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# Vermont State Public Education Expenditure Overview and Analysis Phase 1

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Prepared for  
The Vermont Business Roundtable  
and Lake Champlain Regional  
Chamber of Commerce

by Dr. Nicolas O. Rockler and Thomas E. Kavet

September 2006

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# Vermont State Public Education Expenditure Overview and Analysis – Phase 1

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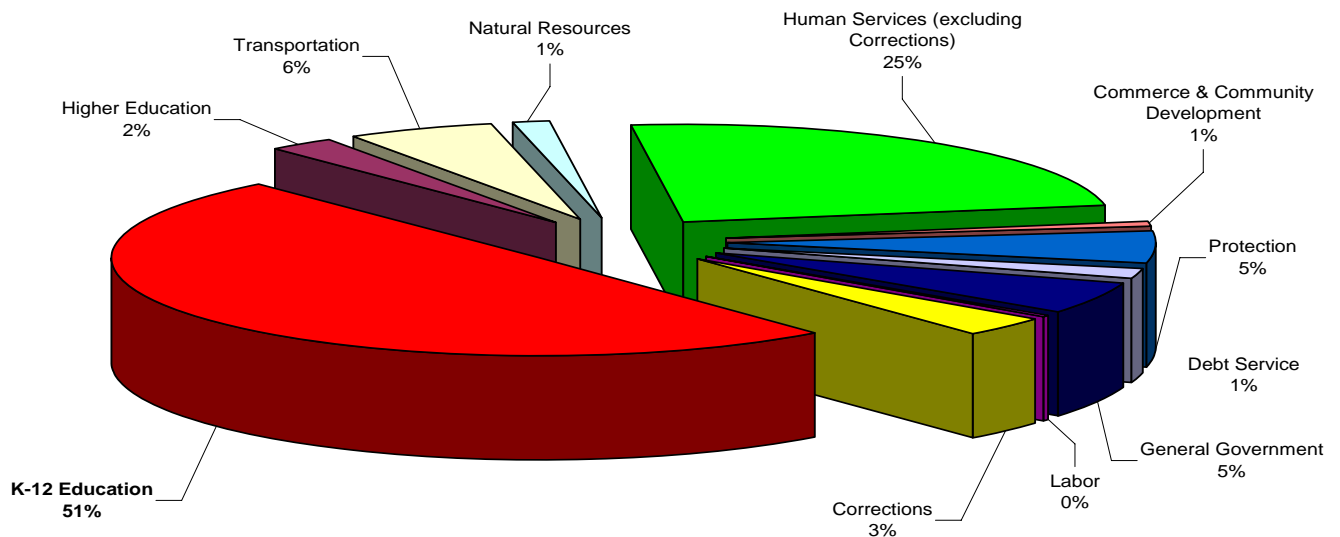
## 1) Overview and Scope of Work – Phase 1

The purpose of this analysis is to provide a broad overview of the primary “cost drivers” affecting public education expenditures in the State of Vermont. Phase 1 of this analysis reviews recent trends in State education expenditures, identifies the largest expenditure components and examines factors that may affect future expenditure growth. This broad overview may be followed by more in-depth “Phase 2” research, which would identify and analyze more detailed expenditure patterns by sub-state districts and expenditure components.

Expenditures for public K-12 education will represent more than half of all Vermont State appropriations in fiscal year 2007. This is the largest single State expenditure item and, of significance, has been growing at rates far in excess of general inflation. The compound average annual growth rate for total State K-12 education expenditures has been more than double that of the Consumer Price Index over the past ten years.

**Figure 1: Vermont Tax Dollars At Work - FY2007 Vermont State Appropriations**

All Funds, Source: State of Vermont, Department of Finance and Management

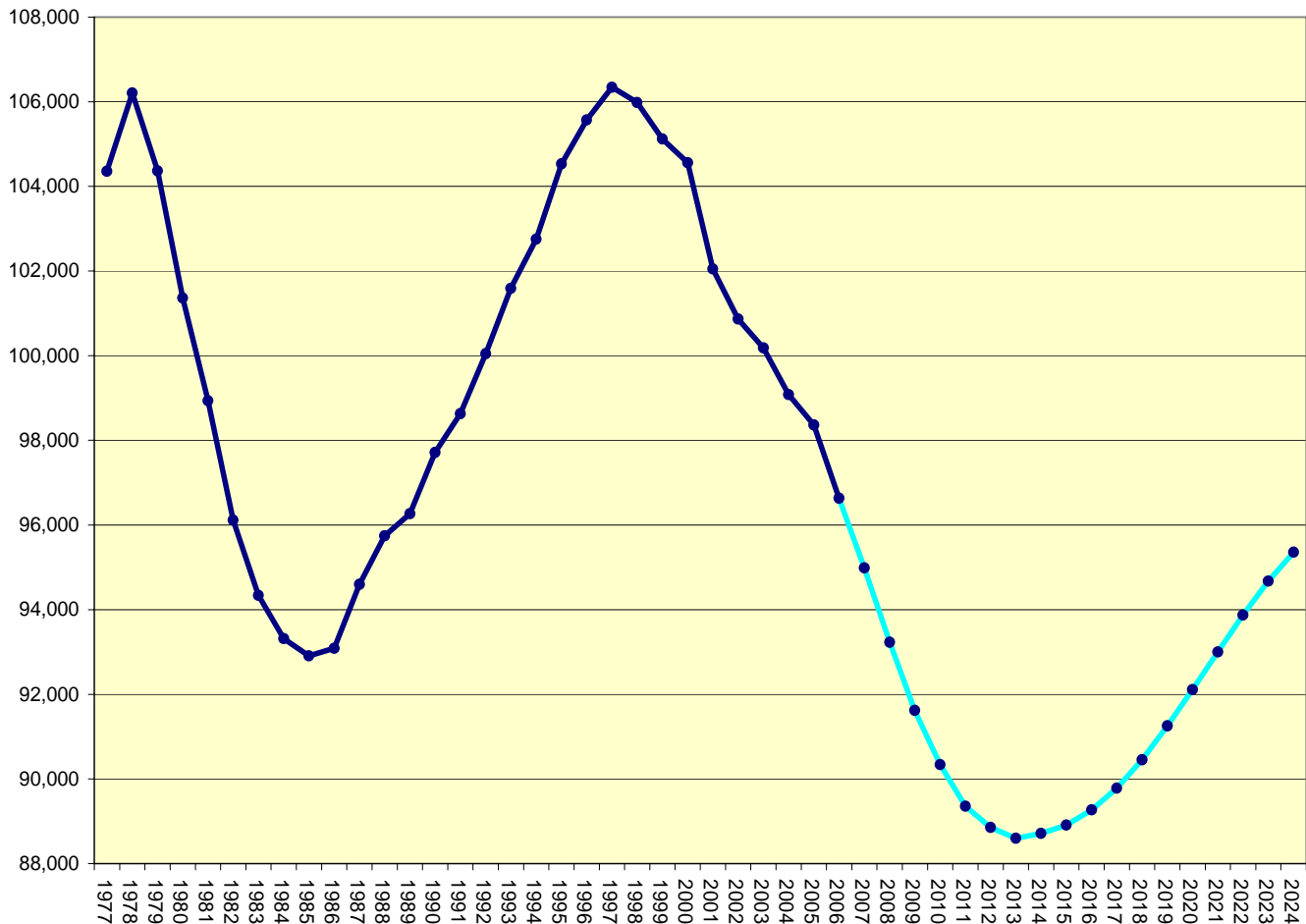


Despite state-wide enrollment declines of nearly 10,000 students since 1997, total educational expenditures have increased by more than \$400 million over the same period, a 50% increase. On a per student basis, expenditures have grown at compound annual rates of about 6.3% per year, while inflation growth over the same period has been 2.5%.

Over the last ten years, amidst falling enrollments, total educational staffing has steadily increased. Between 1996 and 2006, total staffing increased by 22%, while the number of students declined by 8.5%. This has resulted in a drop in the ratio of students to staff members from nearly seven (6.77) to about five (5.07).

As depicted in the below chart, student enrollments are expected to decline still further over the next seven years, dropping to fewer than 90,000 students, before rising slowly after about 2013. At no time in the next 20 years are enrollment levels expected to reach current (2006) levels. With a smaller served population, there should be opportunities to reduce costs, however, this would require a reversal of the expenditure trends experienced during the past decade.

**Figure 2: Vermont Public School Enrollments**



Sources: Vermont DOE and Consensus Administration and Joint Fiscal Office Projections - May 2006

## 2) Source Data Collection and Review

Much of the effort associated with Phase 1 was focused on the compilation and processing of detailed data from the State Department of Education. The Department was extremely cooperative in providing data and responding to queries, but the information was voluminous and required considerable effort to make it comparable over time and geography. Expenditure data were provided for 1992-2005 for all local education authorities (LEAs), as well as union, unified and joint contract district, and supervisory unions. From this, we have assembled an expenditure database that will allow for a wide range of expenditure analyses.

Enrollment data by school and grade were provided by the Vermont Department of Education and the Legislative Joint Fiscal Office. Official State forecast data were also provided by the Joint Fiscal Office.

Finally, various comparative measures for other states were obtained from information assembled by the National Center for Educational Statistics, U.S. Dept. of Education.

## 3) Primary Vermont Education Cost "Drivers"

Vermont's public education expenditures (primary, secondary, and vocational/technical school) reached nearly \$1.3 billion for fiscal year 2005, as shown in Figure 3.<sup>1</sup> As the largest category of public expenditure, it accounts for a significant share of the State's gross product, approximately 4%. This share has grown by approximately one-half a percentage point over the last 10 years, an indication that its importance to the State economy has increased somewhat.

