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## The Condition of K-12 Public Education in Maine 2005

Paula B. Gravelle

*University of Southern Maine, Center for Education Policy, Applied Research, and Evaluation*

David L. Silvernail PhD

*University of Southern Maine, Center for Education Policy, Applied Research, and Evaluation*

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The Condition of K-12  
Public Education  
in Maine  
2005

**Maine Education Policy Research Institute**

*A nonpartisan research institute funded by the Maine State Legislature,  
the University of Southern Maine, and the University of Maine.*

# The Condition of K-12 Public Education in Maine 2005

*Prepared for the  
Maine Education Policy Research Institute*

by

Paula B. Gravelle  
Research Analyst

David L. Silvernail  
Director

Center for Education Policy, Applied Research, and Evaluation  
College of Education and Human Development  
University of Southern Maine



UNIVERSITY OF  
**SOUTHERN MAINE**

Center for Education Policy,  
Applied Research, and Evaluation

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Applied Research, and Evaluation

Dear Maine Citizen,

We are pleased to present you with the ninth edition of ***The Condition of K-12 Public Education in Maine***. This book is designed to provide Maine citizens, legislators, and educators a yearly report on the state of Maine public schools and education. This new edition updates educational information which appeared in earlier editions, and also provides information on several new topics.

In 1995, the Maine State Legislature established the Maine Education Policy Research Institute, a joint institute funded by the Legislature and the University of Maine System. Under the direction of the Institute's Steering Committee, the Institute is charged with developing a system for monitoring the progress of Maine K-12 public education, and for conducting policy and research studies. You will find the names of the Steering Committee members and the University of Southern Maine Institute staff listed on a subsequent page, and a copy of the legislation establishing the Institute in Appendix A.

Many individuals provide us assistance in compiling information for this report, and they are listed in the Acknowledgments. We thank them for their assistance.

We hope you find the information in this book helpful. If you have any questions about the information in this report, please feel free to contact us at the address on this letterhead or by electronic mail.

Sincerely,

David L. Silvernail  
Director  
Maine Education Policy Research Institute  
University of Southern Maine Office  
e-mail: [davids@usm.maine.edu](mailto:davids@usm.maine.edu)

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## **Maine Education Policy Research Institute University of Southern Maine Office**

David L. Silvernail  
Director

James Sloan  
Research Analyst

Paula Gravelle  
Research Analyst

Brianne Woodard  
Research Assistant

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## Table of Contents

<b>Introduction.....</b>	<b>i</b>
<b>General Information about K-12 Public Education in Maine.....</b>	<b>ii</b>
<b>Context Indicators.....</b>	<b>1</b>
1. Per Capita Personal Income.....	2
2. Poverty Rate.....	4
3. Tax Burden.....	6
4. Property Valuation.....	8
5. Local Revenues.....	9
6. Education Revenue Sources.....	11
7. Public School Student Enrollment.....	13
8. Private School and Home School Student Enrollment.....	15
9. Language Minority Student Enrollment.....	16
10. Special Education Student Enrollment.....	17
11. Children's Well-being and Financial Security.....	19
12. Children's Well-being and Access to Healthcare.....	20
13. Early Childhood Education.....	22
14. School Lunch Program Eligibility.....	24
15. Teen Birth Rates and Temporary Aid to Needy Families.....	26
16. Youth Risk Behaviors.....	27
17. School Drug and Violence Prevention.....	29
18. Educational Attainment of Maine's Adults.....	31
19. Projected Educational Attainment of Maine Public School Ninth Grade Students.....	32
20. Rewards of High School Completion and Higher Education Degree.....	33



<b>Resource Indicators.....</b>	<b>34</b>
21. Per Pupil Operating Expenditures.....	35
22. Education Expenditures by Category.....	36
23. Special Education Expenditures.....	37
24. Transportation of Public School Students.....	38
25. Construction of Public Schools.....	40
26. District Governance Structures.....	41
27. School Type, Grade Span Configuration, and Average Enrollment.....	42
28. Pupil - Teacher Ratios.....	44
29. Staff - Administrator Ratios and Staff - Teacher Ratios.....	46
30. Salaries of Teachers and Administrators.....	47
31. Ages of Teachers and Administrators.....	48
32. Years of Experience of Full-time Teachers and Administrators.....	49
33. Gender of Full-time Teachers and Administrators.....	50
34. Educational Attainment of Teachers and Administrators.....	51
35. Teachers Rank Professional Development Activities.....	52
36. Instructional Time in Maine Schools.....	54
37. How Teachers View Their Schools as Able to Achieve <i>Learning Results</i> .....	55
38. Time Spent on Learning Results Content Areas in Elementary Schools.....	56
39. Minimum Time Requirements for Homework in High School.....	57
40. Percent of High School Students Completing Mathematics and Science Courses.....	58
41. Percent of High School Students Completing Advanced Placement Courses.....	60
42. Reading Recovery.....	61
43. Impact of Maine's One-to-One Laptop Program.....	62

<b>Results Indicators.....</b>	<b>63</b>
44. Maine Educational Assessment.....	64
45. Scholastic Assessment Test.....	67
46. Advanced Placement Test.....	69
47. National Assessment of Educational Progress.....	70
48. Graduation Rate for Maine's High School Seniors.....	72
49. Yearly High School Dropout Rate.....	74
50. Post-Secondary Education.....	76
51. Aspirations of Students Taking the SAT.....	78
52. Maine's College Graduates: <i>Where They Go and Why</i> .....	79
<b>Endnote.....</b>	<b>81</b>
<b>References.....</b>	<b>82</b>
<b>Appendices.....</b>	<b>85</b>
APPENDIX A: Excerpts from Legislation Establishing the Maine Education Policy Research Institute L.D. No. 1124	
APPENDIX B: Recent Publications	

## Introduction

*Education Indicators* are facts and statistics that help to describe a public education system. They are tools which are useful in examining and measuring the effectiveness of the system. Examples include information such as the amount of local funds raised to support local schools, per pupil expenditures, pupil-teacher ratios, and student achievement results. This publication contains a series of indicators which will help interested citizens, policymakers, and legislators understand the many components of the K-12 Maine public education system.

In addition to providing the most current information available for each indicator, historical information and comparable data from the Northeast region and the nation are presented whenever possible. Readers are reminded that the data presented in this report are from a variety of sources, and that the most recent year may vary by indicator. Although each indicator is independent, many are interrelated and therefore require a critical analysis by the reader.

*The Condition of K-12 Public Education in Maine 2005* is comprised of three categories of indicators: 1) *Context*, 2)

*Resources*, and 3) *Results indicators*.

*Context Indicators* describe community and societal characteristics which may have an impact on student learning. Context indicators include information such as community wealth, poverty level, tax burdens, local and state revenues, and school enrollment.

*Resource Indicators* describe school resources which may influence student learning. These indicators include staff and student characteristics, education expenditures, and information about school programs and services. Resource indicators help describe how education resources such as staff and facilities, student-teacher ratios, course offerings and student services are utilized in providing education to Maine's K-12 students.

*Results Indicators* provide tools to assess the productivity of education in Maine. Results indicators include, among others, student achievement results in several assessments, student attitudes and aspirations, and post-secondary education. This information helps to describe how well Maine schools have succeeded in educating Maine's youth.

## General Information about K-12 Public Education in Maine

While Maine's total population has remained relatively steady (1.2 million), public school enrollment has been steadily declining since 1996-97 to 202,025 students in 2003-04. An additional 16,726 students are enrolled in private schools and 4,699 students were home schooled in 2003-04. Maine's 286 school administrative units have a total of 679 public schools in various grade span configurations. Total education expenditures in 2002-03 were approximately \$1.7 billion. On a per-pupil basis, (excluding major capital outlay, transportation, and debt service), Maine's average per pupil operating expenditure was \$7,019 in 2002-03. Finally, close to one out of every three Maine students was eligible to receive free or reduced price lunch in 2003-04.

Maine's students continue to be among the top performers in the National Assessment of Educational Progress (NAEP). In mathematics, both fourth and eighth graders scored above the national average scores for 2003. In reading, Maine's

fourth and eighth grade students ranked sixth in the nation on the 2003 NAEP Reading Test. Both grades scoring higher than the national average, but slightly lower than the regional average.

Results of the MEA, which measures achievement of Maine's Learning Results, showed a significant majority of students partially meeting, meeting, or exceeding the Learning Results standards in 2003-04 in reading and writing. While approximately one-third of students struggled with mathematics and science. Maine students scored below the national average in mathematics, and slightly below in verbal, on the 2004 Scholastic Assessment Test (SAT). Achievement in qualifying scores on Advanced Placement examinations now slightly exceeds the national average. In 2003, approximately 71.2 percent of Maine's public high school graduates intended to enroll in some type of post-secondary education program. More information about these and other facts are provided in the following pages.

## Context Indicators

*Context Indicators* describe community and societal characteristics of the educational environment which may have an impact on student learning. This section provides information on the following indicators:

1. Per Capita Personal Income
2. Poverty Rate
3. Tax Burden
4. Property Valuation
5. Local Revenues
6. Education Revenue Sources
7. Public School Student Enrollment
8. Private School and Home School Student Enrollment
9. Language Minority Student Enrollment
10. Special Education Student Enrollment
11. Children's Well-being and Financial Security
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16. Youth Risk Behaviors
17. School Drug and Violence Prevention
18. Educational Attainment of Maine's Adults
19. Projected Educational Attainment of Maine Public School Ninth Grade Students
20. Rewards of High School Completion and Higher Education Degree

## 1. Per Capita Personal Income

Per capita personal income (PCPI) is one way to describe the general economic well-being of Maine and its communities. It is an important indicator for understanding the financial capacity of the state of Maine and its communities to support schools. PCPI is calculated by dividing all personal income from all sources by the total population of that area. Table 1 and Figure 1 show a comparison of per capita personal income averages for Maine, New Hampshire, Vermont, and the United States during the last five years. This is based on data released by the Bureau of Economic Analysis in 2004. According to the Bureau, the estimated per capita personal income for Maine in 2003 is \$28,935, ranking Maine 30<sup>th</sup> in the nation, or approximately \$2,524 less than the national per capita personal income, \$31,459. New Hampshire is ranked 6<sup>th</sup> in the nation, while Vermont is ranked 22<sup>nd</sup>. However, Maine did show the most growth over the 5-year period.

The final column of the table shows the percentage increase of per capita personal income from 1999 to 2003 after adjusting for inflation.

As indicated by the U.S. Bureau of Economic Analysis, the disparity of income within Maine is quite sizeable and varies considerably between counties. Table 2, on the next page, shows 1998-2002 per capita personal income for all Maine counties. In 2002 (the most recently available county data) the average county per capita personal

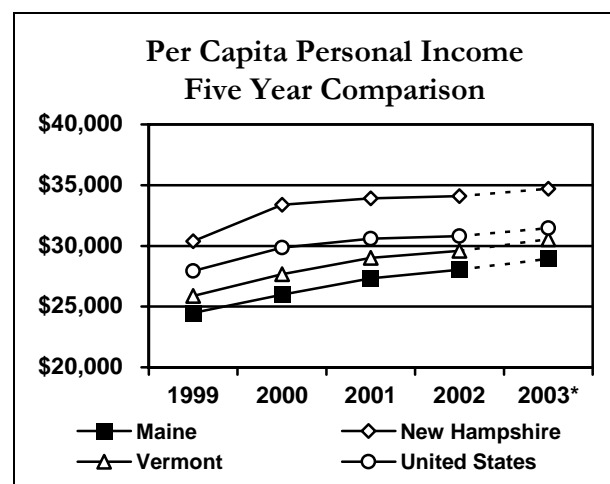


Figure 1: Source: U.S. Bureau of Economic Analysis, 2004

**Table 1: Regional and National Per Capita Personal Income, 1999-2003\***

State	1999	2000	2001	2002	2003*	% Increase after adjusting for Inflation 1999-2003
Maine	\$24,484	\$25,972	\$27,324	\$28,030	\$28,935	8.2%
New Hampshire	\$30,380	\$33,398	\$33,922	\$34,109	\$34,703	3.6%
Vermont	\$25,881	\$27,680	\$29,024	\$29,603	\$30,534	7.3%
United States	\$27,939	\$29,847	\$30,580	\$30,795	\$31,459	2.2%

Source: U.S. Bureau of Economic Analysis, 2004.

\* PCPI estimated figures for 2003

## The Condition of K - 12 Public Education in Maine - 2005

income ranged from a low of \$22,469 for Washington County to a high of \$34,498 for Cumberland County. Interestingly, not only is Cumberland County ranked 1<sup>st</sup> in Maine in PCPI, but it is also ranked 151<sup>st</sup> of all 3,111 counties in the entire United States.

Seven counties in Maine had incomes below \$25,000 and nine had incomes above \$25,000. The average income in Maine's poorest county was only 65.1 percent of the average per capita

personal income in Maine's wealthiest county in 2002.

Since 1998, Maine's per capita personal income grew by 7.7 percent (after adjusting for inflation) compared to a national increase of 3.8 percent. During the same time, Aroostook County showed the highest per capita personal income growth rate within the state while Sagadahoc County showed the lowest growth rate.

**Table 2: Maine Per Capita Personal Income by County, 1998-2002**

Area	1998	1999	2000	2001	2002	% Increase after adjusting for Inflation 1998-2002
<b>Androscoggin</b>	\$22,257	\$23,166	\$24,378	\$25,541	\$26,721	8.8%
<b>Aroostook</b>	\$18,915	\$19,685	\$20,838	\$21,959	\$23,125	10.8%
<b>Cumberland</b>	\$29,217	\$30,294	\$31,864	\$33,504	\$34,498	7.0%
<b>Franklin</b>	\$19,502	\$20,116	\$21,326	\$22,339	\$23,180	7.7%
<b>Hancock</b>	\$24,745	\$25,596	\$27,504	\$28,350	\$29,243	7.1%
<b>Kennebec</b>	\$23,332	\$24,088	\$25,434	\$26,286	\$27,324	6.1%
<b>Knox</b>	\$24,324	\$24,644	\$26,268	\$28,183	\$29,390	9.5%
<b>Lincoln</b>	\$24,842	\$25,424	\$26,815	\$28,411	\$29,420	7.3%
<b>Oxford</b>	\$19,670	\$20,161	\$21,429	\$22,352	\$22,999	5.9%
<b>Penobscot</b>	\$21,412	\$22,117	\$23,621	\$25,207	\$26,123	10.5%
<b>Piscataquis</b>	\$18,970	\$19,550	\$20,701	\$21,993	\$22,699	8.4%
<b>Sagadahoc</b>	\$24,172	\$24,667	\$26,039	\$27,231	\$27,955	4.8%
<b>Somerset</b>	\$19,073	\$20,049	\$21,405	\$22,181	\$22,933	8.9%
<b>Waldo</b>	\$19,454	\$20,288	\$22,974	\$23,330	\$23,775	10.7%
<b>Washington</b>	\$18,894	\$19,619	\$20,537	\$21,635	\$22,469	7.7%
<b>York</b>	\$24,550	\$25,778	\$27,561	\$28,033	\$28,482	5.1%
<b>Maine</b>	<b>\$23,596</b>	<b>\$24,484</b>	<b>\$25,972</b>	<b>\$27,157</b>	<b>\$28,038</b>	<b>7.7%</b>
<b>United States</b>	\$26,893	\$27,939	\$29,847	\$30,580	\$30,795	3.8%

Source: U.S. Bureau of Economic Analysis, 2004.

## 2. Poverty Rate

Poverty is associated with difficulties in health, education, emotional well-being, and delinquency. Children in poverty are more susceptible to health risks which eventually may lead to chronic diseases in adulthood, according to the U.S. Department of Health and Human Services. Also, the U.S. Bureau of the Census reports that children living in families who are poor are more likely than children living in other families to have difficulty in school, to become teen parents, and, as adults, to earn less and be unemployed more.

The federal government defines the poverty threshold for families as the level of income which is below a livable wage. The poverty level or threshold is determined by the number of members in a family. Table 3 provides 2003 figures from the U.S. Bureau of the Census regarding the weighted average thresholds of poverty.

**Table 3: Thresholds of Poverty - 2003**

Number in Family	Annual Earnings
<b>1 Person</b>	\$9,393
<b>2 Persons</b>	\$12,015
<b>3 Persons</b>	\$14,680
<b>4 Persons</b>	\$18,810

Source: US Bureau of the Census, 2004.

The most recent information from the U.S. Census Bureau indicates that

approximately 149,000 people in Maine were living below the poverty threshold in 2003. This was 11.7 percent of the total population, compared to the national level of 12.5 percent.

Twenty-seven states had poverty rates lower than Maine's. The chart below shows the 2-year average poverty rate for Maine and the United States for 2001-2002

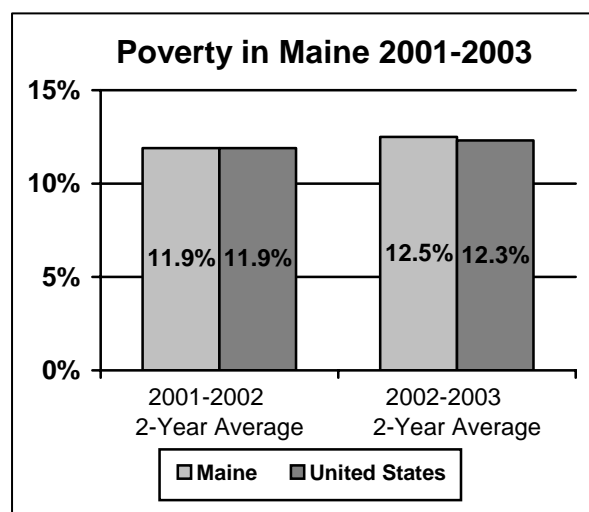


Figure 2: Source: US Bureau of the Census, 2004.

and 2002-2003. These numbers indicate a two-year average increase from 2001-2002 to 2002-2003 of 0.6 percent in Maine, compared to a 0.4 percent increase nationally. The poverty rate increase in Maine has slowed to almost the same as the national average, a significant improvement from last year's increase of 1.7 percent.

According to the *2002 Annual Report Card on Poverty in Maine* issued by



the Maine State Planning Office, an ongoing issue of considerable importance is the large numbers of Maine citizens who existed close to the poverty line but who were not within the federally defined poverty threshold. In fact, most persons with income below 185-200 percent of the poverty level, or two times the poverty level, have inadequate resources to meet basic needs. According to the 2004 Current Population Survey from the U.S. Census Bureau, nearly 30 percent of Maine's population had income below two times the federal poverty guideline, approximately 10 percent of whom are children.

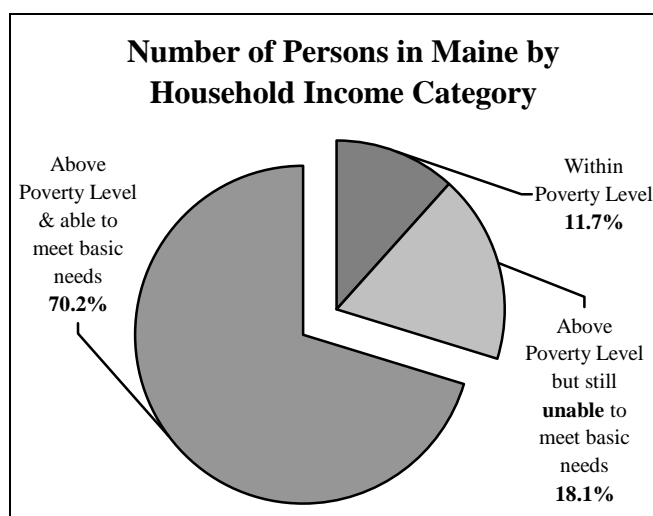


Figure 3: Source: U.S. Bureau of the Census, 2004.

Another indicator of poverty is the annual unemployment rate. According to the U.S. Bureau of Labor Statistics the number of unemployed in Maine increased from 4.6 percent in 2002 to 5.1 percent in 2003, a 0.5 percent increase; compared to 6.0 percent in 2003 nationally, only a 0.2 percent increase. Thirty-three states had higher unemployment rates in 2003 than Maine with Oregon being the highest at 8.2 percent.

The educational attainment of parents has also been linked to the poverty rate of children. As an example, the National Center for Children in Poverty reported that in 2003, 73 percent of children living in poverty had parents who did not hold a high school degree, compared with 43 percent whose parents had a high school degree, but no college education, and 15 percent whose parents had at least some college education. In Maine, 9 percent of low-income families (below 200% of the federal poverty level) are headed by parent(s) who do not have a high school degree.

### 3. Tax Burden

Tax burden refers to the total tax paid as a proportion of total income. The Maine Office of Fiscal and Program Review calculates tax burden by the following method: It combines local and state taxes and divides by the total income received by the population of the state. This method shows how much money the population as a whole has from which to pay state and local taxes. State taxes include personal and corporate income and sales taxes, insurance taxes on hospitals, taxes on some industries, and fees collected for hunting and fishing licenses. Local taxes include auto excise, property, and watercraft taxes. Total income available to the population includes dividends, interest, rent, salaries, proprietors' income, social security and welfare income.

Table 4 shows the state and local taxes as a percentage of income in Maine over the last five years based on information from the Maine Office of Fiscal and Program Review. The last column indicates the combined total tax burden including federal taxes according to Tax Foundation calculations.

When comparing the tax burden in Maine with the tax burden in other states, the rank depends on whether or not federal taxes are included in that percentage of income. Maine is ranked 2<sup>nd</sup> in the nation in tax burden as a percentage of income when comparing just the state and local taxes, New York is ranked 1<sup>st</sup>; however, when adding in the federal tax burden, Maine ranked 6<sup>th</sup>, and Connecticut ranked 1<sup>st</sup>.

**Table 4: State, Local, and Federal Taxes as a Percent of Income in Maine**

<b>Fiscal Year</b>	<b>Local Taxes</b>	<b>State Taxes</b>	<b>Combined State &amp; Local Taxes</b>	<b>Combined State, Local &amp; Federal Taxes</b>
<b>2000</b>	4.37%	8.35%	12.72%	34.9%
<b>2001</b>	4.36%	7.91%	12.27%	34.0%
<b>2002</b>	4.53%	7.47%	12.00%	31.0%
<b>2003</b>	4.67%	7.49%	12.16%	29.6%
<b>2004</b>	4.68%	7.76%	12.44%	28.9%

Source: Maine Office of Fiscal and Program Review, 2004 and Tax Foundation, 2004.

As can be seen by the following figures, tax burden based on income can be viewed in a variety of ways. For the people of Maine and New England, with the exception of Massachusetts and New Hampshire which has the second lowest tax burden in the country next to Alaska, the state and local tax burden is above the national average of 10.0 percent. In fact, Maine's tax burden is a full 2.3 percentage points above the national average.

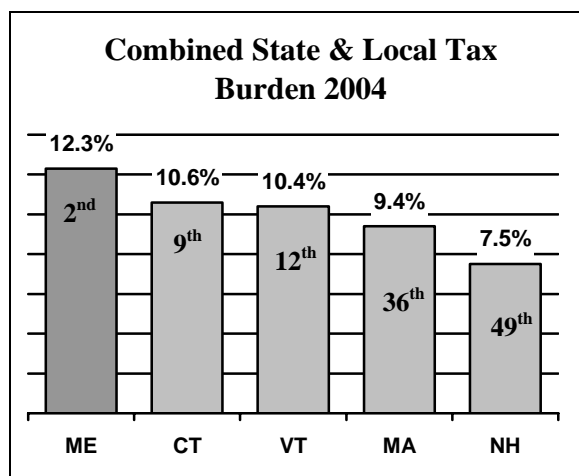


Figure 4: Source: Tax Foundation, 2004.

When factoring in federal taxes, the tax burden among New England states changes dramatically. With Connecticut's tax burden now ranked 1<sup>st</sup> in the nation and 4.5 percentage points above the national average of 27.8 percent, Maine's tax burden is now just 1.1 percent over the national average, and New Hampshire has suddenly jumped from being the second lowest in tax burden to 27<sup>th</sup> in the nation.

