

Endnotes to Vermont K-12 Public Education, June 2007

(1) Vermont Per Pupil Public Education Spending Fall 1990-Fall 2006

Per Pupil Spending (PPS)

Numerator = *current expenditures* as defined by the U.S. Department of Education (USDOE)

Denominator = *actual number* of elementary/secondary pupils enrolled in Vermont public schools.

VT	# Pupils	USDOE		USDOE		VTDOE		VTDOE		VTDOE	
		Cur. Exp. Billions	% +/-	PPS	% +/-	Cur. Exp. Billions	% +/-	LES Billions	% +/-	PPS LES	% +/-
1990	98,630	\$0.599		\$6,073							
1991	100,048										
1992	101,591	\$0.616		\$6,066							
1993	102,755	\$0.644		\$6,266	3.3%						
1994	104,533	\$0.666		\$6,367	1.6%						
1995	105,565	\$0.685		\$6,488	1.9%						
1996	106,341	\$0.718		\$6,753	4.1%						
1997	105,983	\$0.750		\$7,075	4.8%						
1998	105,120	\$0.793		\$7,541	6.6%						
1999	104,559	\$0.870		\$8,323	10.4%	\$0.810		\$0.697		\$6,662	
2000	102,049	\$0.934	7.3%	\$9,153	10.0%	\$0.869	7.2%	\$0.738	6.0%	\$7,236	8.6%
2001	101,180	\$0.992	6.2%	\$9,806	7.1%	\$0.923	6.3%	\$0.786	6.5%	\$7,771	7.4%
2002	99,978	\$1.045	5.3%	\$10,454	6.6%	\$0.972	5.3%	\$0.818	4.0%	\$8,183	5.3%
2003	99,104	\$1.105	5.7%	\$11,150	6.7%	\$1.028	5.7%	\$0.852	4.2%	\$8,601	5.1%
2004	98,361	\$1.168	5.7%	\$11,870	6.5%	\$1.086	5.7%	\$0.909	6.6%	\$9,237	7.4%
2005	96,636	\$1.238	6.0%	\$12,808	7.9%			\$0.963	6.0%	\$9,965	7.9%
2006	95,481	\$1.305	5.4%	\$13,664	6.7%			\$1.015	5.4%	\$10,630	6.7%

CAGR			
90-97	1.0%	3.3%	2.2%
98-06	-1.2%	6.4%	7.7%
99-06	-1.3%	6.0%	7.3%
99-04	-1.2%	6.1%	7.4%
99-02	-1.5%	6.3%	7.9%
			6.0%
			5.5%
			6.9%
			6.8%
			7.1%

The USDOE's *Digest of Education Statistics 2005* provides a wealth of data on U.S. public elementary/secondary education including *Total Expenditures*. Total Expenditures less (a) capital outlay and (b) interest on school debt = *Current expenditures* that account for approximately 85% of Total Expenditures.

Current Expenditures is the standard numerator for computing PPS. *Current Expenditures* consists of (a) Direct Instruction, (b) Support Services for students and staff, (c) General and School administration, (d) Operation and Maintenance, (e) Student Transportation, (f) Food Services and (g) Enterprise Operations (operations funded by sales of products or services, e.g. book stores).

U.S. Department of Education: *Digest of Education Statistics 2005*:

<http://nces.ed.gov/programs/digest/d05/>

Table 160: Total Expenditures for public elementary/secondary education by function. Selected years 1990-91 to 2002-03

Table 157: Current Expenditures for public elementary/secondary education by state. Selected years 1969-70 to 2002-03

Table 33: Enrollment in public elementary/secondary schools by state. Selected years 1990-2005

Vermont Department of Education: *Elementary/Secondary School Enrollment*

http://education.vermont.gov/new/pdfdoc/data/enrollment/enrollment_07.pdf

http://education.vermont.gov/new/html/data/enrollment/enrollment_00.html

The USDOE provides data on expenditures through Fall 2002 or the 2002-03 school year. As the scope of this analysis is through Fall 2006 or the 2006-07 school year it was necessary to estimate Vermont's current

expenditures (per USDOE's definition) for Fall 03-06 by extrapolating from data available from Vermont's Department of Education (VTDOE).

Vermont Department of Education: Summary of Annual Statistical Report of Schools (SASRS)

- http://education.vermont.gov/new/pdfdoc/data/sasrs/05/sasrs_05_02.pdf
- http://education.vermont.gov/new/pdfdoc/data/sasrs/04/sasrs_04_complete.pdf
- http://education.vermont.gov/new/pdfdoc/data/sasrs/03/sasrs_03_complete.pdf
- http://education.vermont.gov/new/pdfdoc/data/sasrs/02/sasrs_02_complete.pdf
- http://education.vermont.gov/new/html/data/sasrs/sasrs_01_toc.html
- http://education.vermont.gov/new/html/data/sasrs/sasrs_00_toc.html

For Fall 2003 and 2004 *current expenditures* (per USDOE definition) were increased by the percentage growth of *current unduplicated expenditures* as reported by VTDOE. As illustrated in the table above, the respective growth rates for current expenditures per USDOE and VTDOE for overlapping years (2000-03) were virtually identical.

It should be noted that, while not large, there is a discrepancy between current expenditures as reported by USDOE and VTDOE. Vermont's lower number is attributable to the exclusion of items in addition to those excluded by the USDOE, i.e. (a) capital outlay and (b) interest on long term debt. Vermont also excludes (c) tuition & fees to Independent schools, out-of-state schools and state agencies, (d) instructional equipment, (e) community services and adult education, and (f) other equipment.

For Fall 2005 and 2006 current expenditures (per USDOE definition) was estimated by using the percentage growth in *Local Education Spending*. *Local Education Spending* (LES) is the amount approved and spent on public education by Vermont's school districts. It is suggestive of but not a completely accurate indication of overall spending as it excludes *Categorical Grants*, i.e. Vermont's partial reimbursement of school districts' special education (SPED), EEE, transportation, technical education, capital debt etc. expenses.

