

# Vermont in Transition:

*A Summary of Social Economic and Environmental Trends*

A study by

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for the

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## Chapter 4: ECONOMY



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# Chapter 4:

# ECONOMY

The structure of any economy is an amalgam of its heritage, the legal and political framework in which it operates, its resources including the level of human capital, and the nature of its trading relationships with other areas. In this respect, Vermont is no different than other states. The state's rural character, small size, and proximity to Canada have inevitably shaped the distinctiveness of the Vermont economy in the 21<sup>st</sup> century. For example, Canada remains our largest foreign trading partner. Only nine establishments in the private sector have more than 1,000 workers; most establishments (78%) employ ten or fewer workers.<sup>1</sup> Vermont's gross state product in 2007 was \$24.5 billion, the smallest of any state in the nation and just behind North Dakota's at \$27.7 billion.<sup>2</sup>

Reflecting its rural tradition, Vermont has a large number of small towns, expanses of open land, dense forests, and many small dairy farms. Out of 246 towns and cities in Vermont, only 9 are cities, and even these are quite small by national standards. The city of Burlington, with a population of just over 38,000 is nearly twice the size of Essex, which is the next largest community. Montpelier, with just over 8,000 people, is the smallest capital in the nation. Chittenden County, the hub of economic activity in Vermont, contains a quarter of the state's population and generates even more of its gross state product.<sup>3</sup> In 2006, the average annual earnings (\$41,863) and per capita income (\$39,621) in Chittenden County were approximately 15% higher than the state as a whole.<sup>4</sup>

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<sup>1</sup> The Vermont Department of Labor reports establishment size by location. Companies that have more than one location in the state account for each worksite separately. In the vast majority of the cases in Vermont, companies have only a single worksite. The Vermont Department of Labor, Economic & Labor Market Information Center. <http://www.vtlmi.info/cewsize2007estab.pdf>.

<sup>2</sup> The Bureau of Economic Analysis, Gross Domestic Product (GDP) by State and Metropolitan Area.

<sup>3</sup> U.S. Census Bureau: State and County QuickFacts

<sup>4</sup> The Vermont Department of Labor, Economic & Labor Market Information Center.

At the start of the 20<sup>th</sup> century, Vermont's economy was agriculturally based, with one out of three workers employed on farms that were mostly dairy.<sup>5</sup> Granite and marble extraction and processing, textiles and machine tools and tourism were also important sources of income during this period. Only 5% of the labor force worked in professional services. By 1940, agriculture still employed one out of every four workers in the state.<sup>6</sup> Today, just 1.3% of Vermont workers are employed in the Census occupational category "farming, fishing, and forestry."<sup>7</sup> The economy has become considerably more diversified with government, real estate, manufacturing, health care, professional services, and tourism providing important sources of income for the state.

This chapter provides a broad overview of recent trends in the Vermont economy. Other sectors of the economy, including agriculture, forestry, energy, infrastructure and affordability are discussed in separate chapters.

## Trends in the Vermont Economy

*Trend number 1: Various measures of income have historically lagged behind national levels, but in more recent years, the incomes of Vermonters are close to or slightly above national averages.*

Vermont incomes have historically lagged well behind national averages, in part reflecting the state's agricultural heritage. In 1950, per capita income stood at only three-quarters of the nation as a whole. With the growth of manufacturing and professional services after

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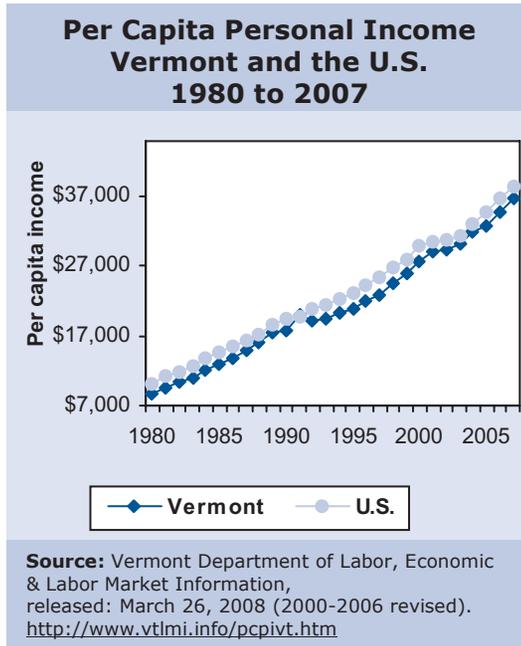
<sup>5</sup> The Encyclopaedia Britannica, Vol. XXVII, 11<sup>th</sup> edition, 1911.