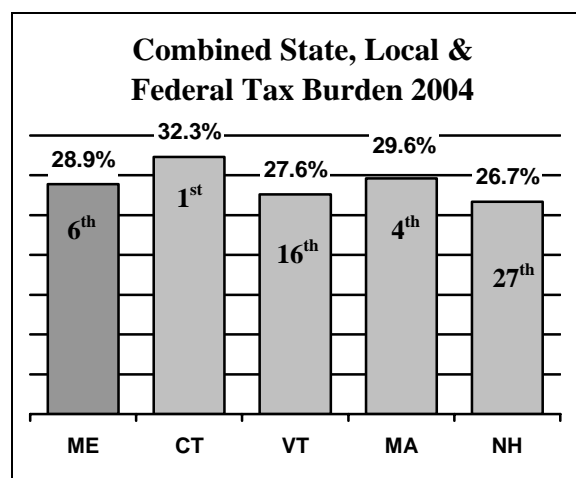


Figure 5: Source: Tax Foundation, 2004.

## 4. Property Valuation

Property tax is the major revenue source used by local communities to fund their schools. Property taxes are based on the value of property. The state assessor establishes the annual State Property Valuation for each community based on the previous year's real estate sales. The valuation calculated by the state is then divided by the number of public school students to acquire a valuation per pupil rate for each community. The per pupil

valuation, as reported in Table 5, is the major factor in establishing the community's ability to raise local funds for education.

The data in Figure 6 indicate that the per pupil valuation has been steadily rising over the past six years, with an overall increase of 70.8 percent from 1994-95 to 2003-04 (not adjusted for inflation). Since 1994-95, the per pupil student valuation has increased from \$302,006 to \$515,877 in 2003-04.

**Table 5: State Per Pupil Valuation**

Valuation Year	Valuation
<b>1994-1995</b>	\$302,006
<b>1995-1996</b>	\$300,424
<b>1996-1997</b>	\$303,980
<b>1997-1998</b>	\$310,500
<b>1998-1999</b>	\$320,682
<b>1999-2000</b>	\$354,880
<b>2000-2001</b>	\$378,625
<b>2001-2002</b>	\$412,835
<b>2002-2003</b>	\$460,191
<b>2003-2004</b>	\$515,877

Source: Maine Department of Education, 2004.

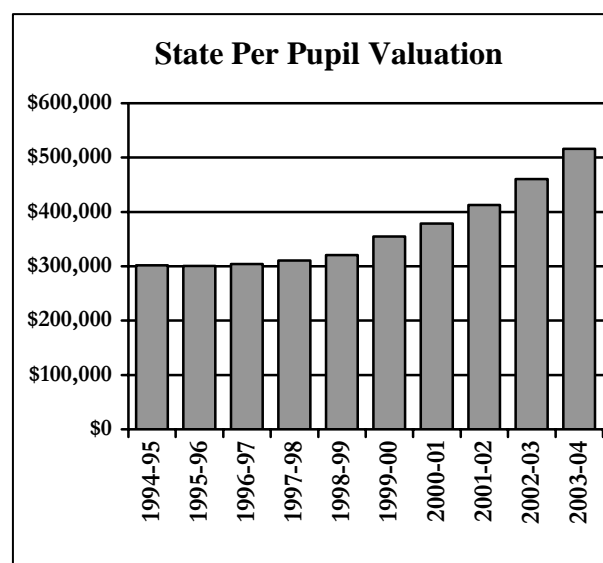


Figure 6: Source: Maine Department of Education, 2004.

## 5. Local Revenues

Education in Maine is primarily funded through local property taxes and state aid to local school districts. In 2003-04, 58.0 percent of education funds came directly from local property taxes, while 42.0 percent was provided through state subsidy, according to the Maine Department of Education.

Local revenues, made up mainly of property taxes, provide the local portion of all education expenditures. Local property taxation is expressed in terms of mills which represent the dollars of property tax raised per \$1,000 of property valuation. The number of mills to be raised, or mill rate, is determined for each community by dividing the total revenue to be raised by the total

valuation of the community. This mill rate is then applied to the valuation of each property.

For example, a community with a valuation of \$50,000,000 which needs to raise \$600,000 in property tax would need a mill rate of 12 ( $\$600,000/\$50,000,000=.012$  or \$12.00 per \$1,000 of value). The property tax for a home valued at \$100,000 would therefore be \$1,200. Expressed as mills, Table 6 on this page, and Figure 7 on the next page, present the full value property tax rate for all Maine communities (used to fund all community services, including education) and the approximate average mills raised to fund only education.

**Table 6: Total Average Mills Raised by Communities and Average Mills for Education**

School Year	Average Total Mills Raised	Average Total Mills Raised for Education	Percent of Total Mills for Education
1993-94	15.53	8.73	56.2%
1994-95	16.03	9.49	59.2%
1995-96	16.45	10.05	61.1%
1996-97	16.76	10.48	62.5%
1997-98	16.78	10.84	64.6%
1998-99	16.78	11.07	66.0%
1999-00	16.46	11.29	68.6%
2000-01	15.97	11.63	72.8%
2001-02	15.56	11.87	74.7%
2002-03	14.97	11.62	77.6%
2003-04	13.89	10.92	78.6%

Source: Maine Department of Education, Maine Revenue Services, 2004.

During 1993-94, the average number of mills raised for education was 8.73, compared to 10.92 mills in 2003-04. The range of mills raised for education by individual communities and municipalities is large, varying in 2003-04 from a low of 0.19 mills to a high of 23.30 mills. The percentage of mills raised for education, as a comparison of total mills raised by communities, has been steadily increasing over the past ten years from 56.2 percent in 1993-94 to 78.6 percent in 2003-04 as shown in Figure 7.

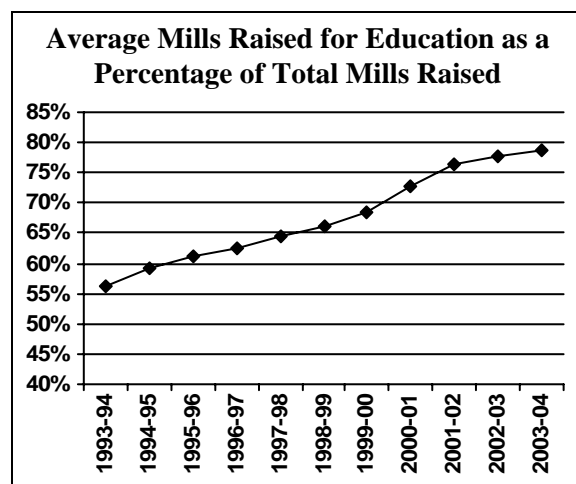


Figure 7: Source: Maine Department of Education, Maine Revenue Service, 2004.

## 6. Education Revenue Sources

Funding of education in Maine is primarily a shared responsibility among the state and local governments. According to the Maine Department of Education, Maine spent approximately \$2.0 billion on K-12 education during the 2003-04 school year. As reported in Table 7, this was an increase of \$750 million, or 56.6 percent, since 1994-95 (not accounting for inflation).

The concept underlying the school funding formula is “pupil equity”: the amount of funding available to support each student’s education should not be dependent upon the wealth of the student’s place of residence. The “pupil equity” principle is balanced by the principle of “taxpayer equity” in that the school funding formula prescribes an amount of money that must be raised locally. The state appropriation, General Purpose Aid (GPA), is then distributed through the school funding

formula to each school administrative unit; this includes a method of calculating a minimum subsidy so that all units will receive some state aid for education.

The state share is determined by state law which specifies the education costs that are to be subsidized. Beginning in 2005-06, subsidized costs will be determined according to the new Essential Programs and Services funding formula. The state pays all of the costs associated with adjustments for expenses incurred by certain school units; for instance, special education costs of state wards and state agency clients. Transportation for after-school activities and field trips, unapproved debt service and capital outlay, and unapproved leases are all examples of expenditures which are paid entirely by the local unit, also known as local funding without state participation.

**Table 7: Maine Education Revenue Sources (in Millions)**

Revenue Source	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
<b>State*</b>	\$654.2	\$662.1	\$680.4	\$712.9	\$781.2	\$810.9	\$864.3	\$886.6	\$901.5	\$907.2
<b>Local</b>	\$616.6	\$653.5	\$687.2	\$722.4	\$752.9	\$788.9	\$840.9	\$909.3	\$962.3	\$1,006
<b>Federal</b>	\$54.9	\$56.4	\$58.1	\$67.2	\$82.9	\$96.2	\$103.5	\$115.4	\$136.7	\$162.1
<b>Total Dollars</b>	\$1,325	\$1,371	\$1,425	\$1,502	\$1,616	\$1,696	\$1,808	\$1,907	\$1,996	\$2,076

Source: Maine Department of Education, *Statewide School Finance Data*, 2004.

\* includes retirement, subsidy and other state grants.

## The Condition of K - 12 Public Education in Maine - 2005

The Education Commissioner's Recommended Funding Level (RFL) percentages for the past ten years, as well as the actual state and local percentage levels, are listed in Table 8. While the RFL remained at approximately 57 percent between 1993-94 and 1995-96, it has been fluctuating since, and is currently at 47.7 percent. Since 1994-95, the state's share of the actual costs has declined from 45.8 percent to 42.0 percent in 2003-04. Correspondingly, the local community contribution, including local option funds

for schools, has increased from 54.2 percent to 58.0 percent in 2003-04, as shown in Figure 8.

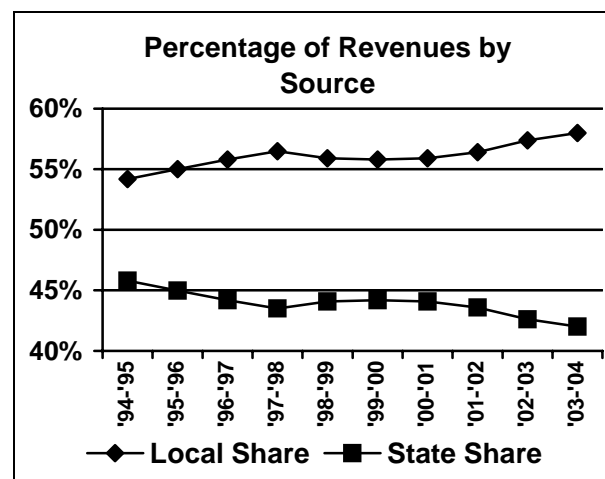


Figure 8: Source: Maine Department of Education, 2004.

**Table 8: Percentage of Education Revenues by Source**

Revenue Sources	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
<b>Recommended Funding Level</b>	57.0%	57.0%	52.2%	52.4%	53.1%	53.6%	50.4%	49.1%	47.6%	47.7%
<b>State Share of Actual Costs</b>	45.8%	45.0%	44.2%	43.5%	44.1%	44.2%	44.1%	43.6%	42.6%	42.0%
<b>Local Share of Actual Costs</b>	54.2%	55.0%	55.8%	56.5%	55.9%	55.8%	55.9%	56.4%	57.4%	58.0%

Source: Maine Department of Education, *Statewide School Finance Data*, 2004.



## 7. Public School Student Enrollment

The Maine Department of Education reported that in 2003-04 there were 202,025 children enrolled in Maine K-12 public schools. This represents an overall ten-year decrease of 4.8 percent, or 10,220 students, since 1993-94. However, Figure 9 does show a slight increase in student enrollment between school years 1993-94 to 1996-97.

According to the U.S. Department of Education, while national public school enrollment is expected to increase by 4.0 percent between 2001 and 2013, Maine's enrollment is expected to *decrease* by approximately 12.5 percent between 2004 and 2013.

Table 9 on the following page shows changes in Maine public school enrollment by county between the 1993-94 and 2003-04

school years. Only three counties showed an *increase* in the last *ten* years: Cumberland County experienced the highest increase, 6.5 percent, and Sagadahoc and York Counties, 2.9 percent each. However, in the last *five* years Cumberland and York experienced a *decrease* in enrollment while Sagadahoc showed a minimal *increase* of 0.44 percent. All other counties have shown a steady decline in student enrollment between 1993-94 and 2003-04.

The last column in Table 9 reports the projected changes in county student populations for the next ten years from 2004 to 2013, according to the Maine State Planning Office. As shown in the table, all sixteen counties are projected to *decline* in student enrollment.

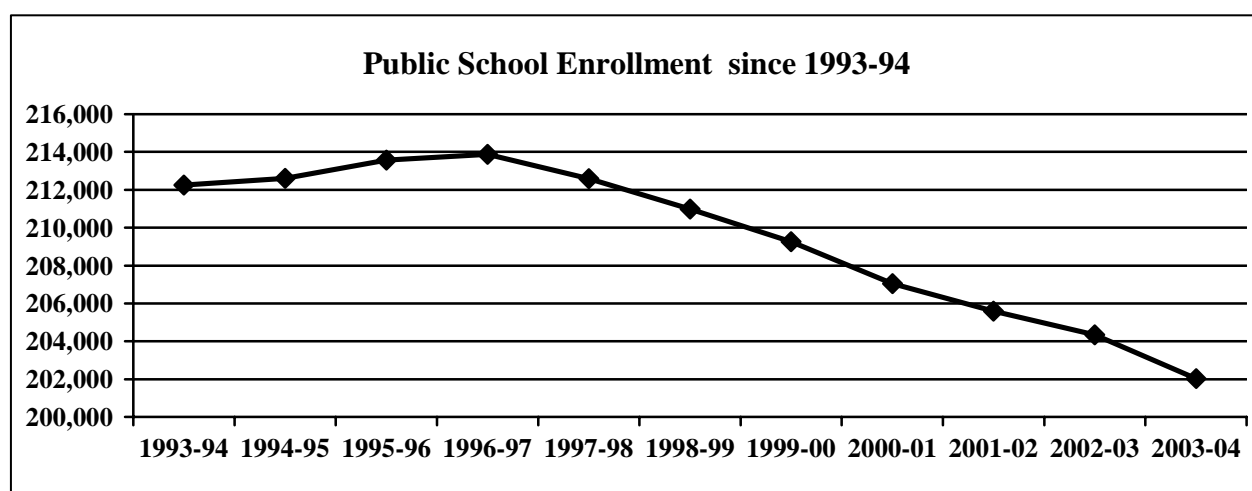


Figure 9: Source: Department of Education, 2004.

**Table 9: Public School 1993-94 & 2003-04 Fall Enrollments by County**

<b>County</b>	<b>Enrollment 1993-94</b>	<b>Enrollment 2003-04</b>	<b>Five Year Enrollment Changes</b>	<b>Ten Year Enrollment Changes</b>	<b>Projected Change in Student Enrollment 2004-2013</b>
<b>Androscoggin</b>	17,320	16,318	-1.24%	-5.79%	-10.31%
<b>Aroostook</b>	15,150	11,813	-10.15%	-22.03%	-21.33%
<b>Cumberland</b>	39,728	42,301	-0.97%	+6.48%	-6.57%
<b>Franklin</b>	5,486	4,814	-9.93%	-12.25%	-23.05%
<b>Hancock</b>	8,229	7,666	-6.34%	-6.84%	-17.45%
<b>Kennebec</b>	20,197	18,682	-5.41%	-7.50%	-16.32%
<b>Knox</b>	5,887	5,576	-2.24%	-5.28%	-11.98%
<b>Lincoln</b>	5,303	4,709	-10.56%	-11.20%	-20.38%
<b>Oxford</b>	10,037	9,798	-2.81%	-2.38%	-13.91%
<b>Penobscot</b>	25,127	22,701	-6.75%	-9.65%	-14.86%
<b>Piscataquis</b>	3,363	2,677	-12.17%	-20.40%	-25.56%
<b>Sagadahoc</b>	6,478	6,669	+0.44%	+2.95%	-15.61%
<b>Somerset</b>	9,143	8,430	-1.18%	-7.80%	-11.44%
<b>Waldo</b>	5,763	5,391	-7.29%	-6.45%	-15.32%
<b>Washington</b>	6,214	4,820	-11.02%	-22.43%	-25.49%
<b>York</b>	28,820	29,660	-2.66%	+2.91%	-6.43%
<b>Totals</b>	<b>212,245</b>	<b>202,025</b>	<b>-4.24%</b>	<b>-4.82%</b>	<b>-12.50%</b>

Source: Maine Department of Education and Maine State Planning Office, 2004.

## 8. Private School and Home School Student Enrollment

**Private School:** Since 1993-94, when 13,049 students were enrolled in approved K-12 private schools in Maine, the number had increased to 17,530 in 2000-01, and has decreased slightly since then to 16,726 in 2003-04.

Figure 10 shows the ten year enrollment trend. Although the ten year change shows an increase of 28.2 percent statewide, the last three years have shown a 4.6 percent decrease. This could be the result of declining student populations throughout the state, as indicated in the public school student enrollment declining numbers.

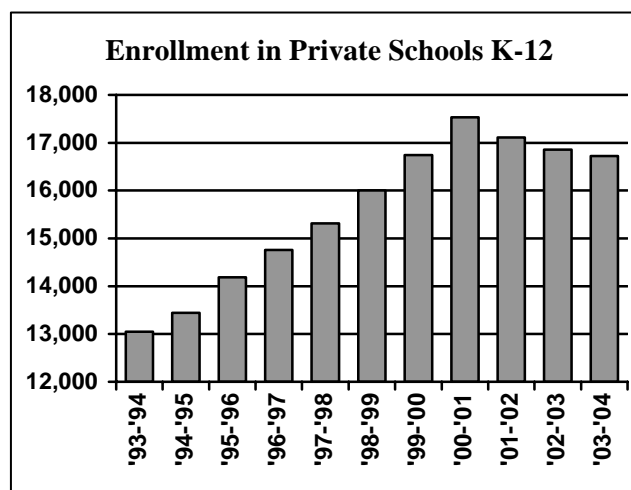


Figure 10: Source: Maine Department of Education, 2004.

**Home School:** In 1990 the number of students who were home schooled was approximately 1,500. Figure 11 shows that in 1995-96, 3,394 students were home schooled, more than double the number reported in 1990. Since then those numbers have been steadily increasing to a current state total of 4,699 students in 2003-04, an increase of 38.5 percent since 1995-96.

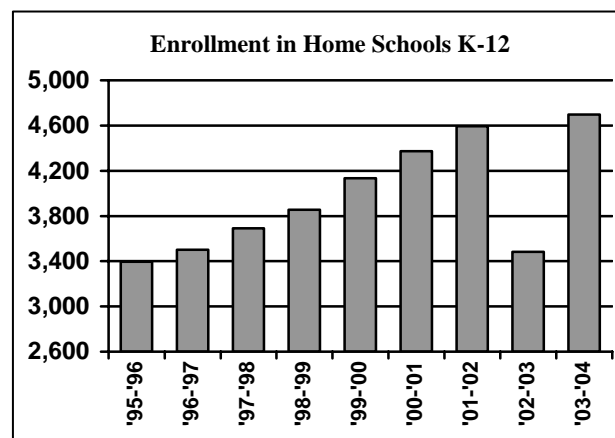


Figure 11: Source: Maine Department of Education, 2004.

Note: According to Maine Department of Education personnel, the large decline in numbers of students being home-schooled from 2001-02 to 2002-03 was due to a stricter enforcement of the rules requiring more information from parents on the application to home-school their children resulting in a decrease of applications being submitted. The numbers then increased dramatically between 2002-03 and 2003-04 when the requirement of an application was replaced with a much simpler letter of intent.

## 9. Language Minority Student Enrollment

In 2003-04, the public school population in Maine included 4,821 students who spoke a total of 89 different heritage languages. Of these students, 3,179, or 63.8 percent, were English Language Learner's (ELL), according to the most recent available data from the Maine Department of Education. This designation refers to students whose native language is not English and who need instruction in language acquisition through such structured approaches as bilingual education or English as a second language. Enrollments have been fluctuating since 1994-95; however they have increased by 48.2 percent since 1998-99 for all students whose primary language is one other than English. During the same period, as shown in Figure 12, the number of students who are English Language Learner's has increased by 26.3 percent.

There were 92 school districts that reported enrollments of ELL students at various levels of concentration, according to 2003-04 data. For instance, Portland had the highest number, 1,110 ELL students. The next highest numbers of ELL students were in Lewiston (304) and the Indian Township School (137). Staff costs in 2003-04 were approximately \$7.5 million. This breaks down to \$5.4 million in local funds and \$2.1 million in state funds.

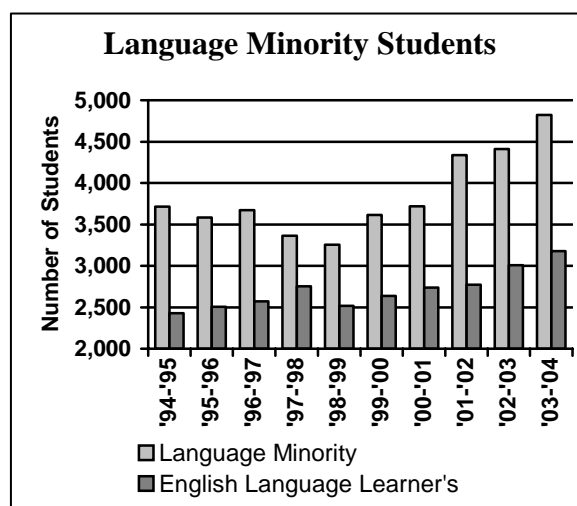


Figure 12: Source: Maine Department of Education, 2004.

## 10. Special Education Student Enrollment

Passed in 1975, revised in 1997, and reauthorized in December 2004, PL105-17 [the Individuals with Disabilities Education Act (IDEA-97)] directed public schools to enroll and educate all students with special needs and to meet these needs in the least restrictive environments. In Maine, students enrolled in special education range in age from 3 to 21 years. The numbers of students qualifying for special education services has increased from 29,363 in 1993-94 to 37,784 in the 2003-04 school year, an increase of 8,421 students. This has been a 28.7 percent increase over ten years in special education student enrollment as shown in Table 10 and Figure 13.

In 2003-04 the percent of all Maine students receiving special education services was approximately 18.7 percent. (Note: Data reflects special education enrollment ages three through 21 years while regular

education enrollment in Maine is for students ages four through 20 years old.) At the national level, 13.9 percent of students, ages three through 21, were served under the Individuals with Disabilities Education Act.

Of these students in 2003-04, approximately 53.8 percent were educated outside of the regular classroom less than 21 percent of the time in Maine, while 47.3 percent of students were educated outside the regular classroom less than 21 percent of the time nationally in 1999-00 (the most recent available data.)

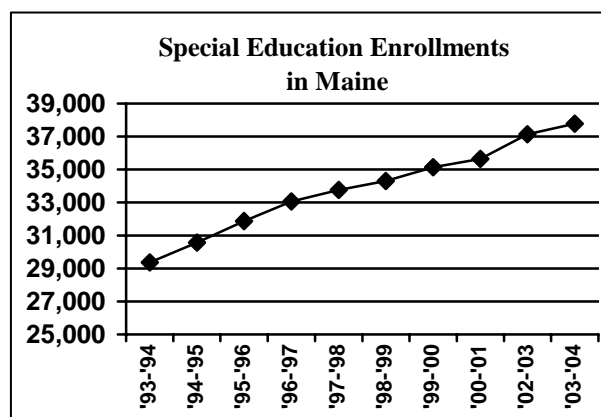


Figure 13: Source: Maine Department of Education, 2004.

**Table 10: Special Education Enrollment in Maine**

Students	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Total Public School	216,943	217,394	218,462	218,560	217,570	216,121	214,984	212,957	211,058	204,853	202,025
Total Special Education	29,363	30,565	31,870	33,055	33,762	34,306	35,139	35,633	36,580	37,139	37,784
% Special Education	13.5%	14.1%	14.6%	15.1%	15.5%	15.9%	16.0%	16.1%	17.3%	18.1%	18.7%

Source: Maine Department of Education, Office of Special Services, 2004.