SPED accounts for approximately 72% of total state grants. With the number of SPED pupils projected to increase by 4.3% (FY08 vs. FY07) to 15.4% of total pupils (vs. 14.6% FY07) combined state/LES SPED spending is expected to increase by \$15.8 million or 7.7% vs. an approximate CAGR of 6.1% during the 1999/00-2006/07 period. PPS SPED spending will increase at the lower rate of 3.2% reflecting the increase in SPED pupils.

SPED	# Pupils	% Total Pupils	Total SPED Eligible Millions	Total Eligible Fed. Funded Millions	Total Eligible State Funded Millions	Total Eligible LES Funded Millions	State/LES Funded PPS
1999/00	14,073	13.5%			\$81.5		
2006/07	13,897	14.6%	\$223.6	\$17.51	\$121.2	\$84.9	\$14,828
P2007/08	14,498	15.4%	\$239.4	\$17.48	\$130.6	\$91.3	\$15,309
% +/- 07 vs 06	4.3%		7.1%	-0.2%	7.8%	7.6%	3.2%
CAGR 99-P07	0.4%				6.1%		

Vermont Department of Education: Summary of Annual Statistical Report of Schools (SASRS)

http://education.vermont.gov/new/pdfdoc/data/sasrs/05/sasrs_05_02.pdf

Vermont State Board of Education: FY08 Budget Recommendations and Annual Report

http://education.vermont.gov/new/pdfdoc/pubs/budget_book_08/budget_book.pdf

Vermont Department of Education: Form B State Performance Plan for 2005-1010

http://education.vermont.gov/new/pdfdoc/pgm_spед/pubs/spp_020107/indicators_5-8.pdf

Vermont Department of Education: Part B Annual Performance Report FFY 05

http://education.vermont.gov/new/pdfdoc/pgm_spед/pubs/apr_020107.pdf

U.S. Department of Education: Digest of Education Statistics 2005:

<http://nces.ed.gov/programs/digest/d05/>

Table 52: Number and percentages of children served under Individuals with Disabilities Act. Selected years 1990-91 to 2003-04

(2) Current Expenditures per pupil

	US	VT	CT	MA	ME	NH	RI	VT Rank
1990	\$4,902	\$6,073	\$7,547	\$5,881	\$4,978	\$5,152	\$5,934	6
1991								
1992	\$5,160	\$6,066	\$7,655	\$6,141	\$5,624	\$5,368	\$6,501	
1993	\$5,327	\$6,266	\$7,947	\$6,423	\$5,569	\$5,433	\$6,797	
1994	\$5,529	\$6,367	\$8,380	\$6,783	\$6,029	\$5,567	\$7,127	
1995	\$5,689	\$6,488	\$8,430	\$7,033	\$6,151	\$5,740	\$7,304	
1996	\$5,923	\$6,753	\$8,580	\$7,331	\$6,426	\$5,920	\$7,612	
1997	\$6,189	\$7,075	\$8,901	\$7,778	\$6,742	\$6,154	\$7,928	11
1998	\$6,508	\$7,541	\$9,318	\$8,260	\$7,155	\$6,433	\$8,294	
1999	\$6,912	\$8,323	\$9,753	\$8,816	\$7,667	\$6,860	\$8,904	
2000	\$7,380	\$9,153	\$10,127	\$9,509	\$8,232	\$7,286	\$9,315	
2001	\$7,727	\$9,806	\$10,577	\$10,232	\$8,816	\$7,935	\$9,703	
2002	\$8,041	\$10,454	\$11,057	\$10,460	\$9,344	\$8,579	\$10,349	6

CAGR

90-02	4.2%	4.6%	3.2%	4.9%	5.4%	4.3%	4.7%
90-97	3.4%	2.2%	2.4%	4.1%	4.4%	2.6%	4.2%
98-02	5.4%	8.5%	4.4%	6.1%	6.9%	7.5%	5.7%

States With Higher PPS than Vermont in 1990 & 2002

State	Fall 90	% of U.S. Avg.	State	Fall 02	% of U.S. Avg.
NJ	\$8,166	166.6%	NJ	\$12,568	156.3%
D.C.	\$8,029	163.8%	NY	\$11,961	148.8%
CT	\$7,547	154.0%	D.C.	\$11,847	147.3%
NY	\$7,510	153.2%	CT	\$11,057	137.5%
Alaska	\$7,502	153.0%	MA	\$10,460	130.1%
VT	\$6,073	123.9%	VT	\$10,454	130.0%
U.S.	\$4,902	100.0%	U.S.	\$8,041	100.0%

U.S. Department of Education: Digest of Education Statistics 2005:

<http://nces.ed.gov/programs/digest/d05/>

Table 166: Current expenditures per pupil in fall enrollment in public elementary/secondary schools by state; Selected years 1969-70 to 2002-03

(3) Affordability: VT PPS vs. VT Per Capita Personal Income & US CPI

	USDOE Vermont PPS	Vermont Per Capita Personal Income	US CPI	Vermont GDP Millions
1990	\$6,073	\$17,876	130.7	\$11,727
1991		\$17,985	136.2	\$11,722
1992	\$6,066	\$19,065	140.3	\$12,590
1993	\$6,266	\$19,485	144.5	\$13,070
1994	\$6,367	\$20,226	148.2	\$13,717
1995	\$6,488	\$21,002	152.4	\$13,892
1996	\$6,753	\$21,964	156.9	\$14,632
1997	\$7,075	\$23,002	160.5	\$15,167
1998	\$7,541	\$24,629	163.0	\$15,935
1999	\$8,323	\$25,881	166.6	\$16,788
2000	\$9,153	\$27,678	172.2	\$17,782
2001	\$9,806	\$28,948	177.1	\$18,828
2002	\$10,454	\$29,292	179.9	\$19,553
2003	\$11,150	\$30,247	184.0	\$20,580
2004	\$11,870	\$31,442	188.9	\$21,992
2005	\$12,808	\$32,717	195.3	\$23,065
2006	\$13,664	\$34,264	201.6	\$24,080
CAGR				
90-06	5.2%	4.2%	2.7%	4.6%
90-97	2.2%	3.7%	3.0%	3.7%
98-06	7.7%	4.2%	2.7%	5.3%
PPS CAGR vs VTPCPI vs USCPI vs VTGDP				
90-06	5.2%	1.0%	2.5%	0.6%
90-97	2.2%	-1.5%	-0.8%	-1.5%
98-06	7.7%	3.5%	5.0%	2.4%

