

Financing Public Education in Delaware

**prepared for
the Delaware Public Policy Institute**

by

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Introduction

The Delaware Public Policy Institute (DPPI) is an entity that brings together stakeholders in Delaware's future. Its mission is to provide public and private decision-makers with practical analysis and opinions for action on major public policy issues affecting the state and its citizens. Past DPPI major projects include "Choices for Delaware".¹

The College of Human Services, Education and Public Policy (CHEP) of the University of Delaware presents the following work in response to the call by the Delaware Public Policy Institute for a comprehensive study of the State's investment of current financial resources in public education.

In the area of public education, the DPPI identifies the following goal:

Education: Improving K-12 education must remain Delaware's highest priority, and the education reform initiatives of the last decade need to be sustained and brought to fruition. In the next decade the success of state leadership must be gauged first and foremost by the achievement of Delaware's students. All children—not just "the brightest"—must advance, and every school must be held accountable for how all its students improve—not just the highest scoring or most easily taught. While making public education work for all of our students will require changes in key areas, with all of our state's advantages, Delaware's public schools should be exemplary.

Education is a vital ingredient in the health of an economy, and has direct bearing on the quality of the Delaware workforce. Effecting spending on public education may increase the quality of the labor market, enhances the productivity and competitiveness of state businesses, and render Delaware attractive to current and emerging industries as well as potential employees.

The purpose of the report is to provide a system-wide review of the public education finance system in Delaware. The report will detail how public education revenue is raised and spent. The report, divided into four sections, considers the

¹ More information about the Delaware Public Policy Institute may be found at <http://www.udel.edu/chep/dppi/>

education system at the state level. The first section is largely background material and provides information that will give the reader a broad perspective on public education financing. The second section describes Delaware's sources and allocation of funds. Where available, data are provided annually from 1990 through 2001. The third section uses comparative information to illustrate similarities and differences between Delaware and neighboring states along with the national average. The final section presents observations from the analysis. Understanding the allocation of resources can drive policy choices and highlight accountability of the system. This report serves as an overview of the financial system of public education in Delaware.

Where possible, this research utilizes the most recent available data. For Delaware-specific data, the primary sources are the State Board of Education and the Department of Education's Report of Educational Statistics. For interstate comparisons the Federal Government's Digest of Education Statistics and the Journal of Education Vital Signs from the American School Board are the main sources.

Background

Public education in Delaware is now a billion dollar investment. During the 2000-2001 school year public school current expenditures² totaled over \$1 billion, and a record 114,518 students were enrolled in state public schools.³ The average annual growth of these expenditures over the past ten years is 6.4%. In per pupil terms⁴, current expenditures increased from \$5,458 in 1990 to \$8,811 in 2000. This equates to 5% average annual growth. See Table 1.0 below.

Table 1.0
Summary of Current Expenditures on Public Education in Delaware:
1990-1991 to 2000-2001

	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01 ⁵
Current Expenditures	544	572	600	644	694	726	789	831	873	918	1,009
% growth	4.4%	5.2%	4.9%	7.3%	7.9%	4.6%	8.6%	5.3%	5.1%	5.2%	9.9%
Enrollment (FTE)	99,658	102,196	104,321	105,547	106,813	108,461	110,549	111,960	113,082	113,598	114,518
% growth		2.5%	2.1%	1.2%	1.2%	1.5%	1.9%	1.3%	1.0%	0.5%	0.8%
Per Pupil Current Expenditures	5,458	5,599	5,753	6,101	6,502	6,696	7,135	7,420	7,718	8,085	8,811
% growth		2.6%	2.8%	6.0%	6.6%	3.0%	6.6%	4.0%	4.0%	4.8%	9.0%
Inflation-adjusted Per Pupil Current Expenditures	6,677	6,647	6,633	6,857	7,108	7,111	7,404	7,583	7,718	7,822	8,290
% growth		-0.5%	-0.2%	3.4%	3.7%	0.0%	4.1%	2.4%	1.8%	1.3%	6.0%

Note: Current expenditures in millions of dollars. All sources of revenue.

Increases in educational spending have not produced equivalent increases in educational attainment. In Delaware, as in the nation, average student achievement is not improving significantly, and in some instances it is deteriorating. Nationally, average student proficiency in reading is lower now than in 1980. In Delaware, SAT scores

² Any expenditures excluding capital outlay or debt service.

³ Current expenditures adjusted by public enrollment K-12 full time equivalent.

⁴ Full-time equivalent pupils enrolled September 30, grades PK-12. Report of Educational Statistics, 2000-2001, Department of Education and State Board of Education.

continue to fall in the verbal category. Average reading proficiency is declining among 17 year-olds, though math proficiency for this age group shows signs of recovering from a long period of decline. These statistics provide a broad overview of scholastic attainment, while simultaneously masking more alarming numbers for urban and rural students.⁶

Given this apparent disconnect between spending and standards, there is a need to spend wisely. That is, to raise funds and allocate them in a manner that promotes the most efficient end result.

State education spending levels have steadily increased since 1980. However, that trend may not continue. The aging of the population may shift the focus of public funding. As the older population grows, their generation will consume more resources, squeezing available funds for public education.

Three sources fund public education: Federal, state, and local government. These sources finance a variety of operations relating to the provision of public education including wages, benefits, materials, transportation, energy, and capital projects. The sources and allocation of funds will be analyzed in detail in Section 2 of the report.

Briefly, however, here are three primary expenditure types: current, facilities/construction and debt service, and community service and adult non-public education. In Delaware, current expenditures account for 90% of total expenditures, facilities/construction for approximately 8%, with community and adult non-public expenses making up the balance.

Federal education grants are available to states via a variety of programs, such as Drug Free Schools, Education for the Disabled, and Pre-School. States receive Federal

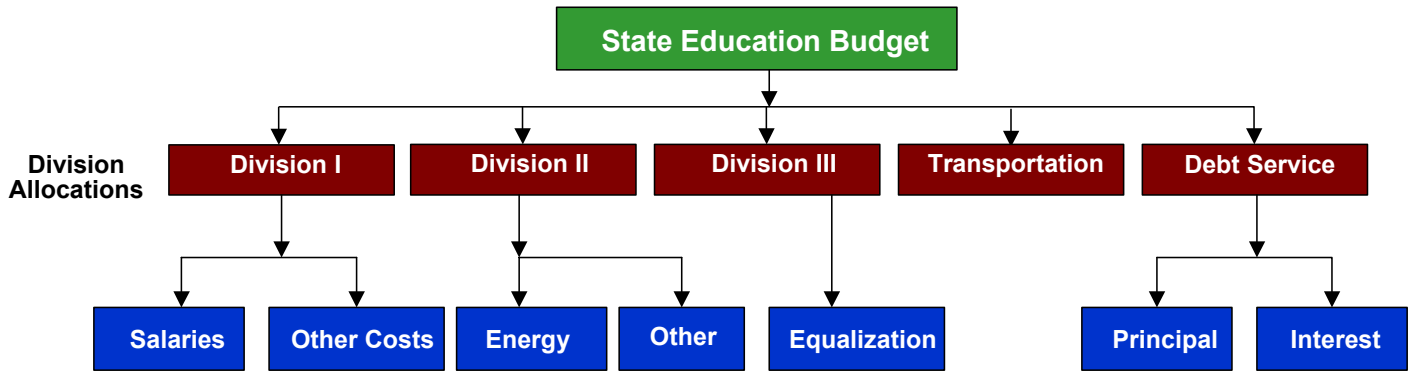
⁵ All spending categories increased in 2000-01. However, the largest driver is instructor salaries.

⁶ Digest of Education Statistics, 2001.

funds, earmarked for specific programs, and while their application may be at the discretion of the state, they must be used within the scope of the grant’s purpose.

State funding for of the operating budget for public education comes from the general fund. The general fund receives money from a multitude of sources, the largest of which are personal income tax, and corporation taxes. Funds are allocated to local school districts via divisions based on enrollment. Each division’s funding is designated for particular expenditures: division I is for the purpose of paying employees of the school districts, division II is for the purpose of paying other non-salary costs, and division III is for the purpose of equalizing revenue based upon tax efforts of the school districts. Transportation and debt service are the other primary current expenses. State expenditures are discussed in greater detail beginning on page 15. Local funding is raised primarily via property taxes. As described later, property taxes are a solid source of finance.

Figure 1.0
Organization of the State Education Budget for Current Expenditures



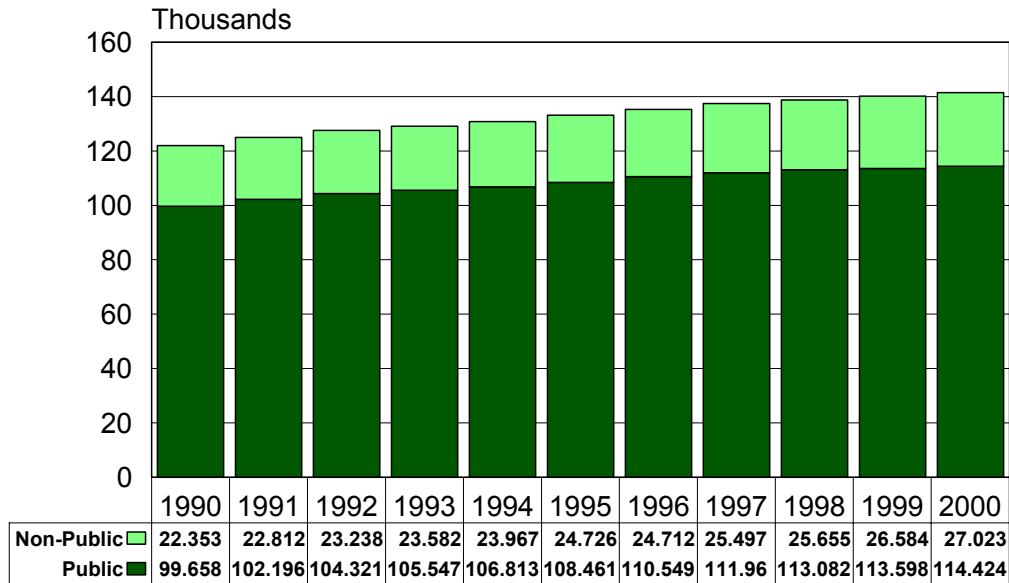
Source: Center for Applied Demography and Survey Research, University of Delaware.

State funds are the largest contributor to public education. Allocation of these funds occurs from a formula, which guarantees a minimum level of funding for public education. The following section discusses the funding mechanism in greater detail. However, it is important to note that, generally speaking, education funding is tied to enrollment levels: the greater the enrollment, the more allocated funding. Since enrollment is a function of the size of the school age population, demographics play a key

role in determining the amount of education expenditures. A brief overview of the State’s demographics is provided below.

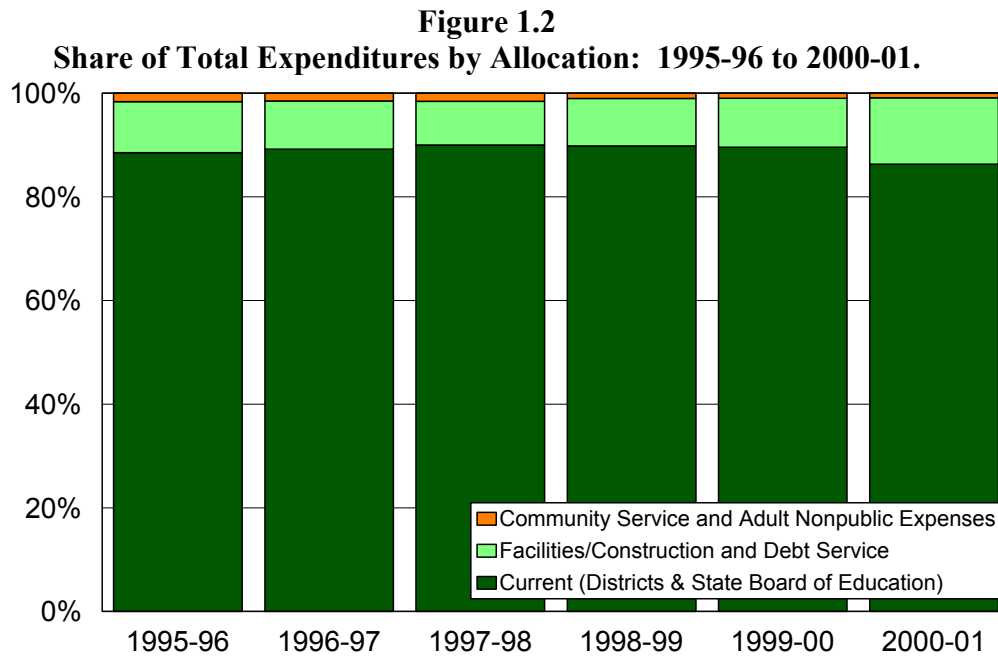
Delaware’s population continues to grow. Between 1990 and 2000, the population increase was 17.6%, bringing the total number of residents to 783,600. The population growth average for the nation was 13.1%. Delaware is the thirteenth fastest growing state in the country, and the first in the North East region. Between 1990 and 2000, the population aged 5-17 grew 25%. Simultaneously, public school enrollment grew 15%, and non public school enrollment, 21%. The historical trend of school enrollment is shown in Figure 1.1 below.

Figure 1.1
Delaware Elementary and Secondary School Enrollment
by School Type



Source: Center for Applied Demography and Survey Research, University of Delaware. Digest of Education Statistics, 2001, estimated Fall enrollment. Public enrollment includes Charter school enrollment.

State and local districts also fund capital projects or facilities/construction projects and community service and adult nonpublic expenses. These projects range from minor projects (less than \$250,000) to major projects (\$250,000 or more). Capital expenditures account for approximately 12% of total expenditures. See Figure below 1.2. An explanation of capital spending is provided on page 32.