Maine students receive special education services for one of fourteen classification categories. In 2003-04, two types of disabilities accounted for approximately 60 percent of the students served in Maine: Specific Learning Disability (33.6 percent), and Speech and Hearing Impairment (25.8 percent). Over the last ten years, there has been noticeable growth in the proportion of students with disabilities identified as “Other Health Impairment” and “Autism”. Between the 1994-95 and 2003-04 school years, the

proportion of students served as “Other Health Impairment” grew from 2.8 percent to 11.3 percent, and the proportion of students identified as having “Autism” grew from 0.36 percent to 2.7 percent.

Table 11 reports numbers and percentages of students enrolled in special education relative to each county's total student population. The variations range from a low of 12.9 percent in Piscataquis County to a high of 24.1 percent in Somerset County.

**Table 11: Numbers and Percents of Students with Disabilities by County, 2003-04**

<b>County</b>	<b>Number of Students in Special Education</b>	<b>Number of Students Enrolled in Public Schools</b>	<b>Percent of County Student Population in Special Education</b>
<b>Androscoggin</b>	3,185	16,318	19.5%
<b>Aroostook</b>	2,036	11,813	17.2%
<b>Cumberland</b>	6,388	42,301	15.1%
<b>Franklin</b>	776	4,814	16.1%
<b>Hancock</b>	1,497	7,666	19.5%
<b>Kennebec</b>	3,494	18,682	18.7%
<b>Knox</b>	1,241	5,576	22.3%
<b>Lincoln</b>	1,018	4,709	21.6%
<b>Oxford</b>	1,839	9,798	18.8%
<b>Penobscot</b>	4,202	22,701	18.5%
<b>Piscataquis</b>	346	2,677	12.9%
<b>Sagadahoc</b>	1,354	6,669	20.3%
<b>Somerset</b>	2,034	8,430	24.1%
<b>Waldo</b>	1,126	5,391	20.9%
<b>Washington</b>	1,055	4,820	21.9%
<b>York</b>	6,151	29,660	20.7%
<b>Maine Total</b>	<b>37,784</b>	<b>202,025</b>	<b>18.7%</b>

Source: Maine Department of Education, 2004.

## 11. Children's Well-being and Financial Security

Financial security impacts on children's psychological and emotional health, access to health care, and overall well-being. The likelihood of financial security increases for children who live with both parents, and decreases for children who live with only one parent. In Maine, the U.S. Census Bureau reported that 12.7 percent of children lived in female-headed single-parent families in the year 2003. This compared to a national rate of 11.4 percent.

Further examination of children under age six in the United States living in female-headed, single-parent households in 2003 showed that approximately 52.9 percent were living below the poverty threshold. This is over five times the rate of their counterparts in married-couple families.

According to the Annie E. Casey Foundation's *Kids Count 2004 Data Book*, other key indicators of children's well-being and financial security include teens who are high school dropouts; teens not attending school and not working; children living in families where no parent has full-time, year-round employment; children in poverty; and families with children headed by a single parent. Each of these indicators may contribute to a child living in what might be considered a "high risk" family.

The following table shows how Maine compared nationally and in other New England states for each of these indicators and the 50 state ranking provided by the Annie E. Casey Foundation based on a three year average of data from 2000 to 2002.

**Table 12: Percent of Children Living in High Risk Family Categories  
(3-year average of data from 2000-2002)**

Indicator	ME		NH		VT		US
	%	Rank	%	Rank	%	Rank	%
Teens who are high school dropouts	8%	13	9%	24	7%	7	9%
Teens not attending school and not working	8%	19	5%	3	6%	6	8%
Children living in families where not parent has full-time, year-round employment	26%	33	20%	8	23%	19	25%
Children in poverty	13%	17	7%	1	12%	9	16%
Families with children headed by a single parent	26%	11	25%	7	28%	22	28%

Source: Annie E. Casey Foundation, 2004.

## 12. Children's Well-being and Access to Health Care

**Maine Children Without Health Insurance:** Children who have health insurance are more likely than others to receive necessary and preventative medical and dental care. A recent survey conducted by the U.S. Bureau of the Census revealed that the number of uninsured children (those 18 years and under) declined from 11.1 million (15.4 percent) in 1998 to 8.4 million (11.4 percent) in 2003.

For Maine, the U.S. Bureau of the Census reported a decrease in the number of uninsured children since 1995, when 47,000, or 16.1 percent, were uninsured. According to findings from the U.S. Census Current Population Survey, 17,000, or 6.0 percent, of Maine's children lacked health insurance in year 2003. This was a slight decrease over 2002 as shown in Table 13.

**Table 13: Percent of Children Without Health Insurance, Maine & United States**

Year	Maine	U.S.
1999	6.5%	12.6%
2000	8.0%	11.7%
2001	7.5%	11.7%
2002	7.9%	11.6%
2003	6.0%	11.4%

Source: US Bureau of the Census, Current Population Survey, 2004.

**Maine Children With Maine Care:** The number of Maine children who meet eligibility levels for Maine Care (formerly Medicaid) also is an indication of children's health needs and access to health care. The Maine Department of Health and Human Services reported that in fiscal year 2003, 37.5 percent, or 115,610 Maine children, aged 0-17 years, participated in Maine Care. The participation rate among counties varied greatly from a high of 61.6 percent in Washington County to a low of 26.7 percent in Cumberland County, as seen in Figure 14.

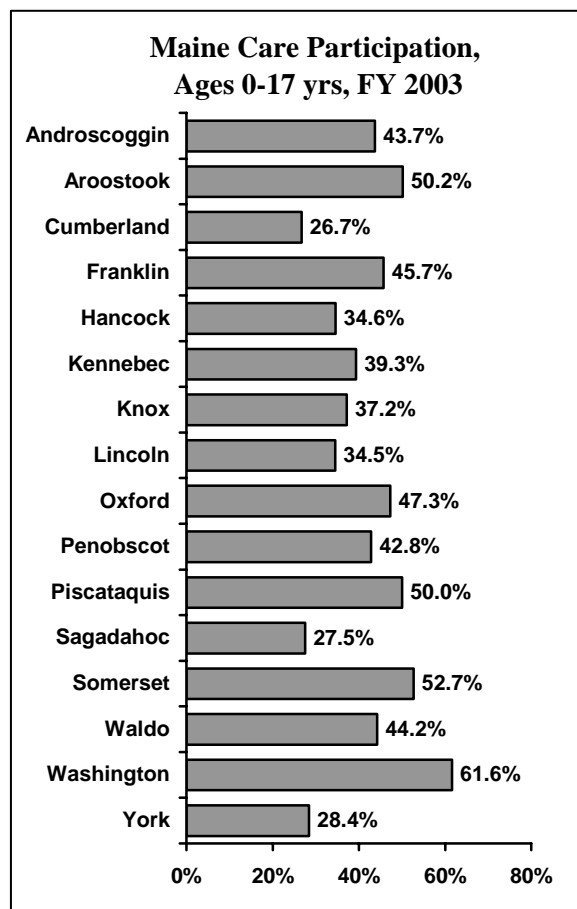


Figure 14: Source: Maine Department of Health & Human Services, Bureau of Health, 2004.



**Maine Children Immunizations:** Another indicator of children's well-being is the level of immunizations. Maine requires all children to have a minimum of the following immunizations before entering school: 5 doses of DTP or 3 doses of TD; 2 doses of MMR; 4 doses of OPV; and effective in 2003, 1 dose of Varicella. The National Immunization Program, a division of the Center for Disease Control, collects data on vaccinations yearly using the National Immunization Survey. Figure 15 indicates the percentage of children 24 months old in Maine and the United States who have been immunized with the 4:3:1:3 combination, which includes all those listed above except the varicella vaccine. As can be seen by the chart, Maine had been above the nation in immunization of 24 month old children until 2003 when Maine dropped below the nation by 2.2 percent.

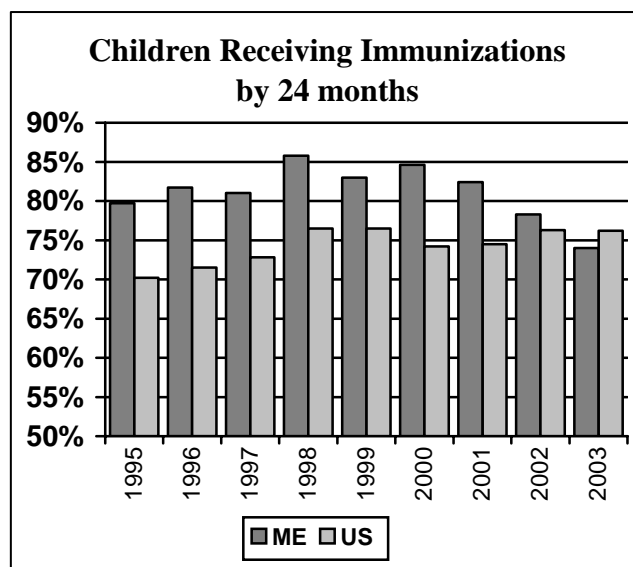


Figure 15: Source: Center for Disease Control, 2004.

### 13. Early Childhood Education

Studies have shown that participation in center-based early childhood care and education programs such as Head Start, nursery school, and prekindergarten not only provide childcare support for working parents, but also are instrumental in preparing a child for elementary school. The National Center for Education Statistics reported that in 2000-01, 35.3 percent of the public elementary schools in the United States offered prekindergarten classes. In that same year, 10.7 percent of public elementary schools in Maine offered prekindergarten classes. Since then the numbers of schools offering prekindergarten programs in Maine has increased to 20.3 percent and the number of students enrolled in these programs has increased by 56.2 percent.

Recent studies have also shown that increasing the length of time kindergartners are in school may increase their cognitive, social and physical development. These children also have greater access to other school services, such as the school lunch program, guidance services, special education services, and Title I services. In Maine, the number of schools offering all day kindergarten has increased significantly since 1999-00, as may be seen in Table 14 below. Consequently the number of children attending these all day programs has also increased from 10.3 percent in 1997-98 to 50.8 percent in 2003-04. Most recent national information available indicated that 60.3 percent of kindergarteners nationwide attended a full-day program in 2000-01.

**Table 14: PreKindergarten and All Day Kindergarten in Maine**

Year	Early Kindergarten and/or 4-Year Old Programs			All Day Kindergarten		
	Schools Offering	% of Total Elementary Schools	Students Attending	Schools Offering	Students Attending	% of Total Kindergarten Students
<b>1997-98</b>	43	n/a	969	n/a	1,634	10.3%
<b>1998-99</b>	54	n/a	1,078	n/a	2,290	14.4%
<b>1999-00</b>	57	10.0%	1,101	93	2,457	17.2%
<b>2000-01</b>	60	10.7%	1,062	153	4,463	32.4%
<b>2001-02</b>	75	12.8%	1,333	201	5,515	40.2%
<b>2002-03</b>	78	13.5%	1,525	220	6,729	49.0%
<b>2003-04</b>	91	20.3%	1,659	225	7,125	50.8%

Source: Maine Department of Education, 2004.

While both Head Start and Prekindergarten are designed to provide children with experiences that will prepare them for school, their services and target recipients differ. Head Start programs focus on providing comprehensive services for low-income children and their families, specifically, services that center on education, socio-emotional development, physical and mental health, nutrition, and parent supports. Prekindergarten tends to focus only on the child – in contrast to the dual child-family focus of Head Start. The administration of Head Start is also different from Prekindergarten programs. Head Start funds flow directly from the U.S. Department of Health and Human Services to grantees. Head Start grantees are mostly nonprofit organizations, but some are schools or school districts.

In Maine, 3,970 infants, toddlers and preschoolers benefited from Maine's Head Start programs in 2002-03. Programs received funding from both federal and state governments. Maine is one of only a few states whose funding allows for more children to be served. Figure 16 illustrates the sources of funding for Head Start in Maine in 2001-02.

Head Start programs are required to screen and provide on-going assessment of all enrolled children. Outcome measures

across the State of Maine demonstrate that all children ages 3 to 5 increased their literacy skills. National FACES Research has shown that at the end of the program year, the typical Head Start child possesses specific cognitive and social skills that signify a readiness to learn in Kindergarten, and in Kindergarten, Head Start children exceeded the growth expectation of a typical kindergartner. Attendees showed significant gains in vocabulary, letter recognition, writing, and other pre-literacy skills.

In a more localized study of school readiness, a survey of the Success By 6 project by the Center For Education Policy, Applied Research, and Evaluation found that in 2002, 67 percent of teachers surveyed indicated that Head Start or other preschool programs made a positive difference in preparing children for school.

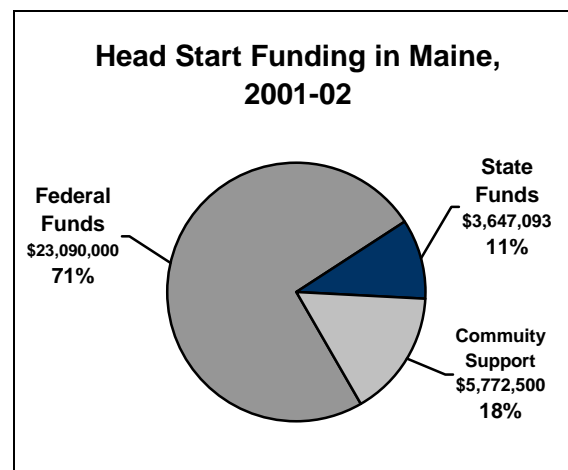


Figure 16: Source: Maine Head Start, 2003

## 14. School Lunch Program Eligibility

Subsidized school lunch programs help to meet the nutritional needs of children. In school year 2003-04, as reported by the Maine Department of Education, students who qualify for *free* lunches must live in a household earning no more than \$23,920 for a family of four. To qualify for *reduced* lunches, students must live in a household earning no more than \$34,040 for a family of four.

In 1993-94, 30.6 percent of the total public school population qualified for lunch subsidies. Figure 17 and Table 15 show that since 1993-94, the percentages fluctuated until they reached a ten-year high of 32.7 percent in 2003-04.

Overall, the number of students qualifying for *reduced* lunches has increased, from 6.5 to 7.7 percent since 1993-94. The percent of students eligible for *free* lunches had been decreasing slightly

since 1993-94 when it was at 24.0 percent until it reached a ten-year high of 25.1 percent in 2003-04. In school year 2003-04 approximately 50,543 students were eligible for the *free* lunch program and 15,445 students were eligible for the *reduced* lunch program, for a total of 65,988 students, or 32.7 percent of the total school population of participating schools.

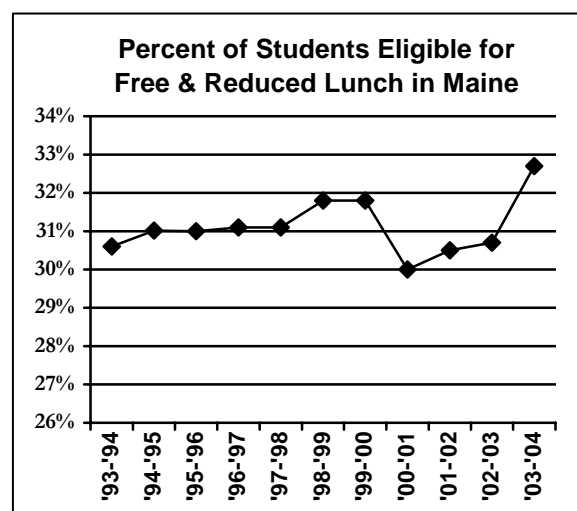


Figure 17: Source: Maine Department of Education, 2004.

**Table 15: Students Eligible for Participation in Subsidized School Lunch Programs in Maine**

Students Eligible	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Free Lunches	24.0%	24.2%	24.2%	24.3%	23.8%	24.2%	23.9%	22.1%	22.9%	23.1%	25.1%
Reduced Lunches	6.5%	6.8%	6.8%	6.9%	7.3%	7.7%	7.8%	7.9%	7.6%	7.6%	7.7%
Total Students	30.6%	31.0%	31.0%	31.1%	31.1%	31.8%	31.8%	30.0%	30.5%	30.7%	32.7%

Source: Maine Department of Education, 2004.

Table 16 lists the percentages of students by county in Maine who were eligible to receive subsidized school lunches in 2003-04. Cumberland County reported

the lowest percentage of school lunch eligibility (22.3 percent) while Washington County reported the highest percentage (52.7 percent).

**Table 16: Children Eligible to Receive Subsidized School Lunches, by County, 2003-04**

<b>County</b>	<b>Students Eligible for Subsidized Lunches</b>	<b>Percent of Enrollees in School</b>
<b>Androscoggin</b>	5,615	36.3%
<b>Aroostook</b>	5,438	45.2%
<b>Cumberland</b>	9,367	22.3%
<b>Franklin</b>	2,050	43.0%
<b>Hancock</b>	2,214	30.6%
<b>Kennebec</b>	6,432	32.7%
<b>Knox</b>	1,447	30.3%
<b>Lincoln</b>	1,436	30.3%
<b>Oxford</b>	4,215	39.9%
<b>Penobscot</b>	8,287	35.5%
<b>Piscataquis</b>	1,629	52.1%
<b>Sagadahoc</b>	1,590	30.9%
<b>Somerset</b>	4,001	45.1%
<b>Waldo</b>	2,376	44.0%
<b>Washington</b>	2,615	52.7%
<b>York</b>	7,276	24.7%
<b>Maine</b>	<b>65,988</b>	<b>32.7%</b>

Source: Maine Department of Education, 2004.

## 15. Teen Birth Rates and Temporary Aid to Needy Families

Research indicates that children born to single teenage mothers are more likely to drop out of school, give birth out of wedlock, divorce or separate, and be dependent on welfare. In 2002, with 25.4 births per 1,000 women, Maine had the 4<sup>th</sup> lowest teen birth rate in the country, just below Vermont (24.2), Massachusetts (23.3), and New Hampshire (20.0). This reflected a significant decline in birth rates for Maine teenagers aged 15-19 years since 1991 when the rate was 43.5. Figure 18 provides a comparison of teen birth rates for Maine and the United States, according to the Centers for Disease Control and Prevention.

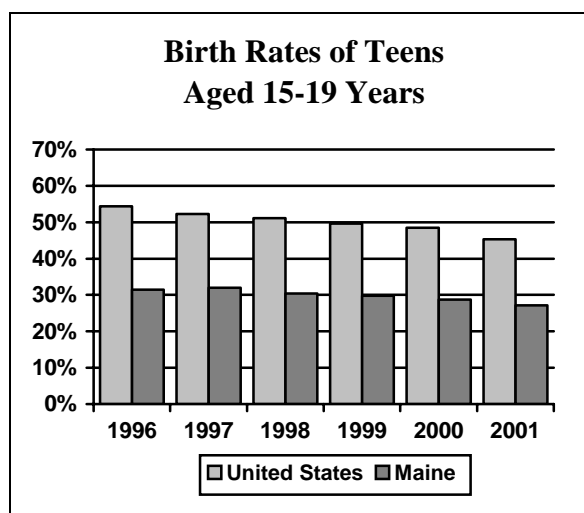


Figure 18: Source: National Vital Statistics Reports, 2004.

The level of public assistance provided through the program of Temporary Aid to Needy Families (TANF) is also

important in discussions of children's well-being. According to the Maine Department of Health and Human Services, Bureau of Family Independence, in September, 2003 there were 20,553 Maine children receiving TANF. This was 6.8 percent of all children in Maine aged 0-17 years. Figure 19 shows percentages of children on TANF by county. Androscoggin had the highest with 10.9 percent of its children on TANF while Hancock County had the lowest at 3.4 percent.

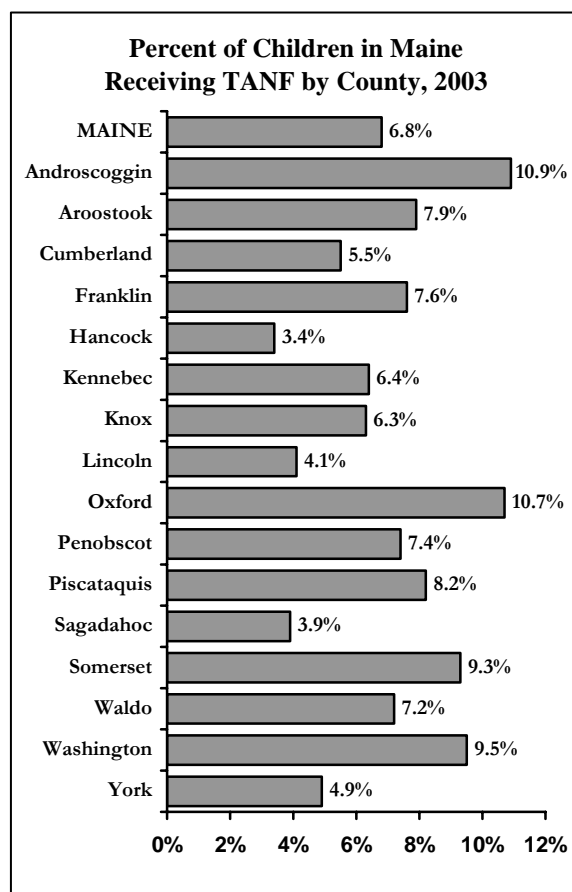


Figure 19: Source: Maine Department of Health & Human Services, Bureau of Family Independence, 2004.

## 16. Youth Risk Behaviors

In its recent report on youth risk behaviors, the Center for Disease Control revealed that in the United States in 2003 the most prevalent causes of death in 10-24 year-olds were motor-vehicle accidents (32.3%), other unintentional injuries (11.7%), homicide (15.1%), and suicide (11.7%). Health-risk behaviors, such as tobacco, alcohol, and other illicit drug use, also contribute to the leading causes of mortality and morbidity among youth and adults, and are often established during youth.

In terms of alcohol and other drug use, Table 17 shows how Maine's youth, 10-24 years old, compared to the alcohol and drug use behaviors of youth in New Hampshire, Vermont, and the United States.

Maine's youth tended to use marijuana and inhalants at a slightly higher rate than the national youth population, however, use of alcohol and cocaine have dropped below the national average.

A review of tobacco use, as reported in Table 18 on the next page, shows that Maine youth who smoked cigarettes during the past month were slightly fewer (20%) than their counterparts in the United States (22%). Maine youth (10%) smoked cigarettes on 20 or more days during the past month, slightly less than youth in Vermont (11%). Eleven percent of Maine youth smoked cigars; this was less than the national average (15%) and slightly less than use reported in New Hampshire (14%) and Vermont (12%).

**Table 17: Alcohol and Other Drug Use Among Youth, 2003.**

	United States	Maine	New Hampshire	Vermont
Drank alcohol during the past month.	45%	42%	47%	44%
Reported episodic heavy drinking during the past month.	28%	27%	31%	26%
Used marijuana during the past month.	22%	26%	31%	28%
Ever used cocaine.	9%	8%	10%	N/A
Ever sniffed or inhaled intoxicating substances.	12%	13%	13%	N/A

Source: U.S. Center for Disease Control and Prevention, 2004.

**Table 18: Tobacco Use Among Youth, 2003.**

	<b>United States</b>	<b>Maine</b>	<b>New Hampshire</b>	<b>Vermont</b>
Smoked cigarettes during the past month.	22%	20%	19%	22%
Smoked cigarettes on 20 or more days during the past month.	10%	10%	10%	11%
Used smokeless tobacco during the past month.	7%	4%	4%	5%
Smoked cigars during the past month.	15%	11%	14%	12%

Source: U.S. Center for Disease Control and Prevention, 2004.

The risk behaviors, as shown in Table 19, are associated with one of the leading causes of death among youth. Slightly less Maine youth (15%) than national youth (18%) rarely or never used safety belts, while Vermont's youth (7%) was significantly lower. Twenty-seven percent of Maine youth rode with a drinking

driver more than New Hampshire (25%) and Vermont (22%), but less than the national average (30%).

Nine percent of Maine youth reported they had attempted suicide during the past year, which is slightly above the national average (8%) and those in New Hampshire (8%) and Vermont (7%).

**Table 19: Unintentional and Intentional Injuries among Youth, 2003.**

	<b>United States</b>	<b>Maine</b>	<b>New Hampshire</b>	<b>Vermont</b>
Rarely or never used safety belts.	18%	15%	13%	7%
Rode with a drinking driver the past month.	30%	27%	25%	22%
Were in a physical fight during the past month.	33%	26%	30%	27%
Attempted suicide during the past year.	8%	9%	8%	7%

Source: U.S. Center for Disease Control and Prevention, 2004.