Bureau of Economic Analysis: millions of current dollars

<http://www.bea.gov/regional/spi/drill.cfm>

U.S. Department of Labor, Bureau of Labor Statistics Base Period 1982-84=100; Series ID CUUROOOSAO; annual unless noted otherwise

<http://data.bls.gov/cgi-bin/surveymost>

Bureau of Economic Analysis: millions of current dollars

<http://www.bea.gov/bea/regional/gsp/action.cfm>

Vermont Department of Labor, Economic & Labor Market Information

<http://www.vtmi.info/pcivt.htm>

(4) Primary Cost Drivers

VTDOE (millions)	<u>99/00</u>	<u>00/01</u>	<u>01/02</u>	<u>02/03</u>	<u>03/04</u>	<u>04/05</u>	CAGR <u>99/00-04/05</u>
Total Current Expenditures	<u>\$810.3</u>	<u>\$869.2</u>	<u>\$923.2</u>	<u>\$972.2</u>	<u>\$1,027.8</u>	<u>\$1,086.1</u>	<u>6.0%</u>
Wages/Salaries	\$524.2	\$556.7	\$589.4	\$616.5	\$642.0	\$676.7	5.2%
Employee Benefits	\$114.1	\$131.4	\$144.5	\$159.7	\$179.6	\$192.9	11.1%
Purchased Prof/Tech. Services	<u>\$47.3</u>	<u>\$48.2</u>	<u>\$52.5</u>	<u>\$55.4</u>	<u>\$60.5</u>	<u>\$64.5</u>	<u>6.4%</u>
Subtotal	<u>\$685.6</u>	<u>\$736.3</u>	<u>\$786.4</u>	<u>\$831.5</u>	<u>\$882.2</u>	<u>\$934.1</u>	<u>6.4%</u>
Purchased Property Services	\$22.5	\$23.3	\$23.6	\$23.6	\$25.6	\$25.8	2.8%
Other Purchased Services	\$37.4	\$38.9	\$42.5	\$45.2	\$47.0	\$46.7	4.5%
Supplies/Books/Fuel, etc	\$58.5	\$63.5	\$64.1	\$65.2	\$67.0	\$72.2	4.3%
Other	<u>\$6.4</u>	<u>\$7.3</u>	<u>\$6.6</u>	<u>\$6.7</u>	<u>\$6.1</u>	<u>\$7.2</u>	<u>2.5%</u>
Subtotal	<u>\$124.7</u>	<u>\$132.9</u>	<u>\$136.8</u>	<u>\$140.7</u>	<u>\$145.7</u>	<u>\$151.9</u>	<u>4.0%</u>
							AVG.
Percentage Relationships Total Current Expenditures	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Wages/Salaries	64.7%	64.0%	63.8%	63.4%	62.5%	62.3%	63.5%
Employee Benefits	14.1%	15.1%	15.7%	16.4%	17.5%	17.8%	16.1%
Purchased Prof/Tech. Services	<u>5.8%</u>	<u>5.5%</u>	<u>5.7%</u>	<u>5.7%</u>	<u>5.9%</u>	<u>5.9%</u>	<u>5.8%</u>
Subtotal	<u>84.6%</u>	<u>84.7%</u>	<u>85.2%</u>	<u>85.5%</u>	<u>85.8%</u>	<u>86.0%</u>	<u>85.3%</u>
Purchased Property Services	2.8%	2.7%	2.6%	2.4%	2.5%	2.4%	2.6%
Other Purchased Services	4.6%	4.5%	4.6%	4.7%	4.6%	4.3%	4.5%
Supplies/Books/Fuel, etc	7.2%	7.3%	6.9%	6.7%	6.5%	6.7%	6.9%
Other	<u>0.8%</u>	<u>0.8%</u>	<u>0.7%</u>	<u>0.7%</u>	<u>0.6%</u>	<u>0.7%</u>	<u>0.7%</u>
Subtotal	<u>15.4%</u>	<u>15.3%</u>	<u>14.8%</u>	<u>14.5%</u>	<u>14.2%</u>	<u>14.0%</u>	<u>14.7%</u>
Enrollment	104,559	102,049	101,180	99,978	99,104	98,361	CAGR
PPS by Object Total Current Expenditures	<u>\$7,750</u>	<u>\$8,518</u>	<u>\$9,124</u>	<u>\$9,724</u>	<u>\$10,371</u>	<u>\$11,042</u>	<u>7.3%</u>
Wages/Salaries	\$5,013	\$5,455	\$5,825	\$6,166	\$6,478	\$6,880	6.5%
Employee Benefits	\$1,091	\$1,288	\$1,428	\$1,597	\$1,812	\$1,962	12.4%
Purchased Prof/Tech. Services	<u>\$453</u>	<u>\$473</u>	<u>\$519</u>	<u>\$554</u>	<u>\$611</u>	<u>\$656</u>	<u>7.7%</u>
Subtotal	<u>\$6,557</u>	<u>\$7,215</u>	<u>\$7,772</u>	<u>\$8,317</u>	<u>\$8,901</u>	<u>\$9,497</u>	<u>7.7%</u>
Purchased Property Services	\$215	\$228	\$234	\$236	\$258	\$262	4.0%
Other Purchased Services	\$357	\$381	\$420	\$452	\$474	\$474	5.8%
Supplies/Books/Fuel, etc	\$559	\$622	\$633	\$652	\$676	\$735	5.6%
Other	<u>\$61</u>	<u>\$71</u>	<u>\$65</u>	<u>\$67</u>	<u>\$62</u>	<u>\$73</u>	<u>3.7%</u>
Subtotal	<u>\$1,193</u>	<u>\$1,303</u>	<u>\$1,352</u>	<u>\$1,408</u>	<u>\$1,470</u>	<u>\$1,545</u>	<u>5.3%</u>