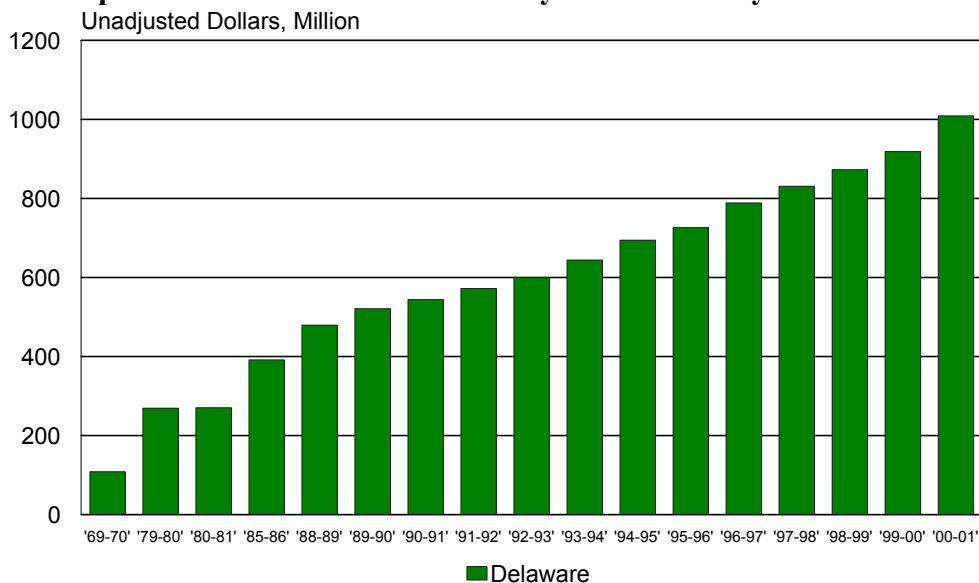
Source: Center for Applied Demography and Survey Research, University of Delaware. Digest of Education Statistics, 2001. Report of Educational Statistics, State Board of Education and Department of Education.

As Figure 1.2 illustrates, expenditures for current expenses are the largest category of spending. Therefore, current spending will be the primary focus of this report.

Delaware Financing

Delaware's financing of public education has steadily increased over the past several decades, as shown in Figure 2.0 below. In the last decade alone, current expenditures for public elementary and secondary schools almost doubled to over \$1 billion.

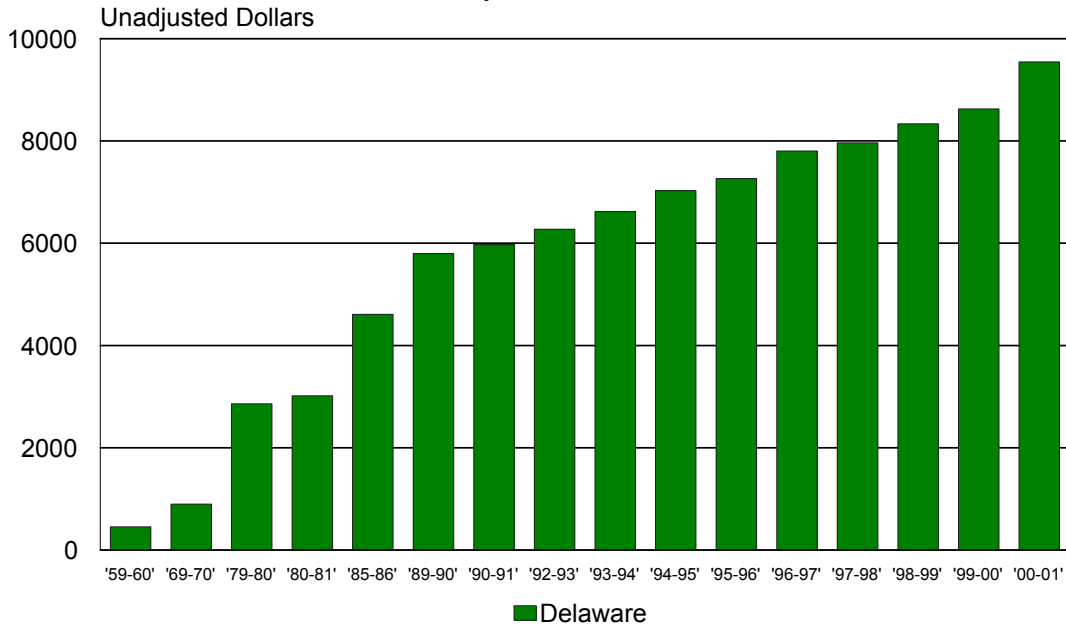
Figure 2.0
Current Expenditures for Public Elementary and Secondary Schools in Delaware



Source: Center for Applied Demography and Survey Research, University of Delaware
Digest of Educational Statistics, 2001, table 168. Expenditures include local, State and Federal funds.

Since expenditures rise naturally with enrollment, it is useful to report spending on a per pupil basis. In this way the size of the student population is held constant. Per pupil spending has increased 40% since 1990, from \$5,974 to \$8,336, see Figure 2.1 below.

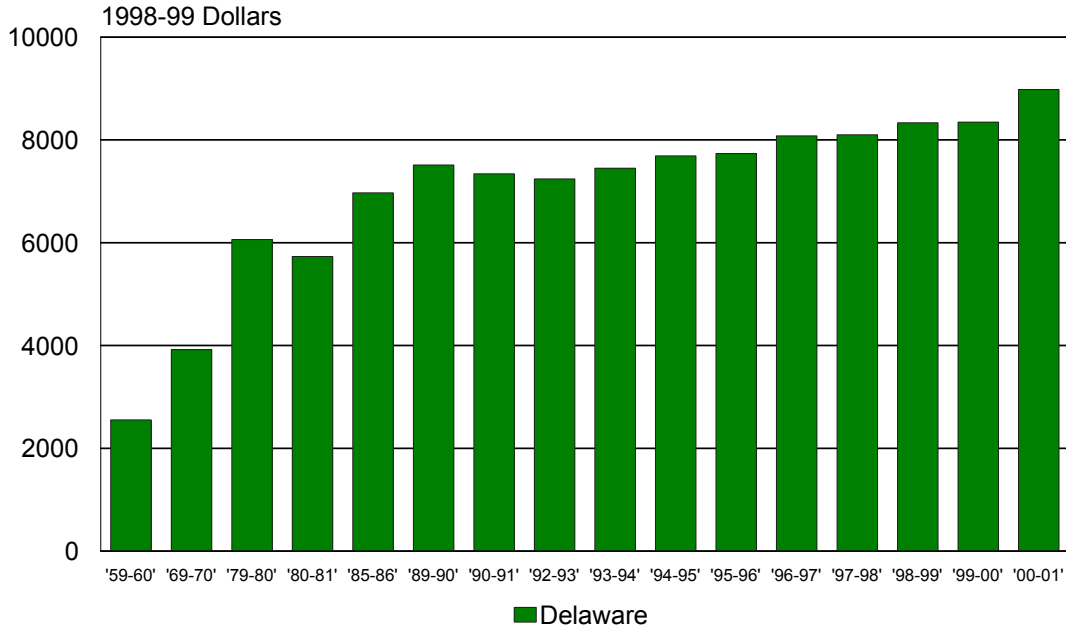
Figure 2.1
Current Expenditures Per Pupil in Average Daily Attendance in Public Elementary and Secondary Schools in Delaware



Source: Center for Applied Demography and Survey Research, University of Delaware Digest of Educational Statistics, 2001, table 168. Expenditures include local, State and Federal funds.

As with most goods and services, education costs rise over time due to inflation. To remove the effect of inflation from the per pupil statistics, expenditures are reported in constant 1998-1999 dollars. This adjustment reveals a more modest rate of increase in per pupil expenditures, see Figure 2.2 below. Inflation adjusted expenditures per pupil grew 14% during the nineties, compared to 84% in unadjusted expenditures for the same period.

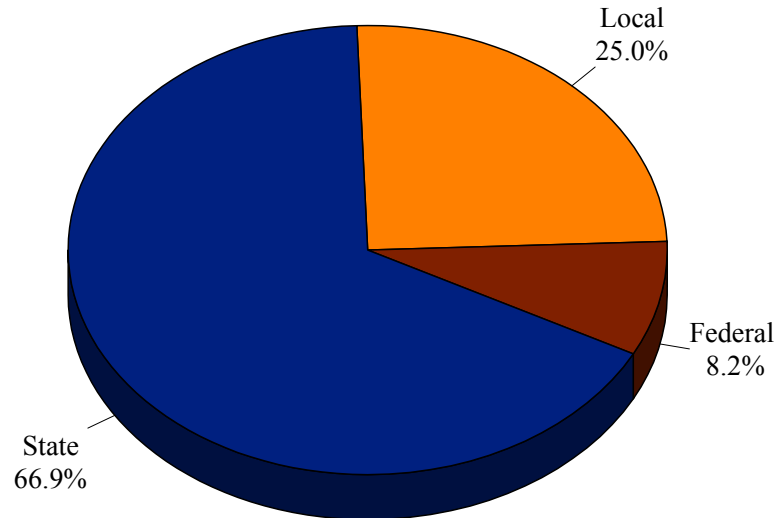
Figure 2.2
Current Expenditures Per Pupil in Average Daily Attendance in Public Elementary and Secondary Schools in Delaware



Source: Center for Applied Demography and Survey Research, University of Delaware Digest of Educational Statistics, 2001, table 168. Expenditures include local, State and Federal funds.

As stated earlier, three distinct sources fund Delaware Public education: Federal, State and local. These sources vary in the size of their contributions, as well as their means of generating revenue. The relative contribution size is shown in Figure 2.3 below. Clearly, the State is the largest contributor of funds to public education. Local funds are the next greatest, with 25%, and Federal funds account for 8%. Despite the wide variation in contributions, the public education system depends upon each source. As will be shown later, each state receives approximately the same share of contribution from the Federal government. However, state and local shares vary from state to state and reflects each state’s organization.

Figure 2.3
Sources of Educational Revenue in Delaware
2000-2001



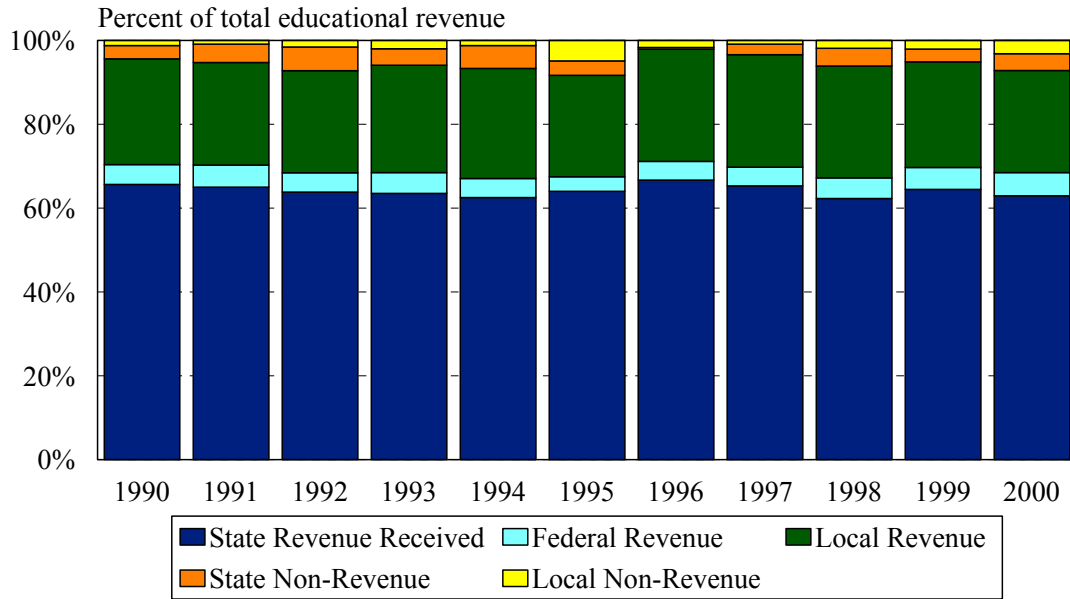
Source: Center for Applied Demography and Survey Research, University of Delaware, Report of Educational Statistics, State Board of Education and Department of Education. Table 28. Total all districts, plus Charter Schools and State Board of Education. May not sum to one hundred due to rounding differences.

Delaware's public education system is organized as follows: Delaware operates a combination flat grant and tax-base equalizing program. Under a flat grant, the State sets a minimum level of funding and fully pays that amount through the General Fund. Local school districts may supplement the funding if they choose. Funds are apportioned as per capita grants determined by the number of students, and the education and experience of teachers. The latter factors bring variability to the funding mechanism. These allocations are classified under Delaware's Division I and Division II funding. (See discussion on page 15.)

The State also operates a tax-base equalizing program, called Division III funding. The State's role is to equalize school districts' abilities to raise necessary funds. Funds are redistributed from affluent districts to less affluent ones in order to provide a

more equitable distribution. Other states operate different systems, which will be discussed in the next section.

Figure 2.4
Sources of Educational Revenue in Delaware as Share of Total
1990-2000

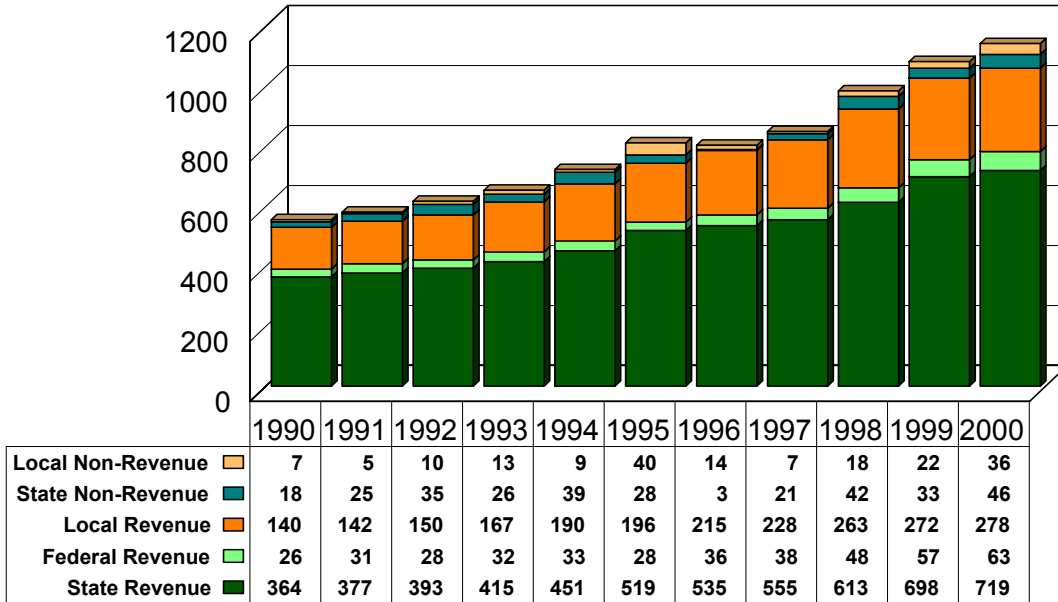


Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware. The 1995 increase in local non-revenue receipts is driven by Brandywine and Christina School Districts. Non-revenue receipts are typically bonds issued to pay for planning, constructing, renovating and equipping schools.