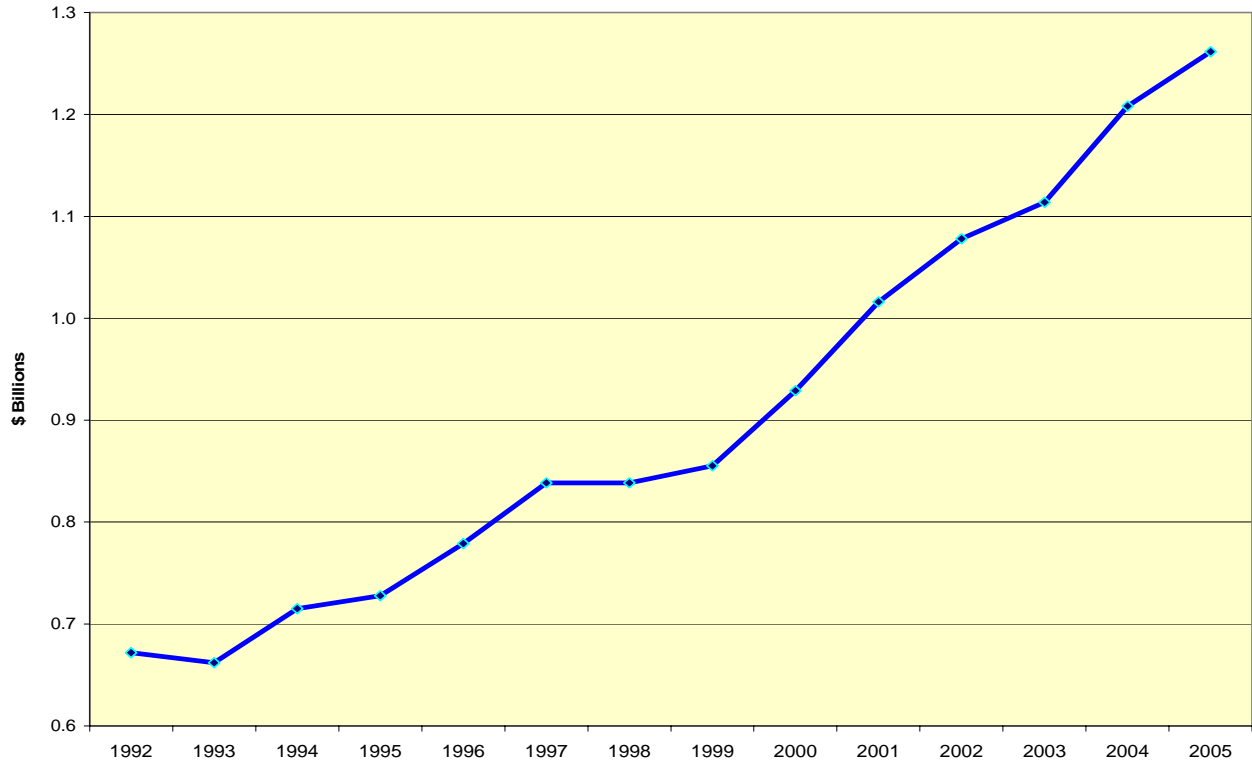
On average, annual education expenditures increased at about 5% per year over the 1992-2005 period, far faster than the 2.6% average rate of growth in consumer prices, as shown in Figure 4. We note that consumer price-level growth was uncharacteristically low during this period, capped by highly competitive imported goods and services prices. Public education expenditures, on the other hand, are dominated by domestic expenditures, primarily personnel costs (i.e., salary and benefits) and purchased support service costs. Of these costs, the increasing cost of benefits has risen significantly, as shown in Figure 5.<sup>2</sup>

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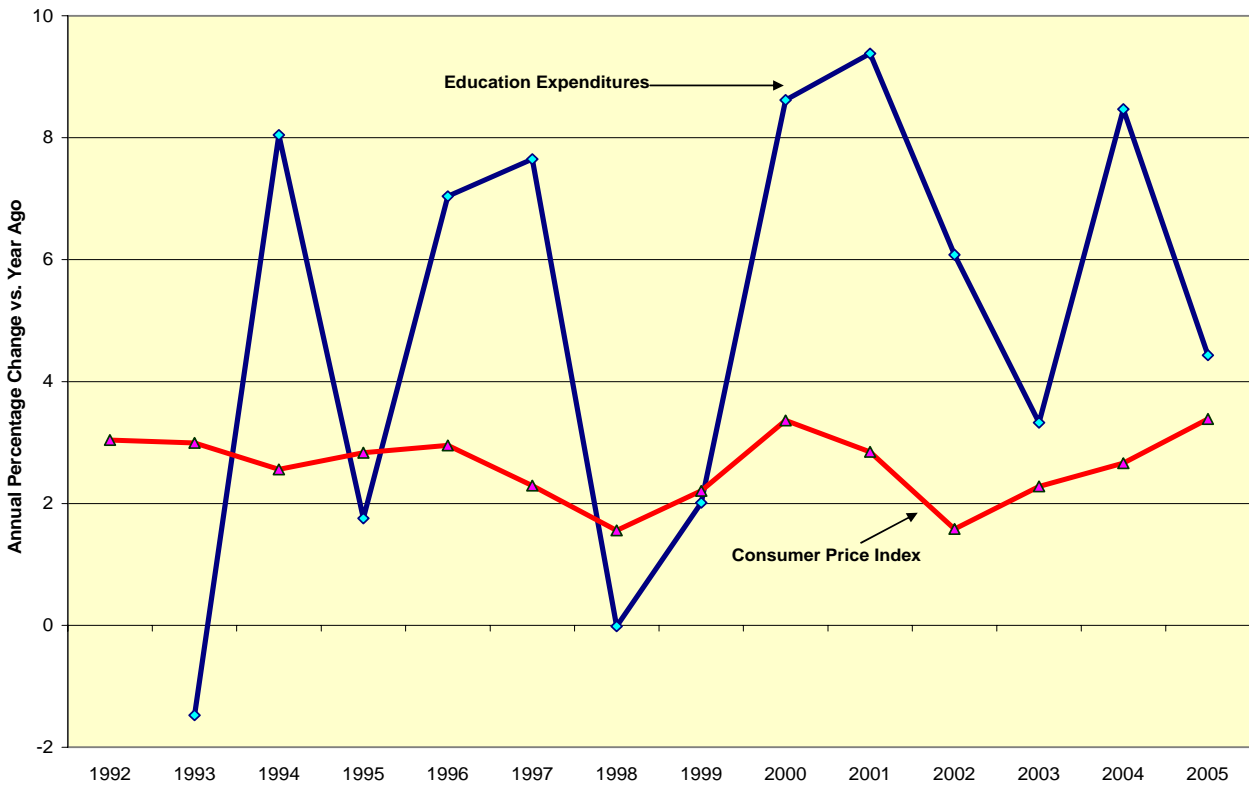
<sup>1</sup> Expenditures presented here are "unduplicated" for each local educational authority (LEA), meaning that tuition and transfers to other Vermont public schools, fees and assessments paid to supervisory unions, and other non-educational payments and transfers have been deleted from the total expenditure calculation. Duplicated expenditures amounted to approximately \$377 million in FY2005. Note that tuition and transfers paid by LEAs to Vermont private and out-of-state schools are in the total unduplicated expenditures, although the enrollment figures do not generally include private schools, even those that are publicly funded. Private and out-of-state transfers amounted to approximately \$65 million in FY2005.

<sup>2</sup> Benefits include health care, social security, group life insurance, retirement contributions, workers' compensation, unemployment compensation, tuition reimbursement, and other miscellaneous benefits. The dataset used for this analysis did not permit us to distinguish among these different types.

**Figure 3: Vermont Total Educational Expenditures, 1992-2005**  
 (Source: Vermont Department of Education)

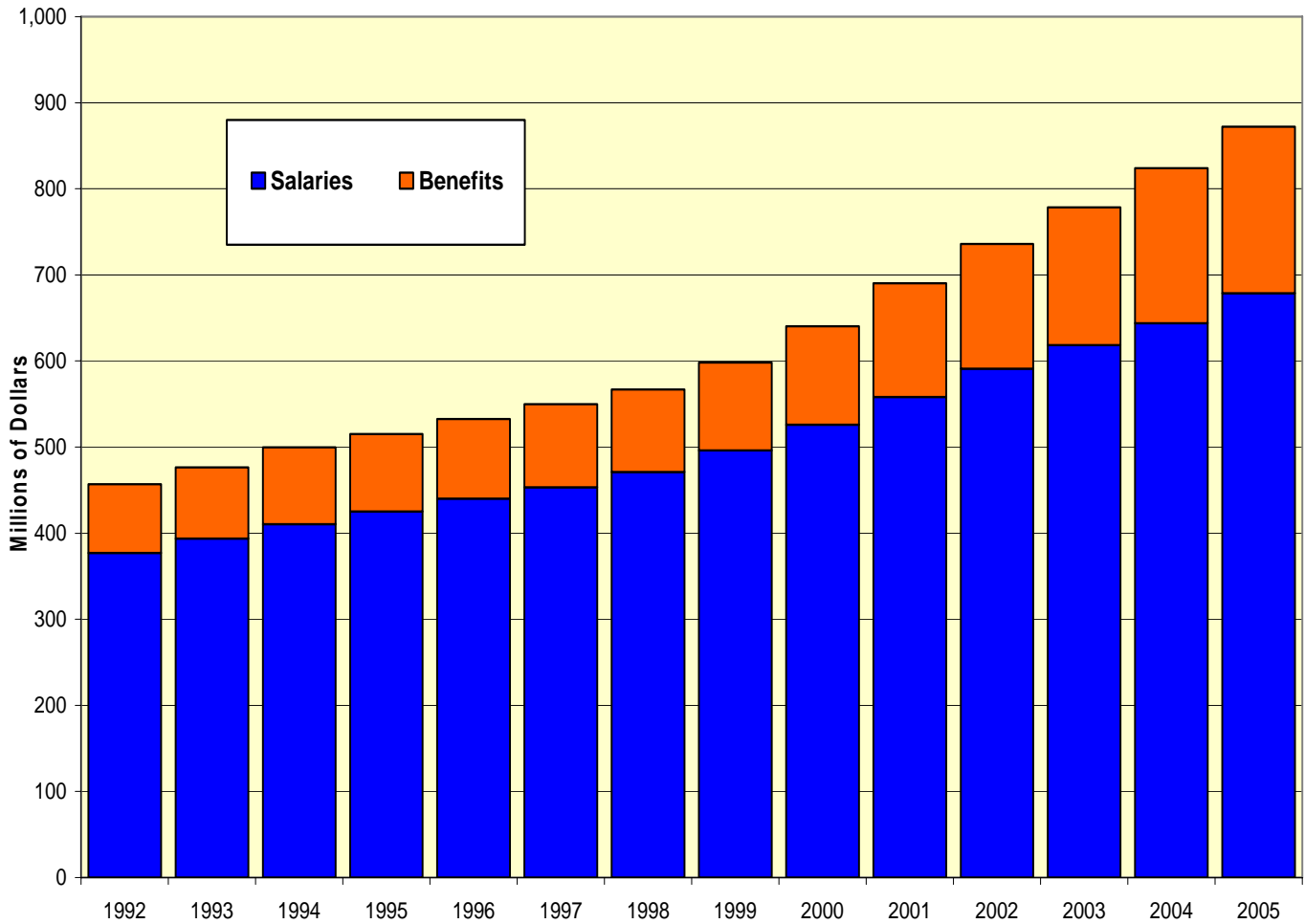


**Figure 4: Educational Expenditures versus CPI**  
 (Sources: U.S. Bureau of Labor Statistics, VT Department of Education)



