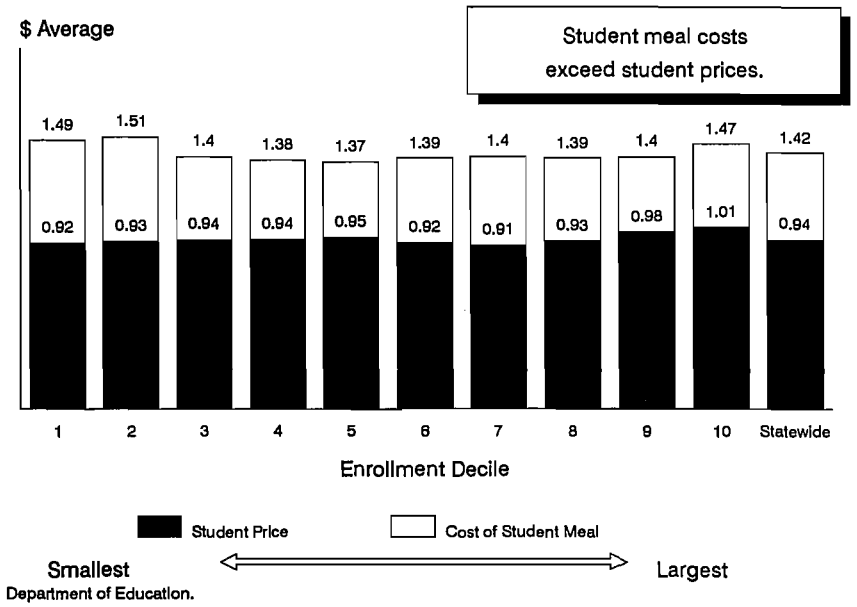
23 Federal regulations require districts to charge adults at least $1.55 for lunch. Districts charging less must reimburse their food service accounts for the difference.

Districts in southern Minnesota charged adults an average of $1.63 for lunch while Twin Cities suburban districts charged $1.74 on the average. Adult meal prices in Minneapolis-St. Paul averaged $1.82.

We examined whether districts were charging enough for full price meals to cover student meal production costs. Figure 4.15 shows district costs per student meal and lunch charges. As these data indicate,

- **On average, it cost districts about 34 percent more to serve lunches than they charged students.**

Figure 4.15: Student Meal Costs And Prices by District Size, 1987-88




Source: Department of Education.

The discrepancy between student meal production costs and the amount charged to students was greatest in the smallest 20 percent of districts as well as in northern Minnesota.

Districts, however, receive both state and federal reimbursement for each student meal served. During the 1987-88 school year, they received $.21 for each full price meal served, $1.405 for each free meal, and $1.005 for each reduced-price meal. Because student meal costs averaged $1.42 statewide, districts had to charge full price students at least $1.21 to cover their hot lunch costs. However,

- **During the 1987-88 school year, districts lost an average of about $.27 or 19 percent on each lunch they served to students who could pay full price and about 1 cent on lunches served to students who qualified for meals at free or reduced rates.**

On the average, small districts, which tend to have higher than average production costs but set only average prices, lost about $.36 on each full price student meal. In contrast, very large districts, also with higher than average production costs, charged students more per meal and lost less--about $.25 on each student meal served.

Table 4.4 documents the cost per total lunches served (for both public and private schools) and the changes in state and federal reimbursement rates over time. Although we do not have comparable trend information on the amounts districts charged to students, we can see that:

- **At least since 1981, lunches have usually cost districts more to produce than they have received from the federal government to feed students at free or reduced rates.**

## Table 4.4: Hot Lunch Reimbursement Rates, 1987-88

| Year | Average Cost Per Meal | State and Federal Reimbursement | | |
|---|---|---|---|---|
| | | Full Price | Reduced Price | Free Price |
| 1981-82 | $1.17 | $.160 | $.6925 | $1.0925 |
| 1982-83 | 1.15 | .169 | .750 | 1.1500 |
| 1983-84 | 1.23 | .190 | .8025 | 1.2000 |
| 1984-85 | 1.29 | .195 | .85 | 1.2550 |
| 1985-86 | 1.32 | .200 | .9025 | 1.3025 |
| 1986-87 | 1.33 | .205 | .9550 | 1.3550 |
| 1987-88 | 1.39 | .210 | 1.005 | 1.4050 |

Note: Statewide data which include public and private schools as well as adult and student meals.

Source: Minnesota Department of Education.

The data in Table 4.4 show that, on the average, districts have lost about $.02 for each reduced and free meal they have served over time.

### Adult lunch prices did not always cover student meal costs.

Districts are not reimbursed for adult meals. Thus, adult prices must be at least equal to meal costs to break even. We examined whether adult prices adequately covered student meal production costs and found that, on average, they did. However,

- **Adult lunches were priced below student meal costs in about seven percent of districts during 1987-88.**

In these districts, meals cost anywhere from a few cents to about a dollar more than the adults were charged. Moreover, districts did not always charge adults. For example, in one district, financial auditors reported that employees received free lunches if they worked at least two hours in the school cafeteria. Some districts reported that they served very few adult lunches during the year--less than three daily.

# Program Viability

To be eligible for federal reimbursement, food service programs must be operated by districts on a non-profit basis.[24] We evaluated whether districts' two major programs, hot lunch and a la carte/other, generated enough revenue to cover operating costs in 1987-88.

First, we subtracted expenditures from income for each school district with a hot lunch program. Although nearly one-fourth of districts covered their costs, we found that:

- **Seventy-eight percent of the districts which provided hot lunch lost money on their programs during the 1987-88 school year.**

**Generally, hot lunch programs lose money while a la carte programs make money.**

The net income for districts' hot lunch programs ranged from a negative $481,588 to a positive $199,447. On the average, the loss per district was $17,266 statewide. For the 338 disticts who lost money, the average deficit was $25,252. However, half of these districts lost less than $10,000.

The Minnesota Department of Education encourages districts to operate a la carte programs to help offset the losses from hot lunch programs. We learned that this is a useful strategy because a la carte programs were more likely than hot lunch programs to break even.

- **Eighty-four percent of districts reported that income from their a la carte programs exceeded costs.**

The net income from a la carte programs ranged from a negative $378,056 to a positive $545,449. Statewide, income exceeded costs by an average of $16,093. The 58 districts reporting deficits in their a la carte programs lost about $14,000 on the average. Half of these districts reported small deficits of less than $1,350.

However, despite the contributions of a la carte programs, we found that profits generally were too small to offset the losses that were typical from hot lunch programs. After adding the balance from the two programs, we found that:

- **Most (52 percent) of districts lost money on their hot lunch and a la carte programs during the 1987-88 school year.**

On the average, districts' hot lunch and a la carte programs together lost $1,173. The net income from these two programs statewide ranged from a negative $339,382 to a positive $273,432. The 226 districts with losses in their overall program averaged a negative $13,759. Half of these districts lost less than $4,700.

