Teacher Compensation in Vermont: A VT NEA Economic Fact Sheet

Prepared for the Vermont National Education Association by Thomas E. Kavet

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Overview

Teacher compensation can be viewed relative to three economic standards:

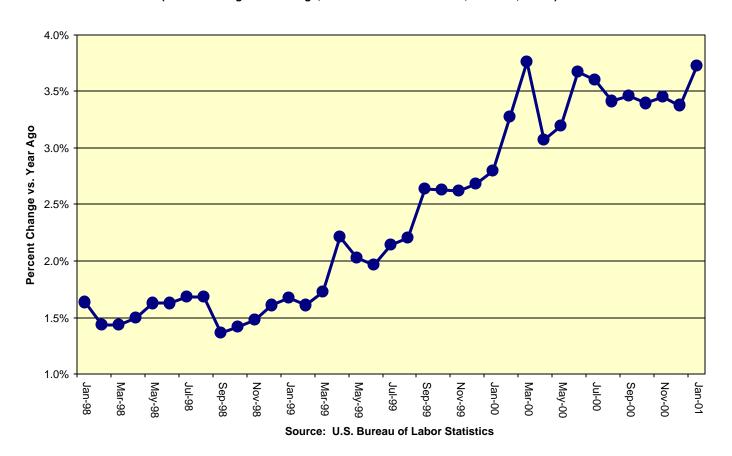
- 1) Changes in the cost of living, or general inflation rates, usually measured as the change in the Consumer Price Index (CPI).¹
- 2) Compensation in other professions, especially those with comparable training requirements and levels of responsibility.
- 3) The absolute cost of basic needs or compensation sufficient for a "decent standard of living."

Current Inflation Trends

- In calendar year 2000, the CPI rose 3.4%, its highest annual increase in 9 years.
- Expectations for future inflation have risen significantly in recent months.
- Due to large energy price increases that disproportionately affect residents in colder climates, recent inflation rates in Vermont are likely to have exceeded U.S. levels.

¹ The most common measure of inflation is the CPI-U, or the Consumer Price Index for All Items, Urban, as measured by the U.S. Bureau of Labor Statistics, U.S. Department of Labor. Because there is no comparable measure that is specific to Vermont, the U.S. CPI may be used as a reasonable approximation of cost of living increases affecting Vermont residents.

CHART 1 - Inflation Has Accelerated Over the Past Three Years (Percent Change vs. Year Ago, U.S. Consumer Price Index, All Items, Urban)



Teacher Compensation Relative to Other Professions

- Tight labor markets have accentuated the income gap between teachers and other professions in recent years.
- Recent data from the National Association of Colleges and Employers (NACE) reveal that starting salaries for U.S. teachers in 1999-2000 reached a record low relative to comparable professions.
- Bureau of Labor Statistics (BLS) data suggest occupational salary differentials tend to persist over entire careers.
- Recent Vermont-specific data from the Vermont Department of Employment and Training continue to show a wide earnings gap between teachers and other professions.

U.S. Starting Salaries

According to the NACE Salary Survey, starting U.S. teacher salaries in 2000 averaged \$26,845. ² The average U.S. starting salary for all other BA candidates was \$40,601, or more than 50% above that for teachers. Per the below graph, this differential is the largest on record.

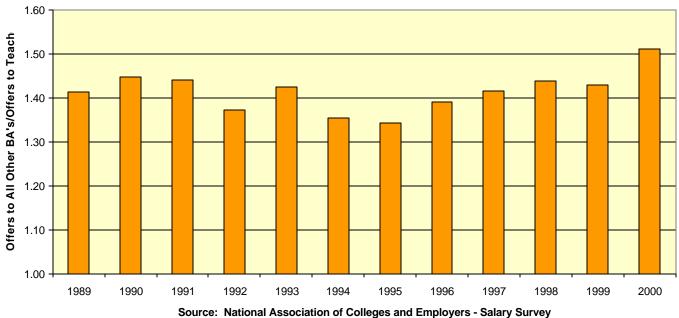


CHART 2 - Value of U.S. Starting Salary Offers to All Other BA's as a Percentage of Offers to Teachers

Vermont Occupational Pay Differentials

Data on Vermont teachers' pay relative to other Vermont occupations is collected by the Vermont Department of Employment and Training in their Occupational Employment Survey (OES). The 1999 OES is the most recent available and is summarized in Appendix B. This summary lists all Vermont professions in which the annual salary level exceeds those of teachers.³ Based on the OES data, the average 1999 annual salary for Vermont teachers was \$36,836.