Vermont Department of Education: Summary of Annual Statistical Report of Schools (SASRS)
http://education.vermont.gov/new/pdfdoc/data/sasrs/05/sasrs_05_02.pdf
http://education.vermont.gov/new/pdfdoc/data/sasrs/04/sasrs_04_complete.pdf
http://education.vermont.gov/new/pdfdoc/data/sasrs/03/sasrs_03_complete.pdf
http://education.vermont.gov/new/pdfdoc/data/sasrs/02/sasrs_02_complete.pdf
http://education.vermont.gov/new/html/data/sasrs/sasrs_01_toc.html
http://education.vermont.gov/new/html/data/sasrs/sasrs_00_toc.html

(5) Vermont: Actual Pupil/Teacher & Pupil/Staff Ratios Fall 1996 -Fall 2005 vs Hypothetical Ratios Assuming Maintenance of 1996 staffing levels.

Year	# Pupils	Total Staff	Teachers	Other	Actual	Actual	96 Staffing	96 Staffing
					P/T	P/S	P/T	P/S
1996	106,341	15,555	7,712	7,843	12.8	6.3	Same	Same
1998	105120				12.8	6.3	13.6	6.8
1999	104559		8473		12.3	6.0	13.6	6.7
2000	102049	18099	8683	9416	12.1	5.7	13.2	6.6
2001	101180		8740		11.8	5.6	13.1	6.5
2002	99978		8822		11.7	5.4	13.0	6.4
2003	99104	18,787	8,753	10,034	11.3	5.3	12.9	6.4
2004	98361	19,018	8,750	10,268	11.2	5.2	12.8	6.3
2005	96636	19,069	8,847	10,222	10.9	5.1	12.5	6.2

Vermont Department of Education: Teacher/Staff FTE and Salary Reports
http://education.vermont.gov/new/html/data/teacher_FTE.html
 A Review of Vermont Education Expenditures from FY96 to FY01
http://education.vermont.gov/new/pdfdoc/pubs/expenditures_96_01.pdf

US Pupil/Teacher & Pupil/Staff Ratios Fall 1998 and Fall 2002

	Pupil/Teacher					%	Pupil/Staff					%
	Fall 1998	Rank '98	Fall 2002	Rank '02	+/-		Fall 1998	Rank '98	Fall 2002	Rank '02	+/-	
USA	16.4		15.9		-3.0%	8.6		8.1		-5.8%		
Alabama	15.7	25	15.7	31	0.0%	8.5	33	8.3	36	-2.4%		
Alaska	16.7	37	16.6	37	-0.6%	8.4	30	7.9	27	-6.0%		
Arizona	20.0	47	19.9	46	-0.5%	10.0	43	9.7	45	-3.0%		
Arkansas	16.2	33	14.9	22	-8.0%	11.1	49	7.1	14	36.0%		
California	21.0	50	20.6	49	-1.9%	11.5	50	10.9	48	-5.2%		
Colorado	17.7	40	16.6	37	-6.2%	9.2	42	8.3	36	-9.8%		
Connecticut	14.0	7	13.5	8	-3.6%	7.0	4	6.6	4	-5.7%		
Delaware	16.0	30	15.1	24	-5.6%	8.8	37	8.1	33	-8.0%		
District/Columbia	13.9	5				7.3	6	6.6	4	-9.6%		
Florida	18.4	44	18.4	43	0.0%	8.9	39	8.8	41	-1.1%		
Georgia	15.8	28	15.6	29	-1.3%	7.9	18	7.6	24	-3.8%		
Hawaii	17.7	40	16.8	41	-5.1%	10.8	48	8.9	42	17.6%		
Idaho	18.2	42	17.9	42	-1.6%	10.3	45	10.0	46	-2.9%		
Illinois	16.5	35	15.9	34	-3.6%	8.6	34	8.1	33	-5.8%		
Indiana	17.0	39	16.7	40	-1.8%	8.0	21	7.9	27	-1.3%		
Iowa	15.2	18	13.9	12	-8.6%	7.6	8	7.2	17	-5.3%		
Kansas	14.8	17	14.4	17	-2.7%	7.8	15	7.4	21	-5.1%		
Kentucky	16.1	31	16.3	36	1.2%	7.2	5	6.9	9	-4.2%		
Louisiana	15.6	24	16.6	37	6.4%	7.7	12	7.1	14	-7.8%		
Maine	13.3	2	12.1	3	-9.0%	6.7	2	5.9	2	11.9%		
Maryland	16.9	38	15.7	31	-7.1%	9.0	41	8.4	38	-6.7%		
Massachusetts	13.8	3	13.2	7	-4.3%	7.6	8	6.8	7	10.5%		
Michigan	18.5	45	19.9	46	7.6%	8.2	26	9.5	44	15.9%		
Minnesota	15.7	25	16.0	35	1.9%	8.4	30	8.0	31	-4.8%		