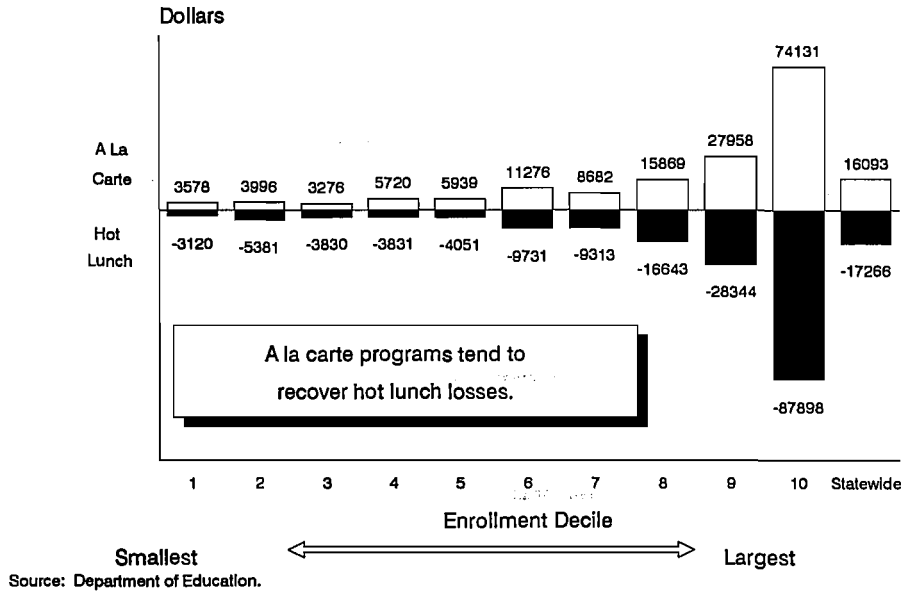
---

*24* A la carte/other programs may make a profit, but the food service fund may not have more than a three month operating balance.

We examined a variety of factors to determine what contributes to the economic viability of district food programs. For hot lunch, we found that two variables were critical: district enrollment size and the cost of living. As Figure 4.16 shows,

- **The larger districts tended to lose more--especially in the Twin Cities metropolitan area--money on hot lunch programs than districts located elsewhere.**

Figure 4.16: Net Income From Major Food Programs by District Size, 1987-88




Source: Department of Education.

In contrast, for the a la carte program, enrollment size was a positive factor. We learned that:

- **A la carte programs were more likely to break even in districts with a large number of students.**

District enrollment size and location are well known, important variables which help to explain food service programs' viability. In Minnesota, the larger districts tend to have low rates of student participation and less successful hot lunch programs. However, their a la carte programs serve as alternatives which often are successful. Also, larger districts may have more opportunities to expand their a la carte programs into the general community.

The picture is quite different in smaller districts. They are less likely to operate a la carte programs which may serve as alternatives for lunch menus. Their participation rates in hot lunch programs tend to be higher, so a la carte programs may not seem desirable.

It should be noted that some districts (22 during the 1987-88 school year) contract with private food service companies for their food service programs. However, we found this unimportant in explaining the success or failure of district food programs.[25]

Besides a la carte programs, districts can make up food service deficits in other ways if necessary. First, some may have enough reserves in their food service funds from previous years to cover current losses. Second, districts can transfer money from their general fund to the food service fund.

## General Fund Transfers

Some administrators are philosophically opposed to using general fund money for non-instructional purposes, but others take a different view. We asked the administrators in our sample to tell us what they did in 1987-88 and found:

- **About one-third of the state's districts transferred money from their general fund to make up for food service program losses.**

**Some districts transferred general fund money to cover food service losses.**

Among these districts, the average amount transferred amounted to $12,187. The transfers ranged from $28 to $113,500 and, we estimate, would have totaled about $1.7 million statewide in 1987-88. In other words,

- **Food service losses consumed about the same amount of money as could have paid about 61 teachers' salaries for the year.**

Districts in northern and southern Minnesota were most likely to transfer money from their general fund to cover food service losses. The state's smallest districts accounted for about one-third of all the money which was transferred.

It should be noted that state policy encourages districts to transfer money from the general fund to other funds when deficits occur.[26] However, the State Auditor's Office and private auditors do not always encourage this practice, depending on local circumstances.

As a result, other districts had losses but did not make transfers to cover them. In some cases, the general strategy was to reduce or make up the loss by raising prices the next year. Overall, we estimate:

- **Districts would have had to raise lunch prices by about $.15 for hot lunch programs to be self-sufficient during 1987-88.**

---

*25* Results were that contracting districts had slightly higher hot lunch losses but also slightly higher a la carte net income. Those using private contractors showed a slight positive balance when both hot lunch and a la carte programs were combined.

*26* Minnesota Department of Education, UFARS Manual, Section III, III-2.

However, for those districts where successful a la carte programs helped to offset hot lunch losses, hot lunch prices would have had to be increased by an average of only one or two cents.

Another way we saw that districts could bring more revenue into their food service programs and decrease losses was to control some of the food-related activity which is now delegated to clubs and student groups. For example, profits from vending machines and concessions could be directed to the districts' food service account when programs are operating at a deficit. However:

**Not all food-related accounts are included in the food service fund.**

- **In some cases where money was diverted from the general fund to cover losses, districts allowed students to keep the profit from certain food sales.**

For example, we found that one district which transferred about $15,000 to its food service fund during the 1987-88 school year had food-related student activity funds with year-end balances totaling about $2,300.

We find transfers from the general fund especially questionable when program income is controlled mainly by district administrators. Instead of transferring general funds to recover hot lunch deficits, administrators could instead: (1) expand their a la carte food programs, (2) raise prices to cover the cost of lunch, and (3) control food-related accounts whose proceeds now benefit student or other groups.

# TRANSPORTATION

Districts may provide twelve different types of students transportation programs during the school year. These programs, described in Figure 4.17, fall into one of two major categories of transportation aid: regular and non-regular.

Under the category of regular pupil transportation, districts receive state aid for busing non-handicapped elementary students who live at least one mile from school and for non-handicapped secondary students who live at least two miles from school. Non-regular transportation aids are for special services or populations. For example, districts may have half-day kindergarten programs which require busing children at noon, and they may have special vehicles to transport disabled students.

In addition, districts may levy local communities to pay for transportation services which are excluded from state aid programs. The levy money often is to bus secondary students who live less than two miles from school and to avoid students' exposure to pedestrian traffic hazards.

## Figure 4.17: Transportation Services

**REGULAR**

**To and From:** One round trip per day between home and school for: a) non-handicapped elementary students residing one mile or more from the assigned school and, b) non-handicapped secondary students residing two miles or more from the assigned school.

**NON-REGULAR**

**Handicapped:** One round trip per day between home and school for handicapped students, transporting students between public school buildings for instructional purposes in special education programs, and transporting nonpublic pupils between the nonpublic school and a public school for shared-time special education classes.

**Board and Lodging:** Cost of board and lodging students when local school boards determine that board and lodging is more feasible or efficient than providing daily transportation services.

**To and From Board and Lodging Facility:** Transportation between home and the board and lodging facility where the pupil is placed.

**During-Day:** Transporting pupils during the school day: a) between public school buildings within the district for instructional purposes, b) to and from state board approved secondary vocational centers for vocational classes, and c) between schools located in two or more districts for cooperative academic and vocational classes.

**Shared Time:** Regular transportation of nonpublic pupils between the nonpublic school and a public school for shared-time classes.

**Nonpublic Support Services:** Transportation of nonpublic pupils between the nonpublic school and a public school or a neutral site for health, guidance, and/or counseling services.

**Noon Kindergarten:** Noon transportation to and from school for kindergarten pupils attending half-day sessions.

**Late Activity:** Late transportation home from school for pupils involved in after schol activities.

**Desegregation:** Transporting students to and from schools located outside their normal attendance areas under the provisions of a plan for desegregation mandated by the State Board of Education or under court order.

**Secondary 1 to 2 Miles:** Transporting secondary students living between one and two miles from school.

**Traffic Hazards:** Cost of transportation or related services necessary because of extraordinary traffic hazards.

Source: 1990-91 Proposed Biennial Budget.