**Figure 5: Personnel Expenditures on Salaries and Benefit, 1992-2005**

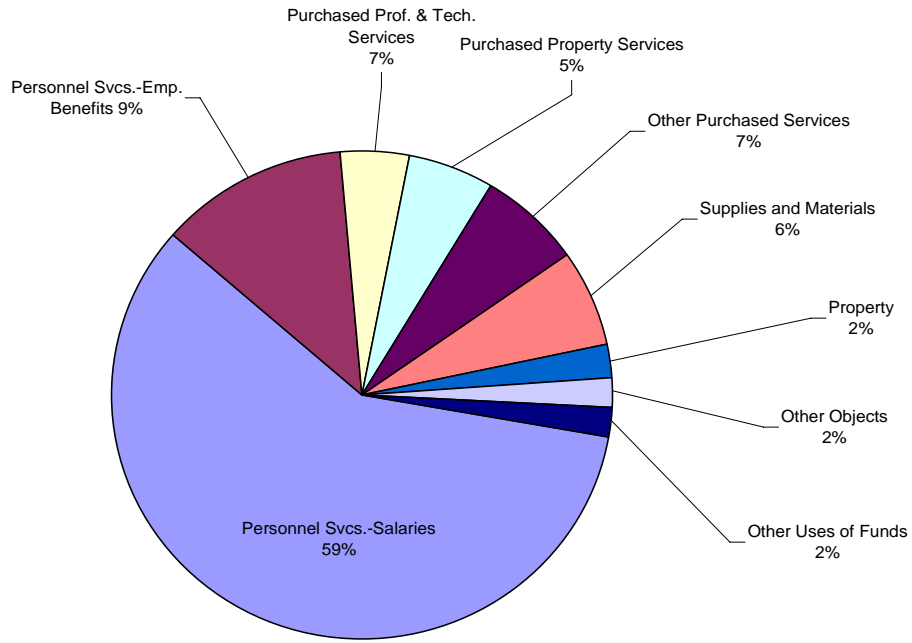
(Source: Vermont Department of Education)



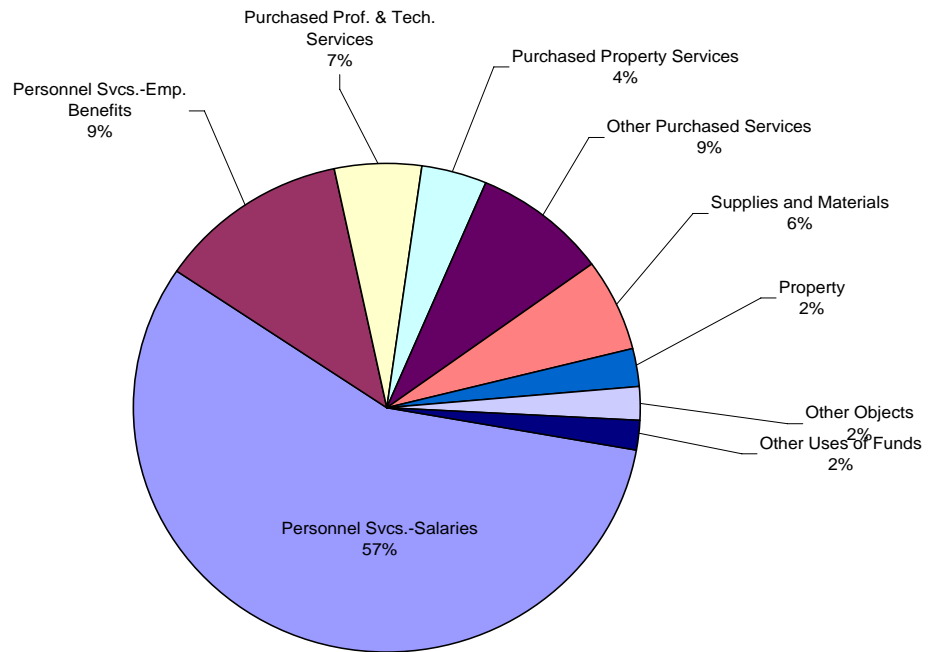
In spite of the growth in benefit costs (a topic discussed at more length below), the composition of expenditures has been remarkably stable. In Figures 6 through 8, we show of the composition of expenditures by major “object” codes at five-year intervals from 1995 to 2005. These codes are standardized expenditure classifications by which schools and school districts report to state and federal education departments to enable comparative analysis.

As shown, the largest component of expenditures is personnel salaries, which fell from 59 percent of total expenditures in 1995 to 51 percent in 2005. The declining share in this item was offset by a combination of increasing share in benefits, rising from 9 percent to 12 percent over the ten year interval, and increasing other purchased services, which grew from 7 percent in 1995 to 10% in 2005. The remaining categories saw changes in the range from zero to two percentage points.

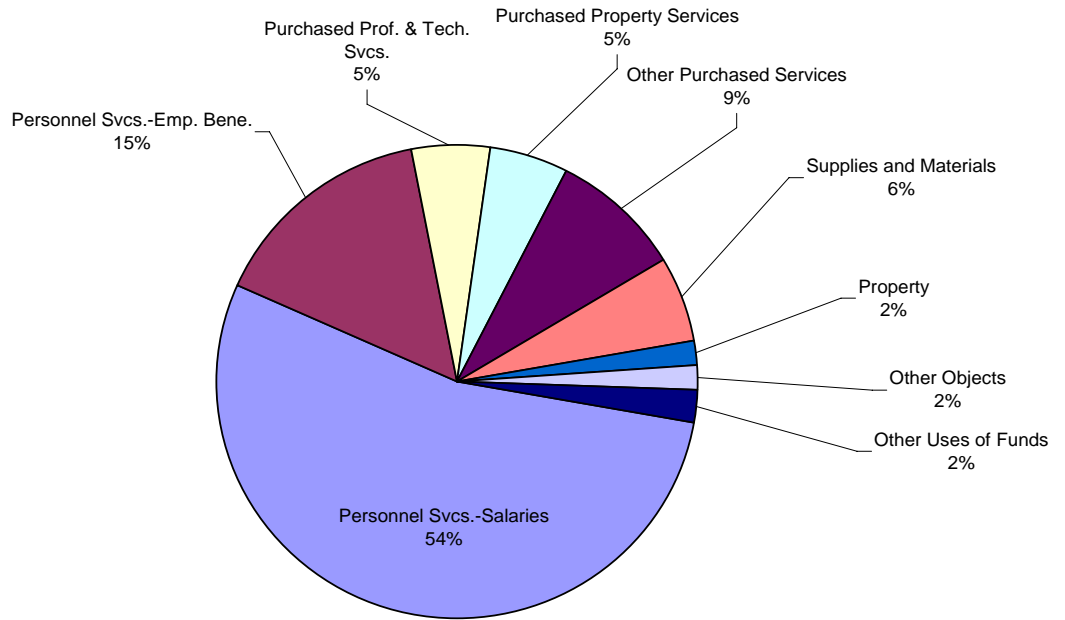
**Figure 6: 1995 Expenditures by Object**



**Figure 7: 2000 Expenditures by Object**



**Figure 8: 2005 Expenditures by Object**



Although personnel costs dominate overall spending by their sheer size, several of the purchased services categories are of substantial size and have exhibited exceptionally high growth rates. Table A on page 8 details expenditures by category, ranked by 2005 expenditure amount and with 10-year compound average annual growth rates.

Among the most important features evident in Table A is that for the largest expenditure objects, those above \$50 million in 2005, personnel salaries have the slowest growth rate. Both professional/technical services and tuition paid to private schools (within Vermont) grew more rapidly than personnel salaries. In addition to private school tuition, several other expenditure types are characterized by high growth with compound annual growth rates of 10 percent or more. These include tuition paid to non-Vermont schools, services purchased from non-Vermont schools, transportation purchased from non-Vermont schools, and judgments against LEAs. With the exception of judgments, these higher expenditures may arise from special needs, but whatever the underlying cause, they are large enough and growing fast enough to warrant additional analysis. Taken together, the five high-growth categories accounted for \$18 million in 1995, and grew to \$66 million by 2005, an aggregate growth rate of 14 percent per year.



**Table A: Expenditures by Object, 2005 and Average Annual Growth Rates**

EXPENDITURE PURPOSE	AMOUNT	GROWTH RATE '95-'05 (Compound Annual)
Personnel-Salaries	678,819,555	4.8
Personnel-Benefits	193,349,650	8.0
Professional/Technical Services	68,413,873	7.3
Tuition to Private Schools	52,352,188	14.3
Supplies and Materials	46,232,797	1.3
Construction Services	37,128,518	5.0
Nonconstruction Property Services	26,921,685	5.2
Bond Retirement (Current and Advance Principal Repayments)	26,794,258	8.2
Other Purchased Services	24,396,199	6.7
Student Transportation-Paid to Non-School Providers	22,473,321	7.4
Equipment	20,694,797	NA
Interest	16,109,894	4.2
Tuition to Non-Vermont Schools	12,031,943	10.2
Electricity	11,505,963	NA
Energy (excluding Electricity)	7,652,286	NA
Books and Periodicals	7,399,334	4.4
Miscellaneous-Not Judgements or Interest	5,426,759	0.4
Services from Non-Vermont Schools	1,170,391	35.9
Special Education Services from Private or Non-Vermont Schools	992,137	NA
Building Acquisition (Non-construction)	814,805	-11.0
Student Transportation-Paid to Non-Vermont Schools	668,280	25.8
Land Acquisition and Improvements	122,991	0.4
Other-Including Fund Transfers	105,578	-20.3
Judgements Against Local Education Authorities	93,620	12.3
<b>TOTAL</b>	<b>1,261,670,822</b>	<b>5.7</b>

NA-Not Available (Purpose not specifically identified in 1995)

While expenditures on personnel have risen at a brisk pace over the 1992 to 2005 period, the number of full-time equivalent teachers has grown only modestly. In 1992, there were approximately 7,500 public school teachers. The corresponding figure for 2002 was 8,500<sup>3</sup> (NCES, 2003). The growth in FTE teachers, however, at 13.3% over this period appears to be high relative to the change in enrollments, which increased by less than 1%, from approximately 100,000 to 100,800, over the same interval.