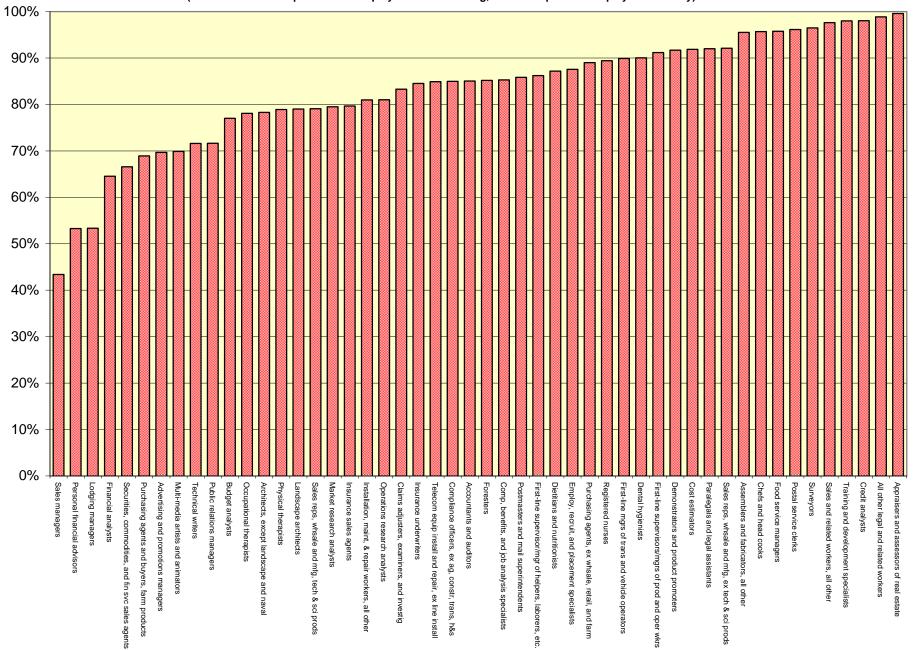
These data continue to show a significant differential in annual earnings between teachers and many professions with comparable educational requirements and levels of responsibility. Chart 3, on the following page, "Vermont Teachers' Pay as a Percentage of Selected Vermont Occupations," illustrates some of these differentials.

² See the Fall 2000 "Salary Survey," performed annually by NACE, Volume 39, Issue 4, which included more than 21,000 starting salary job offers to Bachelor's Degree candidates. Appendix A summarizes these data.

³ Care should be taken in drawing conclusions associated with occupations based on small sample sizes in the Occupational Employment Survey. The employment totals for each occupation upon which the OES data are based are displayed in Appendix B. In order to generate valid statistics for occupations with small OES sample sizes, OES data may be pooled across several years.

CHART 3 - Vermont Teachers' Pay as a Percentage of Selected Vermont Occupations

(Source: Vermont Department of Employment and Training, 1999 Occupational Employment Survey)



Lifetime Earnings Differentials

Pooled data over the past several years reveal NACE U.S. starting salary differentials that are close to the average salary differentials as reported by the U.S. Bureau of Labor Statistics, indicating a persistence in salary differentials over a career lifetime. For example, starting engineering salaries average about 1.5 to 1.6 times those of teaching, and average U.S. engineering salaries are about 1.52 times those of teachers. This differential can result in huge financial disparities between professions with comparable educational requirements over a person's career.

We have constructed a model (see Appendix C) to estimate both the ret present value and cumulative compounded cost at retirement of teaching vs. other occupations, given various assumptions. This model allows input assumptions (shaded green) controlling career duration, annual expected nominal and real wage growth, an expected wage differential relative to teachers (this may be fixed or variable by year), nominal starting teacher's salary, and a long-term discount rate.

Even with relatively conservative assumptions on all these counts, dramatic economic impacts can be observed. Per Appendix D, a Vermonter who spends his or her entire career in teaching could forego well over a million dollars by the time he or she retires, relative to someone whose career in Vermont is as a securities and financial services sales agent, a market research analyst, a landscape or other architect, an insurance sales agent, a physical or occupational therapist, a public relations or advertising manager, an accountant or auditor, an insurance claims examiner, or a budget analyst. In fact there are 109 Vermont professions in which the cumulative lifetime income differential with teachers exceeds \$1,000,000.

In the model sample underlying Appendix C, we have assumed a career duration of 44 years (age 22 to 65), a combined annual growth rate for both inflation and real growth of 4% (constant for both teachers and compared occupations), occupational relatives based on Vermont's relatively lower occupational differentials, an annual discount rate of 5%, and a Vermont starting teachers salary of \$24,639 (based on the current VT-NEA salary schedule, weighted by the number of FTE teachers).

As illustrated in Appendix C, the current annual salary differential between Vermont teachers and engineers at 1.47 is close to that between U.S. teachers and engineers (1.52). If this differential persists over an entire career, the total career income differential will amount to \$3.4 million, or an equivalent net present value of about \$400,000.

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⁴ See U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics, at http://www.bls.gov/text%5Fonly/oeshome%5Ftxt.htm

Teacher Compensation Relative to Minimal Basic Living Needs

Another way to view teacher compensation in Vermont is relative to minimal basic living needs. The Vermont State Legislature recently defined and adopted a set of "Basic Needs Budgets" with which to inform welfare, minimum wage and other policy considerations. These budgets quantify minimal living expenses for 36 different family configurations, medical insurance options and regions (urban/rural) in the State.

These basic needs budgets are based on minimal costs for essential items such as food, housing, medical insurance, transportation, child care, clothing, utilities, and a small provision for savings and personal expenditures. As detailed in Appendix E, these budgets contain no frills. For example, the USDA "moderate" food plan used in the budgets assumes a food allowance for a female, age 20 to 50, of \$38.10 *per week* – about the same as the \$37 *per day* maximum food allowance for Vermont legislators.

Vermont basic needs budgets are updated annually by the Vermont Legislative Joint Fiscal Office.⁵ Since the most recent budget calculations are for calendar 1999, these budgets must be adjusted for current 2000-2001 school year use. Based on recent growth in the Consumer Price Index, these budgets may be reasonably adjusted to the current school year by multiplying by a factor of 1.05.

Based on these data, some Vermont teachers' salaries are below levels that may be considered a minimum "livable income." Seven VT-NEA districts have starting salaries that are below the minimum \$21,179 required for a single person with no dependents, and many are not much above this level. Fifty three VT-NEA districts have M+30 maximum salary levels that are below a livable income level for a single wage earner supporting a spouse and two children. The average Vermont teachers' salary in 1999-2000 was about \$5,000 below the annual livable income for this family configuration during the same time period.