Figure 2.4 illustrates the relative shares of revenue sources. Revenue receipts received allow additions to assets without increasing school indebtedness, reducing school property value or depleting school property. Money from taxes and tuition are examples of revenue receipts. Non-revenue receipts are receipts that accrue to the district as the result of incurring an obligation that must be met at a future date or reducing the value of school properties through the exchange of a property asset into a cash asset. Money obtained from the sale of bonds or school property would be classified as a non-revenue receipt.

There is little fluctuation in the relative size of these sources over the past decade. The State revenue averages 64% over the past decade. While the relative contributions are little changed, the associated dollar contribution increased. See Figure 2.5 below.

Figure 2.5
Sources of Educational Revenue in Delaware: 1990-2000



Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware

Total spending on public education grew 95% during the last decade.⁷ State contributions almost doubled over this period, growing from \$382 million to \$731 million. Public education in Delaware is now a billion dollar per year expenditures, with total state and local contributions combining to more than \$1 billion in 2000-2001.

A discussion of each of these sources follows. Attention will be focused on the state and local sources, since they fall under the direct control of the Delaware’s stakeholders. Included are excerpt tables from the Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.⁸ Variation in the data between the Census Bureau and the Department of Education may exist due to

⁷ In nominal, non-inflation adjusted, terms. In inflation-adjusted terms, current expenditures on Public Schools increased 43%.

⁸ <http://www.census.gov/govs/www/school00.html>

reporting differences. Nevertheless, the Census Bureau data provides valuable insight into the State’s education finance.

Table 2.0 provides an overview of the primary revenue streams and expenditures in Delaware. As stated earlier, the State is the largest source of public education revenue. Non-debt expenditures may be categorized into current spending, capital outlay, and others. In the tables that follow, these overview numbers are disaggregated to highlight the principle revenues and expenditures within each category.

Table 2.0
Summary of Public School System Finances for Elementary-Secondary Education
(thousands of dollars)

Revenue				Expenditure				Debt	Cash and securities
Total	From Federal Sources	From state sources	From local sources	Total	Current spending	Capital outlay	Other		
1073506	69540	716375	287591	1015602	928022	79176	8404	162561	25612

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.

Federal Funds.

Delaware received \$94 million from the Federal government for the school year 2000-2001. Allocations of funds are made through a number of Federal programs⁹, and are earmarked for specific purposes. The Department of Education provides detailed explanations of these programs.¹⁰ School districts receive a degree of discretion in the spending of these funds, contingent upon their use within the scope of the Federal program’s design. Federal revenue is either distributed through the state or paid directly. The size of the Federal revenue by function is shown below (Table 2.1).

⁹ IASA Title I, IASA Title VI, ECIA Handicap, IDEA-B Basic, IDEA-B Pre-school, IASA Migrant, Public Law 874, IASA Title II, Math/Science Act, Vocational Education, Adult Basic Education, Drug Free Schools, Other.

¹⁰ Federal Department of Education website: www.ed.gov

Table 2.1
Revenue From Federal Sources (thousands of dollars)

	Distributed through state						Direct Federal aid	
Total	Total	Compensatory	Handicapped	Child Nutrition	Vocational	Other and nonspecified	Total	Impact aid only
69540	61493	17359	8548	13623	2653	19310	8047	8047

Source: Census Bureau's Statistical Tables of Public Education Elementary-Secondary Education
Finances: 1999-2000.

State Funding.

The General Fund finances the State's public education spending. The General Fund's sources include, but are not limited to, personal income tax, corporation taxes, gross receipts tax, and franchise taxes.

Using the General Fund to finance public education suggests that public education competes for dollars with all other public services. However, the State employs a funding formula, which ensures a minimum level of provision to public schools, see Table 2.2 below. Furthermore, local school districts may supplement state funds with their own funds.

Table 2.2
Revenue From State Sources (thousands of dollars)

Total	Formula assistance	Compensatory programs	Handicapped programs	Vocational programs	Transportation programs	Other and nonspecified state aid	State payments on behalf of LEA
716375	498176	-	1999	-	43075	171024	2101

Source: Census Bureau's Statistical Tables of Public Education Elementary-Secondary Education
Finances: 1999-2000.

The funding formula operates by converting enrollments to units. The pupil to unit ratio differs by grade and type of student. Elementary school pupils typically require small class sizes for effective learning, so the pupil to teacher ratio is low relative to secondary school pupils, for whom larger class sizes are the norm. Special education

pupils do require still smaller class sizes, which leads to small pupil to teacher ratios. For example, 20 secondary students equate to one unit, whereas 17.4 elementary students equate to one unit, and 4 to 15 special education students equate to one unit (depending on the requirements of the special education students).

The State compensates school districts on a per unit basis. This compensation is split into divisions for classification purposes, which are defined below:

- Division I Unit—State appropriations allocated to a school district on a unit enrollment formula designated for the purpose of paying the employees of the various school districts of the state in accordance with the state supported salary schedules. The dollar amount paid per teacher varies with their education and experience.
- Division II Unit—State appropriations allocated to a school district on a unit enrollment formula designated for all other non-salary costs, such as energy, except those for debt service and the transportation of pupils.
- Division III Unit—State appropriations allocated to a school district based on a tax effort formula, utilized to equalize revenue receipts among school districts.

Broadly speaking, therefore, the student class size drives Division I funding. The other determinants of Division I funds are contingent on the teachers hired. Funds are released based upon teacher experience (years of service), and education. The salary reimbursement occurs in the following manner: Each school district may hire a teacher for each enrollment unit, and then charge the state for that teacher's salary based on the approved state salary schedule. The amount a district may charge is a function of that teacher's experience and education. Local school districts may supplement the state supported salary with their own funds. Indeed, districts often supplement the state funding by as much as 40%.

Linking teacher's salaries to their length of service and education can lead to "wage creep" in the expenses: as the age of the teaching staff increases, so does experience, leading to higher wages for the existing staff. In general, the average age and education of teachers increased over time.

Figure 2.6
Selected characteristics
of Delaware Public
School Teachers

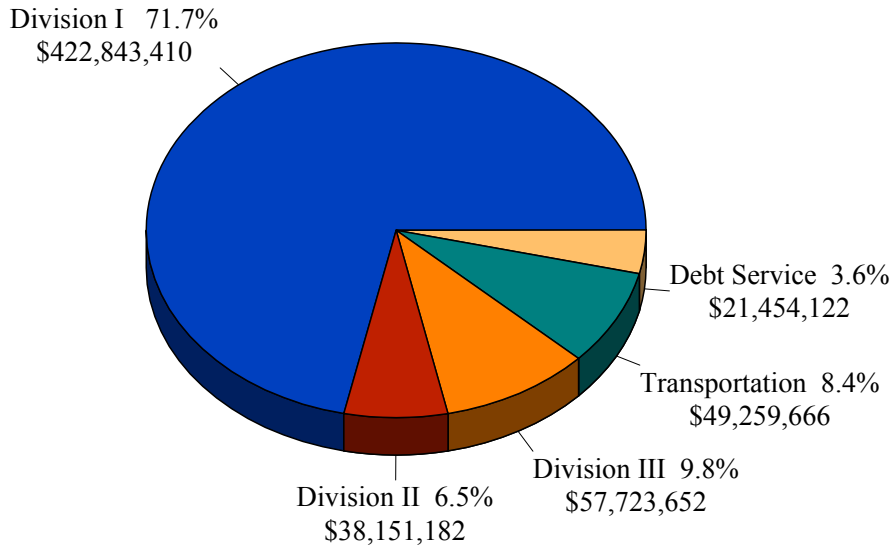
	<u>1981</u>	<u>2001</u>
Average age	39	42
Highest degree held (percent)		
Less than bachelor's	1.0	3.1
Bachelor's	63.6	48.8
Master's or specialist degree	34.9	47.3
Doctor's	0.4	0.8

Source: Delaware Department of Education.

The average age of teachers continues to rise, as does the level of education. These factors cause larger wage bills. However, higher wage bills may or may not reflect more effective teaching.

Division I, which is salaries and other costs, is the largest state appropriation. This is to be expected given the labor-intensive nature of education. Division III equalization is the second largest category, albeit far smaller than Division I. Energy and other costs, which fall under Division II financing, receive 6.5% of the budget.

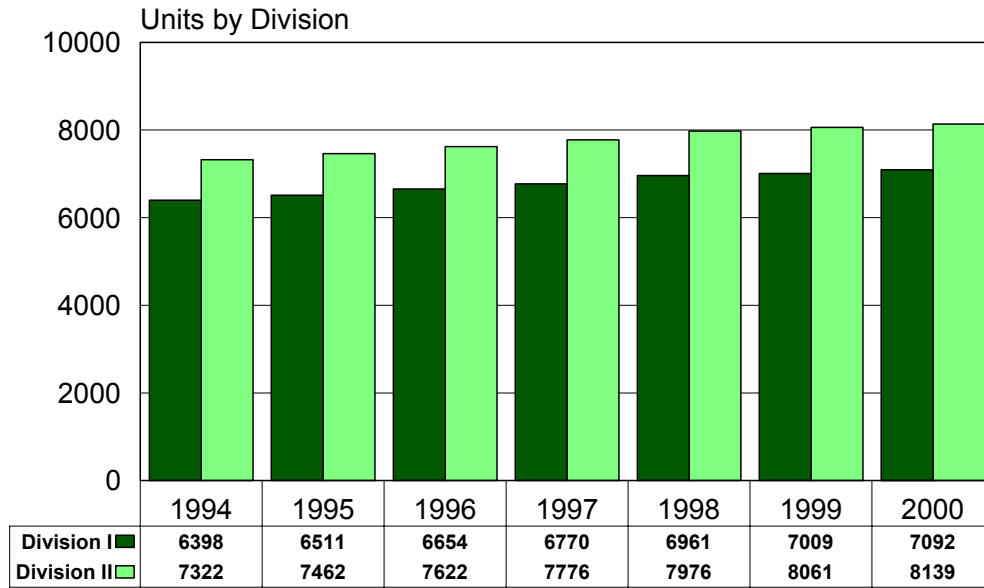
Figure 2.7
State Appropriations 2000-2001
Total All Districts, State



Source: Center for Applied Demography and Survey Research, University of Delaware.

Division units mirror population and enrollment trends. They will also be affected by any alteration of the pupils per unit ratio, as may be the case with class size reductions. The recent trend in Division I and II units is presented in Figure 2.8 below.

**Figure 2.8
Delaware Funding Units by Division
1994-2000**



Source: Center for Applied Demography and Survey Research, University of Delaware
Report of Educational Statistics, State Board of Education and Department of Education,
State of Delaware.

Division III State funding seeks to equalize the revenue receipts for school districts. The assessment-to-sales ratio is a critical variable in the formula that allocates Division III funds to school districts in Delaware. Table 2.9 illustrates the growing importance of these funds to the State's school districts. Division III funds rose from \$7.7 million in the 1983-84 school year to \$53.8 million in the 1999-2000 school year. As a result, Division III as a percentage of total state educational appropriations increased from 3.1% to 8.1% by the 1999-2000 school year.¹¹

Figure 2.9
Division III and Total
State Educational
Budget (in Millions of
Dollars, unadjusted)

Fiscal Year	Division III Budget	Total State Budget	Percent of Total
1983-1984	7.7	247.3	3.1
1984-1985	13.2	265.7	5.0
1985-1986	16.1	293.1	5.5
1986-1987	21.7	309.7	7.0
1987-1988	24.1	329.9	7.3
1988-1989	25.1	358.5	7.0
1989-1990	29.2	377.4	7.7
1990-1991	32.7	401.1	8.2
1991-1992	36.0	422.8	8.5
1992-1993	39.1	431.4	9.1
1993-1994	41.1	457.6	9.0
1994-1995	42.1	475.9	8.8
1995-1996	44.0	530.1	8.3
1996-1997	46.5	554.8	8.4
1997-1998	49.1	609.6	8.1
1998-1999	51.6	637.5	8.1
1999-2000	53.8	666.7	8.1

Source: Budget of the State of Delaware

Local Funding.

Local funding is the second most important source of public education finance. These funds make up twenty-five cents of every public education dollar spent, making this a vital component of the education budget.

Local sources rely on property taxes for the majority of their revenue. Property taxes account for over 80% of local education revenue, see Table 2.3.

¹¹ See The 1999 Assessment to Sales Ratio Study for a discussion of Division III funding.
<http://www.cadsr.udel.edu/DOWNLOADABLE/DOCUMENTS/ASSSAL99.pdf>

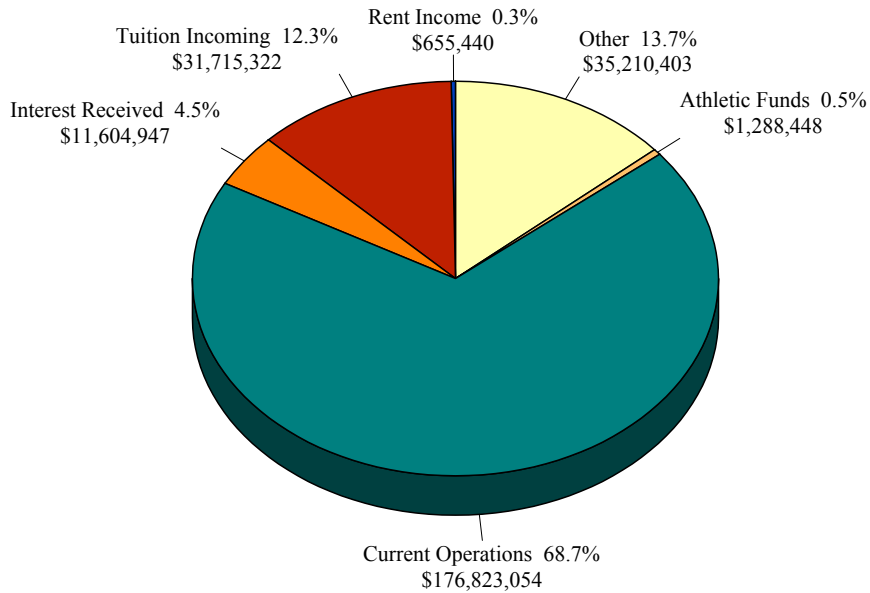
Table 2.3
Revenue From Local Sources (thousands of dollars)

Total	Property taxes	Other taxes	Parent government contribution	Nonschool local government	School lunch charges	Tuition and transportation charges	Other charges	Other local revenue
287591	234829	-	-	-	12705	-	-	40057

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.