<sup>3</sup> U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 1992-93, Version 1c; and "State Nonfiscal Survey of Public Elementary/Secondary Education," 2002-03, Version 1a. 2003. <http://nces.ed.gov/quicktables/Detail.asp?Key=1296>

This growth may be accounted for by the conversion of contract employees to staff employees and the need for specialized teachers for special education and technology-related fields, but additional analysis of the expenditure and employment databases is needed to determine the underlying sources of growth. Vermont's rising instructional staff count relative to enrollments is consistent with nationwide trends towards lower pupil-teacher ratios, which fell from 17.7 pupils per teacher in 1992 to 16.2 in 2002.

Total employment by public schools includes not only instructional staff but administrators and support personnel. In 2006, total public school employment amounted to approximately 19,000 jobs. Instructional staff in this same year (including teacher's aides) accounted for about 68 percent of these positions, a figure that has remained relatively stable over the past decade.

As in the case with expenditures by object type presented above, expenditures by function are also highly stable over time. Functions distinguish direct instructional costs from non-instructional ones, including instructional support services, facilities, non-instructional support, and other costs.

Even though expenditures appear to be largely invariant with fluctuating enrollment levels, we see that some elements of staffing levels respond to served population changes. In Table B, below we show staffing by major function. Both student transportation and school food services staffing have declined by a combined 130 persons over the past 10 years.

This is overwhelmed, however, by growth in other functional areas with a gain of approximately 3,300 persons, with the largest being in direct instruction and school administration. From more detailed tables (not shown here), we see that the gains in instructional activities are concentrated in secondary school graded positions, ungraded positions and teachers' aides, the latter accounting for more than one-third of the growth. In school administration, clerical staff accounted for approximately 150 new positions. The other major growth in staffing occurred in maintenance and security staffing, which saw growth of an additional 250 positions.

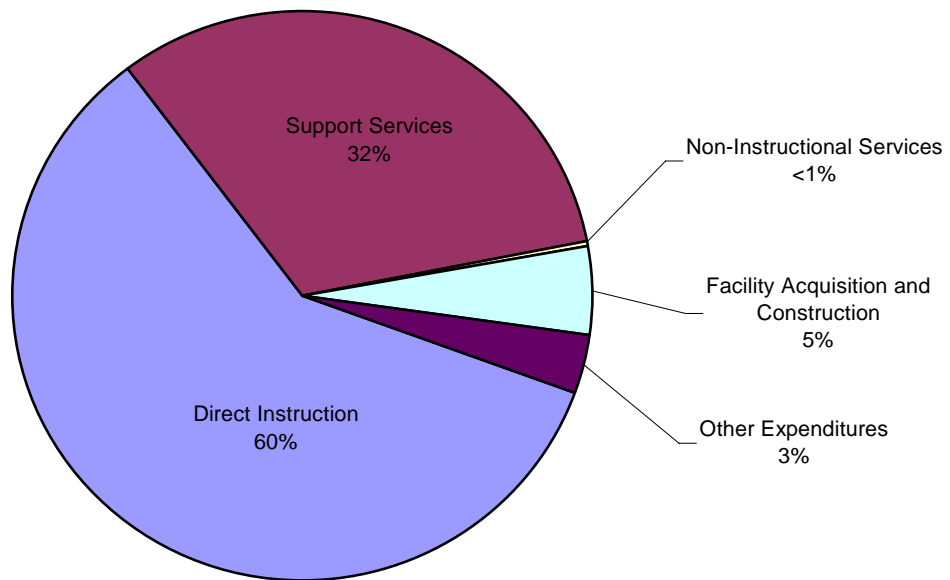
**Table B: Staffing by Function, 1996 and 2006**

<i>FUNCTION</i>	<i>FY96 Staff</i>	<i>FY06 Staff</i>	<i>Growth Rate - Percent 1996 to 2006 (compound annual)</i>	<i>Percent Change 1996 to 2006</i>
<b>Direct Instructional Services</b>	10,671	13,105	2.1	22.8
<b>Support Services</b>				
<b>For Students</b>	927	1,325	3.6	42.9
<b>For Instructional Staff</b>	530	638	1.9	20.4
<b>For General Administration</b>	220	177	-2.1	-19.4
<b>For School Administration</b>	1,001	1,311	2.7	31.0
<b>For Business</b>	1,112	1,386	2.2	24.6
<b>Student Transportation Staff</b>	423	349	-1.9	-17.6
<b>Support Services-Central</b>	31	146	17.0	380.3
<b>Food Service Staff</b>	688	632	-0.9	-8.2
<b>TOTAL</b>	<b>15,604</b>	<b>19,069</b>	<b>2.0</b>	<b>22.2</b>

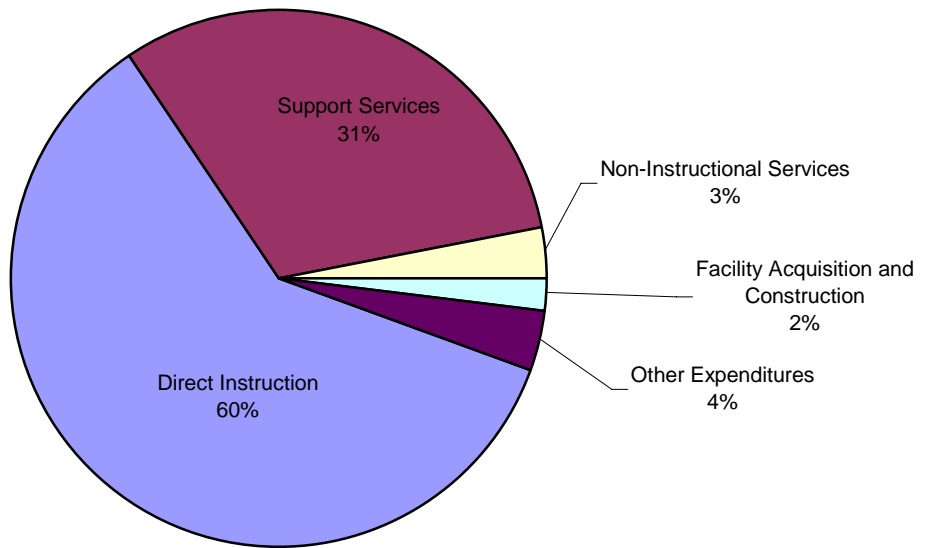
As shown in Table B, between 1996 and 2006, despite a decline in enrollments of 8.5% (totaling nearly 9,000 students), total staffing increased by more than 22%. This phenomenon is one of the fundamental factors driving education costs.

In Figures 9 through 11, we show the composition of functional costs for the 1995-2005 period. As shown, direct instruction in 2005 accounts for approximately 59 percent of all costs, almost unchanged compared to the 1995 and 2000 proportions. Support services accounted for 32 percent in 2005, identical to 1995 and up by only one percentage point from 2000. Non-instructional services grew from almost zero in 1995 to 3 percent in 2005, while expenditures for facilities fell slightly and miscellaneous purposes went almost unchanged.

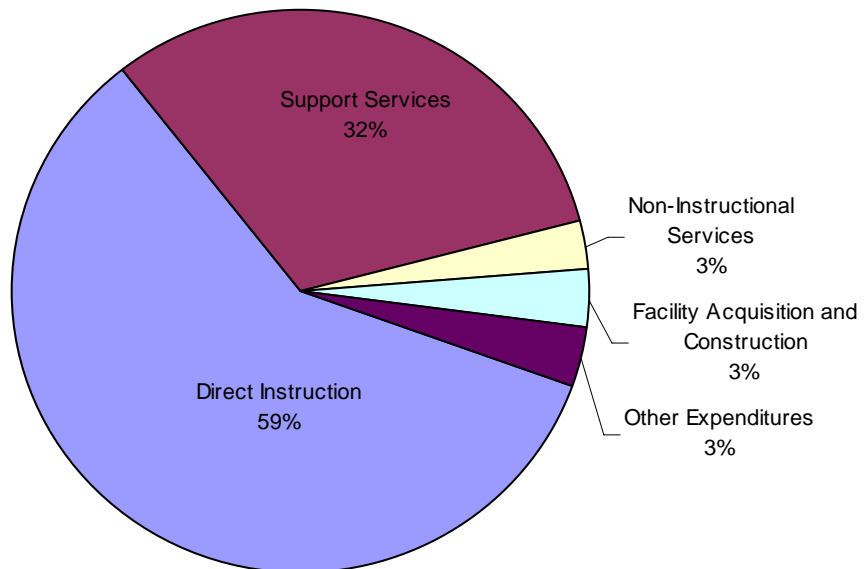
**Figure 9: 1995 Expenditures by Function**