## 17. School Drug and Violence Prevention

Results from the Youth Risk Behavior Survey associated with the U.S. Department of Health and Human Services revealed that in 2003, 9.2 percent of U.S. high school students reported that they had been threatened or injured with a weapon at school within the past year. Other findings were the following: 12.8 percent had been in a physical fight on school property within the past 12 months, and 6.1 percent said they had carried a weapon to school on one or more of the past 30 days.

In Maine, a partnership of Maine state and other agencies sponsored the Maine Safe and Drug-free Schools Data Collection Project in conjunction with the U.S. Department of Education. Data collected for the 2002-03 school year from 669 (100 percent) of the schools required to submit a report to the state, revealed that there were 10,428 reported incidents of prohibited behavior (personal offenses, criminal acts, policy violations, weapons-related incidents, and alcohol, tobacco, and other drug related incidents). A total of 7,054 offenders were responsible for 10,204 of the reported incidents, or an average of 1.4 incidents per student, indicating a number of repeat offenders. The project further reported that there was an average of

5.1 incidents per 100 Maine students. Some incidents resulted in the removal of student(s) from school. A total of 1,151 (11%) incidents, including assault and battery, fighting, threatening and harassing resulted in student(s) removal from school, according to data collected for school year 2002-03.

In its 2004 Maine Youth Drug and Alcohol Use Survey of 75,165 students, grades 6 through 12, the Maine Office of Substance Abuse found that a majority of students felt safe at school, with only 16.1 percent reporting they felt *unsafe*. Males (17.2 percent), more than females (14.7 percent) were likely to report this. Related to this, 12.7 percent of students reported that they had attacked someone with intention to harm. Male students (17.5 percent) were more than twice as likely as female students (7.5 percent) to report this.

According to the Maine Office of Substance Abuse, when 6-12<sup>th</sup> graders were asked if they had carried a handgun without permission during they past year, 2.6 percent reported they had done so. However, males (4.3 percent) were much more likely than females (0.7 percent) to have reported that they had carried a handgun without permission in the previous year.

The State of Maine has made efforts toward prevention of drug and alcohol abuse and other prohibited behaviors among school-age children. More specifically, the Maine Safe and Drug-Free Schools and Communities Act Program (SDFSCA) reported that in 2002-03, 81 percent of school districts offered a total of 2,547 prevention-related programs, services, and activities (PSAs) at the district level. While 94 percent of schools offered a total of 3,116 programs at the school level serving an average of 155 students per program

The most prevalent PSA provided by schools was Drug Prevention Instruction, reported by 505 Maine schools (75%). Table 20 lists the specific types of activities and the percentage of schools providing them in 2002-03.

**Table 20: Type of PSAs Offered in Schools**

<b>Type of Program Offered in 2002-03</b>	<b>% of Schools Offering</b>
Drug prevention instruction	75%
Counseling & Referrals	67%
Violence prevention	59%
Special, one-time events	54%
Conflict Resolution	53%
Student Support Services	47%
Curriculum Development	33%
Before/After School Programs	32%
Community Service Projects	29%
Alternative Education Programs	13%
Services for out-of-school youth	3%

Source: Maine Safe & Drug-Free Schools Data Collection Project, 2004.

Schools in Maine also provided a total of 1,172 drug and violence prevention-related professional development programs to faculty and staff. A major focus of school prevention training for staff and faculty was on violence prevention, with 40 percent of all staff development programs emphasizing violence prevention, and 46 percent emphasizing both drug and violence prevention. Table 21 shows the top twelve staff development activities offered and the percentage of schools providing those activities.

**Table 21: Staff Development Activities**

<b>Type of Activity in 2002-03</b>	<b>% of Schools Providing</b>
Student Assistant Team training	25.3%
Civil Rights/Diversity training	24.2%
Violence prevention training	22.1%
Crisis Mgmt./Emergency Planning	20.9%
Conflict Resolution & Mediation	19.7%
Life Skills training	12.4%
Wellness	11.7%
DARE	10.8%
Peer Helpers/Peer Mediation	8.2%
Substance Abuse Awareness	8.1%
Bullying Prevention	5.7%
Mentoring	0.3%

Source: Maine Safe & Drug-Free Schools Data Collection Project, 2004.

## 18. Educational Attainment of Maine's Adults

The completion of high school and education beyond high school is an indicator of our national and state well-being. The U.S. Census Bureau reported that in the year 2003, 86.6 percent of Maine's population 25 years old and older had attained a high school diploma. Maine was 2.0 percentage points higher than the national average (84.6 percent); however, lower than all other New England states except Rhode Island, as shown in Figure 20. New Hampshire had an increase of 4.4 percent from last year making them the best in the nation for this category.

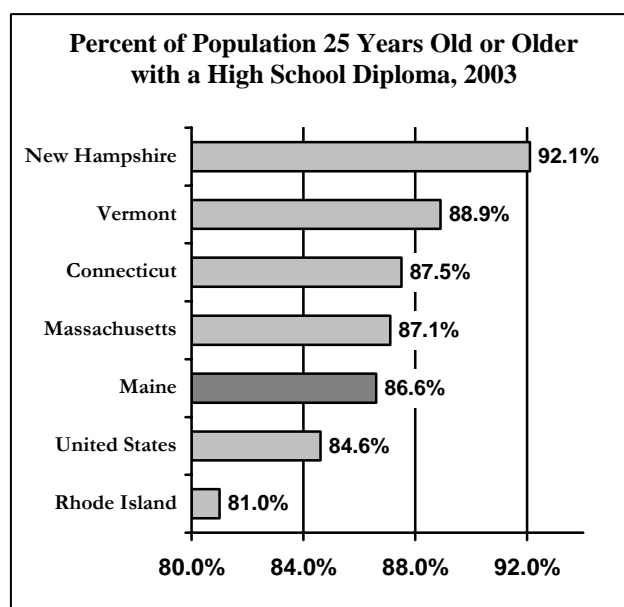


Figure 20: Source: U.S. Census Bureau, 2004.

When considering the population 25 years old or older with a bachelor's degree or higher, Maine was at 23.7 percent, 3.5 percent *lower* than the national average. All other New England states scored higher in populations of this age group who had attained bachelor's degrees or higher, as shown in Figure 21. New Hampshire also had a 3.8 percent increase in this category ranking them 5<sup>th</sup> in the nation.

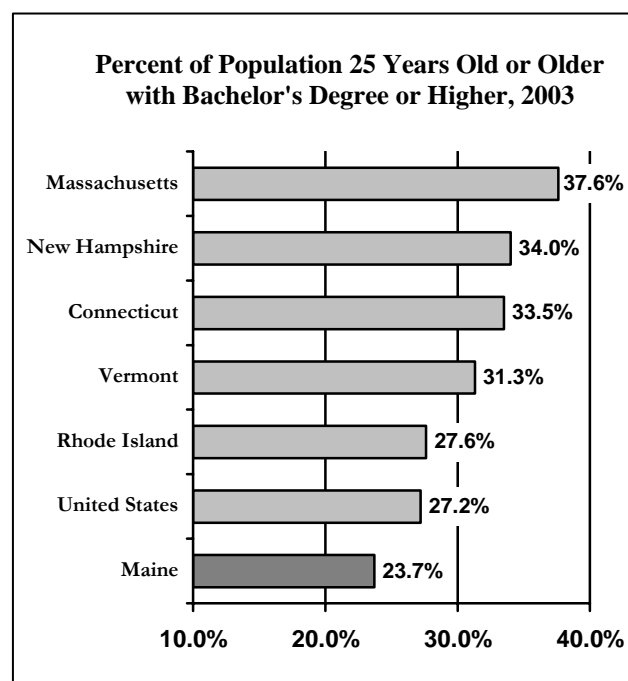


Figure 21: Source: U.S. Census Bureau, 2004.

## 19. Projected Educational Attainment of Public School Ninth Graders

As reported in the previous indicator, Maine ranks high in the nation in terms of the percent of those people 25 years old and older who have earned a high school diploma. However, in the same year (2003) only 23.7 percent of the same population had earned at least a bachelor's degree, according to the National Center for Education Statistics.

Why this large gap between the percent of high school graduates and bachelor's degree graduates? There are a myriad of reasons for the gap, some of which become more apparent if one examines available national and Maine trends. Figure 22 provides a projection of the educational attainment of Maine's 9th graders, given what we know about graduation and persistence rates.

As shown in the figure, approximately 87.2 percent, or 16,013, of Maine's public school 9th graders are expected to graduate from high school four years later. Of these 16,013 graduates, typically just below 70 percent (11,177) report they plan on enrolling in some type of college or university. Breaking this down further, of those who report they plan to enroll, approximately 82 percent (9,165) do so. And of these 9,165 college freshmen,

approximately 65 percent will earn a 2- or 4-year college degree by their mid to late 20's.

Thus, currently only about 32.3 percent of Maine's public school 9th graders are expected to complete a college or university degree program early in their lifetime. More may earn degrees later in life, but this information provides some insight as to why Maine ranks 36<sup>th</sup> in the country in terms of the percent of our population having earned a bachelor's degree or higher.

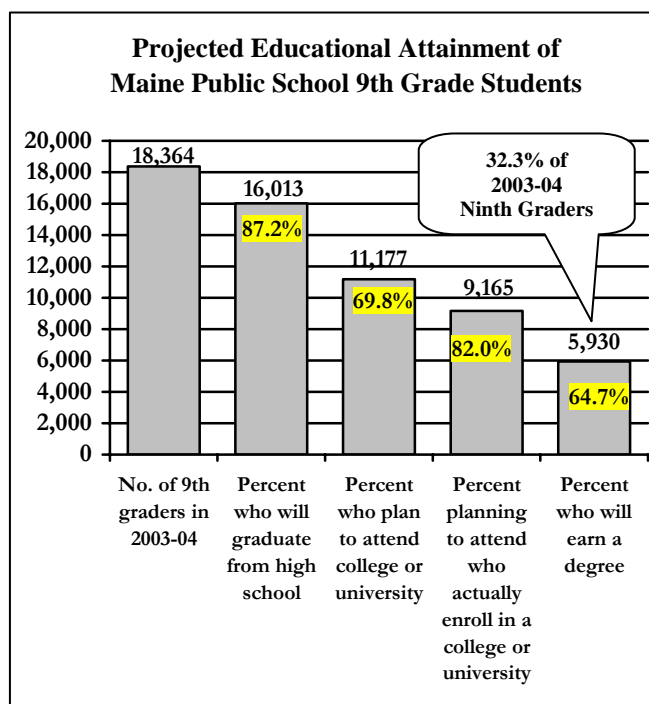


Figure 22: Source: Maine Department of Education, 2004. National Center for Education Statistics, 2004.

## 20. Rewards of High School Completion and Higher Education Degree

Although the rewards of attaining higher and higher levels of education are often intrinsic (personal satisfaction, social position, etc.), the extrinsic rewards are measurable. According to the U.S. Bureau of the Census, in 2002 the national median income of males 25 years old and older with less than a high school diploma was \$24,292, or 70.4 percent of the median income (\$34,508) of male high school graduates. For similarly-grouped females,

the median income was \$19,098, or 73.6 percent of the earnings (\$25,966) of female high school graduates.

Further comparisons by educational attainment and income revealed that males with “some” college earned \$41,663, and females earned \$30,629. Males who had attained bachelor's degrees earned \$58,663, while females with the same educational attainment had earned \$41,757, as shown in Table 22.

**Table 22: National Median Annual Income of Workers, Aged 25 and Older, by Level of Educational Attainment, 2002**

Gender	Not a High School Graduate	High School Graduate	Some College	Associate's Degree	Bachelor's Degree	Master's Degree
Male	\$24,292	\$34,508	\$41,663	\$45,086	\$58,663	\$71,074
Female	\$19,098	\$25,966	\$30,629	\$32,312	\$41,757	\$50,400

Source: U.S. Bureau of the Census, Annual Demographic Survey, 2004.

## Resource Indicators

*Resource Indicators* describe school resources, inputs and processes which may influence student learning. Information is provided on the following indicators:

21. Per Pupil Operating Expenditures
22. Education Expenditures by Category
23. Special Education Expenditures
24. Transportation of Public School Students
25. Construction of Public Schools
26. District Governance Structures
27. School Type, Grade Span Configuration, and Average Enrollment
28. Pupil - Teacher Ratios
29. Staff - Administrator Ratios and Staff - Teacher Ratios
30. Salaries of Teachers and Administrators
31. Ages of Teachers and Administrators
32. Years of Experience of Full-time Teachers and Administrators
33. Gender of Full-time Teachers and Administrators
34. Educational Attainment of Teachers and Administrators
35. Teachers Rank Professional Development Activities
36. Instructional Time in Maine Schools
37. How Teachers View Their Schools as Able to Achieve the  
*Learning Results*
38. Time Spent on Learning Results Content Areas in Elementary  
Schools
39. Minimum Time Requirements for Homework in High School
40. Percent of High School Students Completing Mathematics and  
Science Courses
41. Percent of High School Students Completing Advanced Placement  
Courses
42. Reading Recovery
43. Impact of Maine's One-to-One Laptop Program

## 21. Per Pupil Operating Expenditures

As reported by the Maine Department of Education, Maine's per pupil operating expenditures have increased steadily over the past ten years. Per pupil operating expenditures are calculated by dividing the total school expenditures (including special education and vocational education, but excluding transportation and debt service) by the total number of students. In the last ten years the average per pupil operating costs increased from \$4,299 in 1992-93 to \$7,019 in 2002-03 (not

accounting for inflation). This was an overall increase, since 1992-93, of 63.3 percent (27.3 percent when accounting for inflation) and an average annual increase of 5.7 percent. In 2002-03, per-pupil operating costs for individual units ranged from a low of \$4,209 to a high of \$29,528. A more detailed review of the last ten years in Table 23 shows the average per-pupil costs since 1993-94 and the annual percentage increases.

**Table 23: Statewide Average Per-Pupil Operating Expenditures**

<b>Fiscal Year</b>	<b>1992-1993</b>	<b>1993-1994</b>	<b>1994-1995</b>	<b>1995-1996</b>	<b>1996-1997</b>	<b>1997-1998</b>	<b>1998-1999</b>	<b>1999-2000</b>	<b>2000-2001</b>	<b>2001-2002</b>	<b>2002-2003</b>
<b>Per-Pupil Operating Costs</b>	\$4,299	\$4,411	\$4,600	\$4,738	\$4,938	\$5,146	\$5,474	\$5,818	\$6,233	\$6,640	\$7,019
<b>Annual Percent Increase</b>	1.7%	2.6%	4.3%	3.0%	4.2%	4.2%	6.4%	6.3%	7.1%	6.5%	5.7%

Source: Maine Department of Education, 2004.

## 22. Education Expenditures by Category

Maine's total education expenditures for school year 2002-03 were \$1,662,502,683, an increase of \$80.7 million or 5.1 percent from the previous year. Figure 23 shows how the expenditures break down by category statewide. Regular education received nearly half (44.5 percent), or \$739.4 million of the financial resources. The costs in the regular education category included teacher salaries and benefits, support staff salaries and benefits, and materials and supplies.

The second highest category of expenditures was special education. These costs were approximately \$221.2 million (13.3 percent) reflecting expenditures for salaries and benefits, testing, materials, and supplies for all special education students, except those who were state wards and state agency clients. (The "Special Education

Expenditures" indicator on the following page reports an expenditure figure that *includes* costs associated with state wards and state agency clients.) Facilities maintenance, the third highest expenditure category, accounted for 11.4 percent of all costs, or \$190.1 million. This reflected all the costs of operating the buildings but excluded debt service.

In 2002-03, administration costs totaled approximately 9.3 percent of education costs, with 4.1 percent, or \$67.4 million, spent on superintendents' offices, and 5.2 percent, or \$86.6 million, expended on principals' offices. These categories included expenses for personnel, and supplies and materials, according to the Maine Department of Education. The profile in expenditures varies among school districts across the state.

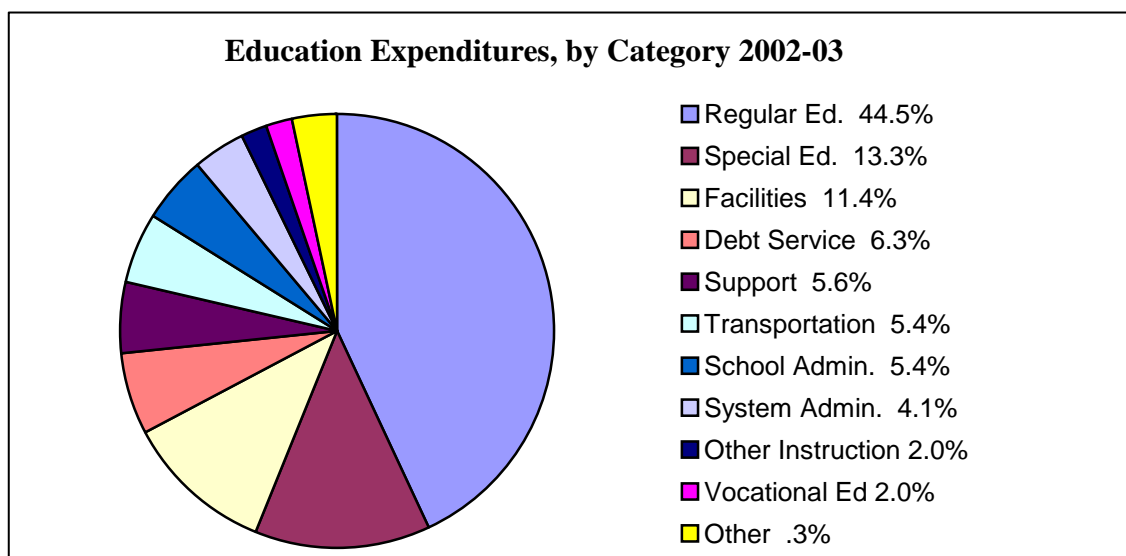


Figure 23: Source: Maine Department of Education, 2004.



## 23. Special Education Expenditures

Maine special education costs have risen since 1993-94, when more than \$133 million was spent, to approximately \$247.2 million in 2002-03, as shown in Table 24 and Figure 24. This was a 49.1 percent increase when accounting for inflation. These figures include expenditures for state wards and state agency clients. The top five expenditures for locally operated special education programs in 2002-03 were for special education teachers (42.3%), Ed. Tech. III (10.2%), Ed. Tech II (9.94%), speech and hearing therapists (8.0%), and Ed. Tech. I (7.7%). Approximately 18 percent of these expenditures were spent on related services such as psychological services, speech and language therapy, occupational therapy, social work services, and services for the deaf and hearing impaired.

Most recent available figures revealed that between school year 2001-02 and 2002-03, special education costs have increased by 4.5 percent while total school expenditures increased by 5.1 percent. As a

share of total education expenditures, special education costs had reached 11.3 percent in 1991-92. In 2002-03, the special education share had increased to 13.3, according to the Maine Department of Education.

From the perspective of enrollments, the total number of public school students decreased by 1.1 percent between 2002-03 and 2003-04, and special education enrollments increased by 1.7 percent. Furthermore, while Maine public school total enrollments have declined in the last ten years by 4.8 percent, special education enrollments have increased by 28.7 percent.

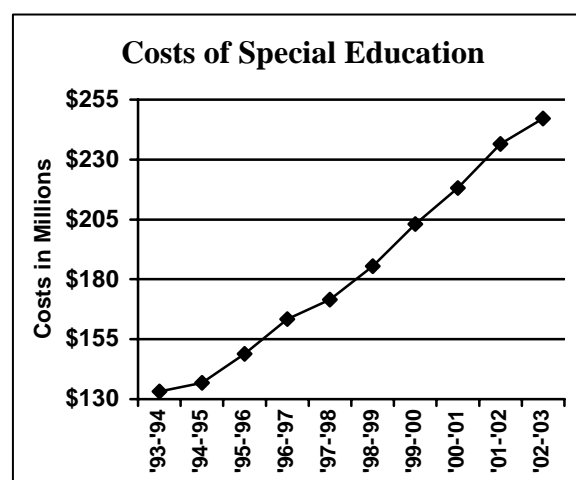


Figure 24: Source: Maine Department of Education, 2003.

**Table 24: Special Education Expenditures, 1993-94 through 2002-03**

Special Education Expenditures (Millions)	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
	\$133.2	\$136.8	\$148.9	\$163.4	\$171.6	\$185.6	\$203.1	\$218.1	\$236.5	\$247.2

Source: Maine Department of Education, 2004.

## 24. Transportation of Public School Students

According to the Maine Department of Education, expenditures for school bus transportation of students in the public schools has increased since 1993-94 by approximately \$20.6 million (\$5.7 million, or 10.5%, when adjusting for inflation) from \$54.7 million to \$75.3 million in 2002-03, a 38 percent increase, or an average of 3.8 percent per year, while total miles traveled per year has increased an average of 1.0 percent per year, as shown in Table 25. The number of children transported has remained relatively stable throughout the ten year comparison. Recent analysis by the Maine Education Policy Research Institute has shown that two *uncontrollable* cost drivers, number of resident pupils and number of miles of road, are the best available predictors of transportation costs.

Costs per mile ranged between a low of \$.48 and a high of \$4.16, and the statewide average cost per mile was \$2.16 in 2002-03. This was an increase of \$.44 since 1993-94, but a decrease of \$.09 from last year, as shown in Figure 25. The average expenditure per student conveyed was \$417.53 in school year 2002-03. This was a

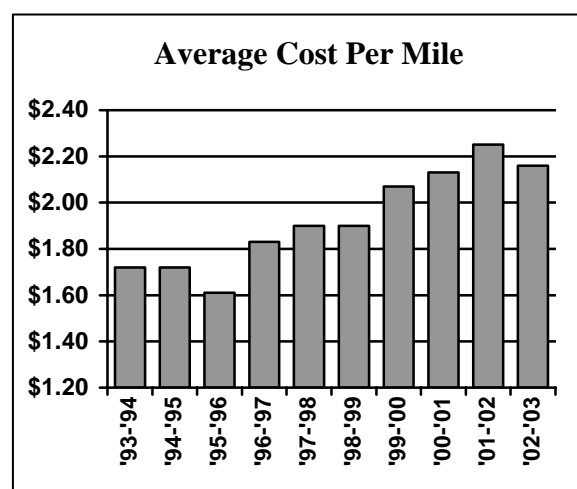


Figure 25: Source: Maine Department of Education, 2004.

**Table 25: Maine Public School Student Transportation Statistics**

Year	Expenditures	Miles Traveled	Average Cost per Mile	Average Number of Children Transported
1993-94	\$54,727,736	31,799,487	\$1.72	181,568
1994-95	\$55,410,841	32,222,470	\$1.72	179,173
1995-96	\$57,440,782	35,661,796	\$1.61	180,631
1996-97	\$58,692,703	32,085,230	\$1.83	182,266
1997-98	\$59,919,872	31,490,490	\$1.90	182,288
1998-99	\$62,671,801	32,900,582	\$1.90	181,037
1999-00	\$67,066,803	32,417,593	\$2.07	179,102
2000-01	\$71,675,710	33,582,119	\$2.13	175,345
2001-02	\$75,620,891	33,674,714	\$2.25	171,362
2002-03	\$75,255,406	34,828,884	\$2.16	180,240

Source: Maine Department of Education, 2004.

decrease of 4.0 percent from the previous year. Comparison with other states shows that in school year 2001-02, Maine spent, on average, \$441 per student to transport 171,362 students. In the same year, New Hampshire spent \$480 per student, Connecticut, \$380 per student, and Massachusetts, \$590 per student. [Note: Figures for Connecticut and New Hampshire include private school students. Data for Vermont was unavailable.] The national average cost per student conveyed was \$556, according to School Bus Fleet Magazine, a trade publication. During school year 2002-03, only 20 percent of the children in Maine who attended public school did not travel to and from school in a bus. The national average percent of students who were not transported was roughly 50 percent.