Specific Vermont-NEA districts or Uniserve regions may choose to construct their own expense budgets that could be considered "reasonable" for the purpose of salary negotiations, or could use "basic needs budgets" created and maintained by the Legislature or others.

Additional Supporting Data

We welcome your ideas and suggestions for additional supporting data and/or research relating to teacher compensation issues in Vermont. Please contact your Uniserve representative or the Vermont-NEA if you have any such suggestions or would like additional information on any of the above topics.

⁵ See, for 1999 data, "Basic Needs Budgets and the Minimum Wage – A Report to the General Assembly", Prepared by the Joint Fiscal Office, January 15, 2001

APPENDIX A

Source: National Association of Colleges and Employers Fall 2000 Salary Survey

AVERAGE YEARLY	SALARY	OFFERS
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AVERAGE YEARLY SALARY OFFERS	Cuivey			
Bachelor's Degree Candidates				
(Data Combined for Men and Women)	No. of	Average	\$ Offer	. %
By Functional Area For All	Offers	0 1	0 1	change
Types of Employers	Sept.	Sept.	Sept.	
	2000	2000	1999	
FINANCE				
Accounting (Public)	988	37255	34984	6.5%
Accounting (Private)	685	34616	33080	4.6%
Auditing (Public)	300	37999	35515	7.0%
Auditing (Private)	217	35805	33801	5.9%
Commercial Banking (Consumer)	128	32025	29499	8.6%
Commercial Banking (Lending)	110	34281	32657	5.0%
Investment Banking (Corporate Finance)	177	41002	37130	10.4%
Investment Banking (Mergers & Acquisitions)	45	42067	39732	5.9%
Investment Banking (Real Estate)	13	40000	37261	7.4%
Investment Banking (Sales & Trading)	165	37143	33799	9.9%
Financial / Treasury Analysis	826	39645	36131	9.7%
Portfolio Management/Brokerage	234	33453	33414	0.1%
Insurance - Underwriting	89	33732	31018	8.7%
Insurance - Claims	76	30129	29265	3.0%
COMMUNICATIONS				
Design / Graphic Arts	88	33619	29054	15.7%
Media Planning	48	30271	27904	8.5%
Reporting	25	23452	21022	11.6%
Communications - Production	83	36672	31949	14.8%
Public Relations	73	31240	26429	18.2%
Writing / Editing	45	32570	27164	19.9%
MARKETING	70	00000	07000	0.40/
Advertising	72	28962	27288	6.1%
Brand / Product Management	153	37304	31357	19.0%
Buyer / Merchandising	205	35500	32126	10.5%
Customer Service	251	31135	26765	16.3%
Distribution Market Bassarah	73	35978	34034	5.7%
Market Research	189	34030	33026	3.0%
Purchasing	64 4066	40311	32305	24.8% 4.8%
Sales PUBLIC ADMINISTRATION	1066	33143	31636	4.8%
	20	20606	27674	2 40/
Executive, Legislative, General Finance, Taxation, Monetary Policy	30 92	28606 35937	27671 30355	3.4% 18.4%
Law Enforcement	32	26558	29257	-9.2%
Military	81	32684	30962	5.6%
National Security	24	37819	44717	-15.4%
Urban / Regional Planning	13	32306	26677	21.1%
ENGINEERING	13	32300	20011	21.170
Bioengineering	26	44385	39736	11.7%
Design / Construct	767	41056	40273	1.7%
Environmental / Sanitation	98	36046	33764	6.8%
Field Engineering	332	42215	37173	13.6%
riola Engineening	332	72213	57175	13.070

Manufacturing / Industrial	590	46393	42347	9.6%
Systems / Programming	407	46878	43214	8.5%
Power Systems	80	45980	42574	8.0%
Software Design & Development	1113	50099	45590	9.9%
Hardware Design & Development	376	49326	45892	7.5%
Research & Development	266	46518	43273	7.5%
Testing	189	44305	40962	8.2%
Process Engineering	538	49111	46391	5.9%
Production Engineering	225	47320	43969	7.6%
Project Engineering	876	44167	42088	4.9%
Quality Control	107	43555	39987	8.9%
Other Engineering (NEC)	1678	44371	41833	6.1%
Industrial Hygiene/Occupational Safety	5	37640	33800	11.4%
HEALTH CARE	Ŭ	07010	00000	11.170
Administrative (Healthcare)	21	29262	30230	-3.2%
Dietician	5	28500	20280	40.5%
Medical Technology	27	33229	31078	6.9%
Registerd Nurse	109	33263	32031	3.8%
Occupational Therapy	2	43500	36920	17.8%
Pharmacist	72	65018	59375	9.5%
Physical Therapy	13	35638	38881	-8.3%
Respiratory Therapy	1	31000	31853	-2.7%
Speech Pathology!Audiology	6	26367	30340	-13.1%
Other Health Related	58	26767	27440	-13.1%
SOCIAL SERVICES	30	20/0/	27440	-2.5/0
	57	25502	22700	7.5%
Social Services - Administration	57	25582	23789	23.2%
Counseling	49	26631	21616	
Fundraising! Development Social Work	13	27654	25188	9.8%
COMPUTERS	68	22821	22457	1.6%
	604	11611	40025	0.10/
Computer Programming	694	44644	40935	9.1%
Information Systems Systems Analysis & Design	624	44565	41596	7.1%
OTHER FUNCTIONAL AREAS	393	45184	41083	10.0%
	50	20055	40000	4.40/
Actuarial	50	39655	40089	-1.1%
Agriculture!Natural Resources	155	29714	27907	6.5%
Architecture	124	30736	28667	7.2%
Consulting	1628	45160	42587	6.0%
Human Resources/Industrial Relations	172	32272	29496	9.4%
Management Trainee (Entry Level Mgmt.)	1212	33494	30510	9.8%
Math ! Statisticians	8	39961	36056	10.8%
Paralegal	47	31082	27549	12.8%
Performing Arts (Entertainment)	12	25537	24455	4.4%
Religious Occupations	10	21200	25180	-15.8%
Research - Nontechnical	76	33102	28358	16.7%
Research (Technical/Scientific)	140	33507	30681	9.2%
Teaching	1053	26845	26286	2.1%
TOTAL	21332	39922		
Teaching as a % of All BA Offers		67.2%		