**Figure 10: 2000 Expenditures by Function**



**Figure 11: 2005 Expenditures by Function**

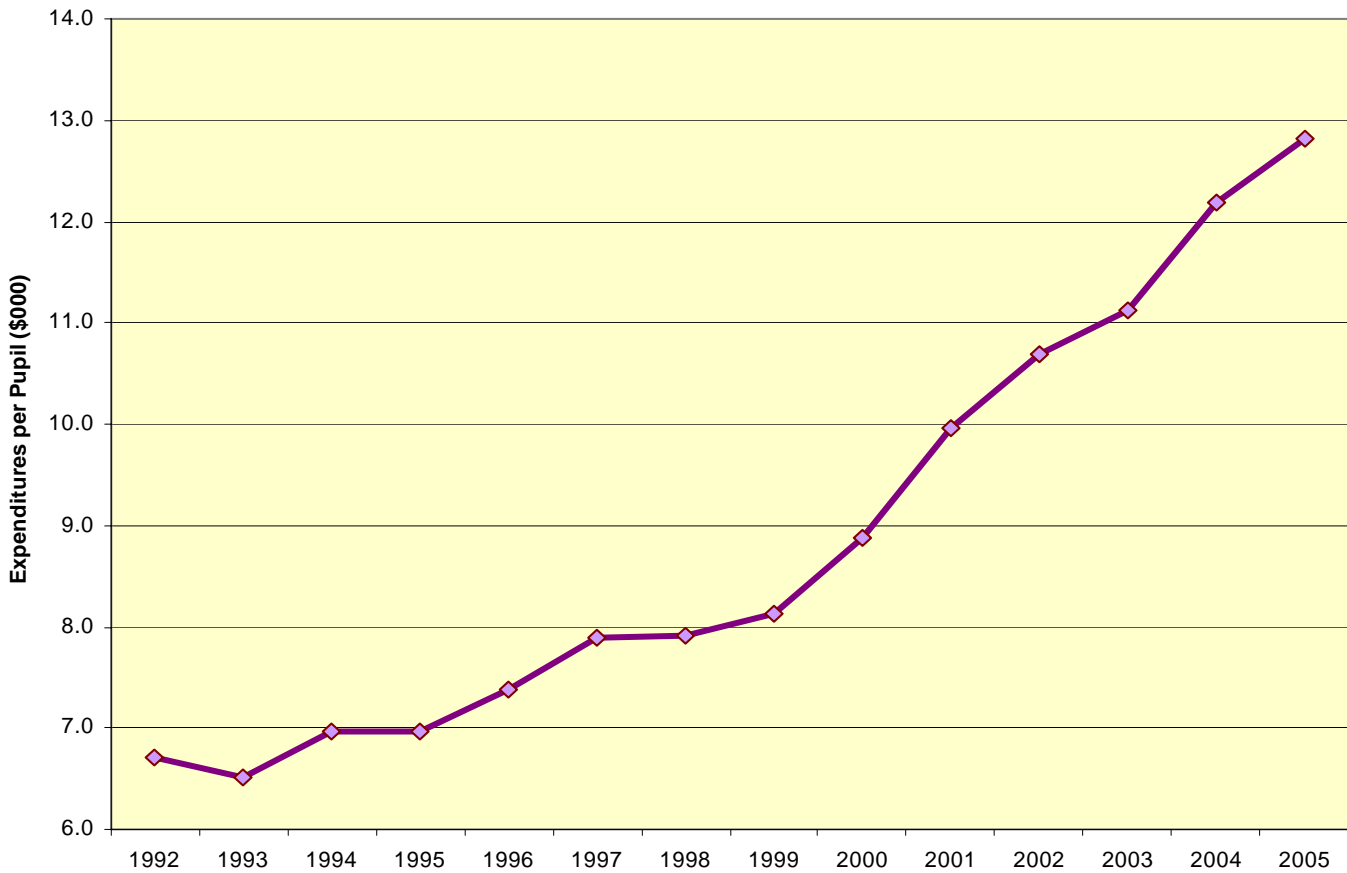


## Vermont Compared to Other States

With total expenditures growing at about 5.5 percent per year (compound annual rate) in the last decade, and declining enrollments, it is not surprising to find rising expenditures per pupil, as shown in Figure 12. By 2005, expenditures per pupil reached \$12,800, an amount which could place Vermont near the top of all states in the United States.

As shown in Table C, by 1999, Vermont already ranked 8<sup>th</sup> among the states with respect to per pupil expenditures, when enrollment was near its peak at approximately 106,000 students. In 2002, Vermont had moved up one place, to 7<sup>th</sup> in the nation. With enrollments in 2007 expected to total about 95,000 and forecast to continue to fall over the next several years due to demographic factors, the per pupil spending rate will only rise further unless expenditure adjustments are made to reflect the declining student population.

**Figure 12: Expenditures per Pupil, 1992-2005**  
(Sources: Vermont Department of Education and Joint Fiscal Office)



In addition to near top-level expenditures per pupil, Vermont leads the nation in having the lowest student-to-teacher ratio, shown to be 12 to 1 in 2000. This is three-quarters of the national average of 16 to 1. When it comes to average teacher salaries, however, Vermont's schools are comparatively less generous, with an average salary of approximately \$39,000 per year, well below the national average of \$44,000 per year, and ranking 30<sup>th</sup> overall.

Not only are Vermont salaries comparatively low, but they have been growing slowly compared to other states. Data from the National Education Association comparing teacher salary growth over the 1993 to 2003 period show that Vermont salaries grew 22 percent over the 10 year period, placing it 45<sup>th</sup> in growth rates of all states<sup>4</sup>. Compared to average salary growth in the US of 30 percent over those 10 years, it is evident that Vermont salary demands have been modest.

What is not clear from these figures, however, is whether low salary growth is making it difficult for Vermont schools to retain skilled, experienced teachers. If the relative stability in the number of teaching positions and low salary growth dilutes the skill quality of Vermont public school teaching, then student performance will not show the improvement that declining pupil-teacher ratios would lead us to expect. Viewed another way, if Vermont's relatively low salaries mean that more specialists are needed to supplement classroom teachers to maintain student performance, then instructional support services expenditures will continue to grow and outpace the effect of declining enrollments. In this event, the State's direct instruction salary advantage will provide only an illusory benefit to taxpayers when total costs are computed.

In view of the State's high level of spending per pupil and low ratio of pupils to teachers, one might suspect that Vermont, by virtue of small district sizes and the high number of districts, would have drastically higher administrative and fixed costs compared to other states. Surprisingly, this is not true to any great degree.

While the 2003 U.S. public school average allocation of expenditures to general and school administrative functions were 1.8 percent and 4.8 percent, respectively, the corresponding figures for Vermont were 2.4 percent and 6.5 percent. These slightly higher percentage did not diminish the proportion of expenditures allocated to instructional activities, which were 60 percent of the 2003 total, well above the 52 percent seen nationwide.

Vermont compares very favorably to many states that have much higher capital costs (11 percent nationally versus 4 percent in Vermont) and somewhat higher interest expenses (2.5 percent nationally versus 1.4 percent in Vermont.) Whether the relatively low level of capital spending has resulted in a shortage of instructional equipment or deficient school facilities cannot be determined from these data, but it is likely that Vermont benefits from continued services of facilities that have long been paid-off and even yield slightly lower than average operations and maintenance expenditures.

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<sup>4</sup> National Education Association. 2005. Rankings and Estimates. Table C-13. <http://www.nea.org/edstats/images/05rankings.pdf>

## Table C

### 1999 Expenditure per Pupil, 2001 Average Teacher Salary, and 2000 Pupil-Teacher Ratio

	1999 Expenditure per pupil:		2001 Average Teacher Salary		2000 Pupil/teacher ratio	
		RANK		RANK		RANK
<b>United States – Total</b>	<b>\$6,911</b>		<b>\$44,604</b>		<b>16</b>	
Alabama	5,638	43	39,268	27	15	23
Alaska	8,806	6	49,418	10	17	37
Arizona	4,999	50	36,966	40	20	49
Arkansas	5,277	48	35,389	47	14	17
California	6,314	29	53,870	3	21	50
Colorado	6,215	33	40,222	25	17	40
Connecticut	9,753	4	54,300	2	14	7
Delaware	8,310	9	48,363	11	15	20
District of Columbia	10,107	2	47,049	12	14	10
Florida	5,831	38	38,719	31	18	44
Georgia	6,437	27	44,073	16	16	34
Hawaii	6,530	26	41,951	22	17	39
Idaho	5,315	47	37,482	37	18	45
Illinois	7,133	20	50,000	8	16	31
Indiana	7,192	16	44,195	15	17	38
Iowa	6,564	25	38,230	33	14	12
Kansas	6,294	31	36,673	42	14	15
Kentucky	5,921	37	37,847	34	17	41
Louisiana	5,804	40	35,437	45	17	42
Maine	7,667	14	37,100	39	13	5
Maryland	7,731	13	46,200	13	16	32
Massachusetts	8,761	7	50,293	7	14	9
Michigan	8,110	10	52,037	5	18	43
Minnesota	7,190	17	43,330	19	16	35
Mississippi	5,014	49	32,800	49	16	36
Missouri	6,187	34	37,695	36	14	13
Montana	6,314	30	34,379	48	15	29
Nebraska	6,683	24	36,236	44	14	16
Nevada	5,760	41	41,524	23	19	47
New Hampshire	6,860	22	38,911	29	15	25
New Jersey	10,337	1	54,575	1	13	2
New Mexico	5,825	39	36,490	43	15	27
New York	9,846	3	53,081	4	14	8
North Carolina	6,045	36	42,959	21	15	21
North Dakota	5,667	42	31,709	50	13	6
Ohio	7,065	21	44,492	14	16	33
Oklahoma	5,395	45	35,412	46	15	28
Oregon	7,149	19	43,886	17	19	46
Pennsylvania	7,772	12	50,599	6	16	30
Rhode Island	8,904	5	49,758	9	15	19
South Carolina	6,130	35	38,943	28	15	24
South Dakota	5,632	44	31,295	51	14	18
Tennessee	5,383	46	38,554	32	15	26
Texas	6,288	32	39,293	26	15	22
Utah	4,378	51	37,414	38	22	51
<b>Vermont</b>	<b>8,323</b>	<b>8</b>	<b>38,802</b>	<b>30</b>	<b>12</b>	<b>1</b>
Virginia	6,841	23	41,262	24	13	3
Washington	6,376	28	43,483	18	20	48
West Virginia	7,152	18	36,751	41	14	14
Wisconsin	7,806	11	43,114	20	14	11
Wyoming	7,425	15	37,841	35	13	4

NOTE: Constant 2001-02 dollars based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Price index does not account for different rates of change in the cost of living among states. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Digest of Education Statistics, 2002 (NCES 2003-060), tables 67, 78 and 169 (pp. 79, 88, 198-99), 2003.

U.S. Department of Education, National Center for Education Statistics, Revenues and Expenditures for Public Elementary and Secondary Schools, various years; Statistics of State School Systems, various years; and Common Core of Data surveys. National Education Association, Estimates of School Statistics; and unpublished data, 2002.