Mississippi	16.1	31	15.6	29	-3.1%	7.7	12	7.4	21	-3.9%
Missouri	14.6	15	13.6	9	-6.8%	7.9	18	7.1	14	10.1%
Montana	15.7	25	14.5	18	-7.6%	8.4	30	8.0	31	-4.8%
Nebraska	14.3	11	13.6	9	-4.9%	7.6	8	7.0	13	-7.9%
Nevada	18.9	46	18.4	43	-2.6%	10.7	47	11.0	49	2.8%
New Hampshire	15.4	22	13.9	12	-9.7%	8.0	21	6.9	9	13.8%
New Jersey	13.8	3	12.8	4	-7.2%	7.4	7	6.9	9	-6.8%
New Mexico	16.5	35	15.1	24	-8.5%	8.0	21	7.3	20	-8.8%
New York	14.6	15	13.7	11	-6.2%	7.6	8	6.7	6	11.8%
North Carolina	15.8	28	15.2	26	-3.8%	8.2	26	7.9	27	-3.7%
North Dakota	14.4	13	12.9	5	10.4%	7.8	15	6.9	9	11.5%
Ohio	18.2	42	14.7	20	19.2%	8.8	37	7.6	24	13.6%
Oklahoma	15.4	22	15.4	27	0.0%	8.9	39	8.4	38	-5.6%
Oregon	20.0	47	20.4	48	2.0%	10.1	44	10.1	47	0.0%
Pennsylvania	16.4	34	15.4	27	-6.1%	8.7	35	7.9	27	-9.2%
Rhode Island	13.9	5	14.2	16	2.2%	8.7	35	8.7	40	0.0%
South Carolina	15.2	18	14.9	22	-2.0%	8.2	26	11.0	49	34.1%
South Dakota	14.3	11	14.0	14	-2.1%	8.0	21	6.8	7	15.0%
Tennessee	15.3	21	15.8	33	3.3%	8.2	26	8.1	33	-1.2%
Texas	15.2	18	14.8	21	-2.6%	7.8	15	7.2	17	-7.7%
Utah	22.4	51	21.8	50	-2.7%	12.3	51	11.8	50	-4.1%
Vermont	12.8	1	11.7	1	-8.6%	6.3	1	5.4	1	14.3%
Virginia	14.2	8	11.8	2	16.9%	7.9	18	7.2	17	-8.9%
Washington	20.1	49	19.2	45	-4.5%	10.6	46	9.0	43	15.1%
West Virginia	14.2	8	14.0	14	-1.4%	7.7	12	7.4	21	-3.9%
Wisconsin	14.4	13	14.6	19	1.4%	8.0	21	7.8	26	-2.5%
Wyoming	14.2	8	13.0	6	-8.5%	6.9	3	6.4	3	-7.2%

U.S. Department of Education: Digest of Education Statistics 2005:

<http://nces.ed.gov/programs/digest/d05/>

Table 65: Teachers, enrollment, and pupil/teacher ratios in public elementary/secondary schools; Fall 1998 through Fall 2003

Table 82: Staff, enrollment, and pupil/staff ratios in public elementary/secondary schools; Fall 1997 through Fall 2003

(6) Vermont Public Education Staffing Fall 1996, Fall 2000 and Fall 2005 by Function

				<u>00 vs</u>	<u>96</u>	<u>05 vs</u>	<u>96</u>			
				+/-	+/-	+/-	+/-			
				#	%	#	%			
Vermont Education Staffing by Function (FTE)				<u>Fall 96</u>	<u>Fall 00</u>	<u>Fall 05</u>				
				15,555	18,099	19,069	2,544	16.4%	3,514	22.6%
Function	Description									
1000	<u>Direct Instructional Services</u>			<u>10,786</u>	<u>12,610</u>	<u>13,105</u>	<u>1,824</u>	<u>16.9%</u>	<u>2,319</u>	<u>21.5%</u>
	<i>Teachers</i>			<i>7,712</i>	<i>8,682</i>	<i>8,848</i>	<i>970</i>	<i>12.6%</i>	<i>1,136</i>	<i>14.7%</i>
	<i>Pre-Kindergarten</i>			41	62	77	21	51.2%	36	87.8%
	<i>Kindergarten</i>			280	303	344	23	8.2%	64	22.9%
	<i>Elementary</i>			2,753	2,843	2,943	90	3.3%	190	6.9%
	<i>Secondary</i>			3,024	3,355	3,263	331	10.9%	239	7.9%
	<i>Ungraded</i>			1,070	1,405	1,942	335	31.3%	872	81.5%
	<i>Vocational Education Directors</i>			544	714	279	170	31.3%	-265	-48.7%
	<i>Teachers Assistants</i>			<i>3,074</i>	<i>3,928</i>	<i>4,258</i>	<i>854</i>	<i>27.8%</i>	<i>1,184</i>	<i>38.5%</i>
2100	<u>Support Services Students</u>			<u>921</u>	<u>1,165</u>	<u>1,325</u>	<u>244</u>	<u>26.5%</u>	<u>404</u>	<u>43.9%</u>
	Attendance/Social Work			25	53	105	28	112.0%	80	320.0%
	Guidance Counselors (K- 6)			148	165	164	17	11.5%	16	10.8%
	Guidance Counselors (7-12)			202	228	266	26	12.9%	64	31.7%
	Nurses/Nurses Aides			195	267	276	72	36.9%	81	41.5%
	Psychological/Speech									
	Pathology./Audiology			233	279	358	46	19.7%	125	53.6%
	School Registrars			23	45	41	22	95.7%	18	78.3%
	Administrative Assistant Clerical			95	128	115	33	34.7%	20	21.1%
2200	<u>Support Services Instructional Staff</u>			<u>509</u>	<u>599</u>	<u>638</u>	<u>90</u>	<u>17.7%</u>	<u>129</u>	<u>25.3%</u>
	Athletic Directors			38	30	42	-8	-21.1%	4	10.5%
	Audiovisual Staff			31	45	112	14	45.2%	81	261.3%
	Administrative Assistant Clerical			57	51	46	-6	-10.5%	-11	-19.3%
	Curriculum Coordinators			17	45	51	28	164.7%	34	200.0%
	EEE Directors			15	13	15	-2	-13.3%	0	0.0%
	Librarians			213	235	225	22	10.3%	12	5.6%
	School Library Support Staff			137	176	146	39	28.5%	9	6.6%
	Title IX Coordinators			0	4	2	4		2	
2300	<u>Support Services General Admin.</u>			<u>195</u>	<u>203</u>	<u>177</u>	<u>8</u>	<u>4.1%</u>	<u>-18</u>	<u>-9.2%</u>
	Superintendents			60	60	58	0	0.0%	-2	-3.3%
	Assistant Superintendents			20	22	17	2	10.0%	-3	-15.0%
	Administrative Assistant Clerical			115	122	103	7	6.1%	-12	-10.4%
2400	<u>Support Services School Admin.</u>			<u>985</u>	<u>1,198</u>	<u>1,311</u>	<u>213</u>	<u>21.6%</u>	<u>326</u>	<u>33.1%</u>
	Principals			296	312	319	16	5.4%	23	7.8%
	Assistant Principals			90	109	125	19	21.1%	35	38.9%
	Title 1 Coordinators			14	19	18	5	35.7%	4	28.6%
	Administrative Assistant Clerical			464	528	596	64	13.8%	132	28.4%
	Bookkeeper			0	49	61	49		61	
	Department Heads			42	82	75	40	95.2%	33	78.6%
	Special Education Directors			59	77	93	18	30.5%	34	57.6%
	Vocational Education Directors			20	22	24	2	10.0%	4	20.0%
2500	<u>Central Support Services</u>			<u>218</u>	<u>287</u>	<u>367</u>	<u>69</u>	<u>31.7%</u>	<u>149</u>	<u>68.3%</u>