40601 **66.1%**

Avg all BA's, excl Teaching Teaching Relative to all Non-Teaching Offers

APPENDIX B

Source: Vermont Department of Employment and Training

Source: Vermont Department of Employment and Training 1999 STATEWIDE OCCUPATIONAL WAGE ESTIMATES, PUBLISHED DECEMBER 2000 Annual							
OCCUPATIONAL TITLE	Employment	Mean Salary	Occupation/Teachers				
Internists, general	***	\$ 121,810	3.31				
Psychiatrists	30	. ,	3.30				
Family and general practitioners	140		2.93				
Lawyers	1230		2.72				
Health diag and treating practitioners, all other Engineering managers	170 210		2.40 2.31				
General and operations managers	2970		2.31				
Sales managers	590	. ,	2.31				
Chief executives	630	. ,	2.18				
Computer and information systems managers	330		2.05				
Computer software engineers, systems software	***	\$ 72,630	1.97				
Physician assistants	40		1.91				
Real estate brokers	30	. ,	1.89				
Financial managers	730		1.88				
Personal financial advisors	310 210	. ,	1.88				
Lodging managers Industrial production managers	700	. ,	1.87 1.86				
Marketing managers	420		1.84				
Electrical engineers	230	. ,	1.79				
Pharmacists	300	. ,	1.78				
Medical and health services managers	490	\$ 65,550	1.78				
Transportation, storage, and distribution mgrs	190	\$ 64,970	1.76				
First-line supervisors/mgrs of non-retail sales	670		1.67				
Managers, all other	610	. ,	1.67				
Construction managers	500	. ,	1.66				
Biological science teachers, postsecondary	220		1.65				
Engineers, all other	460		1.61 1.61				
Human resources managers Environmental engineers	70		1.60				
Financial analysts	130	. ,	1.55				
Education administrators, elem and sec school	690		1.54				
Chemistry teachers, postsecondary	80		1.51				
Securities, commodities, and fin svc sales agents	220	\$ 55,330	1.50				
Computer science teachers, postsecondary	180	\$ 55,140	1.50				
Philosophy and religion teachers, postsecondary	70		1.49				
Power distributors and dispatchers		\$ 54,750	1.49				
Psychology teachers, postsecondary	180		1.49				
Management analysts Veterinarians	170 190	. ,	1.48 1.48				
Sales engineers	80		1.47				
Purchasing agents and buyers, farm products	60	. ,	1.45				
Mechanical engineers	570	. ,	1.45				
Art directors	30	\$ 53,310	1.45				
Civil engineers	510		1.45				
Real estate sales agents		\$ 53,130	1.44				
Advertising and promotions managers		\$ 52,880	1.44				
Multi-media artists and animators	30 40		1.43				
Geoscientists, except hydro and geographers Business teachers, postsecondary	240	. ,	1.42 1.42				
Purchasing managers	130		1.42				
First-line supervisor/mgr of police and detectives	140		1.41				
Economics teachers, postsecondary	40		1.41				
Conservation scientists	60	\$ 51,730	1.40				
Technical writers	70	\$ 51,430	1.40				
Public relations managers	140		1.40				
Communications teachers, postsecondary	200		1.39				
Social scientists and related workers, all other	30	. ,	1.39				
Criminal justice & law enforce teachers, postsec Foreign lang and literature teachers, postsec	60 80	. ,	1.39 1.39				
History teachers, postsecondary	90		1.38				
Mathematical science teachers, postsecondary	220		1.38				
Computer software engineers, applications	300		1.37				
Health and safety engineers, ex mining safety		\$ 50,440	1.37				
Property, real estate, and community assn mgrs	***	\$ 50,410	1.37				
Industrial engineers	360		1.36				
Natural sciences managers	40		1.35				
Database administrators	270		1.34				
Education admin, preschool and child care	40		1.34				
English lang and literature teachers, postsec	330	\$ 48,900	1.33				