<sup>6</sup> Statistical Abstracts 1901 - 1950

<sup>7</sup> U.S. Decennial Census "DP-3. Profile of Selected Economic Characteristics: 2000."

World War II, per capita income began to rise more quickly and has now reached 95% of the national level.

Other measures of state income, such as average annual earnings, median household income and median family income also lagged behind national statistics in earlier years, but have now reached levels that place Vermont very near or even just above national norms (see Appendix, Charts 4-1, 4-2, 4-3).<sup>8</sup> Within New England, Vermont's median family and household income measures are just ahead of Maine, but lag well behind the other states.



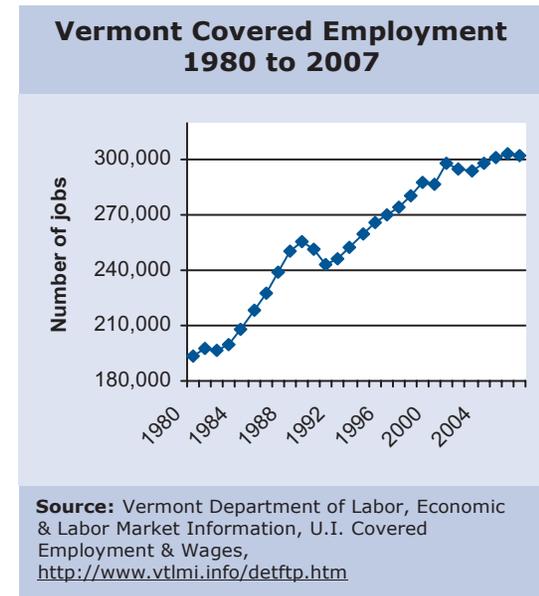
	<i>Vermont</i>	<i>U.S.</i>
Median household income (2007) <sup>9</sup>	\$50,423	\$49,901
Median Family Income (2008) <sup>10</sup>	\$61,100	\$61,500
Earnings of full-time workers (2007) <sup>11</sup>		
Males	\$40,834	\$44,255
Females	\$34,341	\$34,278

Incomes vary significantly by county and town. For example, per capita incomes in 2006 were only 62% of state averages in Essex County, 80% in

Orleans County, and 83% in Caledonia County.<sup>12</sup> These percentages were all considerably lower than was the case in 1970 when the percentages were, respectively, 82%, 85%, and 91%. These statistics provide one of a number of examples that will be highlighted in the following pages of the uneven economic opportunities available in different parts of the state.

*Trend number 2: Employment growth in recent years, has slowed from earlier years. A disproportionate share of this growth has occurred in the Burlington-South Burlington Labor Market.*

Concerns have been raised about whether the Vermont economy is generating enough new jobs, and whether these new jobs will provide sufficient career opportunities. The Vermont Department of Labor tracks employment using two different methodologies, which in 2007, yielded estimates for the state of between 303,000 and 310,000 workers.<sup>13</sup> There are important omissions in both estimates, particularly for a rural state. Among the most salient is that neither tracks self-employment or the number of people who work “under the table.” Yet both series



<sup>8</sup> Vermont Department of Labor, Economic & Labor Market Information. U.S. Census Bureau. Historical Income Tables-Households.

<sup>9</sup> Source: U.S. Census Bureau, Current Population Survey, 2005 to 2008 Annual Social and Economic Supplements.

<sup>10</sup> U.S. Department of Housing and Urban Development, *FY 2008 MEDIAN FAMILY INCOMES FOR STATES, METROPOLITAN NONMETROPOLITAN PORTIONS OF STATES*.

<sup>11</sup> Income, Earnings, and Poverty data From the 2007 American Community Survey, *Median Earnings in the Past 12 Months of Full-Time, Year-Round Workers 16 and Older by Sex and Women's Earnings as a Percentage of Men's Earnings by State: 2007*.