The Maine Department of Education reported that state funding for school bus replacement is averaging \$10.0 million per year inclusive of both cash and term purchases. The number of new buses approved by the state in 2002-03 was 199 of the 208 requests received. This 96 percent approval rating amounts to an increase of 10 percentage points from the previous year. However, 46 of those approved were cancelled due to local budget cuts. This

refers to the publicly owned bus fleet only, and does not include buses provided by contractors.

In the past few years, school districts have turned to leasing and lease-purchasing buses at an increasing rate in order to replace worn out vehicles. This has had a direct cost impact due to the addition of interest expense. Other factors contributing to an overall increasing cost trend include more districts shifting to contracted transportation services, increasing fuel prices and increasing employment costs.

Nevertheless, increased acquisition using lease-purchasing agreements and improved purchasing power generated by the Maine School Bus Bid Program has reduced the average replacement rate of the fleet from 14.5 years in 2001-02 to 13.6 years in 2002-03. This improved turnover has resulted in a reversal of the average total mileage trend, as shown in Figure 26.

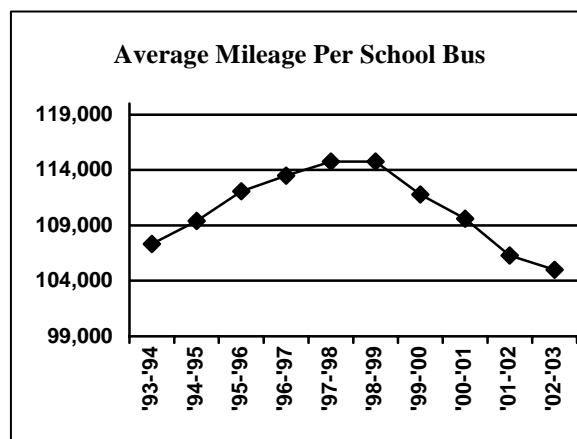


Figure 26: Source: Maine Department of Education, 2004.

## 25. Construction of Public Schools

Since 1972 the number of school projects that have been funded under the state's school construction debt ceiling (Major Capital Improvement Program) is 491. A minimum of 308 of the total number of projects were additions and renovations to existing facilities. New school facilities that replaced existing buildings numbered 179, according to the Maine Department of Education. The projects are funded on a competitive basis by the Debt Service Limit, the amount of state money available for approved construction costs in a given year. In 1990-91 the limit was \$48 million; in 2004-05 the limit was \$84 million; this is expected to be \$96 million in 2006-07. Figure 27 shows school building projects in Maine by decade since 1910, including the current decade to date. The 1950's through the 1980's showed the highest growth.

According to the Maine Department of Education, it is the numerous construction projects of the 1950's and 1960's that are now requiring repairs, renovations, and replacements. In response, the Maine Legislature established the Maine School Facilities Finance Program and the School Revolving Loan Fund. The fund is used to finance the cost of school repair and renovation, among other costs. Since 1999,

a total of 305 necessary repairs and renovations of school facilities have been funded through this program at an estimated total cost of \$90.4 million.

Recent research by the Maine Education Policy Research Institute reported that many variables influence the amount of money a district must spend in order to maintain their facilities. In 2001-02, maintenance expenditures by Maine SAUs varied widely, from a low of \$306 per pupil, to a high of \$3,568 per pupil. Preliminary analysis suggests that the square footage per pupil and the school enrollment size are the best available indicators of per pupil maintenance expenditures.

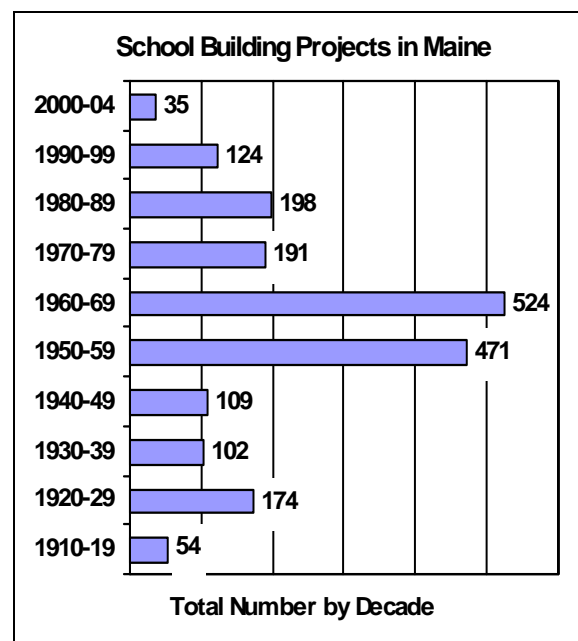


Figure 27: Source: Maine Department of Education, 2004.

## 26. School District Governance Structures

Maine has a rather complex educational system consisting of 286 school administrative units with a variety of governance structures. The five major governance structures are Cities and Towns with Individual Supervision, Community School Districts (CSDs), School Administrative Districts (SADs), Unions, and Units under School Agent Supervision.

To clarify the differences of each of these governance structures, a *city or town with individual supervision* is a single municipality. A *community school district* (CSD) is a combination of two or more municipalities and/or districts formed to build, maintain, and operate a school building or buildings to educate any or all grades. A *school administrative district* (SAD) is a combination of two or more municipalities who pool all their educational

resources to educate all students. A *union* is a combination of two or more school administrative units joined together for the purpose of sharing the costs of a superintendent and the superintendent's office. A *unit under school agent supervision* is a relatively small unit requiring less than full-time administration. Also included in this category is education in Maine's unorganized territory (EUT).

During the 2003-04 school year, the governance structures consisted of 47 cities and towns under individual supervision, 15 community school districts (CSDs), 73 school administrative districts (SADs), 125 unions, and 26 towns under school agent supervision. The following table further illustrates the number of units as well as the number of municipalities included in each type of unit.

**Table 26: Distribution of School Administrative Unit Structures in Maine (2003-04)**

School Administrative Unit (SAU)	Number of SAUs	Number of Municipalities
Cities & Towns with Individual Supervision	47	47
Community School Districts (CSD)	15	45
School Administrative Districts (SAD)	73	273
Unions (including Maine Indian Education)	125	125
Units under School Agent Supervision	26	26
<b>TOTALS *</b>	<b>286</b>	<b>492 *</b>
* 27 municipalities belong to more than one type of school administrative unit structure: 4 are members of two separate CSDs; 2 are members of a SAD and a CSD; 1 is under an Agent of the Commissioner and a member of a CSD; the remaining 20 are SADs in Unions and members of a CSD.		

Source: Maine Department of Education, 2004.

## 27. School Type, Grade Span Configuration, and Average Enrollment

Another factor in understanding the organization of Maine schools is the different types of schools that exist throughout the state. These include elementary schools (including any combination of kindergarten through grade 8); secondary schools (including any combination of grades 9 through 12); and combined elementary and secondary schools (including any combination of kindergarten through grade 12). Table 27 shows the number of public schools in Maine by type for 2003-04.

**Table 27: Public Schools by Type, 2003-04**

School Type	Number
Elementary Schools	524
Secondary Schools	125
Combined	3
Totals	679

Source: Maine Department of Education, 2004.

Included within these school categories are some other types of schools. The secondary schools include 19 Technology Centers and eight Technology Regions. Eleven of the private schools listed are also non-sectarian with 60% or more publicly funded students. Schools that also provide Special Education include 154 public schools and 32 private schools. Those schools that provide Early Kindergarten/4-Year Old Programs number

89 public and 37 private. Finally, one of the public secondary schools is a charter school and three of the public combined schools are State Operated Schools.

According to the National Center for Education Statistics, Maine's public school average student enrollments were significantly smaller than the national average for both elementary and secondary schools. In 2002-03, Maine's elementary schools had an average enrollment of 218 students; the national average was 439. Forty-three states had, on average, more students in each of their elementary schools. Maine's average enrollment for secondary schools in 2002-03 was 561, compared to the national average of 754 students. Thirty-five states had, on average, more students in each of their secondary schools than Maine had.

**Table 28: Sizes of Maine Schools, 2003-04**

Enrollment Size	Public Schools
<b>Under 100</b>	18.0%
<b>100 to 199</b>	20.8%
<b>200 to 499</b>	55.7%
<b>500 to 799</b>	11.0%
<b>800 to 999</b>	2.4%
<b>1000 or more</b>	2.0%

Source: Maine Department of Education, 2004.

## The Condition of K - 12 Public Education in Maine - 2005

For the 2003-04 school year, there were a total of 679 public schools with 54 different grade configurations. The most common type of public school in Maine is the grade 9-12 secondary school with a total of 125, followed by the K-8 elementary

school at 79. However, as shown in the following table, there are a wider variety of grade configurations throughout the state, due to the differing needs and available space within each district and the geographic size of districts.

**Table 29: Public School Grade Configurations and Average Student Enrollment, 2003-04**

Grade Span	Number of Schools	Average Number Students Enrolled	Grade Span	Number of Schools	Average Number Students Enrolled
4YO	1	30	1-5	3	208
4YO-3	2	473	1-6	1	690
4YO-4	2	174	1-12	2	31
4YO-5	1	119	2-3	1	112
4YO-6	1	233	2-4	3	347
EK	1	11	2-5	5	156
EK-K	2	114	2-6	1	104
EK-1	3	158	3-4	3	252
EK-2	3	386	3-5	15	359
EK-3	7	274	3-6	1	224
EK-4	8	166	3-8	1	252
EK-5	18	213	4-5	10	253
EK-6	12	167	4-6	9	243
EK-8	24	144	4-8	3	357
EK-12	3	206	4-12	1	33
K	2	72	5	1	247
K-1	6	131	5-6	1	260
K-2	25	241	5-8	22	377
K-3	20	274	6	1	268
K-4	17	252	6-8	51	419
K-5	75	232	6-12	5	258
K-6	60	242	7-8	17	434
K-7	1	405	7-10	1	29
<b>K-8</b>	<b>79</b>	<b>181</b>	7-12	11	223
K-12	6	226	8-12	1	509
1-2	1	195	<b>9-12</b>	<b>125</b>	<b>610</b>
1-3	1	138			
1-4	3	218	<b>Total</b>	<b>679</b>	

Source: Maine Department of Education, 2004.

**Key:** 4YO = 4-Year Old programs; EK = Early Kindergarten programs

## 28. Pupil - Teacher Ratios

One indication of how school resources are used is in terms of pupil-teacher ratios. The pupil-teacher ratio is calculated by dividing the total number of pupils enrolled in public schools by the total number of full-time equivalent teachers. The teacher count consists of full-time teachers who are classroom teachers, special education teachers, specialist teachers of reading/literacy, itinerant teachers, and speech and hearing clinicians.

Table 30 shows historical data on pupil-teacher ratios in Maine. The ratios have fluctuated only slightly during the early part of the past decade; however, they have declined in recent years. A ratio of 15 to one means that for every 15 students there is one full-time teacher. The average ratio in 2003-04 was 12.5 students to one teacher.

Pupil-teacher ratios vary throughout Maine from a low of 10.0 to one in Washington County to a high of 13.5 to one in Piscataquis and York Counties. Figure 28 shows pupil-teacher ratios for each county.

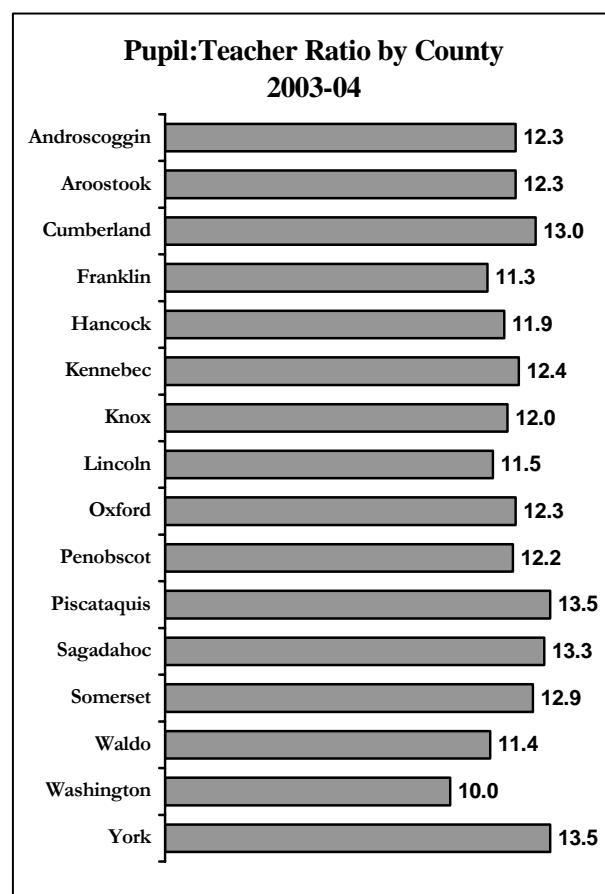


Figure 28: Source: Maine Department of Education, 2004.

**Table 30: Pupil - Teacher Ratios in Maine Public Schools**

Category	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
No. of Teachers	14,609	14,458	14,626	14,798	15,056	15,728	15,974	15,933	16,107	16,178
No. of Pupils	217,279	217,695	213,695	217,570	216,121	214,985	212,957	211,058	204,337	202,025
Pupil/Teacher Ratios	14.9:1	15:1	14.6:1	14.7:1	14.4:1	13.7:1	13.3:1	13.3:1	12.7:1	12.5:1

Source: Maine Department of Education, 2004.



Figure 29 shows ratios as a comparison among northern New England states. According to the information in the *NEA Rankings of the States* publication, Maine, New Hampshire, and Vermont had pupil-teacher ratios lower than the national average of 15.7 students to one teacher in 2003-04. (The reader will note slight differences in state-generated and NEA-generated ratios. This is due to differences in the calculation process.)

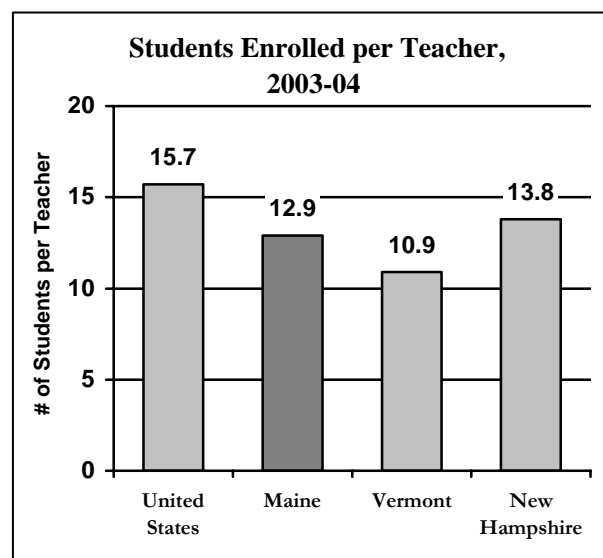


Figure 29: Source: NEA Rankings of the States, 2004.

## 29. Staff - Administrator Ratios and Staff - Teacher Ratios

Staff to administrator ratios are also an indication of how school resources are used. The following table shows numbers of staff and ratios for the 2003-04 school year.

**Table 31: Staff to Administrator Ratios**

Category	2003-04
Administrators (FTE)	1,438
Total Fulltime Staff	33,250
Staff/Administrator Ratio	23.1:1

Source: Maine Department of Education, 2004.

Records from the Maine Department of Education show that in 2003-04 each administrator was responsible, on average, for approximately 23 staff members. Administrators includes superintendents, assistant superintendents, principals, assistant principals, curriculum coordinators, directors of transportation, business administrators, supervisors of instruction, directors and assistant directors of vocational education, as well as directors of services for exceptional children.

The proportion of total instructional school staff that is comprised of teachers is a measure of how school budgets break down in direct education services to students. According to the National Center for Education Statistics, the numbers of nonteaching staff in the public schools grew at a rate faster than the numbers of teachers and students in the 1970's. Throughout the

1970's, the national percent of total staff who were teachers, as opposed to nonteaching staff, declined from 60 percent to 52 percent by 1980. Since then the numbers of teachers and nonteaching staff have increased at approximately the same rates.

The data in Figure 30 shows how Maine compared with other New England states and the United States in the proportion of total public school instructional staff who were teachers in school year 2003-04. As shown in the chart below, Maine exceeded New Hampshire and the New England average, and tied with Vermont. However, Maine fell slightly below the national average of 88.0 percent. Instructional staff included teachers, principals, supervisors, and various other instructional staff.

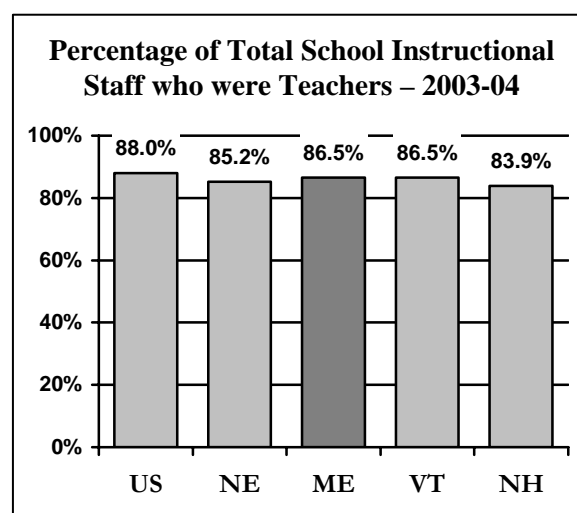


Figure 30: Source: National Education Association, 2004.

### 30. Salaries of Teachers and Administrators

As reported in Table 32 and Figure 31, classroom teacher salaries in Maine increased 21.6 percent (not adjusted for inflation) since 1994-95 to an average salary of \$38,864 in 2003-04. According to the National Center for Education Statistics, in 2003-04 Maine ranked 35<sup>th</sup> in the nation compared to the national average of \$46,726. Maine ranked last among the New England States: Connecticut ranked 2<sup>nd</sup> nationally (\$57,337); Massachusetts 7<sup>th</sup> (\$53,076); Rhode Island 9<sup>th</sup> (\$52,261); New Hampshire 25<sup>th</sup> (\$42,689); and Vermont 27<sup>th</sup> (\$42,007).

In Maine, the average salary for full-time principals has increased 25.6 percent (not adjusted for inflation) since 1994-95 to \$61,960 in 2003-04. The average salary for full-time superintendents in 2003-04 was \$83,650, which represents an increase of 33.0 percent since 1994-95 (not adjusted for inflation).

However, when adjusted for inflation, average salaries of Maine teachers and principals remained relatively flat in the last decade. Teachers' average inflation adjusted salaries decreased by 2.1 percent and principals' increased by 1.2 percent, while superintendents' increased by 7.1 percent from 1994-95 through 2003-04.

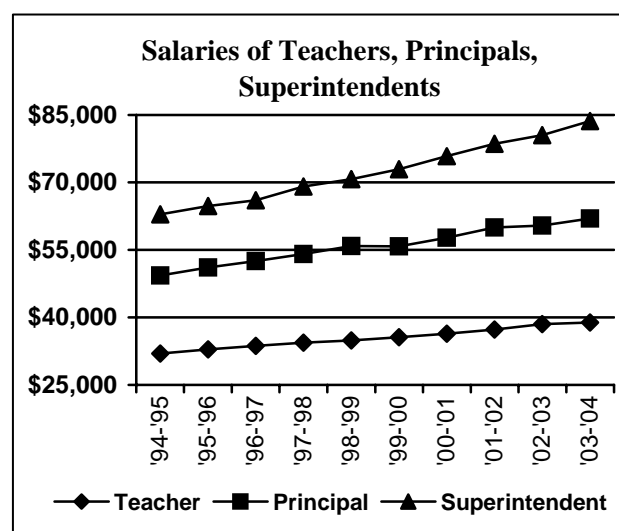


Figure 31: Source: Maine Department of Education, 2004.

**Table 32: Average Salaries of Maine's Teachers, Full-Time Principals, & Superintendents**

Category	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Teacher	\$31,972	\$32,869	\$33,676	\$34,349	\$34,906	\$35,561	\$36,373	\$37,300	\$38,518	\$38,864
Principal	\$49,335	\$51,109	\$52,503	\$54,054	\$55,838	\$55,184	\$57,693	\$59,975	\$60,388	\$61,960
Superintendent	\$62,908	\$64,760	\$66,007	\$69,058	\$70,689	\$72,902	\$75,845	\$78,595	\$80,543	\$83,650

Source: Maine Department of Education, 2004.

### 31. Ages of Teachers and Administrators

According to the Maine Department of Education, in 2003-04, 67.7 percent of Maine's full-time teachers were over 40 years of age, 29.4 percent were between the ages of 40 and 49, and 34.7 percent were between the ages of 50 and 59. Figure 32 shows the percent of full-time teachers by age group in 2003-04.

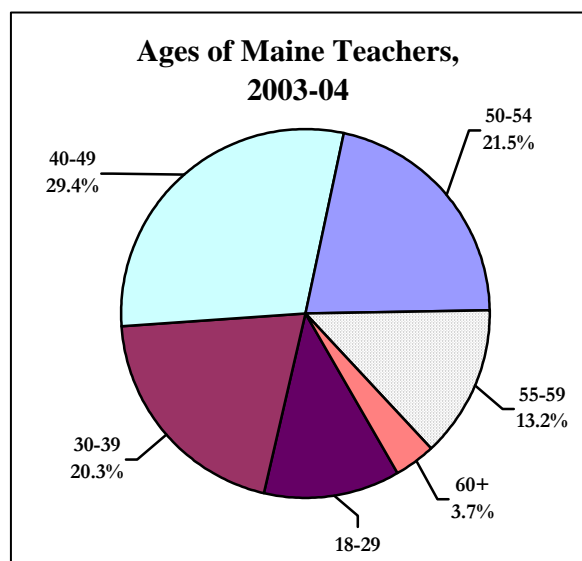


Figure 32: Source: Maine Department of Education, 2004.

In 2003-04, approximately ninety percent of Maine superintendents and principals were over 40 years of age as shown in Figure 33. A breakdown of the data shows that 26.7 percent of these full-time administrators were between the ages of 40-49, while 54.8 percent were between the ages of 50 and 59.

This data indicates that a high percentage of full-time teachers and administrators are approaching retirement, a demographic factor which has possible implications for school funding, retirement costs, and availability of administrative professionals.

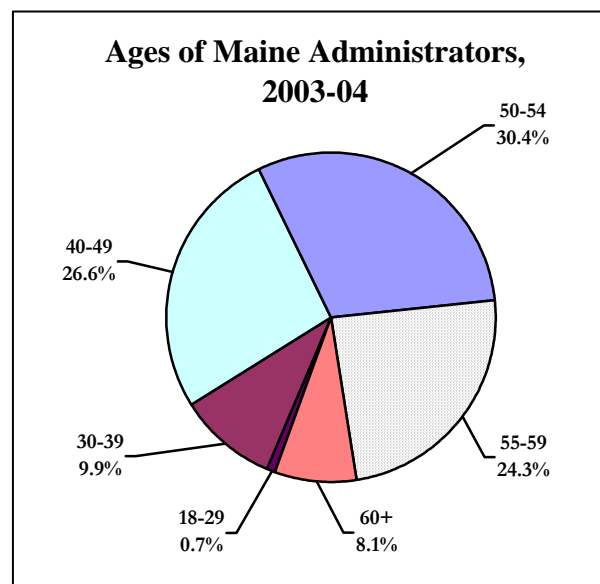


Figure 33: Source: Maine Department of Education, 2004.

## 32. Years of Experience of Full-time Teachers and Administrators

In 2003-04, the largest portion of Maine's full-time teacher work force (41.8 percent) had 19 or more years of experience. There has been little change in this statistic since 1997-98, but a significant change since the early nineties when 28.5 percent of teachers in 1990-91 had 19 or more years of experience. This contrasts with the number of full-time teachers who were relatively new to teaching in 2003-04: almost one in five, or 19.6 percent of the work force, had

0-5 years of experience, as shown in Table 33 and Figure 34.