Social work teachers, postsecondary	60 \$	48,460	1.32
Art, drama, and music teachers, postsec	180 \$	48,100	1.31
Education administrators, postsecondary	290 \$	48,040	1.30
Budget analysts	*** \$	47,830	1.30
Computer programmers	760 \$	47,730	1.30
All oth elec equipment mechanics & repairers	*** \$	47,590	1.29
Occupational therapists	140 \$	47,170	1.28
Architects, except landscape and naval	*** \$	47,060	1.28
Physical therapists	330 \$	46,680	1.27
Social and community service managers	130 \$	46,650	1.27
Landscape architects	*** \$	46,610	1.27
Sales reps, whsale and mfg, tech & sci prods	740 \$	46,570	1.26
Market research analysts	100 \$	46,340	1.26
Insurance sales agents	500 \$	46,240	1.26
Administrative services managers	460 \$	45,640	1.24
Elec repairers, com & ind equip	110 \$	45,520	1.24
Installation, maint, & repair workers, all other	590 \$	45,490	1.23
Operations research analysts	*** \$	45,470	1.23
Commercial and industrial designers	70 \$	45,440	1.23
	240 \$		
Education teachers, postsecondary	•	45,340	1.23
Speech-language pathologists	420 \$	44,750	1.21
First-line supervisors/mgrs of const & extrac	1210 \$	44,320	1.20
Claims adjusters, examiners, and investig	380 \$	44,220	1.20
Mental health counselors	*** \$	43,940	1.19
Health educators	360 \$	43,780	1.19
Insurance underwriters	570 \$	43,580	1.18
Telecom equip install and repair, ex line install	*** \$	43,390	1.18
Compliance officers, ex ag, constr, trans, h&s	830 \$	43,350	1.18
Detectives and criminal investigators	180 \$	43,350	1.18
Accountants and auditors	1860 \$	43,320	1.18
Foresters	30 \$	43,250	1.17
Comp, benefits, and job analysis specialists	150 \$	43,190	1.17
Postmasters and mail superintendents	260 \$	42,910	1.16
First-line supervisors/mgrs, protect svc & other	100 \$	42,800	1.16
Elec repairers, pwrhse, substation, and relay	*** \$	42,730	1.16
First-line supervisor/mgr of helpers, laborers, etc.	200 \$	42,730	1.16
Medical and clinical laboratory technologists	220 \$	42,640	1.16
Urban and regional planners	270 \$	42,500	1.15
Dietitians and nutritionists	100 \$	42,260	1.15
	870 \$		1.15
First-line supervisor/mgr of mech, inst & repair	•	42,260	
Employ, recruit, and placement specialists	310 \$	42,070	1.14
Network and computer systems administrators	360 \$	41,720	1.13
Chemists	150 \$	41,470	1.13
Purchasing agents, ex whsale, retail, and farm	600 \$	41,390	1.12
Registered nurses	4450 \$	41,200	1.12
Electrical power-line installers and repairers	270 \$	40,980	1.11
First-line mgrs of trans and vehicle operators	490 \$	40,970	1.11
Computer systems analysts	370 \$	40,960	1.11
Dental hygienists	510 \$	40,910	1.11
First-line supervisors/mgrs of prod and oper wkrs	2170 \$	40,400	1.10
Hydrologists	*** \$	40,390	1.10
Demonstrators and product promoters	170 \$	40,170	1.09
Cost estimators	430 \$	40,090	1.09
Paralegals and legal assistants	290 \$	40,040	1.09
Sales reps, whsale and mfg, ex tech & sci prods	2630 \$	39,990	1.09
Diagnostic medical sonographers	80 \$	39,730	1.08
All oth drafters, eng, and mapping technicians	50 \$	39,420	1.07
Industrial engineering technicians	310 \$	39,290	1.07
Civil engineering technicians	280 \$	39,090	1.06
Aircraft mechanics and service technicians	140 \$ *** \$	38,590	1.05
Assemblers and fabricators, all other	Ψ.	38,560	1.05
Chefs and head cooks	300 \$	38,490	1.04
Food service managers	340 \$	38,470	1.04
Postal service clerks	330 \$	38,310	1.04
Surveyors	100 \$	38,180	1.04
Sales and related workers, all other	280 \$	37,730	1.02
Training and development specialists	310 \$	37,590	1.02
Credit analysts	140 \$	37,580	1.02
Nuclear medicine technologists	80 \$	37,520	1.02
Educational, vocational, and school counselors	820 \$	37,450	1.02
All other legal and related workers	30 \$	37,260	1.01
Agricultural and food science technicians	50 \$	37,180	1.01
Appraisers and assessors of real estate	120 \$	36,990	1.00
	•		

APPENDIX C

CAREER EARNINGS DIFFERENTIALS

Assumptions

Career Duration (Age 22 to 65) = 44 years Annual Inflation Rate = 2.5% 1.5% Annual Real Growth = Annual Discount Rate = 5.0% **Vermont Starting Salary =** \$24,639 Relative Salary Differential = 1.47

Career Earnings
Differential at Retirement \$3,405,353

\$397,954 **Net Present Value**

Age	22	23	24	25	26	27	28	29	30
Vermont Teacher	\$ 24,639 \$	25,625	S 26,650 \$	27,716 \$	28,824 \$	29,977 \$	31,176 \$	32,423 \$	33,720
Relative Factor	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47
Vermont Engineer*	\$ 36,219 \$	37,668	39,175 \$	40,742 \$	42,371 \$	44,066 \$	45,829 \$	47,662 \$	49,569
Annual Earnings Difference	11,580	12,044	12,525	13,026	13,547	14,089	14,653	15,239	15,848
Annual Earnings Differential Invested With a Return of 5.0%	\$11,580	\$24,203	\$37,938	\$52,862	\$69,052	\$86,594	\$105,576	\$126,094	\$148,247

APPENDIX D

CAREER EARNINGS DIFFERENTIALS FOR SELECTED VERMONT OCCUPATIONS

Assumptions:

Annual Discount Rate =
Annual Growth Trend (Inflation, 2.5%, Plus Real Growth, 1.5%) =
Career From Age 22 to 65, Starting Vermont Teacher Salary =
Average Vermont Occupational Salary Differentials as of 1999