Although the Department of Education typically reports UFARS data in *School District Profiles* and compares the total transportation expenditures per pupil unit for each operating school district, we believe that it is more accurate and useful to:

- **use data collected independently by the department through its Annual Pupil Transportation Report,**
- **analyze the costs in relation to the number and type of transportation services districts provide, and**
- **standardize transportation expenditures on the basis of the number of students who are served or miles which are traveled.**[27]

Table 4.5 shows how much districts statewide spent for each type of pupil transportation, according to the Department of Education. In all, the statewide figures show that districts spent about $177,438 million during the 1987-88 school year. Most of the money--about $111 million--went simply to move students back and forth from school under the state's guidelines for aid payment. This cost about $226 for each student who was transported. Handi-

## Table 4.5: Pupil Transportation Expenditures, 1987-88

| Transportation Aid | Number of Districts | Total Dollars | Statewide Average Cost Per Student Transported | Statewide Average Cost Per Mile |
|---|---|---|---|---|
| Regular | 435 | $110,919,225 | $226 | $1.48 |
| Handicapped | 405 | 30,023,170 | 1,024 | 1.37 |
| Noon Kindergarten | 160 | 6,157,900 | 198 | 1.20 |
| Late Activity | 189 | 3,184,374 | --[a] | 1.20 |
| Vocational Center | 129 | 1,487,885 | 204 | 1.29 |
| Between Schools-Regular | 106 | 933,538 | 54 | 2.16 |
| Shared Time-Regular | 47 | 203,664 | 64 | .22 |
| Shared Time-Special Education | 58 | 569,318 | 527 | 2.23 |
| Cooperative Academic | 80 | 464,343 | 271 | 2.31 |
| Nonpublic Services | 10 | 48,466 | 16 | .45 |
| Boarded and Lodged | 90 | 515,499 | 2,281 | --[a] |
| To Boarding and Lodging Facilities | 109 | 201,907 | 759 | .32 |
| Secondary 1 to 2 Miles | 332 | 7,540,066 | 139 | 7.28 |
| Traffic Hazards | 254 | 6,367,439 | 113 | 7.74 |
| Desegregation | 2 | 8,821,175 | 308 | --[a] |
| Total Statewide | 435 | $177,437,969 | | |

Source: 1987-88 Pupil Transportation Data, Minnesota Department of Education (June 1989, revised).

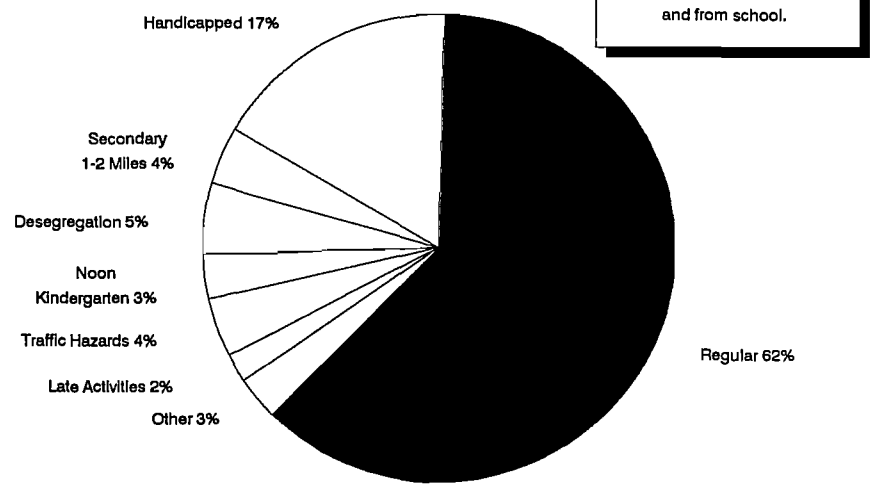
[a]No data available.

27 The Department of Education estimates the percent of students each district transports but does not use this information to adjust figures shown in *School District Profiles*. However, there is no information to estimate how many students benefit from some types of state-aided transportation activities.

capped services accounted for the next largest type of expense, about $30 million. Because few students received this type of service, which often requires specialized equipment, the cost was $1,024 for each student transported.

While districts can provide many different transportation services, seven major activities, shown in Figure 4.18, accounted for 97 percent of all expenditures. Aside from regular transportation to and from school (62 percent) and handicapped services (17 percent), districts spent a fraction of the total on desegregation, transportation for students who live less than two miles from school, noon kindergarten busing, traffic hazard avoidance, and late activity buses. Two of these activities (secondary one to two miles and traffic hazard avoidance) are funded through local levies, not state aids.

Figure 4.18: How Districts Spend Transportation Dollars, 1987-88




Source: Department of Education.

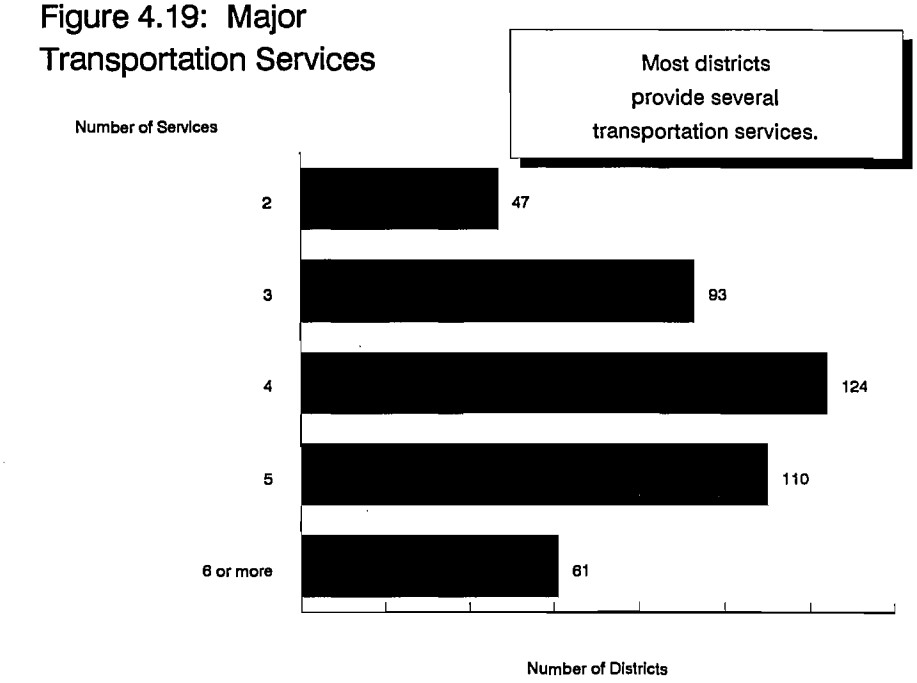
Figure 4.19 shows the extent to which districts statewide participated in each of the seven major transportation services. As indicated,

- **About two-thirds of the districts provided at least four different transportation services to students during the 1987-88 school year.**

We examined several factors which might help to explain why districts provide different levels of transportation service and found that these two were most important: geographic location and enrollment size. In general, larger districts provided a wider range of transportation services. In fact:

- **Most Twin Cities area districts provided at least six out of the seven major transportation services while this was true for less than one-tenth of all districts in the rest of the state.**

Figure 4.19: Major Transportation Services




Source: Department of Education.

Of course, most of the large districts are located in the metropolitan area which often has more traffic hazards which may pose danger to students' walking to school. Also, only the Minneapolis and St. Paul districts received funds for desegregation during the 1987-88 school year.

# Regular Transportation

We focused our analysis on expenses for regular transportation to and from school because all districts provide this service. Also, it represents most of the total amount spent on pupil transportation statewide.

Expenditures for regular transportation varied widely during the 1987-88 school year. On the average, districts spent $255,574 to bus students to and from school. As Appendix B shows, some districts spent as little as $41,578 compared with others whose expenditures topped $650,000. On a per mile basis, we found that districts spent an average of about $1.50 for each mile traveled back and forth to school. In the lowest decile, the cost per mile was $.86. In the highest spending districts, costs were $2.21.

The cost of transportation services depends much on who provides it--the district or a private contractor. Many districts (266) provide all or most transportation services on their own buses while others (167) contract with private carriers for all or some services.[28]

*28* We classified how transportation services were provided using Type I or standard-size buses only. Two districts owned and contracted for the same number of these buses.