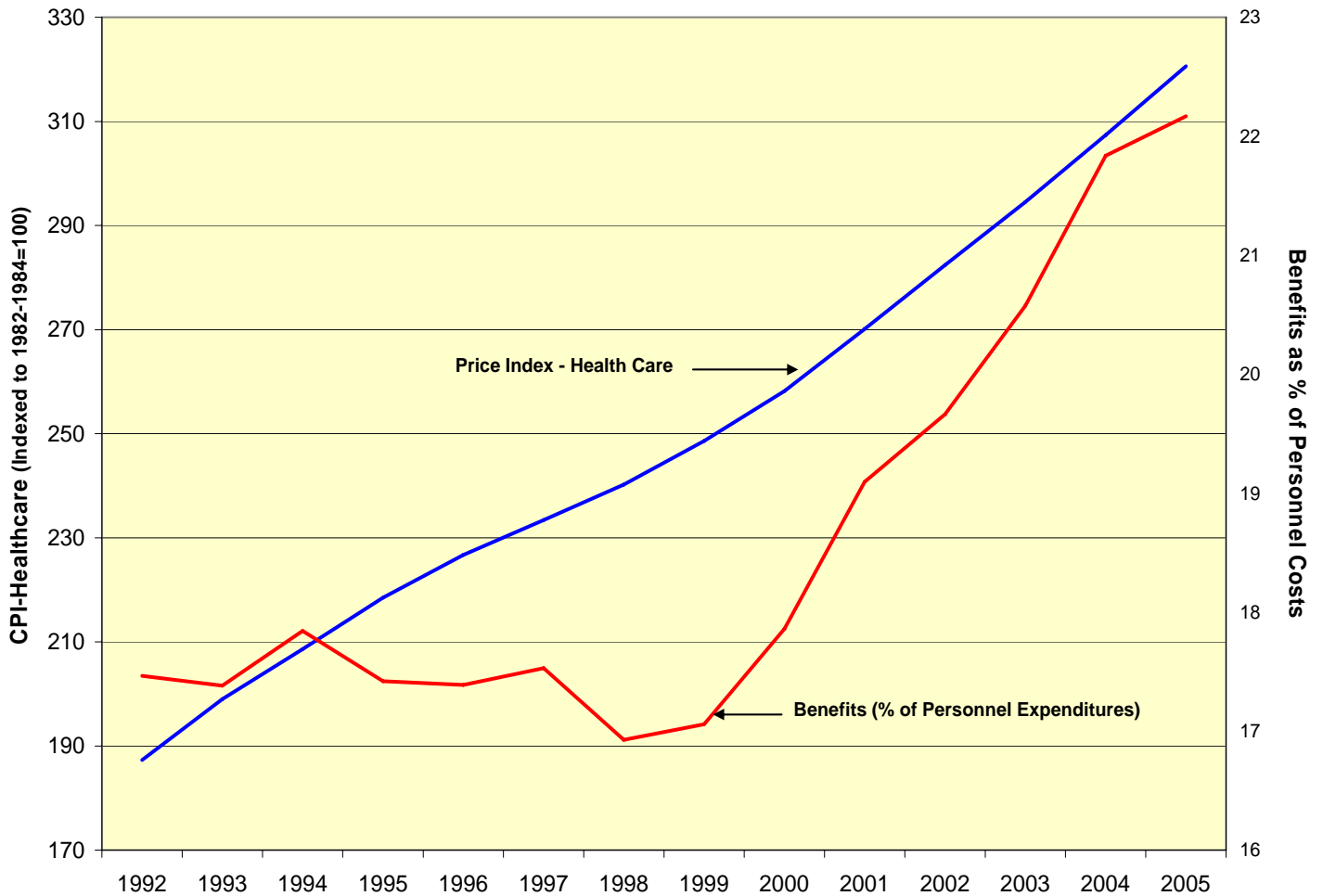
<http://nces.ed.gov/nationsreportcard/mathematics/results2003/schsystchar-c.asp>

## The 'Benefits' Issue

The one category of expenditures that has grown significantly is that of personnel related benefits. In Figure 13 below, we show the annual share of total personnel expenditures on benefits, against which we have plotted the price index of healthcare costs, the primary driver of benefit cost increases of late.

The price-level changes of healthcare have risen dramatically over the period shown, with a 4.2 percent compound annual growth rate from 1992-2005. At the same time, we see benefits as a share of personnel expenditures relatively flat between 1992 and 1999, followed by steady growth between 2000 and 2005. Because healthcare coverage is an included expense to school systems as a part of labor agreements, increased insurance premiums are passed along to public schools with little recourse to limit or control such cost increases.

**Figure 13: Benefits Share of Personnel Expenditures and Healthcare CPI, 1992-2005**



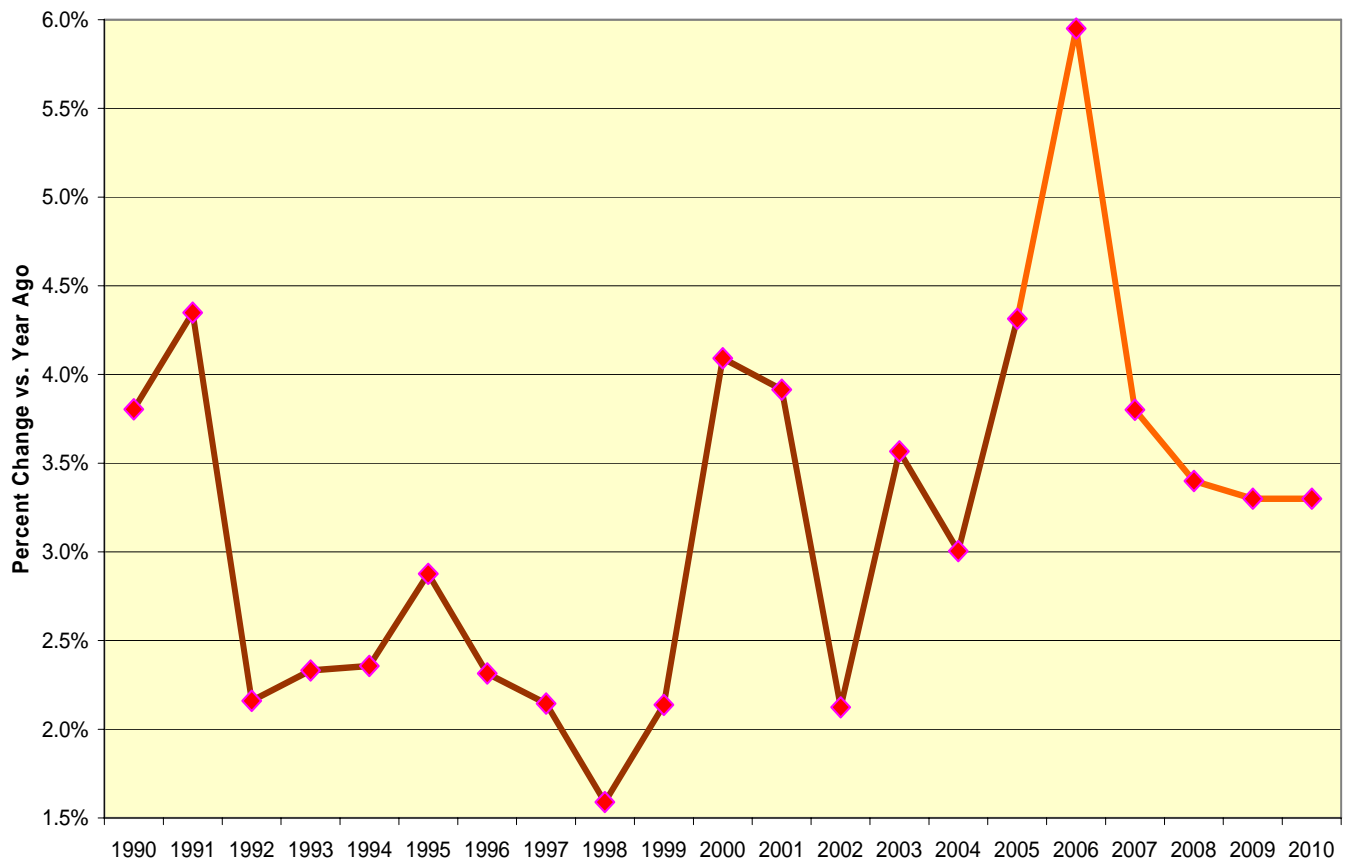


## 4) Future Pressures: Tax Base Stress and Expenditure Growth

### Future Expenditure Pressures

In addition to rising staff levels serving a smaller student population, cost pressures are escalating rapidly in two primary external areas: employee health care benefit costs and energy costs. Health care cost increases have fueled benefit cost growth of more than 200% over the last 8 years and are likely to continue to significantly outpace general inflation in the foreseeable future. Energy costs and their derivatives have been rising as oil prices have nearly quadrupled over the past four years. Rising oil prices affect Vermont education costs through increases in building heating costs, transportation costs and salary pressures from cost of living increases.

**Figure 14: Cost Pressures Will Escalate**  
(Implicit State and Local Government Deflator, Percent Change vs. Year Ago)



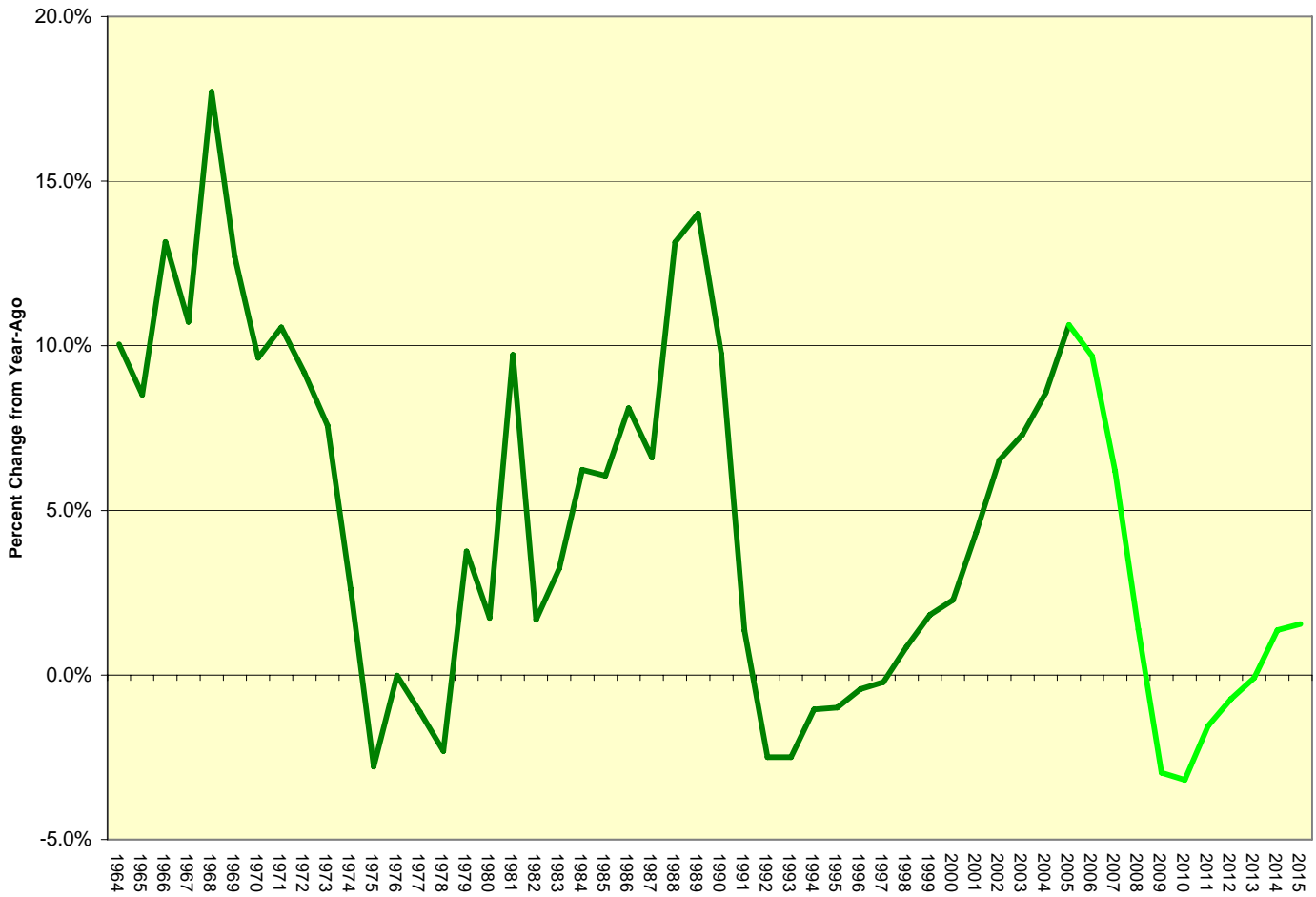
Source: U.S. Department of Commerce, Vermont Joint Fical Office and Administration Consensus Forecasts