	Business Managers	54	62	65	8	14.8%		11	20.4%
	Administrative Assistant Clerical	146	153	156	7	4.8%		10	6.8%
	In-Service Training Staff	0	22	4	22			4	
	Planning, Research & Development	7	10	16	3	42.9%		9	128.6%
	Statistical & Data Processing Staff	11	41	126	30	272.7%		115	1045.5%
2600	<u>Operations/Maint. & Security</u>	926	1,045	1,165	119	12.9%		239	25.8%
2700	<u>Student Transportation Staff</u>	339	318	349	-21	-6.2%		10	2.9%
3100	<u>Food Service Staff</u>	677	672	632	-5	-0.7%		-45	-6.6%

Vermont Department of Education: Teacher/Staff Full-time Equivalency (FTE) and Salary Report
http://education.vermont.gov/new/html/data/teacher_FTE.html
 A Review of Vermont Education Expenditures from FY96 to FY01
http://education.vermont.gov/new/html/pubs/expenditures_96_01.html

(7) Performance: Vermont Students' Average Score and National Rankings....Selected Years

Vermont Students' Average Score and National Rankings....Selected Years

	<u>2000/</u>	<u>2001</u>		<u>2002/</u>	<u>2003</u>		<u>2003/</u>	<u>2004</u>		<u>2004/</u>	<u>2005</u>		<u>2005/</u>	<u>2006</u>
	<u>Score</u>	<u>Rank</u>		<u>Score</u>	<u>Rank</u>		<u>Score</u>	<u>Rank</u>		<u>Score</u>	<u>Rank</u>		<u>Score</u>	<u>Rank</u>
<u>4th Grade</u>														
Reading				227	3		227	4					227	2
Math	232	5					242	2					244	5
<u>8th Grade</u>														
Reading				272	1		271	2					269	5
Math	281	5					286	4					287	3
Science	161	2												

U.S. Department of Education: Digest of Education Statistics 2005:
<http://nces.ed.gov/programs/digest/d05/>

Table 113: Average scale score in reading of 8th graders in public schools; Selected years 1998 through 2005
 Table 122: Average scale score in mathematics of 8th graders in public schools. Selected years 1990 through 2005
 Table 124: Average scale score in science of 8th graders in public schools. Selected years 1996 and 2000
 Table 112: Average scale score in reading of 4th graders in public schools; Selected years 1994 through 2005
 Table 121: Average scale score in mathematics of 4th graders in public schools. Selected years 1992 through 2005

(7) Performance: An 'Apples to Apples' Comparison of 'White/non-Hispanic' Performance

	All Students		White Non-Hispanic	
	2005/	2006	2005/	2006
	<u>Score</u>	<u>Rank</u>	<u>Score</u>	<u>Rank</u>
<u>US Average</u>	217		228	
<u>4th Grade</u>				
Reading	227	2	227	21

U.S. Department of Education: Digest of Education Statistics 2005:
<http://nces.ed.gov/programs/digest/d05/>

Table 112: Average scale score in reading of 4th graders in public schools; Selected years 1994 through 2005

(8) College Bound Seniors- Vermont students' SAT Scores vs US Average and US 'White/non-Hispanics'

<u>Total SAT Scores</u>	<u>1995/96</u>	<u>2000/01</u>	<u>2002/03</u>	<u>2003/04</u>	<u>2004/05</u>
US Average	1013	1020	1026	1026	1028
US White/non-Hispanic	1049	1060	1063	1059	1068
Vermont	1006	1017	1027	1028	1038
VT Rank vs. <u>All</u> Students	35	35	32	33	31

U.S. Department of Education: Digest of Education Statistics 2005:

<http://nces.ed.gov/programs/digest/d05/>

Table 129: SAT score averages of college-bound seniors. Selected years 1987/88 through 2004/05

Table 126: SAT score averages of college-bound seniors by race/ethnicity; Selected years 1986/87 through 2004/05

(9) 2005 4th Grade Reading: State Rankings by Average Score, PPS and Return on Education Spending