Property taxes are the primary means of local funding. Property taxation provides a stable source of revenue irrespective of the economic climate, unlike sales and income taxes, which fluctuate with the economy. Revenue receipts fund 69% of the local districts’ current operations, see Figure 2.10 below.

Figure 2.10
Allocation of Local Revenue Receipts by Current Expense Category 2000-2001



Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware. Includes Charter Schools and State Board of Education.

The percentage distribution of revenue sources is presented below, including selected sources.

**Table 2.4
Percent Distribution of Elementary-Secondary Public School System Revenue
by Source**

	Federal Sources		State Sources		Local sources			
Total	Total	Compensatory Programs	Total	Formula assistance	Total	Taxes and parent government contribution	Other local governments	Charges
100	6.5	1.6	66.7	46.4	26.8	21.9	-	1.2

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.

As mentioned previously, expenditures may be categorized into current spending, capital, and debt service. Current spending is analyzed in Table 2.5 below. Salaries and benefits comprise a large proportion of current spending (77%). Instruction salaries and benefits account for 62% of current spending. Support services account for 34%, and other services 5%.

Support services include:

- pupil support services (Guidance Counselors, Psychologists, Therapists, Nurses),
- instructional staff support services (Directors of Instruction, Supervisors of Instruction, Librarians),
- general administration (Chief School Officers, Assistant Superintendents, Administrative Assistants, Clerical),
- school administration (Principals, Assistant Principals, Clerical),
- operations and maintenance (Custodians, Maintenance Specialists),
- pupil transportation (School Bus Drivers, Transportation Supervisors, Transportation Specialists, Bus Aides Support Services), and
- other (Directors of Administration, Specialists/Support, Supervisors/Support, Administrative Assistants/Support, Clerical).

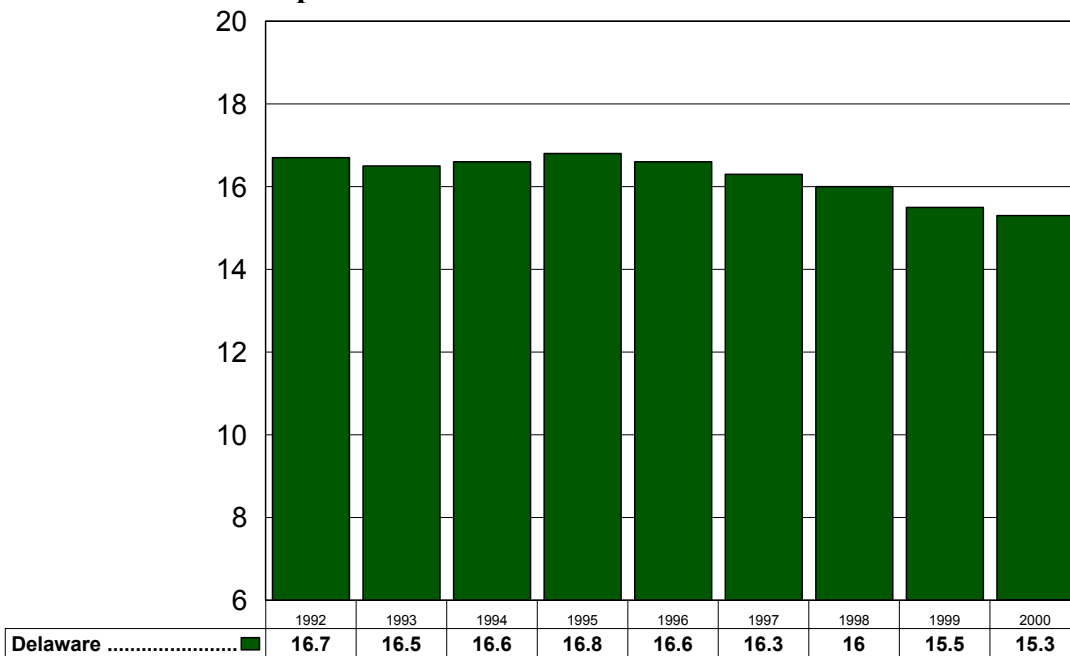
Table 2.5
Current Spending (thousands of dollars)

	All functions		Instruction			Support Services			All Other Functions
	Salaries and wages	Employee benefits	Total	Salaries and wages	Employee benefits	Total	Salaries and wages	Employee benefits	
Total	556165	158174	571982	397066	112396	313410	142485	40948	42630

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.

When considering budget allocations, a number of measures may be utilized: spending per pupil, spending per school, spending per category, etc. Teacher/pupil ratios are a useful way to consider the level of staffing, holding enrollment constant. Delaware’s teacher/pupil ratio fell during the past decade, from 16.7 to 15.3, see Figure 2.11 below.

Figure 2.11
Pupil/Teacher Ratio for Delaware 1992 to 2000



Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

Per pupil current spending is deconstructed below. Of the approximately \$8,000 per pupil spending, 79% is accounted for by salaries and wages and employee benefits. Instructional spending is 60% of current spending. General administration and school administration expressed as a percentage of total current spending are 1% and 6% respectively.

**Table 2.6
Per Pupil Amounts for Current Spending (dollars)**

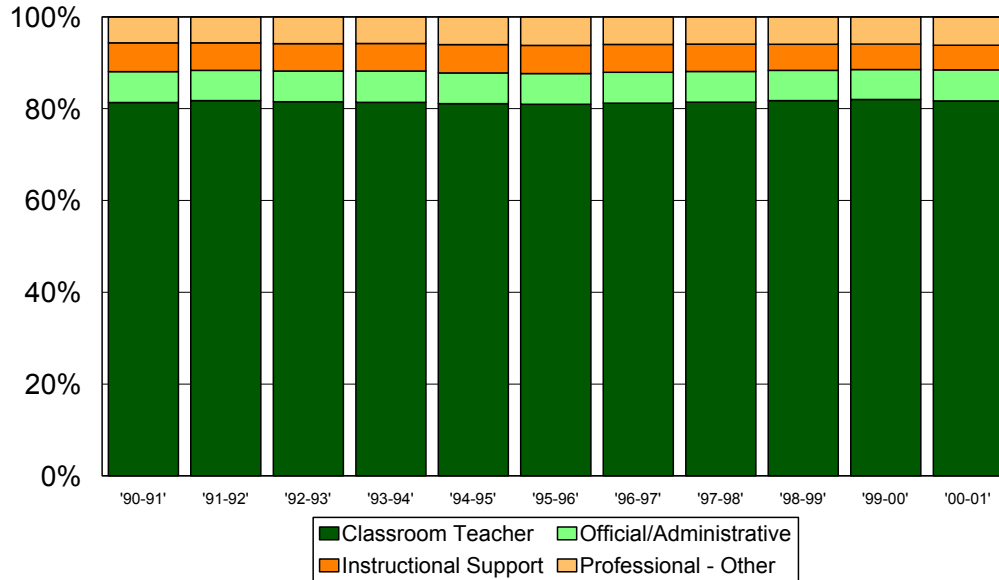
For selected items			For selected functions							
			Instruction				Support services			
Total	Salaries and wages	Employee benefits	Total	Salaries and wages	Employee benefits	Total	Pupil support	Staff support	General Admin	School Admin
8030	4929	1402	4964	3519	996	2778	376	119	85	458

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000. Not all items and functions are reported, therefore function sub-totals do not sum to aggregate.

In theory, public funding of any activity is a reflection of the values, priorities, and preferences of elected officials. However, the reality is that the budget or policy process has for decades now been governed by formula. A formula-based approach supports primarily current activities, with new programs approved for funding only through the availability of additional monies above the needs of current activities. This renders the budget system relatively inflexible to changes in the provision of public education.

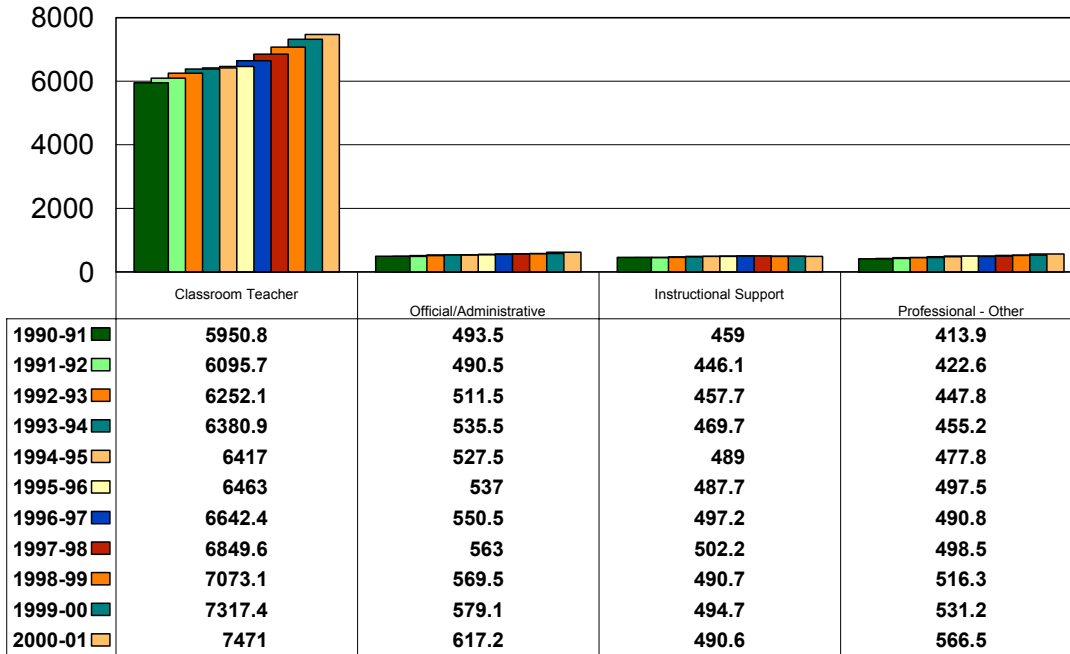
During the 2000-01 school year, classroom teachers are 59% of the total public education workforce. Expressed as a percentage of total professional staff, classroom teachers are 82%. A total of 1,520.2 full time equivalent (FTE) teachers have been added since 1990/91. The composition of Delaware’s staff experienced little fluctuation in the past decades (see Figure 2.12 below).

Figure 2.12
Share of Professional Educational Personnel Full-Time Equivalent by Assignment
Classification: 1990-1991 to 2000-2001



Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

Figure 2.13
Delaware Public Education Staff by Function: 1990-91 to 2000-2001



Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

Classroom teachers are one of the faster growing categories of public education workers; growing 26% between 1990-91 and 2000-01. The growth in enrollment is driving this growth of teachers. Of classroom teachers, elementary and secondary special education teachers are growing the fastest: 33%. Regular elementary teachers and secondary teachers grew 19% and 21% respectively. School officials/administrative staff are growing at 25%. Other professional staff are growing at 37%.

Table 2.7 below shows the trend in staffing over the 1994-1995 to 2001-2002¹² period. The fastest growing category is other professionals, which includes psychologists, psychometrists, speech and hearing specialists, social workers, home visitors, nurses, supervisors of pupil support, and specialists of pupil support. Classroom teachers, which includes both regular and special, have had 16% growth 1994-95 to 2001-02. Officials and administrative staff are growing at a similar pace.

Table 2.7
Delaware Public Education Staff by Function: 1994-1995 to 2001-2002

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	Growth	% Growth
Classroom Teacher	6,417	6,463	6,642	6,850	7,073	7,317	7,471	7,515	1,052	16%
Skilled and Service Worker	3,848	3,882	4,023	4,139	4,218	3,524	3,476	4,166	284	7%
Official/Administrative	528	537	551	563	570	579	617	617	80	15%
Instructional Support	494	488	497	502	491	495	491	522	34	7%
Professional - Other	478	498	491	499	516	531	566	615	118	24%

Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

Note: Numbers are FTE. Totals may not agree due to rounding differences.

Table 2.7 above shows positive growth across the staff categories. The strong growth among the non-teaching staff suggests that these positions are growing with enrollment. This implies that they are variable costs, which are not fixed and change

with volume. In the tables that follow, these overview numbers are disaggregated to highlight the principle revenues and expenditures within each category.

If a measure is constructed comparing pupils to public school personnel, some interesting patterns arise, see Table 2.8 below. The pupil/teacher ratio has fallen over the period as teacher growth outstripped enrollment growth. The pupil-total personnel ratio has also dropped, principally due to the increased number of teachers. The pupil/non-teaching staff ratio has fallen slightly. This indicates that non-teaching staff are being hired at a slightly faster rate than enrollment. If staff efficiency increases, the same number of staff would service a greater number of students, and the pupil-non teaching staff measure would rise. This would equate with economies of scale. Instead, the measure fell slightly.

Table 2.8
Delaware Pupil to Personnel Measures

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Enrollment (FTE) Total	106,813	108,461	110,549	111,960	113,082	113,598	114,518	115,434
Personnel Total	11,765	11,868	12,203	12,552	12,867	12,446	12,622	13,435
Classroom Teachers	6,417	6,463	6,642	6,850	7,073	7,317	7,471	7,515
Non-teachers	5,348	5,405	5,561	5,702	5,794	5,129	5,151	5,920
Ratios								
Pupil/Teacher	16.6	16.8	16.6	16.3	16.0	15.5	15.3	15.4
Pupil/Total Personnel	9.1	9.1	9.1	8.9	8.8	9.1	9.1	8.6
Pupil/Non-teaching staff	20.0	20.1	19.9	19.6	19.5	22.1	22.2	19.5

Source: Center for Applied Demography and Survey Research, University of Delaware Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

¹² The 2001-2002 data are preliminary, but are included to adjust for the volatility in the skilled and service worker category in 1999-00 and 2000-1. This volatility may reflect changes in reporting.