Table 4.6 shows that operating costs per mile were higher when contractors provided regular transportation services in 1987-88. We found that this is true because:

- **The Department of Education permits districts to report expenditures differently, depending how transportation services are provided.**

## Table 4.6: Regular Transportation Costs by Bus Ownership, 1987-88

| Bus Ownership | Cost Per Mile |
|---|---|
| Most buses district-owned | $1.17 |
| Most buses privately owned | 1.93 |
| Equal number of district and privately owned buses | 1.96 |

Source: Minnesota Department of Education.

Districts contracting for some or all of their transportation services pay for bus depreciation as part of their contracts with private carriers. Such costs are paid out of the transportation fund.[29] Thus, we analyzed costs separately for districts which operated most of their buses themselves.

When districts operated most of their buses themselves, we found several variables important in explaining cost per mile variation. In general, the higher the cost of living, the greater districts' costs per mile, so that:

**Regular pupil transportation cost more per mile in Twin Cities metropolitan area districts.**

- **On the average, it cost Twin Cities metropolitan area districts about $.40 more per mile to transport students back and forth to school than it did outstate districts.**

Of course, metropolitan area driving requires lower speeds and more frequent stopping and starting, all of which increase costs. In addition, metropolitan area districts are more likely than outstate districts to bus students from all grades, kindergarten through 12.

# General Fund Transfers

Some districts receive insufficient state aid to cover transportation expenses. State policy requires districts to transfer general funds to cover transportation deficits when districts do not anticipate recovering losses in the future.[30] We

*29* Depreciation for district-owned buses is accounted for in districts' capital funds, which were not included in our analysis. Costs might be closer if transportation and capital fund costs were combined.

*30* Minnesota Department of Education, UFARS Manual, Section III, III-3.

asked district administrators about transferring funds to cover transportation deficits and found that:

**Some districts transferred general fund money to cover transportation fund losses.**

- **About one-fifth of the state's districts transferred money from their general fund to make up for transportation program losses.**

Among these districts, the average amount transferred was $35,373. The transfers ranged from $1,949 to $629,835 and, we estimate, would have totaled about $2.8 million statewide during the 1987-88 school year. Thus:

- **Money transferred from the general fund to make up for transportation losses could have paid about 99 Minnesota teachers' salaries for the year.**

As we found with transfers for food service losses, districts in northern and southern Minnesota were most likely to transfer general fund money to the transportation fund. Districts in these two areas of the state accounted for 83 percent of such transfers.

# SUMMARY

In this section, we outline some ways districts could save money and increase the cost-effectiveness of their expenditures. For the most part, these are based on interviews around the state with school district administrators, discussions with Department of Education staff, and our analysis of the limited spending data which can be used with confidence.

One area of potential savings revolves around school district size. It has been well documented in this and other studies that the cost to provide education services to students in the state's smallest school districts is disproportionately high. Regulating student-staff ratios is one obvious way to improve the cost-effectiveness of Minnesota's education system. Thus:

- **The Legislature could consider setting minimum as well as maximum student-staff ratios to make education services more cost-effective.**

This could occur through district consolidations which were rare for most of the 1980s, but are being discussed more frequently now.[31] To estimate the potential savings of merging the state's smallest 85 districts (each of which has fewer than 281 students in grades K through 12), we used verified data from those small districts who could report their costs and did the following:

- added expenses for district and school administration, district support, operations and maintenance, and food service labor,

31 *Minn. Laws* (1989), Chapter 329 makes it easier for cooperating districts to consolidate by authorizing additional state and local funds to help offset combination costs.

- left constant all expenses for pupil transportation, regular instruction, exceptional instruction, pupil support services, and instructional support services, and

- rounded down the total potential savings to offset increased costs of enrolling up to 281 students in neighboring districts.

Also, we excluded those few districts with high schools further than 20 miles from a neighboring district's high school.[32]

The results suggest that:

- **Savings of about $10 million could result from having one superintendent and fewer administrators, food service workers, custodians, and under-utilized buildings.**

Money recovered from these non-instructional areas then might be used for purposes such as curriculum improvement, instructional technology, training, or paying about 375 teachers' salaries statewide for a year.[33]

We also estimated the potential savings if districts already joined in inter-district cooperation agreements would share superintendents if they did not already in 1987-88. Results showed that only 39 of the 71 districts with formal inter-district cooperation agreements also shared superintendents. At that time, 21 districts employed full-time superintendents but provided less than 12 full years of instruction to students. Thus:

- **At least 21 more districts could have extended their cooperative agreements by sharing superintendents and thereby saved about $225,000 in costs to run superintendents' offices statewide.**

Overall, we found that districts which opted to share superintendents spent only about half as much to compensate superintendents than their peers (similarly-sized districts not involved in sharing).[34]

In addition, other districts could save money by initiating inter-district cooperation agreements which could include shared superintendencies. Currently, some districts already share students but avoid formal inter-district agreements. For example, some of the state's smallest districts bus their high school students to neighboring districts for part of each school day.[35]

In our opinion, districts not able to offer a full curriculum on their own may not need full-time superintendents and could reduce the cost of education by at least pro-rating the superintendents' compensation. Those shared super-

*32* Statewide, only 11 districts are in this category, so mergers usually would be logistically possible.

*33* In 1988, our evaluation of high school education clearly showed that the state's smallest districts have the weakest curricula and provide fewer opportunities for direct student-teacher interaction but spend the most per student. See Office of the Legislative Auditor, *High School Education* (December 1988).

*34* In all, 62 districts shared superintendents during the 1987-88 school year.

*35* See Office of the Legislative Auditor, *High School Education*.

intendents we interviewed told us that they felt comfortable with their ability to oversee more than one small district. They also said that dividing one's time among districts helped to improve education for the students and could increase principals' level of responsibility for school management.

In addition, we believe that districts have many means at their disposal to improve cost-efectiveness, but this matter seldom seems to be approached with vigor until budgets are in jeopardy. However, districts could make greater use of the Department of Education's Management Assistance Program. Upon district request, the department and consultants will analyze district practices, current and future needs, and recommend appropriate actions that may increase the cost-effectiveness of district services.

Based on our study, savings are possible in these particular non-instructional areas. For example:

- **The Department of Education could restrict school board members' compensation to a level which would meet their expenses.**

Previously, Minnesota statutes limited school board members' compensation. Until the limits were lifted in 1973, the Legislature limited school board compensation generally to a maximum of $15 a day or $300 a year.[36] During the 1987-88 school year, we found that school board members received an average of about $1,200 and attended about 20 meetings.

In our opinion, since school board members are not district employees, they should not receive salaries or benefits, but their expenses should be covered. However, we found that 42 percent of districts paid salaries to board members, and about one-fifth provided benefits of some sort to school board members at a cost of nearly $250,000 statewide. In contrast, we learned that one district provided no compensation to its board members.

If the Legislature reinstated its previous methods for limiting payments to school board members, our estimate of the potential savings is that:

- **Statewide, districts could have saved about $1.5 million in administrative costs during the 1987-88 school year or the equivalent of 53 teachers' salaries at the statewide average of $28,400.[37]**

Generally, we believe that districts could spend money more efficiently by adopting a strategy of operating some services on a break-even basis. In other words, they should strive to offset costs with income when possible without adversely affecting instruction or depriving needy students. For example, we found that some districts transferred money from their general fund because their regular prices for hot lunch were set too low. Also, some gave away free meals or charged adults less than what meals cost to produce. Districts also

---

*36* *Minn. Laws* (1973) Chapter 690.

*37* We arrived at this estimate by adjusting the earlier limits for inflation and adding additional compensation for school board officers.

took money from the general fund to cover transportation losses. As a result, we suggest that:

- **The Department of Education should develop policies to help reduce districts' use of general funds to subsidize food services and pupil transportation.**

We estimated that such transfers reduced school districts' general funds by about $4.5 million during the 1987-88 school year. This was money available for instruction, and could have been spent to pay the salaries of about 160 teachers statewide for the year.