The Maine Department of Education reported, in 2003-04, that Maine principals and superintendents also had considerable experience in education, with 78.4 percent having 19 or more years of experience in the education profession and 16.0 percent having between 11 and 18 years of experience, as shown in Figure 35.

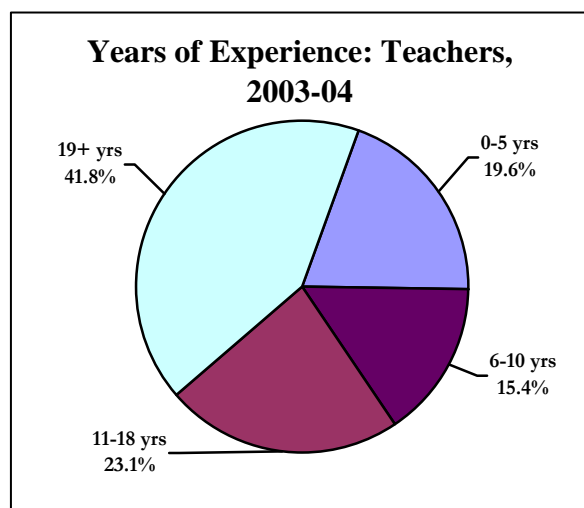


Figure 34: Source: Maine Department of Education, 2004.

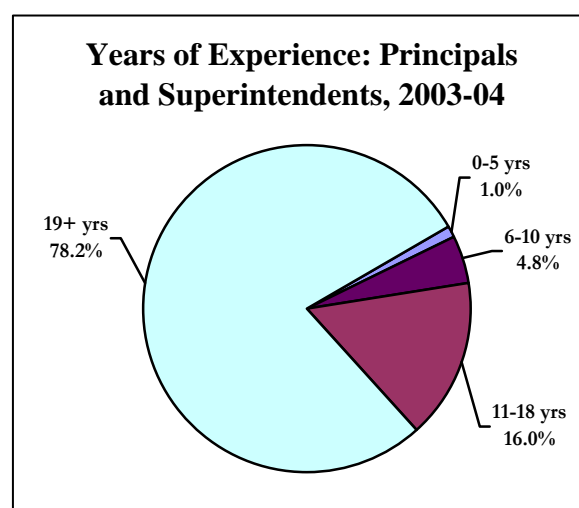


Figure 35: Source: Maine Department of Education, 2004.

**Table 33: Teaching Experience in Maine 1997-98 to 2003-04**

School Year	0-5 years	6-10 years	11-18 years	19+ years	Total Full-time Teachers
1997-98	15.4%	15.3%	26.6%	42.5%	14,750
1998-99	21.5%	15.1%	25.9%	42.3%	15,009
1999-00	18.2%	14.9%	25.1%	41.8%	15,690
2000-01	19.1%	15.0%	24.5%	41.4%	15,912
2001-02	20.2%	14.7%	23.7%	41.4%	16,182
2002-03	20.1%	15.0%	23.0%	41.9%	16,270
2003-04	19.6%	15.4%	23.1%	41.8%	17,153

Source: Maine Department of Education, 2004.

### 33. Gender of Full-time Teachers and Administrators

The proportion of female to male full-time teachers in Maine has shifted only slightly since 1997-98 when 70 percent were female and 30 percent were male. In 2003-04, 73.2 percent of full-time teachers were female and 26.8 percent male. However, if one looks at full-time elementary teachers, one sees a wider discrepancy according to gender, as shown in Figure 36.

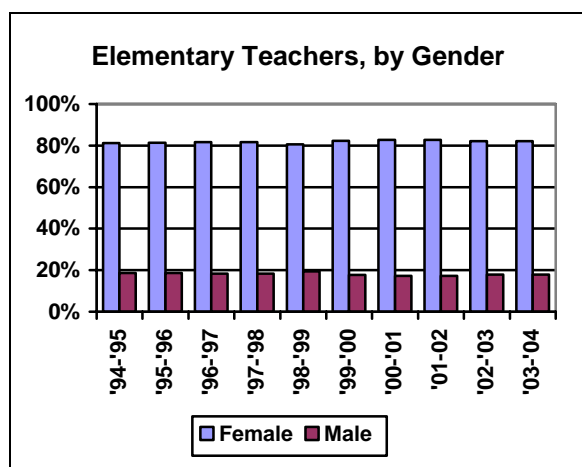


Figure 36: Source: Maine Department of Education, 2004.

In 1994-95, 81.2 percent of all elementary teachers were female, while 50.5 percent of all secondary teachers were male. In 2003-04, 82.1 percent of all elementary teachers were female, while 48.2 percent of all secondary teachers were male. Between 1994-95 and 2003-04, the proportion of full-time male elementary teachers decreased from 18.7 percent to 17.9 percent. Of more than ten thousand elementary teachers, only

1,933 are male. Figure 37 shows a relatively even split between male and female secondary teachers.

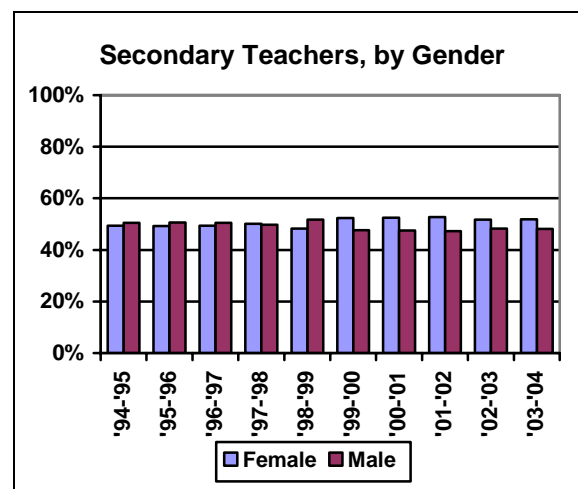


Figure 37: Source: Maine Department of Education, 2004

In terms of administrative staff, the Maine Department of Education reported that in 2003-04, 20.9 percent of full-time superintendents were female, continuing the steady increase from the 6.0 percent reported in 1990-91. The gender gap for principals and assistant principals has also been steadily decreasing from 28.0 percent female in 1990-91 to 46.0 percent in 2003-04.

### 34. Educational Attainment of Teachers and Administrators

The National Education Association reported that in fiscal year 2001, 56 percent of public school teachers nationwide had a bachelor's degree, while 43 percent had attained master's degrees. One percent of teachers nationwide had doctorates.

In 2003-04, 41.8 percent of all full-time teachers in Maine reported that their highest level of educational attainment was a bachelor's degree, while 10.4 percent had attained 15 credit hours beyond the bachelor's. Another 11.1 percent had attained 30 hours of credit beyond the bachelor's, and an additional 25.1 percent had attained a master's degree. Those who

had attained credits beyond the master's degree equaled 8.7 percent. Finally, 1.3 percent had a certificate of advanced study and 0.6 percent had a doctorate, as shown in Table 34.

According to the Maine Department of Education, 43.7 percent of Maine's principals and superintendents held master's degrees as their highest level of study, 24.8 percent had attained either master's plus 15 or master's plus 30 credit hours, 22.7 percent had achieved the certificate of advanced study, and 5.5 percent held doctorates in 2003-04, as shown in Table 35.

**Table 34: Educational Attainment of Teachers, 2003-04**

<b>Educational Attainment</b>	<b>Full-time Teachers</b>
Less than bachelor's degree	1.0%
Bachelor's degree	41.8%
Bachelor's degree +15 hours	10.4%
Bachelor's degree +30 hours	11.1%
Master's degree	25.1%
Credits beyond master's	8.7%
Certificate of advanced study	1.3%
Doctorate	0.6%

Source: Maine Department of Education, 2004.

**Table 35: Educational Attainment of Administrators, 2003-04**

<b>Educational Attainment</b>	<b>Administrators</b>
Bachelor's degree	1.2%
Bachelor's degree +15 hours	0.9%
Bachelor's degree +30 hours	1.2%
Master's degree	43.7%
Master's degree +15, +30 hours	24.8%
Certificate of advanced study	22.7%
Doctorate	5.5%

Source: Maine Department of Education, 2004.

### 35. Teachers Rank Professional Development Activities

The *Maine Learning Results* identifies what students are expected to learn. Consequently, what teachers are expected to teach, and ultimately what assessment methods used will most effectively determine student progress. It is this ongoing need to improve curriculum, instruction, and assessment that promotes the need for professional development systems and activities for teachers throughout the state. The Maine Education Assessment (MEA) surveyed teachers of fourth, eighth, and eleventh graders in 2001 about their ratings of the effectiveness of different-sourced professional development activities.

those activities that helped teachers *teach the Learning Results* content, school-and district-based activities ranked first in effectiveness (72.0 percent). Fourth and eighth grade teachers (72.0 and 70.9 percent, respectively) rated university courses and inservice the second most effective professional development source. On the other hand, eleventh grade teachers ranked activities sponsored by professional organizers second (62.5 percent). Fewer than half of all the teachers surveyed gave high ratings to activities sponsored by the Maine Department of Education (43.6 percent) and regionally-sponsored activities (41.8 percent.)

As shown in Table 36, fourth, eighth, and eleventh grade teachers reported that, of

**Table 36: Effectiveness of Professional Development Activities that Help Teachers *Teach the Learning Results***

Source of Activity	Teachers Who Agree or Strongly Agree			
	4 <sup>th</sup>	8 <sup>th</sup>	11 <sup>th</sup>	Total Average
School-based, district-based	73.5%	73.2%	69.4%	72.0%
University courses and inservice	72.0%	70.9%	54.6%	65.8%
Professional organization	47.2%	55.0%	62.5%	54.9%
Department of Education	42.5%	44.5%	43.8%	43.6%
Regional	40.9%	46.4%	38.0%	41.8%

Source: Maine Education Assessment, Maine Education Policy Research Institute, 2001.



Similar to the rating about professional development activities that are geared toward effective teaching of the Learning Results were the teachers' ratings about those activities that are effective in building a foundation to assess the *Learning Results*. Table 37 shows that more than two-thirds (67.5 percent) of teachers surveyed rated school- and district-based professional development activities as being most effective.

The next most highly rated activity helpful in assessment was university courses and inservice (58.3 percent). Activities

sponsored by professional organizations and the Maine Department of Education were rated effective by fewer than half of the teachers (44.8 and 42.5 percent, respectively), while regionally-sponsored activities were rated effective by only 36.9 percent.

In summary, fourth, eighth, and eleventh grade teachers in Maine reported in 2001 that the most highly effective professional development activities were those that were school- and district-based activities.

**Table 37: Effectiveness of Professional Development Activities  
that Help Teachers Assess the *Learning Results***

Source of Activity	Teachers Who Agree or Strongly Agree			
	4 <sup>th</sup>	8 <sup>th</sup>	11 <sup>th</sup>	Total Average
<b>School-based, district-based</b>	66.0%	70.5%	66.1%	67.5%
<b>University courses and inservice</b>	63.1%	63.2%	48.7%	58.3%
<b>Professional organization</b>	39.5%	50.0%	45.0%	44.8%
<b>Department of Education</b>	38.8%	44.5%	44.1%	42.5%
<b>Regional</b>	37.5%	43.8%	29.4%	36.9%

Source: Maine Education Assessment, Maine Education Policy Research Institute, 2001.

### 36. Instructional Time in Maine Schools

Maine statute establishes a minimum number of days required during the school year and the minimum instructional time in each day. Maine requires schools to have 175 student days with five hours of classroom instruction each day. Some variation does exist among Maine schools where, in some districts, students attend school for more days in the year or for longer days than required. Districts have a variety of requirements for classroom instruction, and some districts vary the hours depending on the grade levels within the school. Table 38 shows the percentage of Maine elementary, middle, and secondary schools with differing lengths of school days. As shown in the table the most common length of the school day is between five and five and three-fourths hours.

Figure 38 shows the difference in the minimum number of hours required in three New England states for classroom

instruction. Maine requires 875 hours (175 days times 5 hours per day) which is less instructional time for students than the required 962.5 hours in Vermont or the 1,080 hours required in New Hampshire. In 2000, according to the National Center for Education Statistics, 33 states required instructional days of 180 or more per year, while 11 states (including Maine) required fewer than 180 days. (Information for six states was unavailable.)

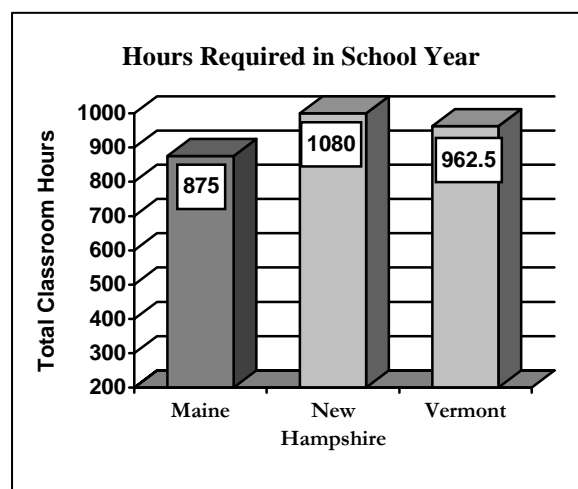


Figure 38: Source: Council of Chief State School Officer, 2001.

**Table 38: Total Classroom Time In Maine Schools**

Length of School Day	K-5 Schools	K-8 Schools	6-8 Schools	9-12 Schools
<b>4.0-4.75 Hours</b>	14.4%	9.9%	5.4%	0%
<b>5.0-5.75 Hours</b>	72.8%	76.2%	67.5%	79.7%
<b>6.0-6.75 Hours</b>	9.9%	13.8%	27%	20.3%
<b>More than 7 hours</b>	3.0%	0%	0%	0%

Source: 2001 Maine Public School Census Survey, Maine Educational Policy Research Institute, 2002.

### 37. How Teachers View Their Schools as Able to Achieve *Learning Results*

The *Maine Learning Results* identify what students are expected to learn, what teachers are expected to teach, and ultimately, what assessment methods will most effectively determine student progress. As stated by the *Maine Learning Results* document, the *Learning Results articulate the knowledge and skills students need for work, for higher education, for citizenship, and for personal fulfillment* - the goals of student learning. How to achieve the *Learning Results* is a common discussion within every school and district in the state.

Maine citizens, educators, and policymakers often ask, “*Are we achieving the Learning Results?*” One source of evidence in answer to this question is teacher expectations and observations. In spring 2001, the Maine Education Assessment (MEA), a statewide assessment test of fourth, eighth, and eleventh graders, surveyed teachers as to their view of whether their school will be able to achieve

mastery of the *Learning Results* for all students.

As shown in Table 39, 7.0 percent of teachers strongly agreed, and 31.4 percent agreed, that their school will be able to achieve mastery of *Learning Results* for all students. Those who disagreed equaled 33.5 percent, strongly disagreed, 22.0 percent. Those who were not sure were 6.1 percent.

Thus, a majority of teachers (55.5 percent) do not think that their schools will be able to achieve the *Learning Results’* stated goals for all students. Fewer teachers, 38.4 percent, agreed the goal will be met. This indicates there is considerable work ahead in order for mastery of the *Learning Results* to be achieved. Hopefully, as educators continue to participate in professional development, curriculum examination, and assessment improvements, significant progress will be made toward achievement of the *Learning Results*.

**Table 39: How Teachers View Their Schools as Able to Achieve Mastery of Learning Results for All Students**

	4 <sup>th</sup> Grade Teachers	8 <sup>th</sup> Grade Teachers	11 <sup>th</sup> Grade Teachers	Total Average Percent of Teachers
<b>Strongly Agree</b>	5.3%	6.4%	9.2%	<b>7.0%</b>
<b>Agree</b>	29.5%	33.5%	31.1%	<b>31.4%</b>
<b>Disagree</b>	32.9%	34.9%	32.8%	<b>33.5%</b>
<b>Strongly Disagree</b>	23.7%	20.6%	21.8%	<b>22.0%</b>
<b>I am not sure</b>	8.7%	4.6%	5.0%	<b>6.1%</b>

Source: Maine Education Assessment, Maine Education Policy Research Institute, 2002.

### 38. Time Spent on Learning Results Content Areas in Elementary Schools

For all Maine children to achieve the Learning Results standards, they need to receive sufficient instruction in each of the eight content areas. In the 2001-2002 Maine Public School Census Survey, elementary principals were asked how many minutes per week students received instruction in the Learning Results areas. Table 40 reports the percent of time each week children in grades K-5 received instruction in these areas. As shown in the table, approximately 36 to 41 percent of the time was spent on English language arts (which includes reading). An additional 21 percent was spent on mathematics. Instructional time in the other six content areas was considerably less. Approximately 10 to 15 percent of the week

was spent on each of the areas of science and social studies, and less than six percent of the week was spent providing instruction in visual and performing arts, and health and physical education. Only about one percent of the instructional week was devoted to foreign language instruction and career preparation.

Since the 1998-99 Census Survey, there has been little change in the percent of time spent each week in the content areas except in health and physical education. In this area, schools had provided instruction nine percent of the time. The new survey reported a decrease to six percent of the time.

**Table 40: Percent of Time per Week Spent on Content Areas**

Content Area	K	1	2	3	4	5
<b>Career Preparation</b>	1%	1%	1%	1%	1%	1%
<b>English Language Arts</b>	41%	43%	42%	39%	37%	36%
<b>Foreign Languages</b>	1%	1%	1%	2%	1%	1%
<b>Health &amp; Physical Education</b>	6%	5%	5%	5%	5%	6%
<b>Mathematics</b>	21%	22%	22%	21%	21%	21%
<b>Science &amp; Technology</b>	11%	11%	12%	13%	14%	15%
<b>Social Studies</b>	10%	10%	10%	12%	13%	14%
<b>Visual &amp; Performing Arts</b>	6%	5%	5%	5%	6%	6%

Source: 2000-2001 Maine Public School Census Survey, 2002.

### 39. Minimum Time Requirements for Homework in High School

Studies have found that the amount of time students spend on completing homework (versus watching television, for example) is related to achievement. In the 2001-2002 Maine Public School Census Survey, high school principals were asked to report whether their school had a *written homework policy* of minimum time requirements. Fifty-one percent of the principals responded affirmatively.

Further, the principals were asked to indicate the homework time requirements expected of their students. Ninth graders were expected to complete as few as 30 minutes (44 percent of schools) and as many

as 120 minutes (6 percent of schools) each night. Tenth graders were also expected to complete between 30 and 120 minutes per night, with 44 percent of the schools expecting 30 minutes, and six percent expecting 120 minutes. In the eleventh grade, 44 percent of schools required 30 minutes and six percent required 120 minutes. Finally, 44 percent of the schools reported that 12<sup>th</sup> graders must complete 30 minutes each night and 20 percent reported 120 minutes of homework for 12<sup>th</sup> graders. Table 41 shows more detail about homework expectations.

**Table 41: Minimum High School Homework Requirements**

Time Required	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>30 Minutes</b>	44%	44%	44%	44%
<b>60 Minutes</b>	25%	25%	19%	13%
<b>90 Minutes</b>	25%	25%	31%	25%
<b>120 Minutes</b>	6%	6%	6%	19%

Source: Maine Public School Census Survey, 2002.

#### 40. Percent of High School Students Completing Mathematics and Science Courses

In order to achieve the Learning Results standards, students need opportunities to learn the content and skills of each discipline. In the 2000-2001 Maine Public School Census Survey, principals were asked to indicate the percent of high school students who will have completed different courses in mathematics and science by the time they are graduated from high school. While completion of standards courses is not the only way students may acquire the knowledge and skills found in the Learning Results, participation in these courses is the only statewide indicator currently available for describing the academic opportunities offered Maine's high school students.

Table 42 reports the estimated percent of students statewide who will have completed selected mathematics courses by

high school graduation. Almost three-fourths of Maine's students will have completed Algebra I, and two-thirds, Geometry. More than half will have completed Algebra II. One-fourth will have completed Pre-algebra, one-fifth, Trigonometry, and close to one-fifth will have taken Computer Science. However, only about one in fourteen high school students will have taken a Calculus course.

There have been some changes in participation in certain courses since the Maine Public School Census Survey 1998-99. The percent of students having taken Review and General Mathematics and Pre-algebra decreased by more than half. Also, the percent of students taking Computer Science and Statistics decreased substantially. There was increased participation, however, in AP Calculus

**Table 42: Percent Completing Mathematics Courses**

<b>Mathematics Courses</b>	<b>Percent (%) Taking Course by Graduation</b>	<b>Mathematics Courses</b>	<b>Percent (%) Taking Course by Graduation</b>
Review Mathematics	5%	Trigonometry/Pre-calculus	21%
General Mathematics	11%	Calculus	7%
Pre-algebra	25%	AP Calculus	4%
Algebra I/Integrated Math I	74%	Statistics	3%
Algebra II/Integrated Math II	57%	Computer Science	17%
Geometry	63%	Other	11%

Source: Maine Public School Census Survey, 2002.

(from four percent to nine percent). Other course participation remained relatively the same.

Course completion patterns for science appear in Table 43. Approximately 60 percent of Maine students will have completed a Physical Science course by graduation time, fifty percent will have taken Chemistry, and 38 percent, Earth Science. Almost one-third will have taken Physics. About one in seven students will have taken Environmental Science and Integrated Science. One in ten students will have taken General Science. Caution must be used in interpreting these findings because there is considerable variation in course titles used throughout the state. Many students may have completed courses that contain content from different courses on this standardized course listing, as evidenced by the large percent (59 percent) of students who will have completed courses

from the Other category in the table.

As with the Mathematics courses, there were changes in participation in science courses since the 1998-99 Census Survey. Participation rates decreased in General Science, Physical Science, Earth Science, Environmental Science, Integrated Science, and Technology with slight increases in Chemistry and Physics. Further study is necessary to discover whether these reductions in participation were the result of reporting ambiguities or an actual trend.

It is also important to note, both in the case of mathematics and science, that the findings from the survey report *estimated* percentages of course completion. The percentages may vary widely among the schools depending upon course availability, course schedules, and the number of students prepared academically to take the courses.

**Table 43: Percent Completing Science Courses**

<b>Science Courses</b>	<b>Percent (%) Taking Course by Graduation</b>	<b>Science Courses</b>	<b>Percent (%) Taking Course by Graduation</b>
General Science	9%	Physics	29%
Physical Science	58%	Technology (taught as a science course)	3%
Earth Science	38%	AP Biology	3%
Environmental Science	14%	AP Chemistry	2%
Integrated Science	16%	AP Physics	1%
Chemistry	50%	Other	59%

Source: Maine Public School Census Survey, 2002.

## 41. Percent of High School Students Completing Advanced Placement Courses

Maine's students need to be ensured opportunities to achieve their full academic potential. One measure of opportunity is the participation of students in Advanced Placement (AP) courses. Students who successfully complete AP courses and earn above a designated score on the standardized AP tests become eligible to receive college credits.

Table 44 reports the average percent of students in Maine's high schools who will have taken Advanced Placement course(s) upon graduation, as reported by principals in the 2001-2002 Maine Public School Census

Survey. As indicated in the table, only small percentages of Maine high school students will have completed Advanced Placement courses. The highest participation rates were in AP English (6.5 percent), and AP History (5.6 percent). The rate in AP Calculus was 4.3 percent. Several other content areas showed lower rates of participation. It is important to note that course availability, course schedules, and academic preparation most likely influence these participation rates. (More information on participation rates may be found in the "Advanced Placement Test" indicator.)

**Table 44: Percent Completing AP Courses**

Advanced Placement Courses	Percent (%) Taking Course by Graduation	Advanced Placement Courses	Percent (%) Taking Course by Graduation
AP English	6.5%	AP Government	1.0%
AP History	5.6%	AP Physics	1.0%
AP Calculus	4.3%	AP French	0.6%
AP Biology	2.6%	AP Spanish	0.5%
AP Studio Art	2.5%	AP German	0.3%
AP Chemistry	1.0%	AP Art History	0.2%
AP Economics	1.0%	AP Latin	0.1%
AP European History	1.0%		

Source: Maine Public School Census Survey, 2002.