Table 2.9
Disaggregated Official/Administrative Staff in Delaware

	<i>1998-99</i>	<i>1999-2000</i>	<i>2000-2001</i>	<i>Change 98/99 to 00/01</i>
Superintendent	23	21	22	-1
Assistant Superintendent	12	10	11	-1
Director	41	47	45	4
Administrative Assistant	11	14	16	5
Supervisor, Gen. Support	74	74	72	-2
Specialist, Gen. Support	72	75	88.1	16.1
Principal	162	157	168	6
Assistant Principal	160	168	181	21
Other General Support	14.5	13.1	14.1	-0.4
Total	569.5	579.1	617.2	47.7

Source: Center for Applied Demography and Survey Research, University of Delaware
Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

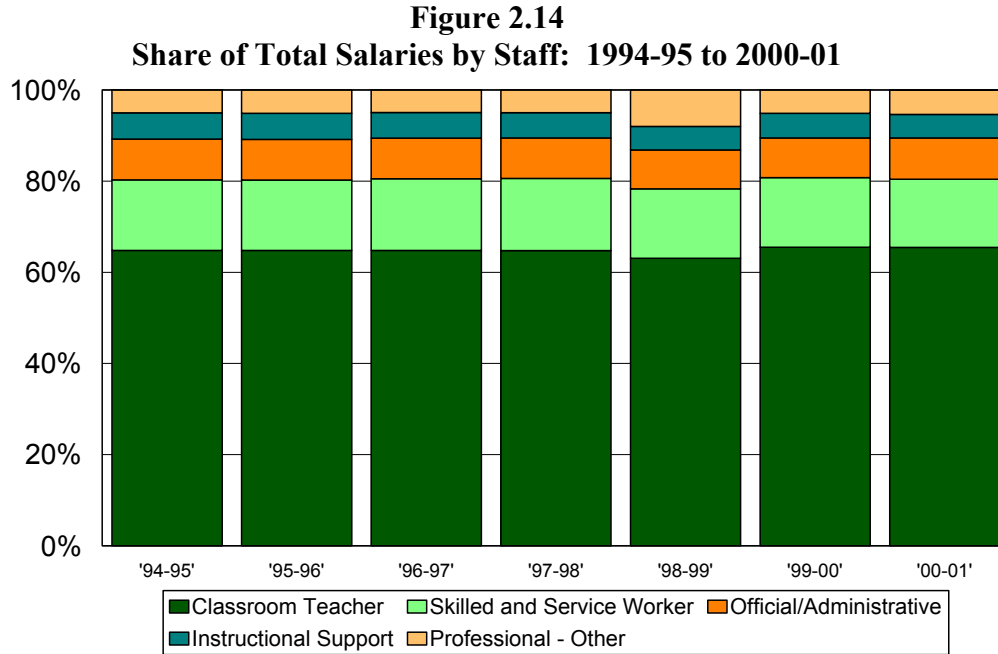
The table above disaggregates the official/administrative classification. The greatest number of additions are general support specialists and assistant principals. Simultaneously, the number of schools in the system has expanded, which is affecting the number of principals and assistant principals.

Table 2.10
Delaware Public Schools

	<i>1998-99</i>	<i>1999-00</i>	<i>2000-2001</i>
High Schools	29	29	29
Junior High/Middle Schools	30	33	30
Elementary Schools	85	82	89
Early Education Schools	17	16	14
Special Schools	16	16	16
Charter Schools	4	5	7
Total Schools	181	181	185

Source: Center for Applied Demography and Survey Research, University of Delaware
Report of Educational Statistics, State Board of Education and Department of Education, State of Delaware.

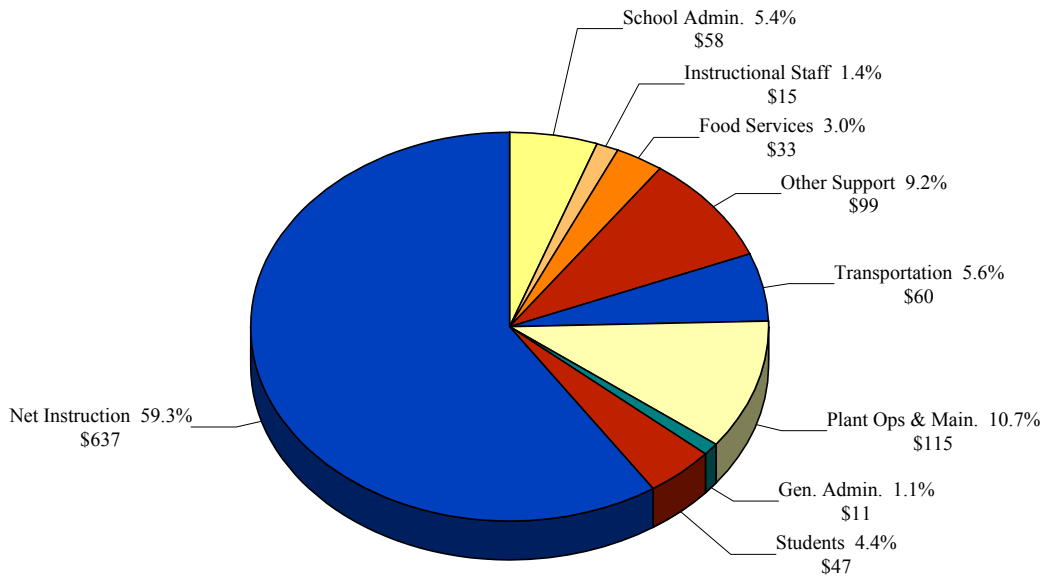
The division of staff salaries is presented in Figure 2.14. Classroom teachers' salaries account for 65% of total salaries. This has been largely unchanged since 1994-95.



Source: Center for Applied Demography and Survey Research, University of Delaware. Digest of Education Statistics, 2001. Report of Educational Statistics, State Board of Education and Department of Education.

Figure 2.15 below illustrates the relative share of current expenses. These shares have exhibited little variation over recent years.

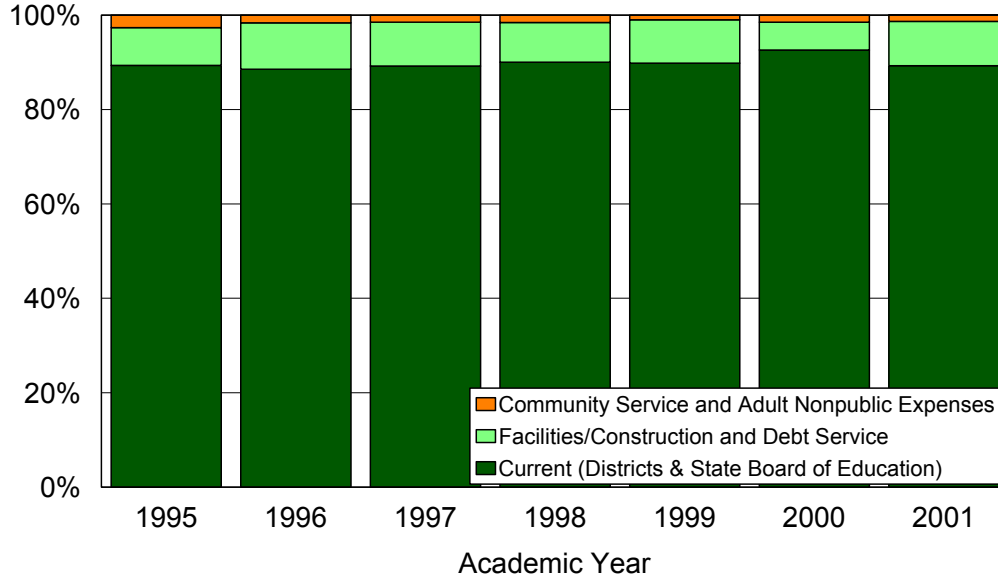
Figure 2.15
Current Expenses
Delaware School Finance
2000-2001



Source: Center for Applied Demography and Survey Research, University of Delaware. Report of Educational Statistics, State Board of Education and Department of Education. Billions of dollars.

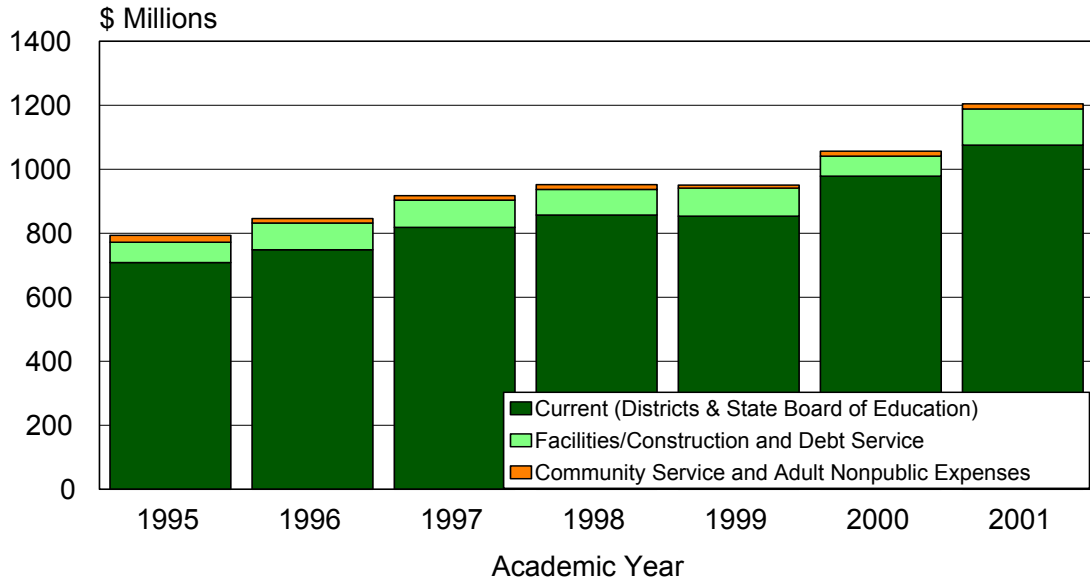
Breaking total expenditures into their broadest categories: current operations, facilities/construction, and community and adult nonpublic expenses, it can be seen that the majority of expenditures go towards current operations (districts and the state board of education). See Figures 2.16 and 2.17 below.

Figure 2.16
Share of Total Expenditures by Allocation: 1995 to 2001



Source: Center for Applied Demography and Survey Research, University of Delaware. Digest of Education Statistics, 2001. Report of Educational Statistics, State Board of Education and Department of Education.

Figure 2.17
Total Expenditures by Allocation: 1995 to 2001



Source: Center for Applied Demography and Survey Research, University of Delaware. Digest of Education Statistics, 2001. Report of Educational Statistics, State Board of Education and Department of Education.

The State of Delaware allocates funds for school construction through two programs: Minor Capital Improvements and Major Capital Improvements.

Minor Capital Improvement Program—The Minor Capital Improvement Program provides for the planned and programmed maintenance and repair of school infrastructure. The program’s primary purpose is to keep real property assets in their original condition of completeness and efficiency on a scheduled basis. It is not meant to increase the school inventory or change its composition. Minor Capital Improvement projects should cost less than \$250,000, except in the case of roof repair. The three-year program is submitted annually and should be comprised of work necessary for good maintenance practice. Under the Minor Capital Program, all districts are funded at a 60% State/40% Local cost ratio.

State Board Contingency—State Board Contingency is a funding allocation under the minor capital improvement program. An allocation of \$115,000 is granted annually for use by the Department of Education for emergency repairs. The guidelines for this are the same as the minor capital program guidelines. Under the State Board Contingency fund, all districts are funded at a 60% State/40% Local cost ratio.

Major Capital Improvement Program—The Major Capital Improvement Program is a program to provide for the planned and programmed repairs, renovations, and expansion of existing school facilities. The program also addresses the need for new school construction. Major Capital Improvement projects are those which cost \$250,000 or more. Districts submit to the Major Capital Improvement Program annually if there is a need for school repairs, renovations, expansions, or new construction. A request for a Major Capital Improvement Program project generates a Certificate of Necessity as determined by the Department of Education and enables a district to hold a referendum. The referendum is the mechanism that establishes the local public’s desire to raise taxes. Once approved through referenda, the State is obligated to fund its portion of the total cost of a

school project. Funding under the Major Capital Improvement Program is based on a school district’s taxing ability. Major Capital Improvement projects are funded from between a 60/40 to 80/20 State/Local ratio.

Capital expenditures are primarily construction costs (72%). Equipment is the second largest capital expenditure (28%).

Table 2.11
Capital Outlay, Interest, and Intergovernmental Expenditures
(thousands of dollars)

Capital Outlay		Equipment			Interest on Debt	Intergovernmental
Total	Construction	Land and existing structures	Instructional	Other		
79176	56878	-	10461	11837	8404	-

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.

Indebtedness and debt transactions constitute 15% of total revenue.

Table 2.12
Indebtedness and Debt Transactions
(thousands of dollars)

Debt outstanding at end of fiscal year			Debt transactions	
Total	Long-term	Short-term	Long-term debt issued	Long-term debt retired
162561	162561	-	20396	4679

Source: Census Bureau’s Statistical Tables of Public Education Elementary-Secondary Education Finances: 1999-2000.