5.0% 4.0% \$24,639

Occupation Relative to Vermont Teachers (Based on 1999 DET Occupational Employment Survey)		Career Earnings Differential		Net Present Value	Relative Factor
Internists, general	\$	16,714,158	\$	1,953,239	3.31
Psychiatrists	\$	16,684,653	\$	1,949,791	3.30
Family and general practitioners	\$	13,995,813		1,635,569	2.93
Lawyers	\$	12,455,681	\$	1,455,587	2.72
Health diagnosing and treating practitioners, all other	\$	10,172,035	\$	1,188,718	2.40
Engineering managers	\$	9,507,202	\$	1,111,024	2.31 2.31
General and operations managers Sales managers	\$ \$	9,499,334 9,458,027	\$ \$	1,110,105 1,105,278	2.31
Chief executives	\$	8,565,026	\$	1,000,920	2.18
Computer and information systems managers	\$	7,640,553	\$	892,885	2.05
Computer software engineers, systems software	\$	7,040,629	\$	822,777	1.97
Physician assistants	\$	6,621,665	\$	773,817	1.91
Real estate brokers	\$	6,456,440	\$	754,508	1.89
Financial managers	\$	6,365,960	\$	743,935	1.88
Personal financial advisors	\$	6,352,191	\$	742,326	1.88
Lodging managers	\$	6,338,422	\$	740,717	1.87
Industrial production managers Marketing managers	\$ \$	6,249,909 6,065,014	\$ \$	730,373 708,766	1.86 1.84
Electrical engineers	\$	5,714,895	\$	667,850	1.79
Pharmacists	\$	5,673,589	\$	663,023	1.78
Medical and health services managers	\$	5,648,018	\$	660,035	1.78
Transportation, storage, and distribution managers	\$	5,533,934	\$	646,703	1.76
First-line supervisors/managers of non-retail sales workers	\$	4,884,836	\$	570,848	1.67
Managers, all other	\$	4,861,233	\$	568,090	1.67
Construction managers	\$	4,817,959	\$	563,033	1.66
Biological science teachers, postsecondary	\$	4,713,710	\$	550,850	1.65
Engineers, all other	\$	4,398,996	\$	514,073	1.61
Human resources managers Environmental engineers	\$ \$	<i>4,</i> 398,996 <i>4,</i> 381,293	\$ \$	514,073 512,004	1.61 1.60
Financial analysts	\$	3,982,000	\$	465,342	1.55
Education administrators, elementary and secondary school	\$	3,911,189	\$	457,067	1.54
Chemistry teachers, postsecondary	\$	3,718,426	\$	434,540	1.51
Securities, commodities, and financial services sales agents	\$	3,637,781	\$	425,116	1.50
Computer science teachers, postsecondary	\$	3,600,409	\$	420,749	1.50
Philosophy and religion teachers, postsecondary	\$	3,551,234	\$	415,002	1.49
Power distributors and dispatchers	\$	3,523,697	\$	411,784	1.49
Psychology teachers, postsecondary	\$	3,517,796	\$	411,094	1.49
Management analysts	\$ \$	3,494,193	\$ \$	408,336	1.48 1.48
Veterinarians Sales engineers	\$ \$	3,454,853 3,415,514	φ \$	403,739 399,142	1.40 1.47
Purchasing agents and buyers, farm products	\$	3,267,992	\$	381,902	1.45
Mechanical engineers	\$	3,264,058	\$	381,442	1.45
Art directors	\$ \$	3,240,454	\$	378,684	1.45
Civil engineers	\$	3,240,454	\$	378,684	1.45
Real estate sales agents	\$	3,205,049	\$	374,546	1.44
Advertising and promotions managers	\$	3,155,875		368,800	1.44
Multi-media artists and animators	\$	3,124,403	\$	365,122	1.43
Geoscientists, except hydrologists and geographers	\$	3,071,295		358,916	1.42
Business teachers, postsecondary Purchasing managers	\$ \$	3,016,220 3,016,220	\$ \$	352,480 352,480	1.42 1.42
Furthering managers First-line supervisors/managers of police and detectives	\$ \$	2,990,650	φ \$	349,491	1.42
Economics teachers, postsecondary	\$	2,941,476	\$	343,745	1.41
Conservation scientists	\$	2,929,674	\$	342,366	1.40
Technical writers	\$	2,870,665	\$	335,470	1.40
Public relations managers	\$	2,868,698	\$	335,240	1.40
Communications teachers, postsecondary	\$ \$	2,843,127	\$	332,252	1.39
Social scientists and related workers, all other	\$	2,839,193	\$	331,792	1.39
Criminal justice and law enforcement teachers, postsecondary	\$	2,807,722	\$	328,114	1.39
Foreign language and literature teachers, postsecondary	\$ \$	2,805,755 2,768,383	\$ \$	327,884 323,517	1.39 1.38
History teachers, postsecondary Mathematical science teachers, postsecondary	\$ \$	2,768,383 2,746,746	\$ \$	323,517 320,988	1.38 1.38
Computer software engineers, applications	\$ \$	2,711,341	φ \$	320,988 316,851	1.37
Health and safety engineers, except mining safety engineers and inspectors	\$	2,675,935	\$	312,713	1.37
Property, real estate, and community association managers	\$	2,670,035	\$	312,024	1.37
Industrial engineers	\$	2,573,653	\$	300,761	1.36
Natural sciences managers	\$	2,520,545	\$	294,554	1.35