These cost increases will likely push the Implicit State and Local Government price Deflator, used to set the State education per pupil block grant, to growth of nearly 6% in FY 2006, its highest level in more than 20 years. Although some of the extraordinary factors affecting FY06 growth will recede in FY07 and beyond, mounting U.S. fiscal mismanagement and the massive U.S. imbalance of trade will add to upside inflation risks over the next decade.

### Revenue Tax Base Pressures

At the same time that costs are accelerating, the primary revenue tax base that funds education in the State will soon be facing a radically different environment than that experienced over the past five years.

**Figure 15: Annual Growth Rate - Vermont Real Adjusted\* Equalized Education Grand List**  
 (\*excluding Utilities, Cable, Exemptions and Contracts, and including Current Use Exempt Value)



Source: Vermont Joint Fiscal Office and Administration Consensus Forecast, May 2006

As real estate markets boomed in recent years, the property tax base upon which education revenues are derived, has been flush. The Equalized Education Grand List has increased at compound annual growth rates of nearly 10% per year since 2000, reaching 13.7% in 2005. Both accelerating property appreciation and record new construction activity contributed to this growth. This has meant that raising tax revenues to support increasing education expenditures has not required property tax rate increases to accomplish this. By FY2008, however, Grand List growth will slow dramatically and could even decline in FY09 and FY10 (see Appendix, Table 1). This will put significant economic (and political) stress on property tax rates and educational spending.

## Further Research Recommendations

As the largest single State government expenditure item, there is a great deal more detail and analytic depth required in order to fully understand all of the factors affecting past and likely future expenditure growth, and draw conclusions about possible policy options that may be associated with any such analysis. While we have developed some of the core data necessary to analyze State public education expenditures and raised some important questions, further data collection and processing is necessary, as well as further work with both State Department of Education personnel and local education administrators, in order to address these issues more fully.

Given the magnitude and importance of this State expenditure category, such analysis could yield significant public benefits.

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# Appendix

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Economic and Demographic Forecast Tables

Vermont State Public Education Expenditure  
Overview and Analysis - Phase 1

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**TABLE 1**  
**Equalized Education Grand List Components**  
Consensus JFO and Administration Forecast - November 2006  
(Millions of Dollars)

	Adjusted* Equalized Education Grand List	+	Utilities Excluding VT Yankee	+	Cable, Exemptions & Contracts	-	Current Use Exempt Value	=	Total Equalized Education Grand List	Real** Adjusted* Equalized Education Grand List	Real** Total Equalized Education Grand List	%ch	%ch	%ch
1980	9906		388							18323				
1981	11888	20.0%	462	19.1%						20105	9.7%			
1982	12825	7.9%	491	6.3%						20442	1.7%			
1983	13762	7.3%	512	4.2%						21103	3.2%			
1984	15170	10.2%	532	3.8%						22419	6.2%			
1985	16577	9.3%	538	1.1%						23775	6.1%			
1986	18317	10.5%	702	30.6%						25701	8.1%			
1987	20057	9.5%	612	-12.7%						27399	6.6%			
1988	23469	17.0%	647	5.7%						31000	13.1%			
1989	27772	18.3%	868	34.1%						35347	14.0%			
1990	31662	14.0%	1019	17.4%						38795	9.8%			
1991	33207	4.9%	1141	12.0%						39318	1.3%			
1992	33124	-0.2%	1240	8.6%						38337	-2.5%			
1993	33041	-0.3%	1340	8.1%						37381	-2.5%			
1994	33389	1.1%	1406	5.0%						36989	-1.0%			
1995	33736	1.0%	1473	4.7%						36624	-1.0%			
1996	34228	1.5%	1433	-2.7%						36467	-0.4%			
1997	34720	1.4%	1393	-2.8%			711		35402	36388	-0.2%	37103		
1998	35407	2.0%	1361	-2.3%	32		746	4.9%	36053	36700	0.9%	37370	0.7%	
1999	36574	3.3%	1355	-0.5%	55	74.7%	799	7.1%	37186	37371	1.8%	37996	1.7%	
2000	38224	4.5%	1330	-1.8%	50	-9.6%	866	8.5%	38738	38224	2.3%	38738	2.0%	
2001	40839	6.8%	1291	-2.9%	81	62.0%	924	6.7%	41286	39881	4.3%	40317	4.1%	
2002	44265	8.4%	1263	-2.2%	98	21.6%	1014	9.7%	44612	42484	6.5%	42817	6.2%	
2003	48462	9.5%	1287	1.9%	106	8.2%	1184	16.7%	48672	45543	7.2%	45740	6.8%	
2004	53998	11.4%	1327	3.1%	118	11.1%	1348	13.9%	54095	49345	8.3%	49434	8.1%	
2005	61406	13.7%	1412	6.4%	144	21.9%	1576	16.9%	61386	54465	10.4%	54447	10.1%	
2006	69023	12.4%	1454	3.0%	158	9.5%	1777	12.8%	68858	59208	8.7%	59067	8.5%	
2007	74641	8.1%	1502	3.3%	169	7.5%	1940	9.2%	74372	61862	4.5%	61639	4.4%	
2008	78684	5.4%	1555	3.5%	180	6.6%	2090	7.7%	78329	63191	2.1%	62906	2.1%	
2009	80114	1.8%	1611	3.6%	192	6.2%	2199	5.2%	79717	62465	-1.1%	62156	-1.2%	
2010	80612	0.6%	1672	3.8%	203	6.0%	2306	4.9%	80181	61023	-2.3%	60696	-2.3%	

\* Adjusted Equalized Education Grand List Excludes Utilities, Cable, Exemptions and Contracts, and Includes Current Use Exempt Value - Used for Analytic Purposes Only

\*\* Adjusted for Inflation Using the U.S. GDP Implicit Price Deflator, Constant 2000 Dollars