In summary, we note that, by improving the cost-effectiveness of other services, some districts could actually increase their revenues for instruction. However, the state needs sound, comparable data from school districts so that funds can be allocated prudently.

In our opinion, the Legislature and the Department of Education should hold districts more accountable for their spending in the future. As we have shown, administrative and technical flaws riddle the UFARS system and seriously handicap policymakers' abilty to make wise decisions about education finance. In the meantime, local districts are largely free from state oversight and sometimes engage in practices which are not cost-effective.

# INTRODUCTION TO SCHOOL DISTRICT SPENDING VERIFICATION REPORT

August 1989

# Appendix A - Survey of UFARS Administrators

Weighted responses received September 5 to October 17, 1989, from 97 of 436 Minnesota school districts. Figures do not always total 100 or 436 due to rounding. The figures below are approximately correct for school districts statewide, subject to sampling variations shown in Table A.1.

1. **Information about the UFARS Administrator (person primarily responsible for UFARS reporting):**

   A. Name _____

   B. Title see detail, p. 147

   C. Telephone number _____

   D. Number of years you have held primary UFARS responsibility for this district see detail, p. 147

   E. Total years of experience with UFARS see detail, p. 147

   F. Highest level of education you have achieved see detail, p. 147

   G. Relevant professional or vocational certification, if any see detail, p. 147

2. **Your district's use of UFARS: Circle the letters which describe the ways in which UFARS expenditure data are used by your district.**

| | | Number | Percent |
|---|---|---|---|
| A. | Budgeting or projecting future expenses | 394 | 90 |
| B. | Deciding how to allocate money among schools or programs | 257 | 59 |
| C. | Lobbying or persuading others to increase funding | 86 | 20 |
| D. | Comparing expenses in this district against other districts | 190 | 44 |
| E. | Simply informing the public about the cost of activities, programs, and services | 265 | 61 |
| F. | Basic accounting and financial auditing | 414 | 95 |
| G. | Other (describe) | 4 | 1 |

3. **Potential areas for UFARS improvement: In your opinion, which of the following areas pose problems in your UFARS reporting?**

| | | Number | Percent |
|---|---|---|---|
| A. | UFARS manual, written instructions, and advisories | 118 | 27 |
| B. | Training or re-training process | 100 | 23 |
| C. | ESV's assistance with coding questions | 32 | 7 |
| D. | Department of Education's assistance with coding questions | 62 | 14 |
| E. | Content or number of UFARS codes | 179 | 41 |
| F. | Technical aspects of data transmission | 42 | 10 |
| G. | Other (describe) | 66 | 15 |
| H. | No areas need improvement | 105 | 24 |

4. **Your routine for reporting expenditures: Check the box which best describes how much time and effort your district usually devotes to UFARS coding issues.**

| | Little to Some Effort # | % | Moderate Effort # | % | Strong Effort # | % | (Not Applicable) # | % | No Response # | % |
|---|---|---|---|---|---|---|---|---|---|---|
| A. Selecting which code is most appropriate to expenses | 72 | 17 | 101 | 23 | 254 | 58 | 5 | 1 | 4 | 1 |
| B. Correcting identified coding errors | 62 | 14 | 98 | 23 | 268 | 61 | 0 | 0 | 9 | 2 |
| C. Training staff to code accurately and consistently | 74 | 17 | 96 | 22 | 185 | 42 | 72 | 17 | 9 | 2 |
| D. Seeking advice or assistance with coding questions from sources outside the district | 117 | 27 | 116 | 27 | 189 | 43 | 5 | 1 | 9 | 2 |

5. **In your opinion, what steps could be taken which would improve the way school district spending figures are publicly reported (e.g., through *District Profiles*)?**

| | Number | Percent |
|---|---|---|
| No information | 279 | 64 |
| Some information | 157 | 36 |

**Thank you very much for your responses. We suggest using the complete UFARS manual along with the enclosed glossary as you review the figures shown on the following pages. All figures are operating expenditures for 1987-88, as maintained by the Minnesota Department of Education in July 1989.**

## INTRODUCTION TO SCHOOL DISTRICT SPENDING VERIFICATION REPORT RESPONSE DETAIL

1B. Title of UFARS Administrators (unweighted)

| | Number | Percent of 105* |
|---|---|---|
| Business Manager | 35 | 33 |
| Other Manager | 8 | 8 |
| Superintendent | 9 | 9 |
| Bookkeeper/Accountant | 47 | 45 |
| Clerical | 3 | 3 |
| No response | 3 | 3 |

(*In 8 districts, more than one person was primarily responsible for UFARS reporting.)

1D. Years with primary UFARS responsibility in this district

| | Number | Percent |
|---|---|---|
| 1 year | 48 | 11 |
| 2-4 | 56 | 13 |
| 5-9 | 96 | 22 |
| 10-14 | 163 | 37 |
| 15 or more | 50 | 11 |
| No response | 20 | 5 |

1E. Total years of experience with UFARS

| | Number | Percent |
|---|---|---|
| 1 year | 20 | 5 |
| 2-4 | 16 | 4 |
| 5-9 | 115 | 26 |
| 10-14 | 225 | 52 |
| 15 or more | 27 | 6 |
| No response | 31 | 7 |

1F. Highest level of education

| | Number | Percent |
|---|---|---|
| High School | 107 | 24 |
| Vocational or 1 year of college | 78 | 18 |
| Some college | 55 | 13 |
| 2.5 to 3 years of college | 15 | 4 |
| College | 92 | 21 |
| Graduate degree | 79 | 18 |
| No response | 10 | 2 |

1G. Relevant professional or vocational certification, if any (e.g., accounting, bookkeeping, business, finance, educational administration)

| | Number | Percent |
|---|---|---|
| None | 81 | 19 |
| UFARS training only | 15 | 3 |
| Relevant classes | 43 | 10 |
| Accounting or bookkeeping certificate | 9 | 2 |
| Registered School Business Official (RSBO) | 6 | 1 |
| Associate degree | 9 | 2 |
| Bachelor's degree | 38 | 9 |
| Master's degree | 40 | 9 |
| Certified Public Accountant | 25 | 6 |
| No response | 169 | 39 |

## Table A.1: Profile of Minnesota School Districts Represented in the School District Spending Verification Sample

| | All Districts (N = 436) | Sample: Unweighted (N = 97) | Sample: Weighted (N = 436) |
|---|---|---|---|
| Region | | | |
| North (1, 2, 3, 5) | 26% | 26% | 29% |
| Central (4, 6, 7) | 30 | 26 | 26 |
| South (8, 9, 10) | 33 | 34 | 35 |
| Twin Cities Suburbs | 11 | 12 | 9 |
| Twin Cities Proper | <1 | 2 | 1 |
| ESV Computing Region | | | |
| 1 Moorhead | 21% | 18% | 21% |
| 2 Duluth | 8 | 8 | 8 |
| 3 St. Cloud | 16 | 13 | 16 |
| 4 Marshall | 20 | 25 | 20 |
| 5 Mankato | 23 | 19 | 23 |
| 6 St. Paul | 1 | 6 | 1 |
| 7 Roseville | 11 | 11 | 11 |
| Enrollment Size Decile | | | |
| 1 Less than 218 | 10% | 10% | 11% |
| 2 218-280 | 10 | 8 | 8 |
| 3 281-359 | 10 | 10 | 11 |
| 4 360-456 | 10 | 7 | 7 |
| 5 457-627 | 10 | 8 | 9 |
| 6 628-844 | 10 | 10 | 12 |
| 7 845-1,159 | 10 | 8 | 10 |
| 8 1,160-1,769 | 10 | 11 | 12 |
| 9 1,770-3,837 | 10 | 11 | 11 |
| 10 3,838 or more | 10 | 14 | 10 |
| Adults with Four or More Years of College | | | |
| < 7% | 29% | 19% | 20% |
| 7-10% | 45 | 49 | 52 |
| >10% | 27 | 32 | 29 |
| Nonwhite Student Enrollment | | | |
| 0-2% | 60% | 47% | 49% |
| 2-5% | 25 | 31 | 32 |
| 5-100% | 15 | 22 | 19 |
| Projected Enrollment Change: 1986-1991 | | | |
| < -5 | 37% | 34% | 35% |
| -5 to +5 | 39 | 40 | 42 |
| > +5 | 24 | 26 | 23 |
| Interdistrict Cooperation Agreement | | | |
| Present | 16% | 16% | 15% |
| Absent | 84 | 84 | 84 |
| Local Referendum Levy | | | |
| Present | 50% | 51% | 52% |
| Absent | 50 | 49 | 48 |