	•		•		
Database administrators	\$	2,475,305		289,267	1.34
Education administrators, preschool and child care center/program	\$	2,471,371	\$	288,808	1.34
English language and literature teachers, postsecondary	\$	2,373,023	\$	277,315	1.33
Social work teachers, postsecondary	\$	2,286,477	\$	267,201	1.32
Art, drama, and music teachers, postsecondary	\$	2,215,666	\$	258,926	1.31
Education administrators, postsecondary	\$	2,203,864	\$	257,547	1.30
Budget analysts	\$	2,162,558	\$	252,719	1.30
Computer programmers	\$	2,142,888	\$	250,421	1.30
All other electrical and electronic equipment mechanics, installers, and repairs	\$	2,115,351	\$	247,203	1.29
Occupational therapists	\$	2,032,738	\$	237,549	1.28
Architects, except landscape and naval	\$	2,011,102	\$	235,020	1.28
Physical therapists	\$	1,936,357	\$	226,285	1.27
Social and community service managers	\$	1,930,456	\$	225,596	1.27
Landscape architects	\$	1,922,588	\$	224,676	1.27
Sales representatives, wholesale and manufacturing, technical and scientific t	\$	1,914,720	\$	223,757	1.26
Market research analysts	\$	1,869,480	\$	218,470	1.26
Insurance sales agents	\$	1,849,811	\$	216,171	1.26
Administrative services managers	\$	1,731,793	\$	202,380	1.24
Electrical and electronics repairers, commercial and industrial equipment	\$	1,708,189	\$	199,621	1.24
Installation, maintenance, and repair workers, all other	\$	1,702,288	\$	198,932	1.23
Operations research analysts	\$	1,698,354	\$	198,472	1.23
Commercial and industrial designers	\$	1,692,453	\$	197,782	1.23
Education teachers, postsecondary	\$	1,672,784	\$	195,484	1.23
Speech-language pathologists	\$	1,556,733	\$	181,922	1.21
First-line supervisors/managers of construction trades and extraction workers	\$	1,472,153	\$	172.038	1.20
Claims adjusters, examiners, and investigators	\$	1,452,484	\$	169,739	1.20
Mental health counselors	\$	1,397,409	\$	163,303	1.19
Health educators	\$	1,365,937	\$	159,625	1.19
Insurance underwriters	\$	1,326,598	\$	155,028	1.13
	φ \$		φ \$,	1.18
Telecommunications equipment installers and repairers, except line installers Compliance officers, except agriculture, construction, health and safety, and to		1,289,226		150,661	
		1,281,358	\$	149,741	1.18
Detectives and criminal investigators	\$	1,281,358	\$	149,741	1.18
Accountants and auditors	\$	1,275,457	\$	149,052	1.18
Foresters	\$	1,261,688	\$	147,443	1.17
Compensation, benefits, and job analysis specialists	\$	1,249,887	\$	146,063	1.17
Postmasters and mail superintendents	\$	1,194,812	\$	139,627	1.16
First-line supervisors/managers, protective service workers, all other	\$	1,173,175	\$	137,099	1.16
Electrical and electronics repairers, powerhouse, substation, and relay	\$	1,159,406	\$	135,490	1.16
First-line supervisors/managers of helpers, laborers, and material movers, hai		1,159,406	\$	135,490	1.16
Medical and clinical laboratory technologists	\$	1,141,704	\$	133,421	1.16
Urban and regional planners	\$	1,114,166	\$	130,203	1.15
Dietitians and nutritionists	\$	1,066,959	\$	124,686	1.15
First-line supervisors/managers of mechanics, installers, and repairers	\$	1,066,959	\$	124,686	1.15
Employment, recruitment, and placement specialists	\$	1,029,587	\$	120,319	1.14
Network and computer systems administrators	\$	960,743	\$	112,274	1.13
Chemists	\$	911,569	\$	106,527	1.13
Purchasing agents, except wholesale, retail, and farm products	\$	895,833	\$	104,688	1.12
Registered nurses	\$	858,461	\$	100,321	1.12
Electrical power-line installers and repairers	\$	815,188	\$	95,264	1.11
First-line supervisors/managers of transportation and material-moving machin		813,221	\$	95,034	1.11
Computer systems analysts	\$	811,254	\$	94,804	1.11
Dental hygienists	\$	801,419	\$	93,655	1.11
First-line supervisors/managers of production and operating workers	\$	701,104	\$	81,932	1.10
Hydrologists	\$	699,137	\$	81,702	1.10
Demonstrators and product promoters	\$	655,863	\$	76,645	1.09
Cost estimators	\$	640,128	\$	74,806	1.09
Paralegals and legal assistants	\$	630,293	\$	73,657	1.09
Sales representatives, wholesale and manufacturing, except technical and sci		620,458	\$	72,508	1.09
Diagnostic medical sonographers	\$	569,317	\$	66,531	1.08
All other drafters, engineering, and mapping technicians	\$	508,341	\$	59,405	1.07
Industrial engineering technicians	\$	482,771	\$	56,417	1.07
Civil engineering technicians	\$	443,431	\$	51,820	1.06
Aircraft mechanics and service technicians	\$	345,083	\$	40,327	1.05
Assemblers and fabricators, all other	\$	339,182	\$	39,637	1.05
Chefs and head cooks	\$	325,413	\$	38,028	1.04
Food service managers	\$ \$	321,480	\$	37,569	1.04
Postal service clerks	\$	290,008	\$	33,891	1.04
Surveyors	\$	264,438	\$	30,903	1.04
Sales and related workers, all other	\$	175,924	\$	20,559	1.02
Training and development specialists	\$	148,387	\$	17,341	1.02
Credit analysts	\$	146,420	\$	17,111	1.02
Nuclear medicine technologists	\$	134,618	\$	15,732	1.02
Educational, vocational, and school counselors	\$	120,849	\$	14,123	1.02
All other legal and related workers	\$	83,477	\$	9,755	1.01
Agricultural and food science technicians	\$	67,741	\$	7,916	1.01
Appraisers and assessors of real estate	\$	30,369	\$	3,549	1.00