Delaware’s statewide system of financing appears sound. The formula-based appropriations ensure an objective distribution of state funds across school districts. Per pupil funds have been rising over time, reflecting the state’s continued commitment to education. The state shoulders most of the burden of funding public education, however, this reflects the organization of the budget. Funding favors current operations, and within

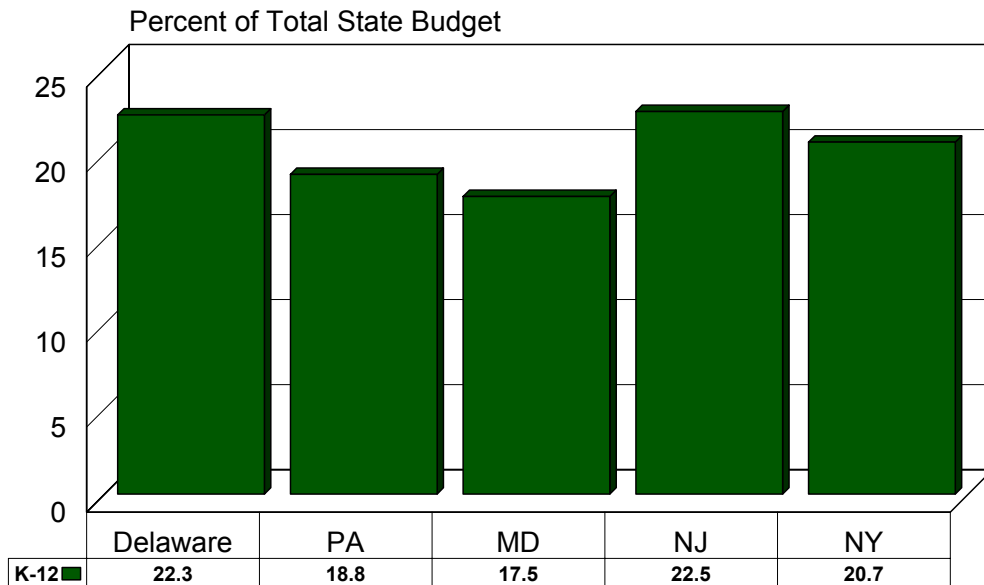
that category, instruction. Teachers comprise the largest share of professional staff. All categories of staff are expanding. Non-teaching staff are growing with enrollment, which implies they are variable costs. Using per-pupil measures, non-teaching staff growth is fractionally outpacing student enrollment growth, resulting in falling pupil/non-teaching staff ratios.

Interstate Comparisons of Public Education Financing

Extending the research to include other states and the national average brings perspective to Delaware’s education financing system. The use of interstate comparisons reveals the similarities between Delaware, other states in this region, and the nation as a whole.

Education absorbs a significant amount of general expenditures in most states. The share of total direct expenditures per capita is shown in Figure 3.0 below. Delaware ranks high amongst Mid-Atlantic region states. Public education accounts for approximately 22% of direct expenditures.

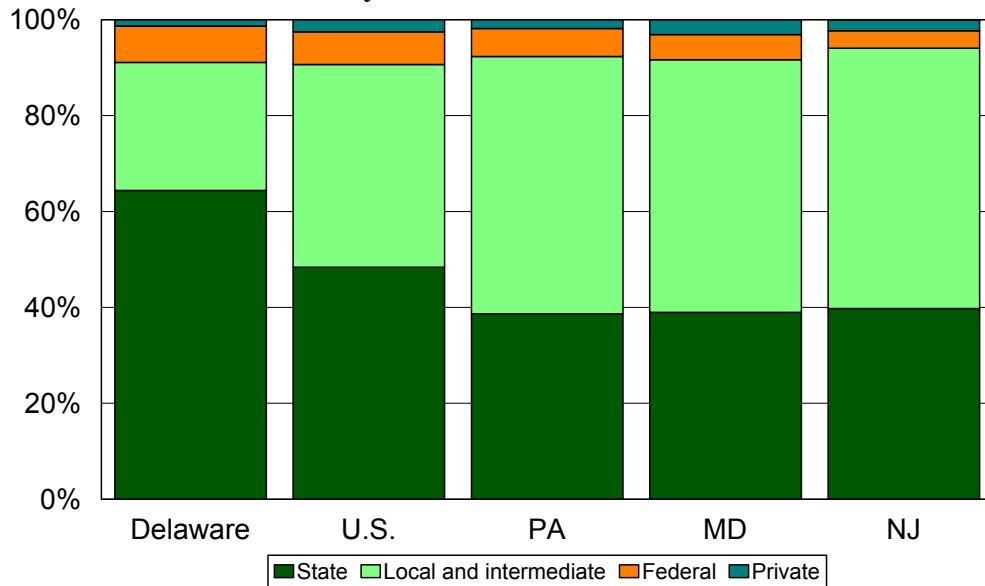
Figure 3.0
State Budget Allocations for Education
Fiscal Year 2000



Source: Center for Applied Demography and Survey Research, University of Delaware, Education Vital Signs

The State of Delaware provides a larger than average share of funds for education compared to other states. This is reflective of Delaware’s system wherein the state rather than the district primarily funds teacher salaries. The contributions to public education by state are illustrated in Figure 3.1 below.

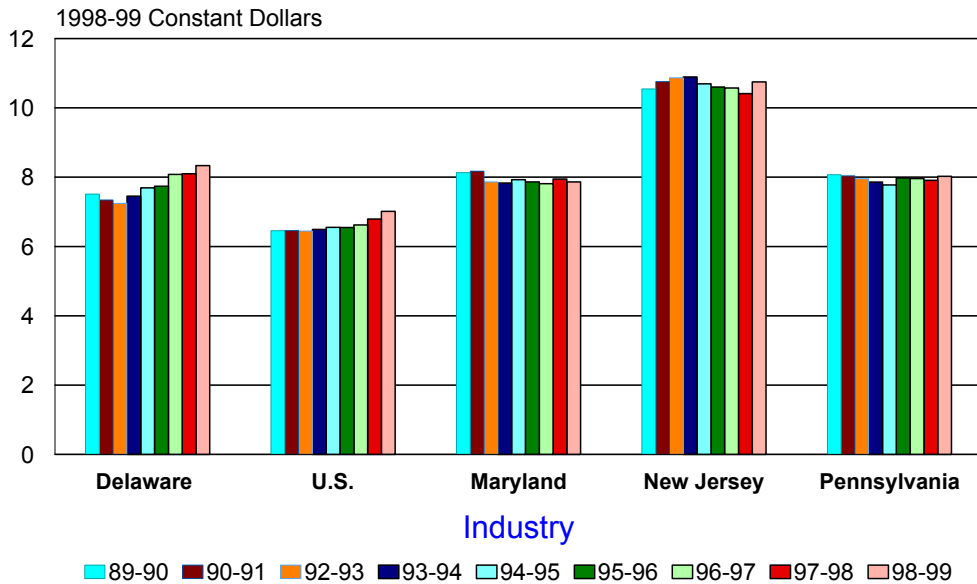
Figure 3.1
Share of Revenues for Public Elementary and Secondary Schools
by Source 1997-1998



Source: Center for Applied Demography and Survey Research, University of Delaware

Per pupil expenditures, adjusted for inflation, continue to rise throughout the nation. Delaware conforms to this trend, as seen in Figure 3.2. Per pupil expenditures for other states in the Mid-Atlantic region essentially remained unchanged over the past decade. Delaware current expenditures per pupil exceed the national average.

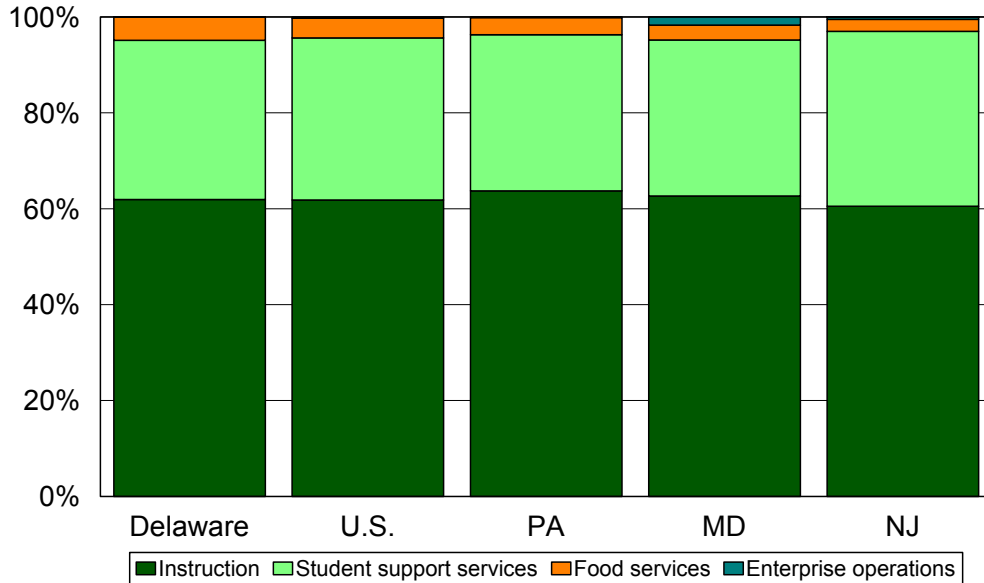
Figure 3.2
Current Expenditures Per Pupil Enrolled in Fall Semester
Public Elementary and Secondary Schools
by Source 1988-90 to 1998-99



Source: Center for Applied Demography and Survey Research, University of Delaware. Digest of Education Statistics, 2001, table 168.

Instruction receives the largest share of expenditures in every state. Approximately 60% of each state’s budget is allocated for instruction. Student support services receive the second largest share, approximately 35%.

Figure 3.3
Share of Total Current Expenditures for
Public Elementary and Secondary Education
By Function 1997-98

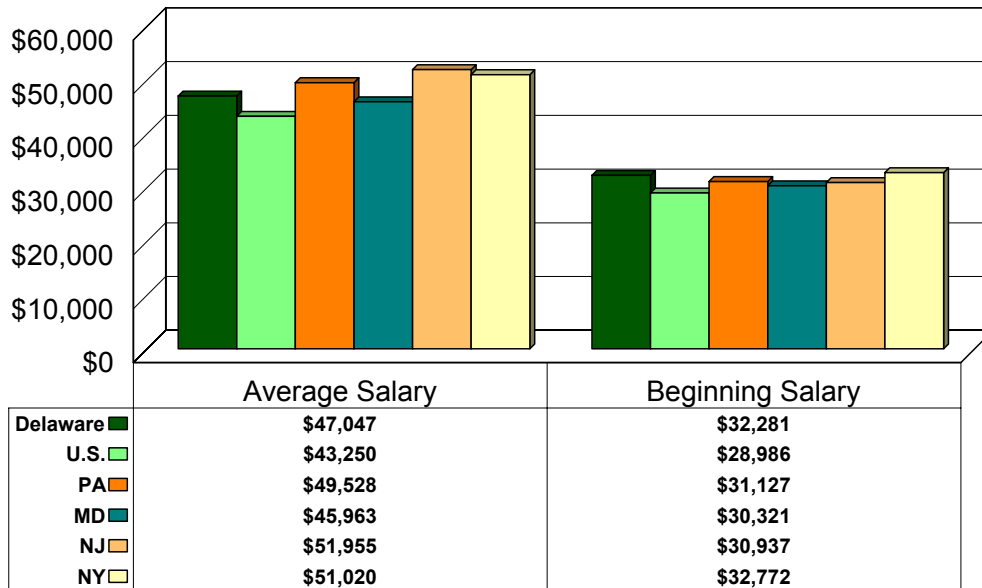


Source: Center for Applied Demography and Survey Research, University of Delaware

The percentage of funds allocated to student support varies little across these states. However, the amount of available funds varies considerably. Delaware’s public education funding is \$1 billion, compared to Pennsylvania’s \$5.8 billion.

Two measures of teacher salaries are now presented: average and beginning. Delaware’s average teachers’ salaries are fractionally lower than other states in the region, but surpass the national average, see Figure 3.4 below. According to the American Federation of Teachers, beginning teacher salaries in Delaware are above the regional and national averages. Delaware teacher salaries became more competitive vis-à-vis salaries in other Mid-Atlantic States with a sizeable increase in 1998-99. However, state averages mask the underlying district salaries, which can make state-to-state salary comparisons hazardous. Pennsylvania school districts, for example, are a diverse mix of income levels and urban and rural. Averaging beginning salaries in the state results in a lower beginning salary than Delaware. However, many of Pennsylvania’s high paying school districts are in close proximity to Delaware, and in comparison to these districts, Delaware fares poorly (see appendix for a sample salary comparison).

**Figure 3.4
Teacher Salaries
2000-2001**

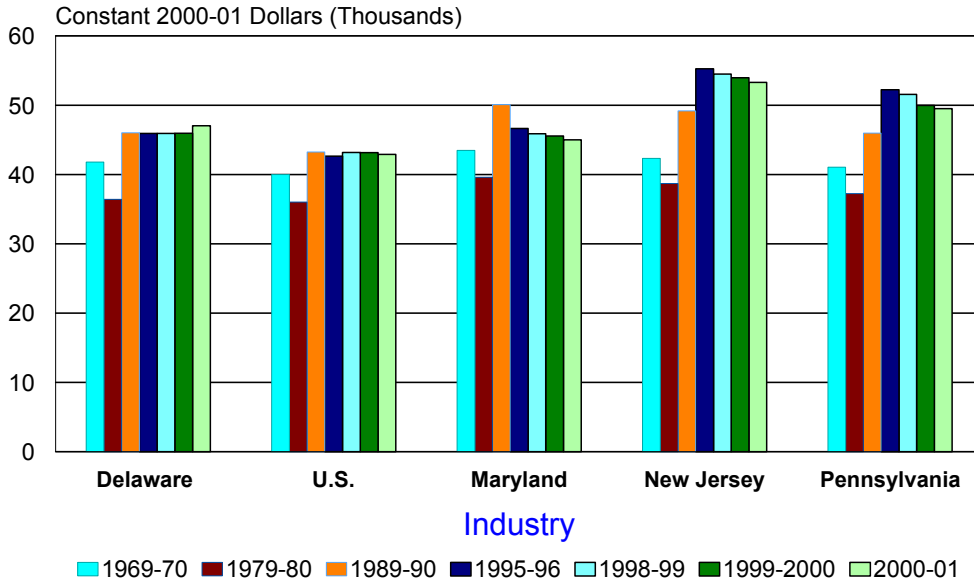


Source: Center for Applied Demography and Survey Research, University of Delaware. American Federation of Teachers, annual survey of state departments of education. <http://www.aft.org/research/survey01/tables/tableI-2.html>

Adjusting teacher salaries for inflation reveals that Delaware’s teachers have experienced an increase in salary. Mid-Atlantic states simultaneously exhibit declining teaching salaries. Average teacher salary is the broadest measure available for compensation in public education. It can be said that compensation is keeping pace with

the rate of inflation, so that Delaware’s teacher salaries are not eroding. In other states, teacher salaries have not kept pace with inflation, leading to a decline in inflation-adjusted salaries.