# Figure A.1: School District Spending Verification Report--Example Page

Evaluation of School District Spending for 1987-88
UFARS Program 200 Series--Regular Instruction
Object Ranges 100, 200, 300, 400, 800, and Program Total,
Funds 1 and 9
(See Glossary for: P200)

To Answer Evaluation Questions: Revise Figures in Red
and Explain Below, or Verify by Circling "Yes"

1. Are all applicable salaries and wages in the 100 range? (Yes)
2. Are all benefits allocated to the 200 range? Yes
3. Are all purchased services included in the 300 range? Yes
4. Does the 400 range include all supplies and materials? (Yes)
5. Does the 800 range include only those expenses not covered by ranges 100, 200, 300, and 400? (Yes)
6. Does the total completely and accurately reflect all expenses for regular instruction including co- and extra-curricular activities in 1987-88? Yes

| REG100 | REG200 | REG300 | REG400 | REG800 | REGTOT |
|---|---|---|---|---|---|
| Regular Instruction Salaries | Regular Instruction Benefits | Regular Instruction Purchased Services | Regular Instruction Supplies & Matls | Regular Instruction Other | Regular Instruction Total |
| 4009431.98 | (2) 923,439.98 ~~$0.00~~ | (3) 199,186.95 ~~$438,514.27~~ | $171,581.97 | $33,066.54 | (4) 5,336,707.42 ~~4352594.76~~ |

(2) Employee Benefits had been Coded to P930

(3) Some tuition costs had been Coded to Instructional Support Services.

# SCHOOL DISTRICT SPENDING

## Appendix B

In each of the following 16 tables, we present statistics which can be used with limited confidence to describe school district expenditures during the 1987-88 school year. Each type of expenditure was checked and has met our criteria for reliability, validity, and consistency with standard definitions (noted at the bottom of each table). However, the figures may be in error for as many as 15 percent of school districts.

We used three sources of information: the UFARS data base at the Department of Education, the Pupil Transportation Annual Report which districts complete at the department's request, and our School District Spending Verification Report. The verification report, completed by a statewide sample of 97 school district administrators in Fall 1989, is described in Appendix A.

The tables show the amount which districts spent from low to high in percentiles of 10. Also, we have indicated the median and average expenditures in dollars per student enrollee based on average daily membership, and in some cases per day, hour, square foot, mile, or member.

If at least 90 percent of the administrators in our sample indicated that they had submitted accurate information through UFARS, tables are based almost entirely on the same data as was submitted to the Department of Education. However, we deleted some cases where errors were obvious.

Because the UFARS pupil transportation data were generally unreliable, statistics for expenses of this type are based on special data which were collected by staff at the Department of Education. Such data are gathered routinely and used specifically to distribute state aids.

Otherwise, tables are based on corrected data which at least 90 percent of the administrators in our sample said was reasonably precise and met standard definitions. Further, we weighted the figures provided by district administrators in our sample to reflect all school districts in the state. This is possible because, with a few exceptions, the sample of school districts was selected randomly, and the districts which responded share important characteristics of other districts in the state.

We caution that results are subject to known limitations, unmeasurable variations, and human errors of reporting and estimation. As a result, these data should be interpreted and used tentatively.

## Table B.1: Total Operating Expenses

| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student | Hourly Dollars Per Student |
|---|---|---|---|---|
| 10th | $1,034,767 | $3,636 | $19.82 | $2.51 |
| 20th | 1,301,698 | 3,786 | 20.80 | 2.65 |
| 30th | 1,512,457 | 3,850 | 21.37 | 2.74 |
| 40th | 2,042,636 | 3,969 | 22.15 | 2.80 |
| Median | 2,595,728 | 4,059 | 22.67 | 2.95 |
| 60th | 3,534,622 | 4,187 | 23.94 | 3.00 |
| 70th | 5,409,058 | 4,448 | 24.86 | 3.16 |
| 80th | 8,053,717 | 4,581 | 26.21 | 3.32 |
| 90th | 14,866,029 | 5,058 | 28.42 | 3.83 |
| Statewide Average | $7,988,092 | $4,243 | $23.75 | $3.03 |

Note: Includes all expenditures for elementary and secondary education during the 1987-88 school year except capital and debt service expenses.

Source: School District Spending Verification Report (n = 97).

## Table B.2: Expenses for Regular Instruction

| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student | Hourly Dollars Per Student |
|---|---|---|---|---|
| 10th | $537,773 | $1,822 | $10.07 | $1.28 |
| 20th | 651,299 | 1,885 | 10.35 | 1.31 |
| 30th | 827,072 | 1,912 | 10.59 | 1.37 |
| 40th | 1,173,654 | 1,957 | 11.02 | 1.41 |
| Median | 1,366,700 | 2,060 | 11.48 | 1.45 |
| 60th | 1,790,104 | 2,109 | 11.67 | 1.51 |
| 70th | 2,561,243 | 2,168 | 12.20 | 1.57 |
| 80th | 4,404,931 | 2,248 | 13.01 | 1.63 |
| 90th | 7,778,325 | 2,569 | 14.09 | 1.85 |
| Statewide Average | $3,941,283 | $2,143 | $12.00 | $1.52 |

Note: Includes expenditures for non-vocational, non-exceptional classroom and other activities, compensation for teachers, coaches, and aides, as well as textbooks, purchased services, and instructional supplies, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.3: Expenses for Textbooks and Workbooks

| Percentile | Dollars | Dollars Per Student |
|---|---|---|
| 10th | $6,042 | $19.62 |
| 20th | 9,261 | 25.31 |
| 30th | 12,659 | 28.66 |
| 40th | 17,840 | 32.82 |
| Median | 24,654 | 35.73 |
| 60th | 34,082 | 40.34 |
| 70th | 43,557 | 43.86 |
| 80th | 62,179 | 49.84 |
| 90th | 123,516 | 59.29 |
| Statewide Average | $60,841 | $39.09 |

Note: Includes books, book substitutes, workbooks, and manuals for individual use as a principal source of study material in particular classes or programs, 1987-88.

Source: UFARS, Minnesota Department of Education.