**TABLE 2**  
**Vermont Enrollment and Population Projections by Selected Age-Cohorts**  
 Consensus JFO and Administration Forecast - November 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total Pop</b>	597239	600416	604683	609937	612824	616274	619092	621233	623050	624690	627755	631804	635052	637602	640230
<b>%ch</b>	-0.65%	0.53%	0.71%	0.87%	0.47%	0.56%	0.46%	0.35%	0.29%	0.26%	0.49%	0.64%	0.51%	0.40%	0.41%
<b>0-4Year</b>	34249	33264	32626	33649	32135	31931	31748	31650	31693	31917	32287	32687	33099	33542	34086
<b>%ch</b>	-5.14%	-2.88%	-1.92%	3.13%	-4.50%	-0.63%	-0.57%	-0.31%	0.14%	0.71%	1.16%	1.24%	1.26%	1.34%	1.62%
<b>%share</b>	5.735%	5.540%	5.396%	5.517%	5.244%	5.181%	5.128%	5.095%	5.087%	5.109%	5.143%	5.174%	5.212%	5.261%	5.324%
<b>5-18Year</b>	119441	118886	117911	121856	118492	117264	115165	113111	110188	108032	105978	104519	102819	101343	100152
<b>%ch</b>	-1.39%	-0.46%	-0.82%	3.35%	-2.76%	-1.04%	-1.79%	-1.78%	-2.58%	-1.96%	-1.90%	-1.38%	-1.63%	-1.44%	-1.18%
<b>%share</b>	19.999%	19.801%	19.500%	19.978%	19.335%	19.028%	18.602%	18.208%	17.685%	17.294%	16.882%	16.543%	16.191%	15.894%	15.643%
<b>5-19Year</b>	127561	127375	126875	131397	127581	126268	124228	122053	119360	117252	115367	113585	112045	110292	108785
<b>%ch</b>	-1.30%	-0.15%	-0.39%	3.56%	-2.90%	-1.03%	-1.62%	-1.75%	-2.21%	-1.77%	-1.61%	-1.54%	-1.36%	-1.56%	-1.37%
<b>%share</b>	21.358%	21.214%	20.982%	21.543%	20.819%	20.489%	20.066%	19.647%	19.157%	18.770%	18.378%	17.978%	17.643%	17.298%	16.992%
<b>0-18Year</b>	153689	152150	150537	155505	150627	149195	146913	144761	141881	139949	138265	137207	135919	134886	134238
<b>%ch</b>	-2.25%	-1.00%	-1.06%	3.30%	-3.14%	-0.95%	-1.53%	-1.46%	-1.99%	-1.36%	-1.20%	-0.77%	-0.94%	-0.76%	-0.48%
<b>%share</b>	25.733%	25.341%	24.895%	25.495%	24.579%	24.209%	23.730%	23.302%	22.772%	22.403%	22.025%	21.717%	21.403%	21.155%	20.967%
<b>5-14Year</b>	84813	83454	82254	85711	82432	80886	78592	76335	73559	71750	70436	69526	68639	67889	67511
<b>%ch</b>	-2.71%	-1.60%	-1.44%	4.20%	-3.83%	-1.88%	-2.84%	-2.87%	-3.64%	-2.46%	-1.83%	-1.29%	-1.28%	-1.09%	-0.56%
<b>%share</b>	14.201%	13.899%	13.603%	14.052%	13.451%	13.125%	12.695%	12.288%	11.806%	11.486%	11.220%	11.004%	10.808%	10.647%	10.545%
<b>15-19Year</b>	42749	43921	44622	45686	45149	45382	45636	45718	45801	45502	44931	44059	43406	42403	41274
<b>%ch</b>	1.62%	2.74%	1.60%	2.39%	-1.18%	0.52%	0.56%	0.18%	0.18%	-0.65%	-1.25%	-1.94%	-1.48%	-2.31%	-2.66%
<b>%share</b>	7.158%	7.315%	7.379%	7.490%	7.367%	7.364%	7.371%	7.359%	7.351%	7.284%	7.157%	6.974%	6.835%	6.650%	6.447%
<b>VT Enrollments</b>	106341	105984	105120	104559	102049	100867	100183	99085	98363	96636	94984	93231	91622	90339	89359
<b>%ch</b>	0.74%	-0.34%	-0.82%	-0.53%	-2.40%	-1.16%	-0.68%	-1.10%	-0.73%	-1.76%	-1.71%	-1.85%	-1.73%	-1.40%	-1.08%
<b>POP SHARES</b>															
<b>0-4Year</b>	5.735%	5.540%	5.396%	5.517%	5.244%	5.181%	5.128%	5.095%	5.087%	5.109%	5.143%	5.174%	5.212%	5.261%	5.324%
<b>5-19Year</b>	21.358%	21.214%	20.982%	21.543%	20.819%	20.489%	20.066%	19.647%	19.157%	18.770%	18.378%	17.978%	17.643%	17.298%	16.992%
<b>20-24Year</b>	5.967%	5.967%	6.051%	6.360%	6.921%	7.214%	7.372%	7.039%	7.255%	7.066%	6.985%	6.958%	6.891%	6.846%	6.774%
<b>25-44Year</b>	32.580%	32.139%	31.648%	28.852%	28.309%	27.560%	27.025%	26.446%	26.394%	26.188%	25.960%	25.740%	25.535%	25.408%	25.360%
<b>45-64Year</b>	22.107%	22.854%	23.643%	24.981%	25.925%	26.719%	27.498%	28.760%	28.949%	29.514%	29.952%	30.181%	30.440%	30.619%	30.702%
<b>65+Year</b>	12.253%	12.286%	12.281%	12.747%	12.782%	12.837%	12.911%	13.014%	13.158%	13.353%	13.582%	13.970%	14.278%	14.569%	14.849%
<b>Total</b>	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
<b>POP LEVELS</b>															
<b>0-4Year</b>	34249	33264	32626	33649	32135	31931	31748	31650	31693	31917	32287	32687	33099	33542	34086
<b>5-19Year</b>	127561	127375	126875	131397	127581	126268	124228	122053	119360	117252	115367	113585	112045	110292	108785
<b>20-24Year</b>	35636	35826	36588	38792	42416	44456	45637	43730	45201	44143	43848	43960	43761	43649	43367
<b>25-44Year</b>	194580	192968	191370	175981	173484	169848	167310	164289	164447	163591	162968	162625	162162	162001	162362
<b>45-64Year</b>	132031	137216	142963	152371	158875	164660	170239	178664	180367	184374	188023	190684	193311	195228	196563
<b>65+Year</b>	73182	73768	74260	77747	78333	79111	79930	80847	81982	83412	85262	88263	90674	92890	95066
<b>Total</b>	597239	600416	604683	609937	612824	616274	619092	621233	623050	624690	627755	631804	635052	637602	640230

**TABLE 3**  
**Relevant Inflation and Other Economic Measures**  
**Consensus JFO and Administration Forecast - November 2006**

U.S. State and Local Government NIPA Chain Weighted Deflator Fiscal Year Basis Calendar 2000 = 100 (FPDIGS.US)			U.S. Consumer Price Index Urban Consumer, All Items Calendar Year Basis 1982-1984 = 100 (FCPIU.US)			OFHEO - Vermont House Price Index Calendar Year Basis 1980 Q1 = 100 (FHOFHOPI.VT)			Vermont Gross State Product (GSP) Nominal Dollars Fiscal Year Basis (FGDP.VT)		
	Index	%ch		Index	%ch		Index	%ch	\$ Billions	%ch	
1981	51.6	NA	1981	90.9	10.4%	1981	106.0	-0.2%	1981	5.2	12.2%
1982	55.4	7.5%	1982	96.5	6.2%	1982	109.6	3.3%	1982	5.7	8.1%
1983	58.5	5.6%	1983	99.6	3.2%	1983	116.0	5.9%	1983	6.0	6.4%
1984	61.0	4.3%	1984	103.9	4.4%	1984	122.8	5.8%	1984	6.6	10.3%
1985	63.5	4.1%	1985	107.6	3.5%	1985	132.2	7.7%	1985	7.3	10.6%
1986	65.6	3.3%	1986	109.7	1.9%	1986	147.7	11.7%	1986	8.0	8.5%
1987	68.0	3.6%	1987	113.6	3.7%	1987	168.6	14.1%	1987	8.8	10.1%
1988	70.4	3.5%	1988	118.3	4.1%	1988	192.8	14.4%	1988	9.9	12.7%
1989	72.7	3.3%	1989	123.9	4.8%	1989	210.7	9.3%	1989	10.8	9.2%
1990	75.5	3.8%	1990	130.7	5.4%	1990	212.8	1.0%	1990	11.3	4.9%
1991	78.8	4.3%	1991	136.2	4.2%	1991	211.0	-0.8%	1991	11.4	0.8%
1992	80.5	2.2%	1992	140.3	3.0%	1992	213.0	0.9%	1992	11.9	3.9%
1993	82.3	2.3%	1993	144.5	3.0%	1993	215.4	1.2%	1993	12.6	5.9%
1994	84.3	2.4%	1994	148.2	2.6%	1994	215.1	-0.2%	1994	13.2	4.9%
1995	86.7	2.9%	1995	152.4	2.8%	1995	216.4	0.6%	1995	13.6	3.0%
1996	88.7	2.3%	1996	156.9	2.9%	1996	220.1	1.7%	1996	13.9	2.7%
1997	90.6	2.1%	1997	160.5	2.3%	1997	222.2	1.0%	1997	14.8	5.8%
1998	92.1	1.6%	1998	163.0	1.5%	1998	227.8	2.5%	1998	15.5	5.2%
1999	94.0	2.1%	1999	166.6	2.2%	1999	237.1	4.1%	1999	16.3	4.9%
2000	97.9	4.1%	2000	172.2	3.4%	2000	254.4	7.3%	2000	17.4	6.7%
2001	101.7	3.9%	2001	177.0	2.8%	2001	274.6	7.9%	2001	18.3	5.5%
2002	103.9	2.1%	2002	179.9	1.6%	2002	295.4	7.6%	2002	19.1	4.3%
2003	107.7	3.7%	2003	184.0	2.3%	2003	316.6	7.2%	2003	19.9	4.2%
2004	111.6	3.6%	2004	188.9	2.7%	2004	359.4	13.5%	2004	21.3	6.6%
2005	117.8	5.6%	2005	195.3	3.4%	2005	411.8	14.6%	2005	22.7	6.7%
2006	124.8	5.9%	2006	202.3	3.6%	2006	453.2	10.0%	2006	23.9	5.3%
2007	129.5	3.8%	2007	209.2	3.4%	2007	472.0	4.2%	2007	25.4	6.1%
2008	133.9	3.4%	2008	216.1	3.3%	2008	472.6	0.1%	2008	26.7	5.5%
2009	138.3	3.3%	2009	222.8	3.1%	2009	472.2	-0.1%	2009	28.2	5.4%
2010	142.9	3.3%	2010	229.7	3.1%	2010	479.3	1.5%	2010	29.6	5.1%

**TABLE 4**  
**Selected Summary Education Expenditure Metrics**

Total Education Expenditures School Year Basis - Unduplicated*			Total Enrollments School Year Basis		Expenditures Per Enrollee	
		%ch	Students	%ch		%ch
<b>1992</b>	671,824,790		<b>1992</b>	100,048	<b>1992</b>	\$ 6,715
<b>1993</b>	661,914,949	-1.5%	<b>1993</b>	101,591	<b>1993</b>	\$ 6,515 -3.0%
<b>1994</b>	715,176,950	8.0%	<b>1994</b>	102,755	<b>1994</b>	\$ 6,960 6.8%
<b>1995</b>	727,729,991	1.8%	<b>1995</b>	104,533	<b>1995</b>	\$ 6,962 0.0%
<b>1996</b>	778,970,520	7.0%	<b>1996</b>	105,565	<b>1996</b>	\$ 7,379 6.0%
<b>1997</b>	838,548,774	7.6%	<b>1997</b>	106,341	<b>1997</b>	\$ 7,885 6.9%
<b>1998</b>	838,415,580	0.0%	<b>1998</b>	105,984	<b>1998</b>	\$ 7,911 0.3%
<b>1999</b>	855,293,586	2.0%	<b>1999</b>	105,120	<b>1999</b>	\$ 8,136 2.9%
<b>2000</b>	929,008,970	8.6%	<b>2000</b>	104,559	<b>2000</b>	\$ 8,885 9.2%
<b>2001</b>	1,016,163,002	9.4%	<b>2001</b>	102,049	<b>2001</b>	\$ 9,958 12.1%
<b>2002</b>	1,077,958,502	6.1%	<b>2002</b>	100,867	<b>2002</b>	\$ 10,687 7.3%
<b>2003</b>	1,113,797,225	3.3%	<b>2003</b>	100,183	<b>2003</b>	\$ 11,118 4.0%
<b>2004</b>	1,208,117,213	8.5%	<b>2004</b>	99,085	<b>2004</b>	\$ 12,193 9.7%
<b>2005</b>	1,261,670,822	4.4%	<b>2005</b>	98,363	<b>2005</b>	\$ 12,827 5.2%
<b>2006</b>	N/A		<b>2006</b>	96,636	<b>2006</b>	N/A

\* Expenditures presented here are "unduplicated" for each local educational authority (LEA), meaning that tuition and transfers to other Vermont public schools, fees and assessments paid to supervisory unions, and other non-educational payments and transfers have been deleted from the total expenditure calculation. Duplicated expenditures amounted to approximately \$377 million in FY2005. Note that tuition and transfers paid by LEAs to Vermont private and out-of-state schools are in the total unduplicated expenditures, although the enrollment figures do not generally include private schools, even those that are publicly funded. Private and out-of-state transfers amounted to approximately \$65 million in FY2005.