Figure 3.5
Estimated Average Annual Salaries of Public Elementary and Secondary School Teachers by State: 1969-70 to 2000-01



Source: Center for Applied Demography and Survey Research, University of Delaware

A further way to consider the operation of gathering and allocating revenue is to deconstruct the budget into its component sources, see Table 3.0 below.

Table 3.0
Percent Distribution of Elementary and Secondary Public School System Revenue by Source and Selected States: 1999-2000

	Total	Federal Sources		State Sources		Local Sources	
		Total	Compensatory programs	Total	Formula assistance	Total	Taxes
U.S.	100	7.1	1.5	49.8	34.0	43.1	35.8
DE	100	6.5	1.6	66.7	46.4	26.8	21.9
MD	100	5.5	1.4	37.8	21.2	56.7	52.1
NJ	100	3.8	1.1	40.3	21.2	55.9	48.8
NY	100	6.1	2.3	43.4	30.6	50.4	46.4
NC	100	6.9	1.6	65.1	45.4	28.1	23.6
PA	100	6.3	-	37.9	22.7	55.8	50.5

Source: U. S. Census Bureau, Annual Survey of Government Finances
 Agency: Governments Division, Elementary-Secondary Education Statistics Branch

State revenue accounts for two-thirds of the public education distribution in Delaware, and almost fifty percent is made through formula assistance. Twenty-seven percent of distributions are from local fund allocations, which are generated almost entirely through property taxes. North Carolina, who also operates a flat grant system of education funding, has a similar mix of funding sources and distributions.

Other states (PA, NY, RI, and CT) require localities to determine desired spending levels and taxation, thereby resulting in localities having a dominant role in finance decisions. The States' role is to equalize districts' ability to raise necessary funds.

Some states (MD, NJ, VA, and others) define a level of adequate funding to provide and use a mix of state and local funds. In this case, the state determines a required level of local participation. The required local effort (RLE) serves as a state-imposed property tax.

The nuances of each state's system determine the mix of revenues and disbursements. Under one system, the state may appear to be shouldering more than local districts in the expense of public education. Under another system the reverse may appear to be the case. Yet taken in aggregate, total spending per pupil is often similar across states in a common region. See Table 3.1 below:

Table 3.1
Per Pupil Amounts for Current Spending of Public Elementary and Secondary School Systems by State: 1999-2000

	Total	For selected objects		Instruction		Support			
		Salaries and wages	Benefits	Total	Salaries and wages	Total	Pupil Support	Gen. Admin.	School Admin
U.S.	6,836	4,500	1,149	4,214	3,078	2,334	335	137	390
DE	8,030	4,929	1,402	4,964	3,519	2,778	376	85	458
MD	7,496	4,809	1,531	4,577	3,234	2,586	326	77	515
NJ	10,283	6,785	1,658	6,053	4,531	3,911	890	297	565
NY	10,039	6,743	1,637	6,872	5,096	2,901	321	196	416
NC	5,990	4,183	926	3,805	2,894	1,847	316	114	403
PA	7,824	4,967	1,321	4,846	3,513	2,690	372	235	338

Source: U. S. Census Bureau, Annual Survey of Government Finances

Agency: Governments Division, Elementary-Secondary Education Statistics Branch

State rankings are another way to represent Delaware's finance system relative to others. An abbreviated table of per pupil elementary-secondary public school system finance amounts is shown below.

Table 3.2
States Ranked According to Per Pupil Elementary-Secondary Public School System
Finance Amounts: 1999-2000

Rank	Revenue		Current Spending for selected categories		
	Total	From State Sources	Total	Instruction	
			Total	Total	Salaries Only
1	DC	VT	DC	NY	NY
2	NJ	HI	NJ	NJ	NJ
3	NY	DE	NY	MA	CT
4	CT	MI	CT	CT	MA
5	AK	AK	AK	AK	RI
6	MA	MN	MA	RI	DC
7	DE	WI	RI	ME	VT
8	RI	NM	DE	VT	AK
9	VT	WA	VT	DE	DE
10	PA	NY	PA	PA	PA

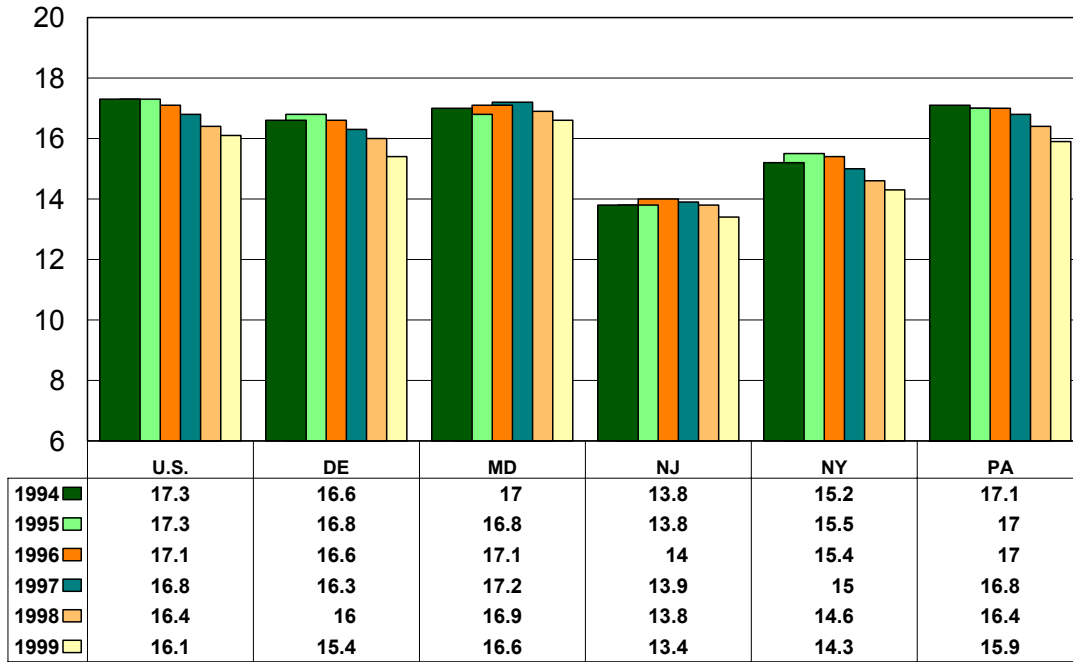
Source: U. S. Census Bureau, Annual Survey of Government Finances

Agency: Governments Division, Elementary-Secondary Education Statistics Branch

Delaware ranks in the top ten in many categories. For revenue, Delaware ranks seventh highest in the nation in terms of total revenue raised per pupil, and third in terms of total revenue raised from state sources. For total current spending per pupil, Delaware is eighth in the nation; ninth for spending on instruction costs.

All states in the region exhibit falling pupil to teacher ratios. Delaware's ratio is lower than Maryland and Pennsylvania, and the nation as a whole. See Figure 3.6 below.

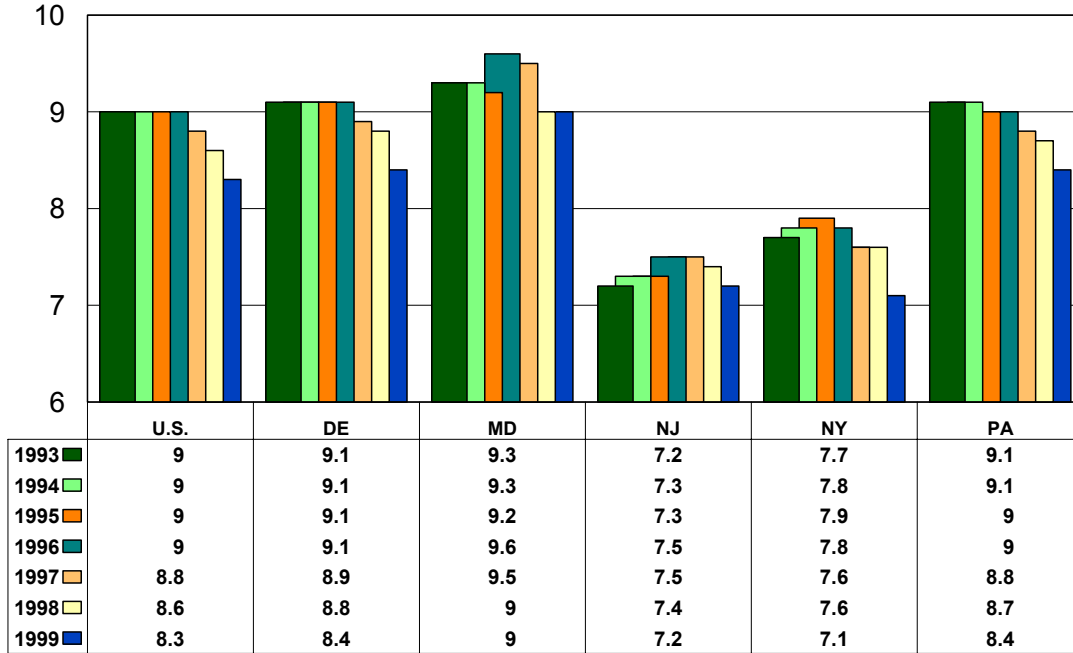
Figure 3.6
Pupil to Teacher Ratio
1994-99



Source: Center for Applied Demography and Survey Research, University of Delaware

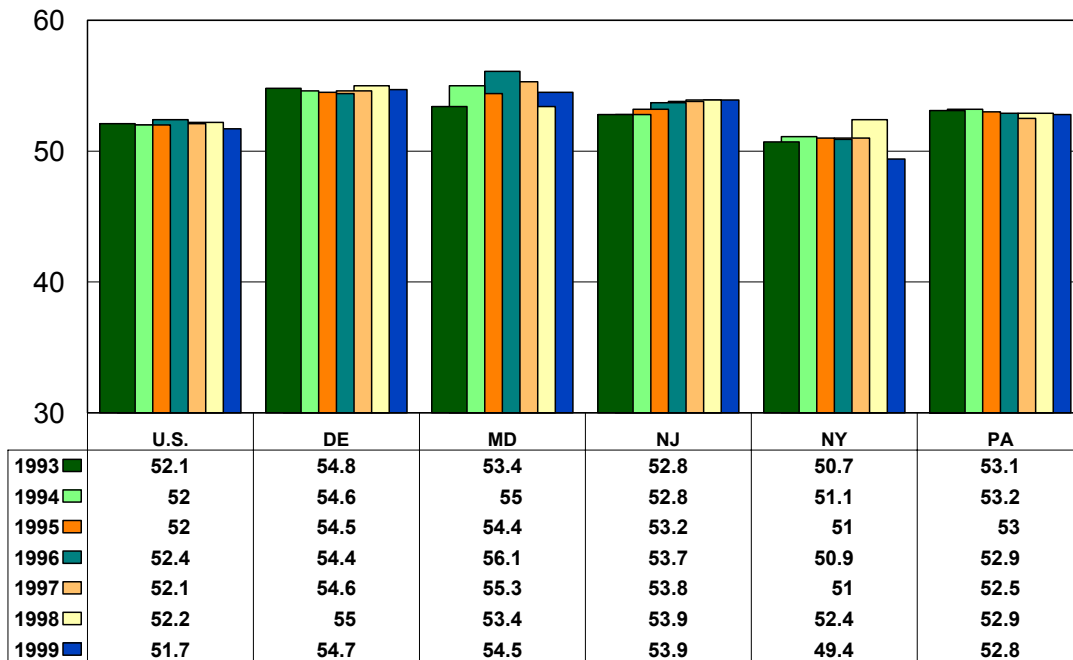
Measuring the number of pupils to total school staff (teachers, instructional support, administration, and service personnel) provides insight into the balance between the workforce who supply education and pupils who receive it. This measure continues to decrease both nationally and regionally. This implies that the provision of education requires a greater number of staff than in prior years. This measure is heavily influenced by the downward trend in pupil to teacher ratio, which occurred with the movement toward smaller class sizes. Over fifty percent of staff are teachers, see Table 3.7.

Table 3.7
Pupils to Total Staff Ratio
1993-99



Source: Center for Applied Demography and Survey Research, University of Delaware

Table 3.8
Teachers as a Percentage of Staff
1993-99



Source: Center for Applied Demography and Survey Research, University of Delaware

As mentioned earlier, public education in Delaware is financed primarily by the State (67%) and local funds (25%). This State/Local funding mix varies from state to state. At the low end, South Dakota's State/Local mix is 35/53. At the high end, Vermont's mix is 75/18. Despite this variation the manner in which spending is allocated varies little. For example, approximately 60% of current per pupil spending is allocated to instruction regardless of the State/Local funding mix. Therefore, Delaware's level of instruction expenditures is neither high nor low.

Delaware's closest peer is Rhode Island (in terms of the size of public school enrollment). Rhode Island's State/Local mix is 42/53. Nevertheless, Rhode Island ranks along side Delaware in per pupil measures (see table 3.2), suggesting that Delaware is in the mainstream with respect to public education finance, and particularly among states in the North East. Student proficiencies between the two states do not differ significantly.

Delaware's closest peer in terms of funding mix is North Carolina (State 65%/Local 28%). North Carolina's enrollment is ten times that of Delaware, which makes comparisons of total expenditures difficult. On a per pupil basis, however, current spending per pupil in Delaware is significantly higher (\$8,030 versus \$5,990). This implies a far greater level of funding in Delaware. One drawback to this comparison is that education expenditures reflect the income level of that state and its region. For example, all North East states are among the highest per pupil spenders. This reflects the high levels of income in these states.

Comparing states in different areas of the country in a meaningful way requires some adjustment for the different income levels. Per capita income is almost \$5,000 higher in Delaware than North Carolina. Starting teacher salaries in Delaware are \$3,000 higher than in North Carolina, and average teacher salaries are \$5,000 higher. Therefore, public education spending should be adjusted by some factor that captures the income differences.

Adjusting public education spending per \$1,000 personal income removes this income bias. Now, the funding gap between Delaware and North Carolina does not appear so large. Total current spending per \$1,000 personal income is \$38.58 in Delaware and \$38.42 in North Carolina. Moreover, based on this measure, Delaware ranks 33rd in the nation rather than in the top ten.

Delaware's public education expenditures are comparable with both neighboring states and the nation. The State's public education spending reflects the higher income of the state, which places Delaware high in the national expenditure rankings. However, adjusting for income levels, Delaware is relatively middle of the road in terms of public education spending.