## Table B.4: Expenses for Exceptional and Gifted-Talented Instruction

| | Total Exceptional | | | Gifted-Talented Only | |
|---|---|---|---|---|---|
| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student | Dollars | Dollars Per Student |
| 10th | $75,823 | $291 | $1.62 | $ 209 | $ .37 |
| 20th | 108,060 | 345 | 1.92 | 350 | .67 |
| 30th | 160,862 | 369 | 2.01 | 490 | 1.17 |
| 40th | 232,512 | 388 | 2.14 | 1,152 | 1.87 |
| Median | 335,854 | 422 | 2.33 | 1,872 | 2.53 |
| 60th | 411,302 | 455 | 2.56 | 4,278 | 4.08 |
| 70th | 562,103 | 493 | 2.86 | 7,251 | 7.46 |
| 80th | 1,027,617 | 564 | 3.30 | 27,666 | 13.65 |
| 90th | 2,112,687 | 686 | 3.77 | 72,442 | 19.29 |
| Statewide Average | $1,060,322 | $454 | $2.56 | $29,682 | $8.11 |

Note: Includes differentiated educational programs and services beyond those normally provided for students with outstanding abilities, if any, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.5: Expenses for District Administration

| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student |
|---|---|---|---|
| 10th | $114,132 | $284 | $1.59 |
| 20th | 139,215 | 321 | 1.77 |
| 30th | 164,520 | 331 | 1.86 |
| 40th | 221,245 | 348 | 1.92 |
| Median | 277,037 | 367 | 2.06 |
| 60th | 342,830 | 386 | 2.14 |
| 70th | 448,980 | 446 | 2.31 |
| 80th | 645,103 | 471 | 2.64 |
| 90th | 1,354,065 | 535 | 3.14 |
| Statewide Average | $751,327 | $399 | $2.24 |

Note: Includes all expenses for administering the district and its schools, such as data processing, printing, business services, support staff, and compensation for administrators, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.6: Compensation for District and School Administrators

| Percentile | Dollars | Dollars Per Student |
|---|---|---|
| 10th | $90,352 | $233 |
| 20th | 106,687 | 253 |
| 30th | 123,973 | 276 |
| 40th | 169,456 | 287 |
| Median | 207,304 | 300 |
| 60th | 258,364 | 318 |
| 70th | 346,698 | 348 |
| 80th | 503,391 | 405 |
| 90th | 1,000,598 | 453 |
| Statewide Average | $598,946 | $325 |

Note: Includes all salaries and benefits for administering the district and its schools, including compensation for superintendents, principals, board members, central office administrators, and support staff, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.7: Expenses for Superintendents

| | Superintendent's Office[a] | | Superintendent's Compensation[b] | |
|---|---|---|---|---|
| Percentile | Dollars | Dollars Per Student | Dollars | Dollars Per Student |
| 10th | $32,388 | $30.07 | $31,962 | $23.37 |
| 20th | 42,966 | 49.18 | 42,023 | 34.39 |
| 30th | 49,814 | 64.04 | 48,572 | 46.56 |
| 40th | 57,286 | 77.31 | 52,588 | 62.08 |
| Median | 64,814 | 94.28 | 56,958 | 72.30 |
| 60th | 73,977 | 109.28 | 60,106 | 87.51 |
| 70th | 85,272 | 129.36 | 64,207 | 103.83 |
| 80th | 96,398 | 153.46 | 68,566 | 121.22 |
| 90th | 118,803 | 189.33 | 82,923 | 154.09 |
| Statewide Average | $73,525 | $108.82 | $56,007 | $85.48 |

Note: Office expenses are for activities of the superintendent and secretarial assistants in general management. Superintendent's compensation includes salary, benefits, and the value of housing or transportation, if provided, 1987-88.

Source a: UFARS, Minnesota Department of Education.

Source b: School District Spending Verification Report (n = 97).

## Table B.8: Expenses for School Board

| | Total[a] | | | Members' Compensation[b] | | |
|---|---|---|---|---|---|---|
| Percentile | Dollars | Dollars Per Student | Dollars Per Member | Dollars | Dollars Per Student | Dollars Per Member |
| 10th | $5,944 | $7.62 | $948 | $2,383 | $2.63 | $398 |
| 20th | 7,553 | 10.80 | 1,243 | 3,410 | 4.41 | 550 |
| 30th | 9,245 | 12.96 | 1,420 | 4,150 | 5.22 | 651 |
| 40th | 10,517 | 15.75 | 1,650 | 4,867 | 6.32 | 777 |
| Median | 12,343 | 19.15 | 1,950 | 5,852 | 7.95 | 925 |
| 60th | 14,859 | 23.40 | 2,331 | 6,555 | 9.78 | 1,044 |
| 70th | 19,096 | 28.83 | 2,949 | 8,386 | 12.85 | 1,147 |
| 80th | 25,352 | 33.68 | 3,938 | 11,322 | 15.52 | 1,450 |
| 90th | 42,589 | 44.15 | 6,789 | 19,200 | 19.55 | 3,200 |
| Statewide Average | $20,708 | $24.66 | $3,177 | $8,839 | $9.86 | $1,203 |

Note: Total is for all activities related to board members, staff, professional services rendered to the board, travel, memberships and conventions, and other expenses related to the board's official duties. Members' compensation includes per diem expenses, salaries, and benefits, if provided, 1987-88.

Source a: UFARS, Minnesota Department of Education.

Source b: School District Spending Verification Report (n = 97).

## Table B.9: Expenses for Employee Health and Dental Insurance

| | Group Hospitalization[a] | | Group Dental[b] | |
|---|---|---|---|---|
| Percentile | Dollars | Dollars Per Student | Dollars | Dollars Per Student |
| 10th | $25,859 | $87.73 | $2,938 | $4.39 |
| 20th | 36,809 | 102.48 | 5,342 | 9.10 |
| 30th | 48,758 | 113.70 | 10,665 | 10.40 |
| 40th | 64,356 | 125.13 | 15,095 | 14.52 |
| Median | 90,840 | 136.47 | 22,734 | 15.78 |
| 60th | 116,963 | 148.13 | 31,682 | 17.67 |
| 70th | 171,509 | 160.40 | 52,723 | 21.47 |
| 80th | 294,197 | 175.57 | 99.504 | 24.37 |
| 90th | 584,376 | 211.89 | 243,726 | 31.91 |
| Statewide Average | $265,261 | $144.03 | $71,809 | $16.77 |

Source a: LIFARS, Minnesota Department of Education, 1987-88.

Source b: School District Spending Verification Report (n = 97), excluding districts without dental insurance.

## Table B.10: Expenses for Board and Staff Travel

| Percentile | Dollars | Dollars Per Student |
|---|---|---|
| 10th | $6,264 | $10.72 |
| 20th | 8,609 | 15.63 |
| 30th | 10,601 | 17.91 |
| 40th | 13,290 | 20.43 |
| Median | 15,495 | 22.09 |
| 60th | 18,359 | 26.45 |
| 70th | 26,841 | 28.11 |
| 80th | 38,743 | 30.36 |
| 90th | 80,729 | 40.21 |
| Statewide Average | $34,539 | $26.04 |

Note: Includes costs for transportation, meals, hotel, and other expenses associated with travel for business, professional development, conferences, seminars, and in-service training, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.11: Expenses for Operations and Maintenance

| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student | Dollars Per Square Foot of Instructional Space |
|---|---|---|---|---|
| 10th | $92,895 | $274 | $1.52 | $1.34 |
| 20th | 111,942 | 296 | 1.62 | 1.44 |
| 30th | 127,050 | 314 | 1.68 | 1.64 |
| 40th | 164,036 | 335 | 1.80 | 1.74 |
| Median | 213,790 | 342 | 1.88 | 1.90 |
| 60th | 266,575 | 365 | 2.11 | 1.98 |
| 70th | 369,879 | 390 | 2.24 | 2.09 |
| 80th | 752,912 | 426 | 2.47 | 2.40 |
| 90th | 1,304,542 | 514 | 3.00 | 2.59 |
| Statewide Average | $711,581 | $372 | $2.08 | $1.94 |

Note: Includes all activities for routine maintenance of real property, buildings, building systems (such as plumbing), equipment, and improvements, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.12: Fuel and Utility Expenses for School Buildings

| | Fuel for Heating Only | | | Other Utility Services | | |
|---|---|---|---|---|---|---|
| Percentile | Dollars | Dollars Per Student | Dollars Per Square Foot | Dollars | Dollars Per Student | Dollars Per Square Foot |
| 10th | $12,727 | $28.70 | $ .16 | $17,028 | $44.75 | $ .21 |
| 20th | 19,860 | 35.00 | .19 | 20,608 | 50.68 | .26 |
| 30th | 23,750 | 39.36 | .21 | 28,760 | 55.92 | .28 |
| 40th | 29,380 | 43.83 | .22 | 35,565 | 59.38 | .32 |
| Median | 32,257 | 47.81 | .23 | 43,386 | 65.49 | .34 |
| 60th | 38,958 | 51.91 | .25 | 59,453 | 68.87 | .35 |
| 70th | 53,922 | 56.66 | .27 | 76,944 | 73.74 | .37 |
| 80th | 93,737 | 64.22 | .31 | 150,620 | 78.24 | .40 |
| 90th | 154,177 | 86.59 | .41 | 264,349 | 87.46 | .48 |
| Statewide Average | $78,995 | $54.44 | $.26 | $127,740 | $67.29 | $.34 |

Note: Heating fuels include coal, steam, wood, fuel oil, natural gas, and electricity. Utility services include water, sewage, garbage collection, electricity, and natural gas not used for fuel, 1987-88.