APPENDIX E

SELECTED BASIC NEEDS BUDGETS*

As defined by the Vermont State Legislature 1999-2000 Legislative Session

And calculated annually by the Vermont Legislative Joint Fiscal Office in the report:

"Basic Needs Budgets and the Minimum Wage A Report to the General Assembly" Prepared January 15, 2001

> 1 Baldwin Street Montpelier, Vermont 05633-5701 802-828-5767

^{*} Additional Basic Needs Budgets and supporting data are available from the Vermont NEA or the Legislative Joint Fiscal Office. NOTE: These data are for 1999 and may be adjusted to the current 2000-2001 school year by multiplying by a factor of approximately 1.05, based on recent growth in the Consumer Price Index

Estimated Cost of Basic Needs and Livable Wage - 1999

Two Parents & Two Children (one wage earner)

(Full-time work with and without employer-assisted health care)

Rural

Urban

	Α	В	С	Α	В	С
	No employer	With employer	With employer	No employer	With employer	With employer
	assisted	assisted	assisted	assisted	assisted	assisted
	health care or	health care +	health care +	health care or	health care +	health care +
	Dr. Dynasaur	Dr. Dynasaur	Dr. Dynasaur	Dr. Dynasaur	Dr. Dynasaur	Dr. Dynasaur
Category	cost / mo.	cost / mo.	cost / mo.	cost / mo.	cost / mo.	cost / mo.
	Moderate Co	st Food Plan	Low Cost Plan	Moderate Co	st Food Plan	Low Cost Plan
Food	\$662	\$662	\$535	\$662	\$662	\$535
Rent & Utilities	\$697	\$697	\$697	\$574	\$574	\$574
Health Care ¹	\$728	\$286	\$286	\$728	\$286	\$286
Transportation	\$543	\$543	\$543	\$641	\$641	\$641
Child Care	\$0	\$0	\$0	\$0	\$0	\$0
Clothing / Household	\$281	\$281	\$281	\$281	\$281	\$281
Telephone	\$34	\$34	\$34	\$34	\$34	\$34
Personal Exp.	\$240	\$240	\$120	\$240	\$240	\$120
Dental insurance ²	\$111	\$66	\$66	\$111	\$66	\$66
Renters Insurance	\$12	\$12	\$12	\$12	\$12	\$12
Term Life Insurance	\$15	\$15	\$15	\$15	\$15	\$15
Savings (5%)	\$166	\$142	\$0	\$165	\$141	\$0
Total Monthly Expenses	\$3,489	\$2,978	\$2,589	\$3,462	\$2,951	\$2,563
Annual Expenses	\$41,864	\$35,733	\$31,069	\$41,540	\$35,409	\$30,761
Federal & State Taxes ³	\$9,021	\$6,822	\$5,149	\$8,905	\$6,706	\$5,038
Annual Income	\$50,885	\$42,555	\$36,219	\$50,445	\$42,114	\$35,799
Equivalent Hourly Wage	\$24.46	\$20.46	\$17.41	\$24.25	\$20.25	\$17.21

- 1. For columns B and C, it is assumed all children are covered by Dr. Dynasaur so the employer only contributes to a two person policy.
- 2. Except for column A, children's dental care is covered by Dr. Dynasaur so the cost is for a two persons only.
- 3. Includes federal and state income taxes, FICA and Medicare.

Source: Vermont Legislative Joint Fiscal Office, January 15, 2001

Estimated Cost of Basic Needs and Livable Wage - 1999

Single Person

(Full-time work with and without employer-assisted health care)

Urban

		O. Daii		
	Α	В	С	Α
	No employer	With employer	With employer	No emp
	assisted	assisted	assisted	assis
	health care	health care	health care	health
Category	cost / mo.	cost / mo.	cost / mo.	cost /
	Moderate Co	ost Food Plan	Low Cost Plan	Mod
Food	\$213	\$213	\$175	\$21
Rent & Utilities	523	523	523	45
Health Care	266	57	57	26
Transportation	233	233	233	26
Child Care	0	0	0	0
Clothing / Household	145	145	145	14
Telephone	34	34	34	34
Personal Exp.	60	60	30	60
Renter's Insurance	12	12	12	12
Dental insurance	38	38	38	38
Term Life Insurance	0	0	0	0
Savings (5%)	76	66	0	75
Total Monthly Expenses	\$1,600	\$1,381	\$1,247	\$1,5
Annual Expenses	\$19,203	\$16,569	\$14,963	\$18,
Federal & State Taxes ¹	\$5,092	\$4,030	\$3,311	\$4,9
Annual Income	\$24,295	\$20,599	\$18,274	\$23,
Equivalent Hourly Wage	\$11.68	\$9.90	\$8.79	\$11.

	Rural								
Α	В	С							
No employer	With employer	With employer							
assisted	assisted	assisted							
health care	health care	health care							
cost / mo.	cost / mo.	cost / mo.							
	st Food Plan	Low Cost Plan							
\$213	\$213	\$175							
458	458	458							
266	57	57							
266	266	266							
0	0	0							
145	145	145							
34	34	34							
60	60	30							
12	12	12							
38	38	38							
0	0	0							
75	64	0							
\$1,567	\$1,347	\$1,215							
\$18,800	\$16,167	\$14,579							
\$4,948	\$4,003	\$3,303							
¢22.749	¢20.470	¢47.000							
\$23,748	\$20,170	\$17,882							
\$11.42	\$9.70	\$8.60							
Ψ11.72	ψ3.10	ψ0.00							

Source: Vermont Legislative Joint Fiscal Office, January 15, 2001

^{1.} Includes federal & state income taxes, FICA and Medicare.