## 42. Reading Recovery

Reading Recovery is an early intervention program that provides assistance for first graders having difficulty with literacy learning. According to the College of Education and Human Development at the University of Maine, the program aims to help first graders develop effective reading and writing strategies in order to work within an average range of classroom performance. It involves an intensive one-on-one session between the child and the Reading Recovery teacher for 30 minutes a day, five days a week. The extra instruction is short-term, lasting usually 12-20 weeks, or at such time as the student achieves the average literacy level of the other first graders in the school.

The College of Education and Human Development at the University of Maine reports that the program was

implemented in 99 school districts and 206 schools in 2003-04.

Figure 39 reports the number of children served by the program between 1992-93 and 2003-04. In 2003-04, the program served 2,391 children, or 17.0 percent of Maine first graders. Of the 2,391 students served, 1,320 students, or 55.2 percent, met the stringent criteria for discontinued service within 20 weeks. Twenty-two percent were recommended for further support. Of the 1,867 children who benefited from a full series of Reading Recovery lessons, 71 percent discontinued.

Reading Recovery also provides professional development for teachers. In 1992-93, there were 75 Reading Recovery teachers in Maine. By school year 2003-04 there were 309 teachers qualified to provide instruction in the program.

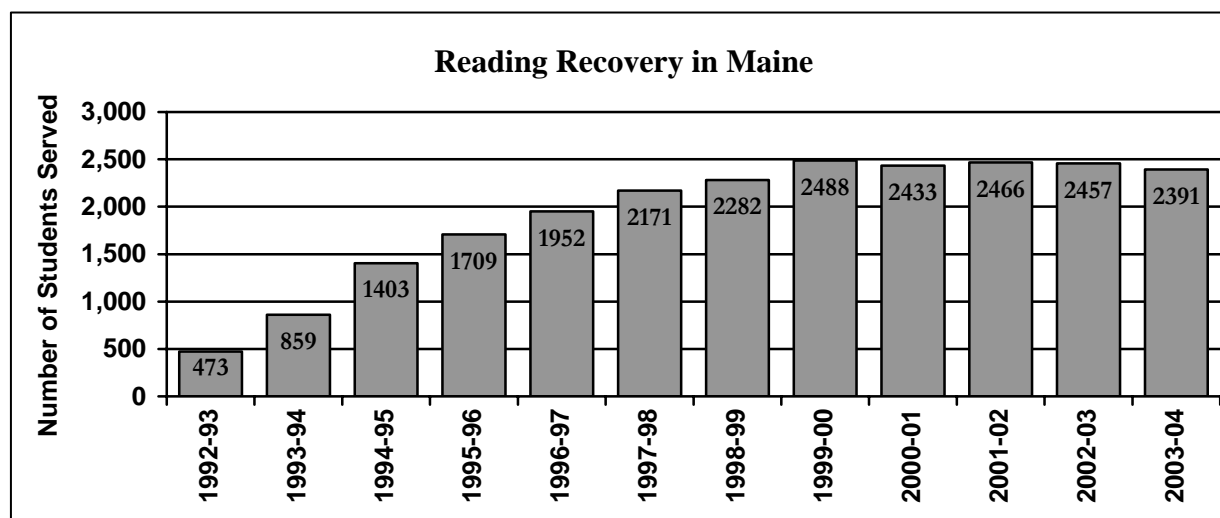


Figure 39: Source: College of Education and Human Development, University of Maine, 2004.

### 43. Impact of Maine's One-to-One Laptop Program

The initial phase of the Maine Learning Technology Initiative (2002-2004) provided all 7<sup>th</sup> and 8<sup>th</sup> grade students and their teachers with laptop computers, and provided schools and teachers technical assistance and professional development for integrating laptop technology into their curriculum and instruction. Evaluation evidence collected and analyzed during this initial phase and reported by the Maine Education Policy Research Institute in the Phase One Summary Evidence Research Report 1 in February 2004 indicates:

- Teachers are using the laptops in a variety of ways. Teacher usage is 20 to 30% higher for teachers with more advanced technology skills, and higher for teachers who have participated in four or more professional development activities.
- Students report using the laptops most frequently in finding information (90%), organizing information (63%), and taking class notes (57%).
- Over 70% of the teachers surveyed reported that the laptops helped them to more effectively meet their curriculum goals, and individualize their curriculum to meet particular student needs.
- Over 75% of the teachers reported that having the laptops helped them better meet Maine's statewide learning standards, the Learning Results.
- More than 4 out of 5 teachers surveyed reported that students are more engaged in their learning, more actively involved in their own learning, and produce better quality work.
- More than 70% of the students surveyed reported that the laptops helped them to be better organized, to get their work done more quickly, and with better quality.
- Teachers reported that all types of students are more engaged in their learning and more motivated to learn, particularly at-risk and special needs children.
- Teachers and principals reported considerable anecdotal evidence that the laptops have had a very positive impact on student attendance, behavior, and achievement, although concrete evidence is still sparse.
- Teachers reported that the greatest obstacles in integrating the laptop technology more into their curriculum and instruction are the lack of technical support, the lack of more professional development opportunities, and the lack of time.
- Superintendents reported some increases in costs with the implementation of the laptops.

## Results Indicators

**Results Indicators** provide a tool to assess the productivity and accomplishments of education in Maine. This section provides information on the following indicators:

- 44. Maine Educational Assessment
- 45. Scholastic Assessment Test
- 46. Advanced Placement Test
- 47. National Assessment of Educational Progress
- 48. Graduation Rate for Maine's High School Seniors
- 49. Yearly High School Dropout Rate
- 50. Post-Secondary Education
- 51. Aspirations of Students Taking the SAT
- 52. Maine's College Graduates: *Where They Go and Why*

#### 44. Maine Educational Assessment

In 1997, the Maine Legislature passed a law establishing common statewide standards for learning called Learning Results. These articulated what students should know and be able to do in each subject. Assessment of student achievement of the Learning Results is accomplished through both statewide and local tests. The new statewide test, the Maine Educational Assessment (MEA), is a significant revision of the old MEA that has been administered since 1985-86. The MEA is administered to all fourth, eighth, and eleventh graders. Focusing on whether a student's performance meets certain content standards, the tests cover the following content areas: reading, writing, mathematics, science and technology. As of 2004, social studies, visual and performing arts, and health are no longer part of the MEA. Instead, the Maine Department of Education will support the development of effective local assessments in these content areas.

In the revised test, students are identified as meeting certain levels of achievement (performance levels) that correspond with learning standards in the Maine Learning Results. The performance levels and score ranges are described as the following: **Exceeds the Standards (561 to 580):** The student's work demonstrates

exemplary accomplishment of content knowledge, analysis, problem solving, and communication skills. **Meets the Standards (541 to 560):** The student's work demonstrates consistent accomplishment of content knowledge, analysis, problem solving, and communication skills. **Partially Meets the Standards (521 to 540):** The student's work demonstrates inconsistent accomplishment of content knowledge, analysis, problem solving, and communication skills. **Does Not Meet the Standards (501 to 520):** The student's work demonstrates limited command of content knowledge, analysis, problem solving, and communication skills.

Table 45, on the following page, provides the results of the 2003-04 MEA for grades four, eight, and eleven in all four content areas. The table shows the percentages of students who achieved at each of four performance levels as well as the average number of points earned (mean scaled score) by each grade.

The 2003-04 MEA results showed that in all four areas the largest block of fourth, eighth, and eleventh graders fell into the “partially meets the standards” category with one exception. In reading, the largest number of fourth and eleventh graders fell into the “meets standards” category.

Table 45: 2003-04 Maine Educational Assessment Statewide Summary Results

Standards Category	2003-2004 MEA		
Reading	Grade 4	Grade 8	Grade 11
Exceeds	1%	1%	2%
Meets	49%	36%	46%
Partially Meets	42%	50%	43%
Does Not Meet	7%	13%	9%
Mean Scaled Score*	540	536	539
Writing	Grade 4	Grade 8	Grade 11
Exceeds	<1%	<1%	2%
Meets	9%	38%	34%
Partially Meets	75%	57%	56%
Does Not Meet	16%	5%	9%
Mean Scaled Score*	530	537	537
Math	Grade 4	Grade 8	Grade 11
Exceeds	2%	1%	1%
Meets	30%	21%	23%
Partially Meets	48%	46%	41%
Does Not Meet	20%	32%	34%
Mean Scaled Score*	534	529	529
Science	Grade 4	Grade 8	Grade 11
Exceeds	<1%	1%	1%
Meets	6%	14%	11%
Partially Meets	67%	54%	58%
Does Not Meet	27%	31%	30%
Mean Scaled Score*	527	528	527

Source: Maine Department of Education, 2004.

\* Scaled Score Range from 501-580

Forty-nine percent of fourth graders scored at the level of “meets the standards” in contrast to 42 percent scoring in the “partially meets the standards” category. And 46 percent of 11<sup>th</sup> graders scoring in “meets the standards”, in contrast to 43 percent in “partially meets the standards.”

In the mathematics category, fourth and eleventh graders showed a marked improvement from 2002-03 going from 28 to 20 percent of fourth graders in the “does not meet” standards level and from 38 to 34

percent of eleventh graders in the “does not meet” standards level, with eighth graders remaining at 32. At the same time, all three grade levels showed improvement in the “meets standards” level with fourth graders improving from 25 to 30 percent, eighth graders from 17 to 21 percent, and eleventh graders from 19 to 23 percent.

Although significantly fewer in number, some students from each grade achieved the highest achievement level, “exceeds” standards. At this level, the

students demonstrated exemplary accomplishment of content knowledge, analysis, problem solving, and communication skills.

Areas where students showed most difficulty were mathematics and science. Approximately one third of eleventh graders “did not meet” the standards in these two content areas; 34 percent in mathematics and 30 percent in science. Of those eighth graders who took the MEA, 32 percent “did not meet” the standards in mathematics and 31 percent in science. Fourth graders showed their highest difficulty to be in science: 27 percent “did not meet” the standards, demonstrating limited command of content knowledge, analysis, problem solving, and communication skills.

The Maine Department of Education reported several observations regarding the 2003-04 MEA results: (1) Mathematics performance is up for grade 4 students in

2004 for the second consecutive year, 4 points higher than 2002 results; (2) Grade 8 mathematics performance is up 2 points and grade 11 performance is up 1 point since the 2002 school year; (3) The percent of grade 4 students “meeting” or “exceeding” the performance standards on the MEA in 2004 has increased by 9 percent since the 2002 school year with a commensurate drop of 9 percent of students scoring at the “does not meet” level; (4) The students at grades 8 and 11 show smaller gains in 2004 in meeting or exceeding standards, however the percentages of students scoring in the lowest performance category have shown declines of 8 percent of students at grade eight and 4 percent of students at grade eleven from the 2002 school year; and (5) MEA student performance in reading, writing, and science/technology is essentially unchanged for the 2004 school year, and has fluctuated little over the past five years.

## 45. Scholastic Assessment Test

The Scholastic Assessment Test (SAT) is a widely used achievement test required for admission by many colleges and universities. The SAT assesses verbal and mathematical abilities and is taken by high school juniors and seniors. Maine's participation rate exceeded the national rate in 2004. Students in Maine who took the SAT equaled 76 percent of high school graduates. Nationally, only 48 percent of graduates took the SAT in 2004, according to The College Board, the national organization that sponsors the SAT.

The average verbal score of Maine students in the year 2004 was 505 (out of a possible 800 points). The average mathematics score in Maine was 501. This compared with national averages of 508 (verbal) and 518 (mathematics). Table 46 reports Maine results with those of New Hampshire, Vermont, and the United States. Maine students generally scored lower than

students in the two neighboring states and the United States.

The College Board also reported gender disparities in SAT performance across the nation. Males scored slightly higher than females in verbal and significantly higher in mathematics. The verbal for males was 512 in the year 2004 while females scored 504. In mathematics, males scored 537 while females scored 501.

When Maine scores were analyzed according to gender, the results showed male students achieving higher test scores than females. On the verbal test, the average score for Maine male students was 511, eleven points higher than female students (500). In mathematics, the disparity was even greater. Male students scored 524 on average while female students averaged 482. Figures 40 and 41, on the following page, show the scores by gender.

**Table 46: Comparison of SAT Results, 2004.**

	Verbal	Mathematics
<b>Maine</b>	<b>505</b>	<b>501</b>
<b>New Hampshire</b>	522	521
<b>Vermont</b>	516	512
<b>United States</b>	508	518

Source: The College Board, 2004.

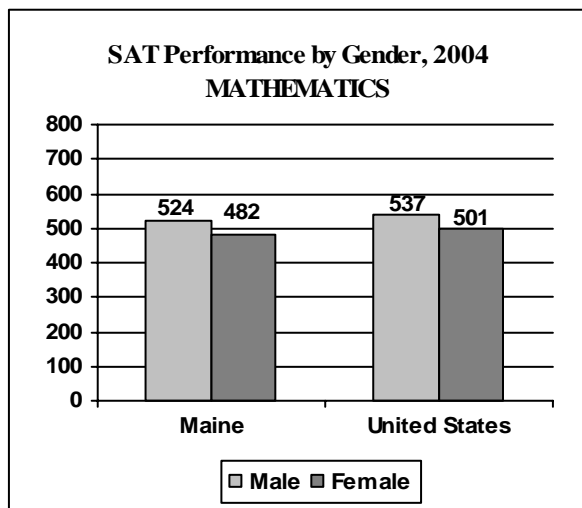


Figure 40: Source: The College Board, 2004.

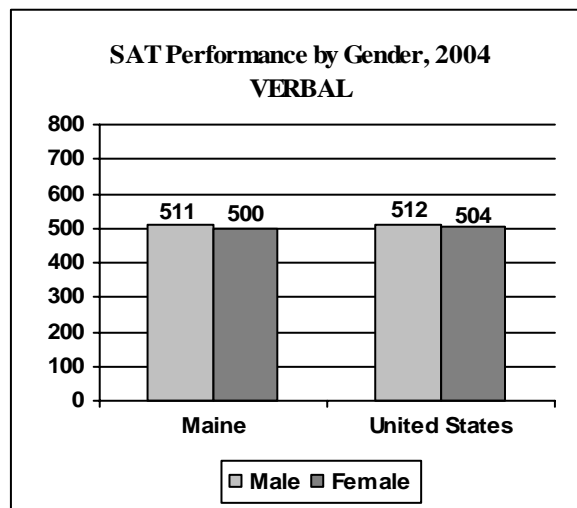


Figure 41: Source: The College Board, 2004.

Additionally, the College Board reported a strong relationship between parental education and student SAT performance. For example, in Maine, students of parents holding a bachelor's

degree had an average combined SAT score approximately 93 points higher than those with parents who had earned only a high school diploma, as shown in Table 47.

**Table 47: Highest Level of Parental Education and SAT Achievement in Maine, 2004.**

	SAT Verbal	SAT Mathematics	Combined Score
<b>No High School Diploma</b>	415	438	853
<b>High School Diploma</b>	476	472	948
<b>Associate's Degree</b>	487	486	973
<b>Bachelor's Degree</b>	523	518	1,041
<b>Graduate Degree</b>	559	552	1,111

Source: The College Board, 2004.



## 46. Advanced Placement Test

Students have the opportunity to take Advanced Placement (AP) courses which allow them to pursue college-level studies while still in high school. Those students who achieve a qualifying score on the national AP exams may receive college credit, placement, or both. AP courses and exams are offered in over 20 subject areas including calculus, English, U.S. history, science, foreign languages, fine arts, and computer science.

The number of public high schools in Maine that offered AP courses increased from 103 in 2003 to 104 in 2004, or equal to 86.7 percent of all public high schools. In New Hampshire, 88.5 percent offered AP, and in Vermont, 86.9 percent. The national average was 67.2 percent of public schools, as shown in Figure 42.

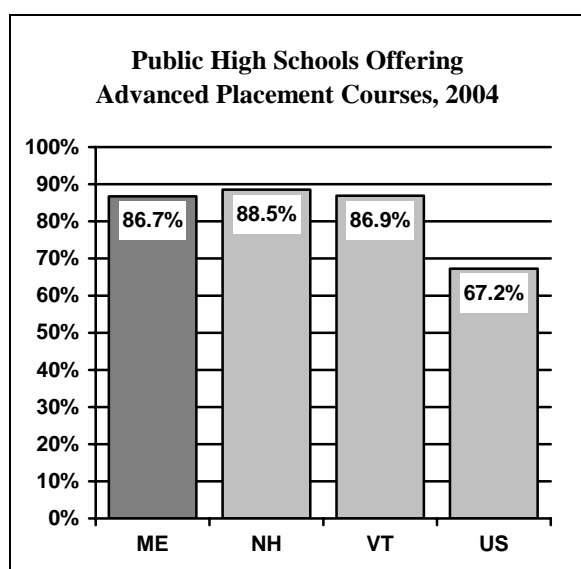


Figure 42: Source: The College Board, 2004.

In 2004, the number of students in Maine's public and private schools who took an AP exam equaled 4,975 students, or 14.5 percent of eligible 11<sup>th</sup> and 12<sup>th</sup> grade students. The national average was 15.1 percent, while New Hampshire had 10.0 percent of its eligible students taking AP exams and Vermont, 14.4 percent.

A score of three or above qualifies a student for possible college credit. Maine's qualifying scores, while exceeding the national average by 0.4 percent in 2004, were lower than both Vermont's and New Hampshire's scores, as shown in Table 48.

**Table 48: Exam Scores that Qualify for possible College Credit, 2004**

State	Percent of Exam Scores Three and Above
Maine	61.8%
New Hampshire	69.3%
Vermont	67.5%
United States	61.4%

Source: The College Board, 2004.

A more detailed breakdown of scores from Maine public and private schools in 2004 shows that those exams that were graded "five", the highest grade possible, numbered 951, or 12.8 percent of all exams taken by Maine students. This was lower than the national average of 14.4 percent, and those of New Hampshire (17.7 percent), and Vermont (17.1 percent).

## 47. National Assessment of Educational Progress

Maine students have a good record of excelling on the National Assessment of Educational Progress (NAEP), also known as "The Nation's Report Card." The NAEP serves as a benchmark for how students across the country are performing in various subjects including reading, writing, mathematics, science, U.S. history, geography, civics, and visual and performing arts, and provides the best available way to compare performance across states.

The NAEP 2003 assessments were in Mathematics and Reading. This marks the first time students in all 50 states participated in the NAEP tests under the federal No Child Left Behind law. Prior to that federal education law, it was up to the states to decide whether to administer the NAEP test.

Figure 43 shows the performance in mathematics assessments of Maine fourth and eighth graders in 2003. Both grade levels scored above the national average scores – ranking 25<sup>th</sup> and 27<sup>th</sup> in the nation

respectively – however both were slightly below the northeast region average scores.

The NAEP has established three levels of performance standards: Basic, Proficient, and Advanced. In 2003, 34 percent of Maine fourth graders who took the test performed at or above the Proficient level in mathematics. Nationally, approximately 31 percent of students performed at or above the Proficient level, while 38 percent of students in the northeast region did so. Maine eighth graders achieving at or above proficiency equaled 29 percent, exceeding the national average for eighth graders of 27 percent, but still slightly lower than the northeast average of 33, as shown in Table 49.

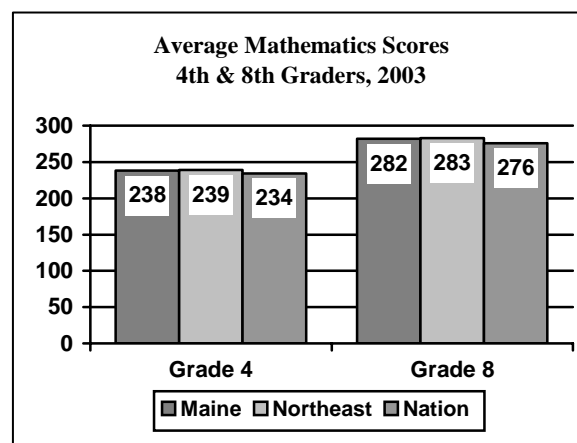


Figure 43: Source: National Assessment of Educational Progress, 2003.

**Table 49: Percent of Students Achieving "At or Above Proficient" in Mathematics**

Students	Maine	Northeast	United States
<b>Fourth Graders</b>	34%	38%	31%
<b>Eighth Graders</b>	29%	33%	27%

Source: National Assessment of Educational Progress, 2003.

Maine fourth graders who took the NAEP Reading Assessment in 2003 scored higher than students in most other states, ranking 6<sup>th</sup> in the nation. Maine students achieved an average score of 224. This was significantly higher than the national average of 216, although slightly lower than the northeast average of 225, as shown in Figure 44.

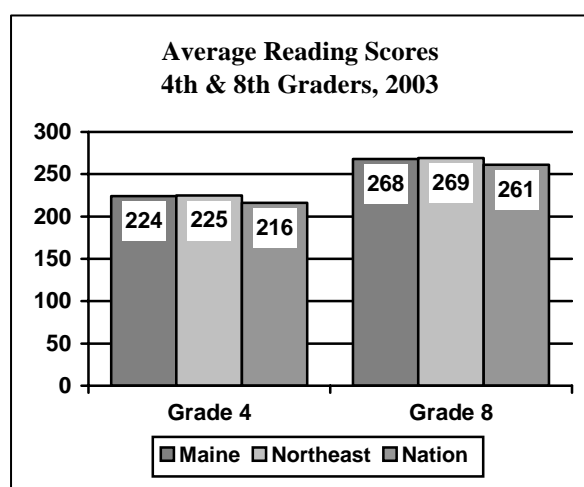


Figure 44: Source: National Assessment of Educational Progress, 2003.

Eighth graders in Maine performed well also, with an average score of 268; they also are ranked 6<sup>th</sup> in the nation for reading proficiency. This was higher than the national average score of 261, but also slightly lower than the northeast average score of 269.

Table 50 shows that 36 percent of Maine fourth graders scored at or above the Proficient level. This was lower than the northeast percentage of 38 but higher than the national percentage of 30. Eighth graders in Maine scored at 37 percent at or above Proficient. The national and northeast percents for eighth graders were 30 and 38, respectively.

**Table 50: Percent of Students Achieving "At or Above Proficient" in Reading**

Students	Maine	Northeast	United States
<b>Fourth Graders</b>	36%	38%	30%
<b>Eighth Graders</b>	37%	38%	30%

Source: National Assessment of Educational Progress, 2003.

## 48. Graduation Rate for Maine's High School Seniors

The number of adults having attained a high school degree or equivalent is one indicator of the long-term economic viability of Maine. The graduation rate has an impact on the aggregate earning power within the state and affects state tax revenues.

Table 51 shows high school graduation rates for Maine between 1998 and 2003. The graduation rate is computed by tracking the number of students who begin with a class in the ninth grade and graduate with that same class four years later in the twelfth grade, thus accounting for those students who drop out. For instance, if 100 students form a ninth grade

class, and five students drop out each of the four high school years, ending with a total of 80 students who graduate at the end of the twelfth year, the graduation rate will be 80.0 percent. Graduates include regular diploma recipients, and those who completed programs other than the regular secondary program, such as special education Individual Education Plans (IEPs). Students who received General Equivalency Diploma's (GED) are not included.

Table 51 shows that the overall high school graduation rate for Maine in 2003 was 87.6 percent, a six year high. Table 52, on the following page, shows the graduation rates by county for 2003.

**Table 51: Graduation Rate, 1998-2003**

<b>Graduation Year</b>	<b>Number of Graduates* (Includes Special Education Graduates)</b>	<b>Number of Dropouts*</b>	<b>Graduation Rate*</b>
<b>1998</b>	12,522	1,870 (since 1994-95)	87.01%
<b>1999</b>	13,275	2,316 (since 1995-96)	85.15%
<b>2000</b>	13,419	2,041 (since 1996-97)	86.80%
<b>2001</b>	13,722	1,973 (since 1997-98)	87.43%
<b>2002</b>	13,653	2,093 (since 1998-99)	86.71%
<b>2003</b>	14,325	1,927 (since 1999-00)	87.57%

Source: Maine Department of Education, 2004.