Return on Education Spending (ROES)

Numerator = average score

Denominator = PPS

<u>State</u>	<u>White/non Hispanic</u>	<u>Avg. Score Rank</u>	<u>PPS</u>	<u>PPS Rank</u>	<u>PPS ROES</u>	<u>ROES Rank</u>
USA Average	228		\$8,468			
Alabama	220	47	\$6,631	44	0.033	9
Alaska	225	30	\$10,390	8	0.022	44
Arizona	224	37	\$6,613	45	0.034	4
Arkansas	225	30	\$6,823	42	0.033	9
California	225	30	\$7,950	27	0.028	24
Colorado	232	8	\$7,772	32	0.030	17
Connecticut	234	4	\$11,639	4	0.020	48
D.C.	252	1	\$12,470	3	0.020	48
Delaware	235	3	\$10,204	9	0.023	42
Florida	228	15	\$6,778	43	0.034	4
Georgia	226	25	\$8,184	24	0.028	24
Hawaii	224	37	\$8,527	21	0.026	31
Idaho	226	25	\$6,401	49	0.035	3
Illinois	230	12	\$8,723	19	0.026	31
Indiana	223	41	\$8,482	23	0.026	31
Iowa	224	37	\$7,972	26	0.028	24
Kansas	225	30	\$7,847	31	0.029	21
Kentucky	222	44	\$7,012	39	0.032	12
Louisiana	223	41	\$7,287	37	0.031	15
Maine	225	30	\$9,835	10	0.023	42
Maryland	233	5	\$9,634	11	0.024	37
Massachusetts	237	2	\$11,010	5	0.022	44
Michigan	226	25	\$9,243	15	0.024	37
Minnesota	231	11	\$8,536	20	0.027	29
Mississippi	220	47	\$6,097	50	0.036	2
Missouri	226	25	\$7,889	29	0.029	21
Montana	228	15	\$7,890	28	0.029	21
Nebraska	228	15	\$8,499	22	0.027	29
Nevada	219	49	\$6,413	47	0.034	4
New Hampshire	228	15	\$9,030	17	0.025	34

New Jersey	233	5	\$13,229	1	0.018	50
New Mexico	225	30	\$7,500	35	0.030	17
New York	232	8	\$12,591	2	0.018	50
North Carolina	227	21	\$6,908	40	0.033	9
North Dakota	228	15	\$7,231	38	0.032	12
Ohio	230	12	\$9,087	16	0.025	34
Oklahoma	219	49	\$6,412	48	0.034	4
Oregon	223	41	\$7,886	30	0.028	24
Pennsylvania	229	14	\$9,470	13	0.024	37
Rhode Island	224	37	\$10,893	7	0.021	46
South Carolina	225	30	\$7,410	36	0.030	17
South Dakota	222	44	\$6,892	41	0.032	12
Tennessee	222	44	\$6,440	46	0.034	4
Texas	232	8	\$7,512	34	0.031	15
Utah	226	25	\$5,092	51	0.044	1
Vermont	227	21	\$11,005	6	0.021	46
Virginia	233	5	\$8,234	23	0.028	24
Washington	228	15	\$7,634	33	0.030	17
West Virginia	215	51	\$8,757	18	0.025	34
Wisconsin	227	21	\$9,478	12	0.024	37
Wyoming	227	21	\$9,458	14	0.024	37

(10) 2005 4th Grade Reading: State (<500,000 pupils) Rankings by Avg. Score, PPS and ROES

Please note that Washington D.C. was excluded from the power point chart

State	Fall 2002	Fall 2005	Avg.	Fall 2002	PPS	PPS	ROES
	Enrollment	White/non Hispanic	Score Rank	PPS	Rank	ROES	Rank
USA Average	48,183,086	228		\$8,468			
D.C.	76,166	252	1	\$12,470	3	0.020	48
Delaware	116,342	235	3	\$10,204	9	0.023	42
North Dakota	104,225	228	15	\$7,231	38	0.032	12
Montana	149,995	228	15	\$7,890	28	0.029	21
New Hampshire	207,671	228	15	\$9,030	17	0.025	34
Nebraska	285,402	228	15	\$8,499	22	0.027	29
Wyoming	88,116	227	21	\$9,458	14	0.024	37
Vermont	99,978	227	21	\$11,005	6	0.021	46
Idaho	248,604	226	25	\$6,401	49	0.035	3
Utah	489,262	226	25	\$5,092	51	0.044	1
Alaska	134,364	225	30	\$10,390	8	0.022	44
Maine	204,337	225	30	\$9,835	10	0.023	42
New Mexico	320,234	225	30	\$7,500	35	0.030	17
Arkansas	450,985	225	30	\$6,823	42	0.033	9
Kansas	470,957	225	30	\$7,847	31	0.029	21
Rhode Island	159,205	224	37	\$10,893	7	0.021	46
Hawaii	183,829	224	37	\$8,527	21	0.026	31
Iowa	482,210	224	37	\$7,972	26	0.028	24
South Dakota	130,048	222	44	\$6,892	41	0.032	12
Mississippi	492,645	220	47	\$6,097	50	0.036	2
Nevada	369,498	219	49	\$6,413	47	0.034	4
West Virginia	282,455	215	51	\$8,757	18	0.025	34

(11) Selected P/T & P/S Ratios of 'Small' School Systems Performing (4th grade reading 2005) Better than or Roughly Comparable to Vermont's Performance

State	Enrollment	Avg. Score	P/T	P/S
Delaware	116,342	235	15.1	8.1
New Hampshire	207,671	228	13.9	6.9
Montana	149,995	228	14.5	8.0
North Dakota	104,225	228	12.9	6.9
Vermont	99,978	227	11.7	5.4
Wyoming	88,116	227	13.0	6.4
Idaho	248,604	226	17.9	10.0
Avg. Ex. VT/ID	133270	229.2	13.9	7.3
Avg. Ex. VT	152492	228.7	14.6	7.7
USA		228	15.9	8.1