Source: School District Spending Verification Report (n = 97).

## Table B.13: Expenses for Custodial and Repair Supplies

| | Custodial[a] | | | Repair[b] | | |
|---|---|---|---|---|---|---|
| Percentile | Dollars | Dollars Per Student | Dollars Per Square Foot | Dollars | Dollars Per Student | Dollars Per Square Foot |
| 10th | $4,352 | $10.61 | $.05 | $2,022 | $1.98 | $.02 |
| 20th | 6,039 | 12.47 | .07 | 3,531 | 6.38 | .03 |
| 30th | 8,300 | 14.32 | .08 | 6,161 | 9.82 | .04 |
| 40th | 10,630 | 16.65 | .08 | 7,744 | 13.55 | .07 |
| Median | 12,971 | 18.72 | .09 | 10,000 | 15.80 | .08 |
| 60th | 17,287 | 21.45 | .10 | 11,680 | 18.82 | .09 |
| 70th | 21,368 | 24.05 | .12 | 17,564 | 21.36 | .11 |
| 80th | 30,757 | 28.55 | .13 | 36,088 | 25.40 | .13 |
| 90th | 52,886 | 35.91 | .16 | 92,776 | 43.12 | .17 |
| Statewide Average | $24,767 | $22.11 | $.10 | $34,932 | $18.86 | $.09 |

Note: Custodial supplies include items such as brooms, mops, soap, and light bulbs. Repair supplies are for ordinary maintenance which does not increase the value or extend the life of an asset, 1987-88.

Source a: UFARS, Minnesota Department of Education.

Source b: School District Spending Verification Report (n = 97).

## Table B.14: Expenses for Food Service

| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student |
|---|---|---|---|
| 10th | $44,389 | $149 | $.82 |
| 20th | 60,911 | 164 | .90 |
| 30th | 74,786 | 175 | .96 |
| 40th | 93,286 | 184 | 1.01 |
| Median | 119,647 | 194 | 1.07 |
| 60th | 149,228 | 203 | 1.13 |
| 70th | 210,104 | 212 | 1.18 |
| 80th | 319,646 | 226 | 1.25 |
| 90th | 620,323 | 244 | 1.35 |
| Statewide Average | $292,152 | $196 | $1.08 |

Note: Includes preparation and service of breakfast, incidental meals, lunches, and snacks, as well as compensation for program administration and lunchroom supervisors, 1987-88.

Source: UFARS, Minnesota Department of Education.

## Table B.15: Regular Transportation Expenses

| Percentile | Dollars | Dollars Per Mile |
|---|---|---|
| 10th | $41,578 | $.86 |
| 20th | 57,187 | .97 |
| 30th | 77,450 | 1.09 |
| 40th | 104,354 | 1.23 |
| Median | 125,411 | 1.36 |
| 60th | 164,079 | 1.48 |
| 70th | 226,975 | 1.64 |
| 80th | 328,536 | 1.90 |
| 90th | 652,005 | 2.21 |
| Statewide Average | $255,574 | $1.47 |

Note: Includes operating expenditures for regular transportation to and from school for elementary and secondary students, 1987-88.

Source: Pupil Transportation Annual Report, Minnesota Department of Education.

## Table B.16: Transportation Expenses

| Percentile | Dollars | Dollars Per Student | Daily Dollars Per Student |
|---|---|---|---|
| 10th | $54,423 | $168 | $ .96 |
| 20th | 67,883 | 191 | 1.09 |
| 30th | 95,800 | 213 | 1.21 |
| 40th | 126,925 | 233 | 1.35 |
| Median | 159,454 | 249 | 1.43 |
| 60th | 209,598 | 274 | 1.57 |
| 70th | 302,133 | 301 | 1.70 |
| 80th | 497,551 | 331 | 1.84 |
| 90th | 923,206 | 397 | 2.21 |
| Statewide Average | $388,491 | $270 | $1.52 |

Note: Includes operating expenditures for regular, noon kindergarten, late activities, secondary one to two miles, traffic hazards, vocational school, handicapped, board and lodging, between schools, shared time (regular and special education), cooperative academic, and non-public health transportation for elementary and secondary students, 1987-88.

Source: Pupil Transportation Annual Report, Minnesota Department of Education.

# SELECTED PROGRAM EVALUATIONS

| | |
|---|---|
| *Insurance Regulation*, January 1986 | 86-01 |
| *Tax Increment Financing*, January 1986 | 86-02 |
| *Fish Management*, February 1986 | 86-03 |
| *Deinstitutionalization of Mentally Ill People*, February 1986 | 86-04 |
| *Deinstitutionalization of Mentally Retarded People*, February 1986 | 86-05 |
| *Management of Public Employee Pension Funds*, May 1986 | 86-06 |
| *Aid to Families with Dependent Children*, January 1987 | 87-01 |
| *Water Quality Monitoring*, February 1987 | 87-02 |
| *Financing County Human Services*, February 1987 | 87-03 |
| *Employment and Training Programs*, March 1987 | 87-04 |
| *County State Aid Highway System: Follow-Up*, July 1987 | 87-05 |
| *Minnesota State High School League*,* December 1987 | 87-06 |
| *Metropolitan Transit Planning*, January 1988 | 88-01 |
| *Farm Interest Buydown Program*, January 1988 | 88-02 |
| *Workers' Compensation*, February 1988 | 88-03 |
| *Health Plan Regulation*, February 1988 | 88-04 |
| *Trends in Education Expenditures*,* March 1988 | 88-05 |
| *Remodeling of University of Minnesota President's House and Office*, March 1988 | 88-06 |
| *University of Minnesota Physical Plant*, August 1988 | 88-07 |
| *Medicaid: Prepayment and Postpayment Review - Follow-Up*, August 1988 | 88-08 |
| *High School Education*,* December 1988 | 88-09 |
| *High School Education: Report Summary*, December 1988 | 88-10 |
| *Statewide Cost of Living Differences*, January 1989 | 89-01 |
| *Access to Medicaid Services*, February 1989 | 89-02 |
| *Use of Public Assistance Programs by AFDC Recipients*, February 1989 | 89-03 |
| *Minnesota Housing Finance Agency*, March 1989 | 89-04 |
| *Community Residences for Adults with Mental Illness*, December 1989 | 89-05 |
| *Lawful Gambling*, January 1990 | 90-01 |
| *Local Government Lobbying*, February 1990 | 90-02 |
| *School District Spending*, February 1990 | 90-03 |
| *Local Government Spending*, Forthcoming | |

Evaluation reports can be obtained free of charge from the Program Evaluation Division, 122 Veterans Service Building, Saint Paul, Minnesota 55155, 612/296-4708.

*These reports are also available through the U.S. Department of Education ERIC Clearinghouse.