\* Includes Private Schools with 60% or more publicly funded students and State-Funded Schools

**Table 52: Public School Graduation Rates by County for 2003**

<b>County</b>	<b>Number of Graduates (Includes Special Education Graduates)</b>	<b>Number of Dropouts since 1999-00</b>	<b>Graduation Rate</b>
<b>Androscoggin</b>	1,030	195	83.92%
<b>Aroostook</b>	786	52	92.36%
<b>Cumberland</b>	2,553	267	90.39%
<b>Franklin</b>	349	43	89.03%
<b>Hancock</b>	490	113	81.09%
<b>Kennebec</b>	1,156	140	88.59%
<b>Knox</b>	521	62	88.86%
<b>Lincoln</b>	165	20	89.19%
<b>Oxford</b>	635	96	86.87%
<b>Penobscot</b>	1,653	228	87.51%
<b>Piscataquis</b>	166	23	87.30%
<b>Sagadahoc</b>	440	96	82.09%
<b>Somerset</b>	609	80	84.33%
<b>Waldo</b>	314	51	84.38%
<b>Washington</b>	291	59	81.71%
<b>York</b>	1,881	283	86.23%
<b>Statewide Total – Public Only</b>	<b>13,039</b>	<b>1,808</b>	<b>87.20%</b>

## 49. Yearly High School Dropout Rate

The high school *yearly* dropout rate is also an indicator of the long-term economic viability of the state. The high school dropout rate, computed according to federal guidelines, is determined by dividing the total number of students in grades nine through twelve who have dropped out of school during a *specific school year* by the total nine through twelve enrollment figures on October 1st of that school year. For example, if 100 students were enrolled, grades nine through twelve, on October 1<sup>st</sup> and only 95 students completed the school year, the dropout rate would be five percent.

Meeting very specific definitions and categorical guidelines, it is each school district that identifies a student as a dropout,

one who has “left school without completing a state or school administrative unit approved secondary program,” according to the Maine Department of Education. The dropout definition excludes from the dropout count students who leave school and return, most transfers, and students who participate in alternative state-approved secondary programs, such as Job Corps, hospital/homebound instruction, residential special education, correctional institutions, and community or technical colleges.

Table 53 reports the yearly dropout rates for the last ten years. Within this decade, the rates have fluctuated between a low of 2.79 percent in 2002-03 to a high of 3.33 percent in 1998-99.

**Table 53: Yearly Public High School Dropout Rates**

Year	Secondary Student Enrollment	Number of Dropouts	Dropout Rate
<b>1993-94</b>	59,215	1,719	2.90%
<b>1994-95</b>	60,127	1,883	3.13%
<b>1995-96</b>	60,707	1,830	3.01%
<b>1996-97</b>	61,412	1,874	3.05%
<b>1997-98</b>	62,291	1,926	3.09%
<b>1998-99</b>	59,744	1,991	3.33%
<b>1999-00</b>	60,685	1,999	3.29%
<b>2000-01</b>	61,512	1,929	3.14%
<b>2001-02</b>	62,295	1,802	2.89%
<b>2002-03</b>	62,340	1,740	2.79%

Source: Maine Department of Education, 2004.

A wide range in dropout rates exists among Maine's counties. Table 54 presents the difference in yearly dropout rates by county from 1997-98 to 2002-03. The dropout rates for 2002-03 range from a low in Aroostook County of 1.18 percent to a high of 4.52 percent in Piscataquis County. There was a decrease in dropout rates in

2002-03 in ten of the 16 counties in Maine, resulting in a slight decrease in the overall yearly dropout rate from 2.89 percent to 2.79 percent of Maine public high school students. The largest decrease occurred in Hancock County, while the largest increase was in Somerset County.

**Table 54: Six-year Comparison of County Public School Dropout Rates**

County	Dropout Rate						
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	One year % change
<b>Androscoggin</b>	3.04%	3.94%	3.33%	4.49%	3.27%	2.94%	-0.33%
<b>Aroostook</b>	1.42%	2.18%	2.65%	1.66%	1.16%	1.18%	+.02%
<b>Cumberland</b>	3.48%	3.94%	3.84%	2.62%	2.98%	2.80%	-0.18%
<b>Franklin</b>	2.45%	2.03%	3.05%	1.50%	4.01%	3.47%	-0.54%
<b>Hancock</b>	4.10%	4.64%	4.73%	4.02%	6.02%	4.03%	-1.99%
<b>Kennebec</b>	2.94%	2.93%	2.64%	1.94%	2.60%	2.44%	-0.16%
<b>Knox</b>	2.49%	2.85%	2.53%	3.54%	1.80%	2.46%	+0.66%
<b>Lincoln</b>	2.37%	2.15%	2.69%	3.91%	4.32%	2.51%	-1.81%
<b>Oxford</b>	4.18%	3.60%	3.24%	3.89%	3.45%	2.73%	-0.72%
<b>Penobscot</b>	3.08%	2.88%	3.76%	3.35%	2.79%	2.68%	-0.11%
<b>Piscataquis</b>	4.05%	2.93%	3.17%	4.72%	4.66%	4.52%	-0.14%
<b>Sagadahoc</b>	3.72%	4.19%	4.49%	4.34%	3.17%	3.90%	+0.73%
<b>Somerset</b>	3.88%	3.16%	3.13%	3.41%	1.71%	3.45%	+1.74%
<b>Waldo</b>	3.61%	4.41%	2.32%	3.17%	3.47%	3.69%	+0.22%
<b>Washington</b>	3.78%	4.04%	3.26%	3.63%	3.57%	2.36%	-1.21%
<b>York</b>	2.77%	3.08%	2.73%	3.31%	2.59%	2.79%	+0.20%
<b>State of Maine</b>	<b>3.12%</b>	<b>3.33%</b>	<b>3.29%</b>	<b>3.14%</b>	<b>2.89%</b>	<b>2.79%</b>	<b>-0.10%</b>

Source: Maine Department of Education, 2004.

## 50. Post-Secondary Education

The number of students continuing to post-secondary schools is another indicator of student achievement. Post-secondary schools encompass formal education or training beyond a high school program, including college and university programs, as well as community colleges and formal training programs.

In 2003, a total of 10,789, or 71.2 percent of seniors (including those receiving diplomas from various alternative secondary programs) graduating from public and private Maine schools reported that they *intended* to pursue higher education. (Those who actually enroll are fewer. See indicator "Projected Educational Attainment of Maine Public School Ninth Grade Students".)

A review of *public* school data alone showed that in 1993-94, 7,213 students, or 58.2 percent of seniors graduating from *public* schools, intended to enroll in post-secondary education, while in 2002-03, 9,101 students, or 69.8 percent of public school graduating seniors said they intended to study at the post-secondary level.

Maine *private* school data showed that the rate of seniors who intended to enroll in post-secondary schools exceeded that of public school students. For instance, in 1993-94, 89.7 percent of seniors attending

private school indicated they intended to enroll in post-secondary schools; in 2002-03, 90.2 percent of graduates intended to do so. Figure 45 shows the recent history of both public and private school graduating seniors in Maine who reported that they intended to pursue post-secondary education.

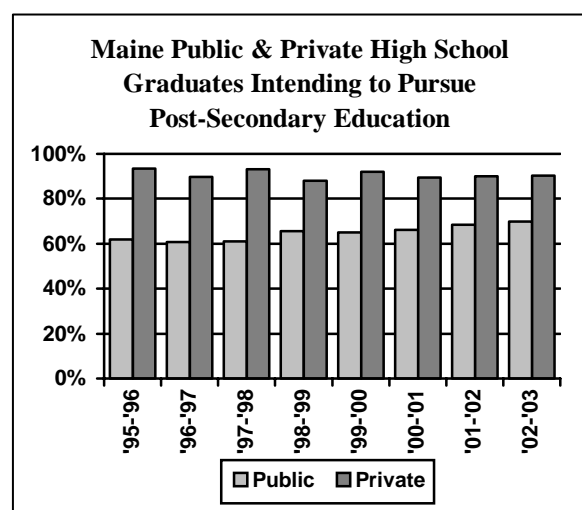


Figure 45: Source: Maine Department of Education, 2004.

Rates of *intended* enrollment in education beyond high school by *public* school students varied among Maine's counties in 2002-03. For instance, Somerset County had the lowest rate (56.2%) while Cumberland County had the highest rate (77.2%) in 2002-03. Between 2001-02 and 2002-03, only eight of the sixteen counties experienced an increase in the rates of graduates going on to post-secondary institutions, as shown in Table 55 on the next page.



**Table 55: Rates of Public High School Graduates  
Intending to Pursue Post-Secondary Education by County**

County	<i>Intended Post-Secondary Enrollment</i>						
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	One Year % Change
<b>Androscoggin</b>	49.5%	55.9%	57.8%	64.6%	68.5%	73.2%	+4.7%
<b>Aroostook</b>	67.5%	69.0%	68.9%	69.5%	73.8%	76.2%	+2.4%
<b>Cumberland</b>	68.3%	69.0%	72.4%	74.6%	73.8%	77.2%	+3.4%
<b>Franklin</b>	62.3%	64.7%	73.8%	66.6%	71.8%	71.1%	-0.7%
<b>Hancock</b>	55.8%	60.5%	55.6%	56.3%	67.6%	66.7%	-0.9%
<b>Kennebec</b>	61.1%	68.7%	69.8%	70.7%	72.5%	70.8%	-1.7%
<b>Knox</b>	63.9%	64.1%	56.2%	58.8%	60.9%	59.9%	-1.0%
<b>Lincoln</b>	56.4%	51.8%	61.1%	62.1%	71.1%	66.1%	-5.0%
<b>Oxford</b>	56.4%	61.2%	57.9%	59.1%	68.7%	70.2%	+1.5%
<b>Penobscot</b>	63.7%	65.0%	67.0%	66.9%	66.6%	68.2%	+1.6%
<b>Piscataquis</b>	68.0%	69.3%	55.4%	58.1%	63.1%	61.5%	-1.6%
<b>Sagadahoc</b>	50.2%	67.1%	57.9%	54.9%	63.9%	58.9%	-5.0%
<b>Somerset</b>	46.3%	56.9%	55.7%	52.5%	58.7%	56.2%	-2.5%
<b>Waldo</b>	58.5%	66.6%	69.8%	64.2%	58.2%	64.0%	+5.8%
<b>Washington</b>	59.3%	61.1%	59.8%	64.2%	64.7%	69.8%	+5.1%
<b>York</b>	60.8%	66.4%	61.7%	66.3%	67.2%	68.1%	+0.9%
<b>Total</b>	<b>60.5%</b>	<b>64.8%</b>	<b>64.8%</b>	<b>66.2%</b>	<b>68.6%</b>	<b>69.8%</b>	<b>+1.2%</b>

Source: Maine Department of Education, 2004.

## 51. Aspirations of Students Taking the SAT

Student aspirations, while difficult to measure, are important indicators of the attitudes and beliefs of students in Maine and across the nation. One measure of aspirations is the post-secondary degree plans of students. Students who took the SAT I (Reasoning Test) in 2004 indicated a range of degree-level goals. As shown in Table 56, 33 percent of Maine test-takers said they planned to attain a bachelor's degree. Twenty-four percent said they planned to complete a master's degree, 14 percent said a doctoral degree, three percent said an associate's degree, and one percent said a certificate program. The remaining 25 percent were either undecided or indicated another type of degree.

A slightly higher percentage of

Maine test-takers planned on a bachelor's degree (33%) than students in New Hampshire (29%), Vermont (31%), and the United States (24%). However, slightly higher percentages of students in New Hampshire planned on studying for a master's degree than test-takers in Maine and Vermont. The national average percent of students intending to study for a master's degree, at 29 percent, exceeded that of each of the three states. The percentages of students in Maine who intended to earn a doctorate were slightly above their counterparts in New Hampshire and Vermont. Once again, the national average of 21 percent exceeded those of Maine, New Hampshire, and Vermont.

**Table 56: Comparison of SAT Test-Taker's Post-Secondary Plans  
Maine, New Hampshire, Vermont, and the United States - 2004**

State	Certificate	Associate's	Bachelor's	Master's	Doctoral
<b>Maine</b>	<b>1%</b>	<b>3%</b>	<b>33%</b>	<b>24%</b>	<b>14%</b>
<b>New Hampshire</b>	1%	2%	29%	25%	13%
<b>Vermont</b>	2%	4%	31%	24%	12%
<b>United States</b>	1%	1%	24%	29%	21%

Source: The College Board, 2004.

## 52. Maine's College Graduates: *Where They Go and Why*

Approximately one-half of Maine's high school graduates leave Maine to attend college. Too little is known about the reasons for their decisions, how many leave initially but return to earn their degrees from Maine institutions, and why Maine college graduates decide to live and work in Maine or in another state. *Where They Go and Why*, a joint study by the Center for Education Policy, Applied Research and Evaluation (CEPARE) and the Finance Authority of Maine (FAME), attempted to answer these questions.

In the spring of 2002, copies of the *Higher Education Survey 2002* were mailed to a sample population of Maine residents who had earned a college degree in 1998. What factors influence where Maine's high school graduates choose to attend college? Table 57 reports the top three reasons students gave for attending a particular college. As may be seen from this information, approximately four out of five respondents indicated that reputation, and

the quality of the program and college, were very important reasons for their decisions. The third most important factor was whether the college was the appropriate size for the student. And, most importantly, the survey results revealed that these are the three top reasons regardless of whether the Maine high school graduate chose to stay in Maine to attend college or decided to attend college in another state.

What factors influence where Maine's college graduates choose to live and work? Tables 58 and 59 on the following page report the five most important reasons respondents gave for choosing to live and work *in* Maine and for choosing to live and work *outside* of Maine. It appears that very different factors play into decisions about whether to live and work in Maine, or in some other state. Those who choose to remain in Maine, or to return after earning a college degree, did so because family or social ties were more important to them than maximizing career opportunities.

**Table 57: Top Three Reasons for Choosing to Attend a Particular College**

Reasons	Very Important	Important	Fairly Important	Not At All Important
1. It had a good program in my field.	45.2%	35.0%	13.1%	6.6%
2. Because of it reputation	33.8%	43.1%	15.6%	7.4%
3. It was the appropriate size I was looking for.	38.8%	35.4%	14.8%	11.0%

Source: *Maine's College Graduates: Where They Go and Why*, February 2003.

**Table 58: Top Five Reasons for Living and Working *in* Maine**

Reasons	Very Important	Important	Fairly Important	Not At All Important
1. I wanted to live closer to family and/or friends.	67.0%	25.0%	5.1%	2.9%
2. I prefer the recreational activities in Maine.	45.6%	34.6%	11.4%	8.4%
3. My spouse or partner wanted to live in Maine.	53.3%	22.3%	9.2%	15.2%
4. I prefer the cultural opportunities and social life in Maine.	37.8%	36.3%	15.5%	10.4%
5. I found a job I wanted in Maine.	39.4%	31.6%	11.7%	17.3%

Source: *Maine's College Graduates: Where They Go and Why*, February 2003.

**Table 59: Top Five Reasons for Living and Working *Outside* Maine**

Reasons	Very Important	Important	Fairly Important	Not At All Important
1. Career opportunities seem better outside Maine.	57.0%	26.4%	7.0%	9.6%
2. The job I got outside Maine was better than any job I was able to get in Maine.	50.5%	26.3%	10.3%	12.8%
3. The pay/benefits are better in positions outside of Maine.	47.8%	25.8%	12.4%	14.0%
4. My spouse or partner found employment outside of Maine.	48.0%	18.4%	6.4%	27.2%
5. I could not find a job I wanted in Maine.	34.1%	29.7%	11.0%	25.2%

Source: *Maine's College Graduates: Where They Go and Why*, February 2003.

## **End Note**

The preceding pages have presented information on K-12 public education in Maine. The information has been obtained from a variety of sources, and encompasses historical data and regional and national

comparisons wherever possible. We hope this information is helpful and that it provides you a statewide perspective on Maine education.

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## **Appendices**

Appendix A: Excerpts from legislation establishing the Maine Education Policy Research Institute.

Appendix B: Related publications.

**APPENDIX A: Excerpts from Legislation Establishing the  
Maine Education Policy Research Institute**

**L.D. No. 1124**

The Education Research Institute, referred to in this section as the "institute," is established to collect and analyze education information and perform targeted education research for the Legislature. The institute shall create and maintain an education information system that tracks important education data for kindergarten and grades one to 12. The institute shall also conduct targeted education research at the request of the Legislature.

**1. Legislature to direct institute.** The Legislature, through the joint standing committee of the Legislature having jurisdiction over education matters, shall direct the institute. The Legislature may appoint a University of Maine System employee to serve as Director of the Education Research Institute. The director shall consult with and act on behalf of the Legislature, performing such data collection, analysis and research as the Legislature may require.

**2. Steering committee.** The Education Research Institute Steering Committee, referred to in this section as the "steering committee," is established to advise the Legislature and the Director of the Education Research Institute on all matters related to the institute. Steering committee members must be appointed by the joint standing committee of the Legislature having jurisdiction over education matters for a term of two years. The steering committee shall meet at least four times each year and must include, but is not limited to, at least one member of the following:

- A. The joint standing committee of the Legislature having jurisdiction over education matters;
- B. the Department of Education;
- C. the State Board of Education;
- D. the University of Maine System;
- E. the Maine School Management Association;
- F. the Maine Education Association;

G. the Maine Municipal Association; and

H. the Maine Principals Association.

A member of the joint standing committee of the Legislature having jurisdiction over education matters shall serve as Chair of the Education Research Institute Steering Committee. The chair shall serve for a two-year term.

**3. Location and access.** The education information system and research results must be maintained by the Director of the Education Research Institute at the University of Maine System. The education information system and research results must be available for use by any interested group or individual. The institute shall charge a fee for use equal to the cost of providing documents, data tapes or other material.

## APPENDIX B: Related Publications

The following is a list of some recent publications describing various aspects of Maine education.

### Reports:

*An Analysis of State Funding and Program Needs For Limited English Proficiency Students.* Mark Kellis & Scott Brezovsky, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.

*Assessing the Performance of Public Education in Maine: A National Comparison.* Jaekyung Lee, College of Education and Human Development, University of Maine.

*Assessing the Performance of Public Education in Maine: Factors Influencing School Differences.* Jaekyung Lee, College of Education and Human Development, University of Maine.

*Assessing the Performance of Public Education in Maine: Factors Influencing Student Performance.* Jaekyung Lee, College of Education and Human Development, University of Maine.

*Characteristics of High and Low Performing High Schools in Maine.* A. Mavourneen Thompson, Maine Education Policy Research Institute, University of Southern Maine.

*Characteristics of High and Low Performing Middle Schools in Maine.* Patricia A. Tiernan, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.

*Characteristics of High and Low Performing Schools in a Predominantly Rural State: Evidence from Elementary Schools.* Rhonda Poliquin & Karen Johnson, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.

*Co-curricular and Extracurricular Opportunities and Participation in Maine Secondary Schools.* David L. Silvernail, Maine Education Policy Research Institute, University of Southern Maine.

*Cost of Education Adjustments in States' School Funding Formulas.* A. Mavourneen Thompson & David L. Silvernail, Maine Education Policy Research Institute, University of Southern Maine.

*Essential Programs and Services: Equity and Adequacy in Funding to Improve Learning for All Children.* Maine State Board of Education.

*Essential programs and services: The basis for a new approach for funding Maine's public schools.* Silvernail, D.L. & Bonney, W.L. (2001). Maine Policy Review, Vol 10 (1), 38-46.

*Financial Characteristics of High and Low Performing Schools in a Predominantly Rural State.* David L. Silvernail, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.

- Financing Public K-12 Education: Examples of Taxation Options in Selected States*, A. Mavourneen Thompson, Maine Education Policy Research Institute, University of Southern Maine.
- Home and Rent Affordability by State of Maine Market Area for Teachers, Non-Teaching School Staff and School Administrators*. David L. Silvernail, Maine Education Policy Research Institute, University of Southern Maine.
- Increasing Postsecondary Enrollments in Maine*. David L. Silvernail, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.
- Impacts of Michigan's School Finance Reforms of 1994: Evidence to Date*. A. Mavourneen Thompson, Maine Education Policy Research Institute, University of Southern Maine.
- Laptop Use by Seventh Grade Students with Disabilities: Perceptions of Special Education Teachers*. Walter J. Harris and Lori Smith, Maine Education Policy Research Institute, University of Maine Office.
- Maine's College Graduates: Where They Go and Why*. David L. Silvernail, CEPARE, University of Southern Maine and Greg Gollihur, Finance Authority of Maine.
- Maine Middle School Co-curricular Opportunities by Size*. Constance M. Perry, Maine Education Policy Research Institute, University of Southern Maine.
- Opportunities to Participate: Availability of Extracurricular and Cultural Opportunities for Middle Level Gifted Students in Rural Areas*. Jay A. McIntire, Dale Doughty, & David W. Brown, College of Education and Human Development, University of Maine.
- Regional Cooperative Relationships Report*. Gail C. Downs & Lori Smith, College of Education and Human Development, University of Maine.
- School District Consolidation in Maine: Finance and Staffing Models for Selected, Hypothetical Consolidated Districts*. Jonathan A. Plucker, Walter G. McIntire, David W. Brown, & Dale Doughty, College of Education and Human Development, University of Maine.
- Selected School District Factors and Grade Eight Pupil Achievement in Maine*. Richard A. Moreau, & Walter G. McIntire, College of Education and Human Development, University of Maine.
- Special Education in Maine: Attaining Equity Through Program and Finance Reform*. W. J. Harris & P. Jain. Maine Education Policy Research Institute, University of Maine.
- States' Provisions of Extra Funding For Economically-Disadvantaged Students*. A. Mavourneen Thompson & David L. Silvernail, Maine Education Policy Research Institute, University of Southern Maine.
- Success by 6: Report of the 2002 School Readiness Survey*. Scott Brezovsky and David L. Silvernail, CEPARE, University of Southern Maine.
- The Impact of Maine's One-to-One Laptop Program on Middle School Teachers and Students*. David L. Silvernail and Dawn M.M. Lane, MEPRI, University of Southern Maine Office.

*The Impact of Repeating a Grade: A Review of Research in the 90's.* Susan K. Woodward & Tonya M. Kimmey, College of Education and Human Development, University of Maine.

*The Maine Learning Technology Initiative: Impact on Students and Learning.* Dawn M.M. Lane, Maine Education Policy Research Institute, University of Southern Maine Office.

*The Maine Learning Technology Initiative: Impact on the Digital Divide.* Paula Gravelle, Maine Education Policy Research Institute, University of Southern Maine Office.

*The Maine Learning Technology Initiative: Teacher, Student, and School Perspectives. Mid-Year Evaluation Report.* David L. Silvernail, Walter J. Harris, Dawn M.M. Lane, Janet Fairman, Paula Gravelle, Lore Smith, Kathy Sargent, and Walter McIntire, Maine Education Policy Research Institute.

*The Maine Learning Technology Initiative: What is the Impact on Teacher Beliefs and Instructional Practices?* Katherine Sargent, Maine Education Policy Research Institute, University of Southern Maine Office.

*Trading Roles: Teachers and Students Learn with Technology.* Janet Fairman, Maine Education Policy Research Institute, University of Maine Office.

*Two Teachers Implement One-to-One Computing: A Case Study.* Abigail Garthwait and Herman Weller, Maine Education Policy Research Institute, University of Maine Office.

*Use of Laptop Computers and Classroom Assessment: Are Teachers Making the Connections.* Jeffrey S. Beaudry, Maine Education Policy Research Institute, University of Southern Maine Office.

*Using Multiple Measures to Evaluate the Performance of Students and Schools: Learning from the Cases of Kentucky and Maine.* J. Lee & T. Coladarci, Maine Education Policy Research Institute, University of Maine.

*Using National and State Assessments to Evaluate the Performance of State Education Systems: Learning From the Cases of Kentucky and Maine.* J. Lee & W. McIntire, Maine Education Policy Research Institute, University of Maine.

*Using School Level Achievement Data in Determining Core Education Costs: The Impact on Perceptions and Policymaking.* David L. Silvernail, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.

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*Technical Report from the Work Group on Early Literacy.* Holly J.P. Kopp, Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.

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