Summary

Many states across the nation are wrestling with the issue of improving public education. Public education consumes a large part of state and local funds, yet, in general, standards are not improving significantly. Therefore, there is a need to ensure the efficient allocation of funds.

Policy-makers must understand the structure and size of finance sources and allocations in order to comprehend the problems of access that can be related to cost. This project is a review of the statewide system of public education funding in Delaware. Its purpose is to inform policy-makers of the structure and size of public education finance sources and allocations. The project is pursued with the following constraints: where possible the most recent Delaware data is used and comparability kept to allow interstate comparisons. There are a number of findings that are worth reiterating from the study.

- Public education is a \$1 billion investment in Delaware.
- Public education consumes more than one-fifth of direct general expenditures per capita, making it the single largest expenditure in the state budget.
- Public education expenditures grew 84% during the last decade. However, in per pupil, inflation terms, expenditure growth was 14%.
- Public education revenue in Delaware is provided by the State (67%), local school districts (25%), and the Federal government (8%).
- Local school district revenue is raised primarily through property taxes (over 80%).
- State funding from the General Fund is allocated based upon formula. Funding levels depend on public school enrollment, and the education and experience of the teaching workforce.

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- Salary and benefits are the largest cost of the public education system.
 - Instruction receives the largest share of funding by function within the public education system.
 - All revenue sources are vital to the provision of public education in the state, regardless of size.
 - Despite the diversity of states in the Mid-Atlantic region, the distribution in percentage terms of public education financing is similar.
 - The pupil/teacher ratio is falling in Delaware.
 - The pupil/non-teaching staff ratio is falling, which reflects the fact that growth in non-teaching staff is outpacing public school enrollment growth.
 - The fastest growing section of staff is other professionals.
 - Local revenue, which is raised primarily through property taxes, is a stable source of revenue and is growing in importance in the public education budget.
 - Delaware ranks in the top ten among all states for per pupil expenditures.

Collectively these data suggest that Delaware is essentially in the mainstream regarding the financing of public education. Even so, there may be room for improvement. All levels of professional staff are growing. The number of classroom teachers has risen to almost 7,500 (a 25% gain since 1990). Student population grew 15% over the same period. Simultaneously, other professional staff have risen in kind. The number of school officials/administrators¹³ grew 26%. That the percentage growth of school officials/administrators matches the growth in classroom teachers implies that school officials/administrators are a variable cost—a cost that varies with the size of operation. However, could these official/administrator positions be classed as fixed

¹³ The State Board of Education and Department of Education define officials/administrators as a grouping of assignments comprising the various skill levels required to perform management activities.

costs—costs that do not vary with the size of operation? If they can, then their growth constitutes an increase in overhead and is a drain on education resources.

The funding formula guarantees a certain level of funding for schools each year. This method of funding has the advantage of bringing certainty to the budget process and saves public education from competing for dollars from the general fund. The downside to the funding formula is the rigidity it instills in the public education system. Consequently, there is little evidence of change in the allocation expenditures over the last decade. Current expenses, those expenses that finance the day-to-day running of the school, account for approximately 90% funds. This figure has been relatively static since 1995, which suggests that there has been no significant change in the apportionment of public education funding. Within current expenses, instruction receives the largest share of funds: approximately 60%. This is on par with the funding allocations across the region and the nation. The implication is that as the budget continues to grow, so too do all uses of funds and at similar rates, leaving the relative shares unchanged. I.e. the expenditure pie is growing larger, but it divided into the same shares. Therefore, no one function of public education gains more than another.

The natural extension of this research is to explore the revenue and costs at the district, or even school level. This finer level of analysis may uncover how funding may be more effectively allocated in ways that were not revealed with the system-wide view.

APPENDIX

Basic Teacher Salary Schedule, 2001-02 School Year, Delaware.

Years of Experience	No Degree	Bachelor Degree	Bachelor Plus 15	Bachelor Plus 30	Master Degree	Master Plus 15	Master Plus 30	Master Plus 45	Doctoral Degree
-	22,209	23,134	24,059	24,985	26,373	27,298	28,223	29,149	30,074
1	22,440	23,365	24,291	25,216	26,604	27,529	28,455	29,380	30,306
2	22,648	23,597	24,522	25,447	26,835	27,761	28,686	29,612	30,537
3	23,481	24,406	25,332	26,257	27,645	28,570	29,496	30,421	31,347
4	24,175	25,031	25,864	26,720	27,969	28,802	29,843	30,768	31,694
5	25,031	25,864	26,720	27,553	28,802	29,658	30,491	31,347	32,179
6	25,864	26,720	27,553	28,385	29,658	30,491	31,347	32,179	33,012
7	26,720	27,553	28,385	29,241	30,491	31,347	32,179	33,012	33,868
8	27,553	28,385	29,241	30,074	32,596	33,429	34,285	35,117	35,973
9	28,385	29,241	30,074	30,907	33,429	34,285	35,117	35,973	36,806
10			30,907	31,763	34,285	35,117	35,973	36,906	37,639
11	-		31,763	32,596	35,117	35,973	36,806	37,639	38,495
12	-			33,429	35,973	36,806	37,639	38,495	39,328
13	-			34,285	36,806	37,639	38,495	39,328	40,161
14	-				37,639	38,495	39,328	40,161	41,017
15	-						40,161	41,017	41,849

Source: Delaware Department of Education.

Sample District Salaries, 2001-2002.

	School District	Starting B.A.	Top MA+45 15 Yrs.	Top Salary MA+45
DE	Brandywine	\$31,716	\$64,353	\$68,500
DE	Appoquinimink	\$30,786	\$58,965	\$58,965
DE	Christina	\$31,537	\$67,488	\$68,688
DE	Colonial	\$30,801	\$67,009	\$68,009
DE	Red Clay	\$31,049	\$65,624	\$65,624
DE	NCCVTSD	\$31,305	\$64,300	\$66,672
PA	Chester Upland	\$32,000	\$67,550	\$67,550
PA	Chichester	\$31,142	\$72,027	\$72,027
PA	Garnet Valley	\$32,725	\$78,513	\$78,513
PA	Haverford	\$32,000	\$78,800	\$78,800
PA	Interboro	\$34,368	\$82,791	\$82,791
PA	Marple Newton	\$34,396	\$73,954	\$76,859
PA	Penn Delco	\$33,150	\$64,934	\$71,004
PA	Radnor Twp	\$38,325	\$83,405	\$83,405
PA	Rose Tree Media	\$35,600	\$78,404	\$78,404
PA	Southeast Delco	\$32,223	\$74,806	\$74,806
PA	Springfield	\$32,500	\$60,664	\$76,450
PA	Upper Darby	\$33,648	\$77,017	\$77,017
PA	Wallingford	\$35,000	\$72,644	\$81,450
PA	William Penn	\$32,998	\$69,139	\$69,139
PA	Avon Grove	\$30,000	\$63,250	\$72,774
PA	Coatesville	\$32,500	\$55,400	\$68,300
PA	Great Valley	\$34,692	\$73,462	\$80,250
PA	Downington	\$32,600	\$59,750	\$71,450
PA	Kennett	\$34,800	\$75,000	\$78,350
PA	Oxford	\$31,422	\$56,102	\$62,602
PA	Tredyffrin-Easttown	\$38,850	\$78,405	\$82,525
PA	Phoenixville	\$34,500	\$68,110	\$75,410
PA	Unionville Chadsford	\$33,000	\$67,481	\$76,949
NJ	Clayton Boro	\$33,439	\$56,669	\$59,927
NJ	Deptford Twp	\$38,715	\$60,225	\$65,496
NJ	East Greenwich	\$34,015	\$53,573	\$58,312
NJ	Logan Twp	\$37,000	\$57,571	\$64,002
NJ	National Park Boro	\$32,280	\$57,883	\$58,378
NJ	Wenonah Boro	\$34,000	\$56,925	\$62,000
NJ	Woodbury City	\$35,000	\$66,200	\$76,603
NJ	Franklin Twp	\$34,150	\$56,610	\$60,560
NJ	Woodbury Heights	\$33,000	\$58,250	\$65,950
NJ	Alloway Twp	\$34,009	\$48,332	\$53,026
NJ	Lower Alloway's Creek	\$32,700	\$49,450	\$61,100

Interstate Comparison of Beginning and Average Salaries, 2001-2002.

Beginning Salary	DE	PA	NJ	MD
1996-97	\$24,349	\$29,426	\$28,039	\$26,548
1997-98	\$25,493	\$29,581	\$28,319	\$27,010
1998-99	\$29,981	\$29,793	\$29,112	\$27,605
1999-00	\$30,945	\$30,185	\$30,480	\$28,612
2000-01	\$32,281	\$31,127	\$30,937	\$30,321
Source: American Federal of Teachers.				
Average Salary	DE	PA	NJ	MD
1996-97	\$41,436	\$47,147	\$49,786	\$41,257
1997-98	\$42,439	\$47,542	\$50,284	\$41,404
1998-99	\$43,223	\$48,457	\$51,692	\$42,545
1999-00	\$44,435	\$48,321	\$50,878	\$43,720
2000-01	\$47,047	\$49,528	\$51,955	\$45,963
Source: American Federal of Teachers.				

Glossary

Assessed Valuation -The value of real estate for purposes of taxation as determined by an assessor.

Average Daily Attendance (ADA) -For a given school year, the average daily attendance of a school is the sum of days present of all pupils when the school was in session divided by the total number of days the school was in session.

Average Daily Membership (ADM) -For a given school year, the average daily membership of a school is the sum of days present and absent of all pupils when the school was in session divided by the total number of days the school was in session.

Bonded School Debt -The part of the school district debt, which is covered, by outstanding bonds of the district.

Capital Outlay -An expenditure which results in the acquisition of fixed assets or additions to fixed assets, including land, existing building, improvement of grounds, construction of buildings, additions to buildings, remodeling of buildings, initial equipment, or additional equipment.

Classroom Teacher -A staff member assigned the professional activities of instructing pupils in classroom situations for which daily pupil attendance figures for the school system are kept.

Combined Tax Rates -The combination of both real estate and capitation taxes (converted into equivalent real estate tax rates) based upon assessed and full value of real estate.

Community Services -Expenditures for programs other than the regular day school, including evening programs and summer programs.

Current Expenses -Any expenditure except for capital outlay and debt service. Staff categories included in the Current Expense tables are:

Instruction: Teachers, Instructional Aides

Support Services: Students
Guidance Counselors, Psychologists, Therapists, Nurses

Support Services: Instructional Staff
Directors of Instruction, Supervisors of Instruction, Librarians

Support Services: General Administration
Chief School Officers, Assistant Superintendents,
Administrative Assistants, Clerical

Support Services: School Administration
Principals, Assistant Principals, Clerical

Support Services: Operations & Maintenance
Custodians, Maintenance Specialists

Support Services: Student Transportation
School Bus Drivers, Transportation Supervisors,
Transportation Specialists, Bus Aides Support
Services

Support Services: Other

Directors of Administration, Specialists/Support,
Supervisors/Support, Administrative
Assistants/Support, Clerical

Food Services: Cafeteria Managers, Cafeteria Supervisors, Cafeteria Workers

Debt Service -Expenditures for the retirement of debt and expenditures for interest on debt, except principal and interest on current loans.

Diploma -A document indicating graduation of a pupil from a Delaware high school.

Division I Unit -State appropriations allocated to a school district on a unit enrollment formula which are designated for the purpose of paying the employees of the various school districts of the state in accordance with the state supported salary schedules.

Division II Unit -State appropriations allocated to a school district on a unit enrollment formula that are designated for all other non-salary costs, except those for debt service and the transportation of pupils.

Division III Unit -Sate appropriations allocated to a school district based on a tax effort formula, which is designated to equalize revenue receipts among school districts.

Document of Secondary Attainment -A document awarded by the Delaware State Board of Education after satisfactory completion of the requirements of the General Education Development Testing Program (GED) to serve as sufficient evidence of levels of secondary educational attainment as revealed through these tests for purposes of employment, licensing, military service requirements and admission to post-high school educational institutions.

Enrollment September 30 -Delaware law requires a total enrollment report for each school district as of September 30. This enrollment count is used as a basis for calculation of units of pupils for school funding purposes.

Equalized Assessment -Tax assessment figure based upon full property value, rather than upon the assessed property value.

Fiscal Effort -A measure of relative tax effort among school districts in the state. Higher tax rates indicate greater tax efforts.

FTE Staff -Derived by dividing the amount of time a person is employed by the time normally required for a corresponding full-time position.

FTE Student -Derived by formula to aggregate full-time students and part-time special education students for unit computation.

Full Valuation -The true or market value of real estate.

Instructional Support -An assignment to a staff member who has expertise in a specialized field to provide information and guidance to other staff members to improve the curriculum.

Non-revenue Receipts -Receipts which accrue to the district as the result of incurring an obligation which must be met at a future date or reducing the value of school properties through the exchange of a property asset into a cash asset. Money obtained from the sale of bonds or school property would be classified as a non-revenue receipt.

Official/Administrative -A grouping of assignments comprising the various skill levels required to perform management activities.

Professional/Other -A grouping of assignments requiring a high degree of knowledge and skills required through at least a Baccalaureate Degree (or its equivalent obtained through special study and/or experience) but not requiring skills in the field of education.

Property Tax -A tax levied on real estate, at a rate per \$100, on the assessed valuation of such property within the school district.

Record of Performance -A document granted to students who have completed at least twelve years of school beyond kindergarten and who have been enrolled in a Delaware public school at least one year prior

to the granting of the record. The record lists the credits earned and the minimal performance requirements met by the students.

Revenue Receipts -Receipts which produce additions to assets without increasing school indebtedness and without reducing the value or depleting school property. Money from taxes and tuition are examples of revenue receipts.

Salary-Average salary is the arithmetic mean of teacher salaries, state and local funds only. Beginning, middle and top salaries are schedule steps for teachers with a Bachelor's Degree and no experience, a Master's Degree and thirteen years experience, and a Master's Degree plus thirty credits with maximum years' experience.

Skilled and Service Worker-A grouping of assignments such as secretarial, technician, cafeteria, and custodial worker that requires a varying level of skills.

Special- Class for exceptional (handicapped) children for whom a program of special education is provided.