(12) Comparative (US, VT and DE) Staffing & Pupil Staffing Ratios: Fall 2002

	USA	%	VT	%	DE	%
Enrollment	48,183,066		99,978		116,342	
SPED Pupils % Total	13.5%		13.7%		15.3%	
School District Staff	285,842	4.8%	813	4.4%	783	5.4%
Officials/Administrators	62,781	1.1%	145	0.8%	273	1.9%
Admin. Support Staff	175,065	2.9%	343	1.9%	329	2.3%
Instruction Coordinators	47,996	0.8%	325	1.8%	181	1.3%
School Staff	4,298,465	72.2%	14,696	79.9%	10,288	71.2%
Principals/Assist. Principals	164,171	2.8%	430	2.3%	367	2.5%
School & Library Support	281,502	4.7%	862	4.7%	471	3.3%
Teachers	3,034,123	51.0%	8,542	46.5%	7,698	53.3%
Instructional Aides	663,552	11.1%	4,210	22.9%	1,388	9.6%
Guidance Counselors	100,912	1.7%	418	2.3%	238	1.6%
Librarians	54,205	0.9%	234	1.3%	126	0.9%
Student Support Staff	187,053	3.1%	762	4.1%	628	4.3%
Other Support Services	1,183,301	19.9%	2,113	11.5%	2,750	19.0%
TOTAL	5,954,661	100.0%	18,384	100.0%	14,449	100.0%

Pupil Per Staff by Function

	USA	VT	DE
School District Staff	168.6	123.0	148.6
Officials/Administrators	767.5	689.5	426.2
Admin. Support Staff	275.2	291.5	353.6
Instruction Coordinators	1,003.9	307.6	642.8
School Staff	11.2	6.8	11.3
Principals/Assist. Principals	293.5	232.5	317.0
School & Library Support	171.2	116.0	247.0
Teachers	15.9	11.7	15.1
Instructional Aides	72.6	23.7	83.8
Guidance Counselors	477.5	239.2	488.8
Librarians	888.9	427.3	923.3
Student Support Staff	257.6	131.2	185.3
Other Support Services	40.7	47.3	42.3
TOTAL	8.1	5.4	8.1

U.S. Department of Education: Digest of Education Statistics 2005:

<http://nces.ed.gov/programs/digest/d05/>

Table 80: Staff Employed in public school systems Fall 2002

(13) Comparative (US, VT and DE) Pupil/Teacher+Instructional Aides Ratios Fall 2002 & Fall 2005(VT only)

	Fall 2002 US	Fall 2002 DE	Fall 2002 VT	Fall 2005 VT
Enrollment	48,183,066	116,342	99,978	96,636
Teachers	3,034,123	7,698	8,542	8,847
Instructional Aides	<u>663,552</u>	<u>1,388</u>	<u>4,210</u>	<u>4,258</u>
	3,697,675	9,086	12,752	13,105
P/T + IA	13.0	12.8	7.8	7.4

Vermont Department of Education: Vermont Staffing-Aggregate by Function
http://education.vermont.gov/new/html/data/teacher_FTE.html

(14) Hypothetical Vermont Education Staffing Changes

	Actual Fall 2005	Revised Fall 2005	+/- <u>Amount</u>	+/- <u>%</u>
Total Enrollment	96,636	Same		
# SPED Pupils	12,314	Same		
SPED/Enrollment	12.7%	Same		
Total Staffing	<u>19069</u>	<u>13238</u>	<u>-5831</u>	<u>-30.6%</u>
Teachers	8847	8201	-646	-7.3%
Other	10222	5037	-5185	-50.7%

Ratios

Pupil/Teacher	10.9	15.0		
SPED Pupil/Staff	??	7.0		
Pupil/Other	9.5	19.2		
Pupil/Total Staff	5.07	7.3	(1)	

(1) Average Pupil/Staff ratio of Delaware, New Hampshire, Montana, North Dakota and Wyoming

(15) Hypothetical Vermont PPS vs. Actual

Year	US CPI	% +/-	VT Enroll- ment	Hypothetical		VT Actual	VT Actual		% +/-	Annual Savings Billions
				Spending CPI + 2% +/- # Pupils		USDOE Cur. Exp. Billions	USDOE PPS	Hypothetical PPS		
1996	156.9	3.0%	106,341	0.7%		\$0.718	\$6,753	same		
1997	160.5	2.3%	105,983	-0.3%	4.0%	\$0.750	\$7,075	\$7,020	4.0%	\$0.006
1998	163.0	1.6%	105,120	-0.8%	2.7%	\$0.793	\$7,541	\$7,213	2.7%	\$0.034
1999	166.6	2.2%	104,559	-0.5%	3.7%	\$0.870	\$8,323	\$7,478	3.7%	\$0.088
2000	172.2	3.4%	102,049	-2.4%	3.0%	\$0.934	\$9,153	\$7,699	3.0%	\$0.148
2001	177.1	2.8%	101,180	-0.9%	4.0%	\$0.992	\$9,806	\$8,007	4.0%	\$0.182
2002	179.9	1.6%	99,978	-1.2%	2.4%	\$1.045	\$10,454	\$8,198	2.4%	\$0.226
2003	184.0	2.3%	99,104	-0.9%	3.4%	\$1.105	\$11,150	\$8,477	3.4%	\$0.265
2004	188.9	2.7%	98,361	-0.7%	3.9%	\$1.168	\$11,870	\$8,809	3.9%	\$0.301
2005	195.3	3.4%	96,636	-1.8%	3.6%	\$1.238	\$12,808	\$9,129	3.6%	\$0.356
2006	201.6	3.2%	95,481	-1.2%	4.0%	\$1.305	\$13,664	\$9,497	4.0%	\$0.398