<sup>12</sup> Vermont Department of Labor, Economic and Labor Market Information Center: <http://www.vtلمي.info/pcpiarea.htm>.

<sup>13</sup> The first job series, “covered employment” tracks employment related statistics from companies and organizations that are subject to the Unemployment Insurance Reporting System. In 2007, there were 303,257 covered employees in Vermont. The second employment series, Current Employment Statistics (CES), is based upon state estimates from a national sample of 150,000 businesses and government agencies. According to the CES survey, Vermont had 307,800 workers employed in non-farm jobs in 2007.

indicate that employment growth has slowed considerably from gains of approximately 4,500 to 5,000 jobs per year prior to the start of the decade, to gains of an average of 1,000 to 1,500 per year after 2000. The slowdown in job growth is not unique to Vermont. Maine, New Hampshire, and many other states have also experienced marked declines in job growth during the last seven years. These statistics, in part, reflect the negative employment impact of the 2001-2002 recession. Yet, recessions have also occurred in each of the preceding decades.

Since self-employment is excluded from both employment series, the employment statistics may miss up to 15% of the workforce, a proportion that could have added almost 60,000 jobs to the total in 2005.<sup>14</sup> Since 1997, the percent of the labor force that is self-employed has changed little (see Appendix, 4-4, 4-5).<sup>15</sup> Vermont's rate is higher than the national rate (11%) and is most common in construction, professional, scientific and technical services, real estate, health care and social assistance, farming, and retail trade.

There is an ongoing public debate about the extent to which job growth in a state is independent of national and international trends. While the Vermont economy certainly reflects some of the unique attributes of the state, it is also strongly influenced by external forces. As one example, the statistical correlation between Vermont's unemployment rate and the national rate between 1980 and 2007 was very high at 0.88.<sup>16</sup> Conservatively, at least 9% of all jobs in the private sector are related to the export sector.<sup>17</sup>

Another employment concern that has received considerable attention is the possibility of geographically unbalanced job growth. Chittenden County or the Burlington-South Burlington broader labor market area has

been the disproportionate recipient of many of the new jobs created in Vermont. The Burlington-South Burlington labor market area, which contains all Chittenden County and the fringes of Franklin and Addison Counties accounted for 37% of all jobs in Vermont in 2006, up from just 31% in 1978 (see Appendix, 4-6).<sup>18</sup> This means that out of all jobs created during this period of time, almost one-half were in the greater Burlington-South Burlington labor market.

*Trend number 3: Over the last twenty years, increasing numbers of Vermonters are finding jobs in health care, retail, professional services and government; jobs in manufacturing, in contrast, are declining. Other industrial sectors have seen smaller employment changes.*

In studying the economy, one of the few things that we can be certain about is that change will occur, and indeed, the structure of Vermont's economy has changed considerably in a reasonably short period of time. The structural changes can be seen by either examining employment trends by industry, as we do first, or by considering contributions to gross state product by different industrial sectors. These trends will not always be the same. For example, there were almost 1,900 fewer workers in computer and electronic manufacturing in 2005 than in 1997, but during this same period, the value of output in this sector grew. The loss of employment in a particular sector is always difficult, but often reflects gains in productivity, the real engine of growth for any economy.

Perhaps the most notable change in the Vermont economy between 1988 and 2006 is the decline in manufacturing employment, which fell from 18.4% of total covered employment to just 12%, a loss of nearly 10,000 manufacturing jobs and the expansion in health care jobs by 20,472 (health care and social assistance accounted for 8.9% of all jobs in 1988, rising to 14.1% in 2006).<sup>19</sup> Vermont has also experienced a modest, but noticeable increase in the percent of the workforce employed in professional services, government (mostly

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<sup>14</sup> The statistics on self-employment come from federal tax records, and it's likely that some of the individuals who are recoded as self-employed may also have other jobs in the covered sector.

<sup>15</sup> U.S. Census Bureau. Economic Census Nonemployer Statistics Vermont, 1997 – 2005.

<sup>16</sup> The correlation coefficient is a measure of statistical association that ranges from a negative 1, a perfect indirect relationship to a positive 1, a perfect direct relationship. A zero suggests that there is no relationship.

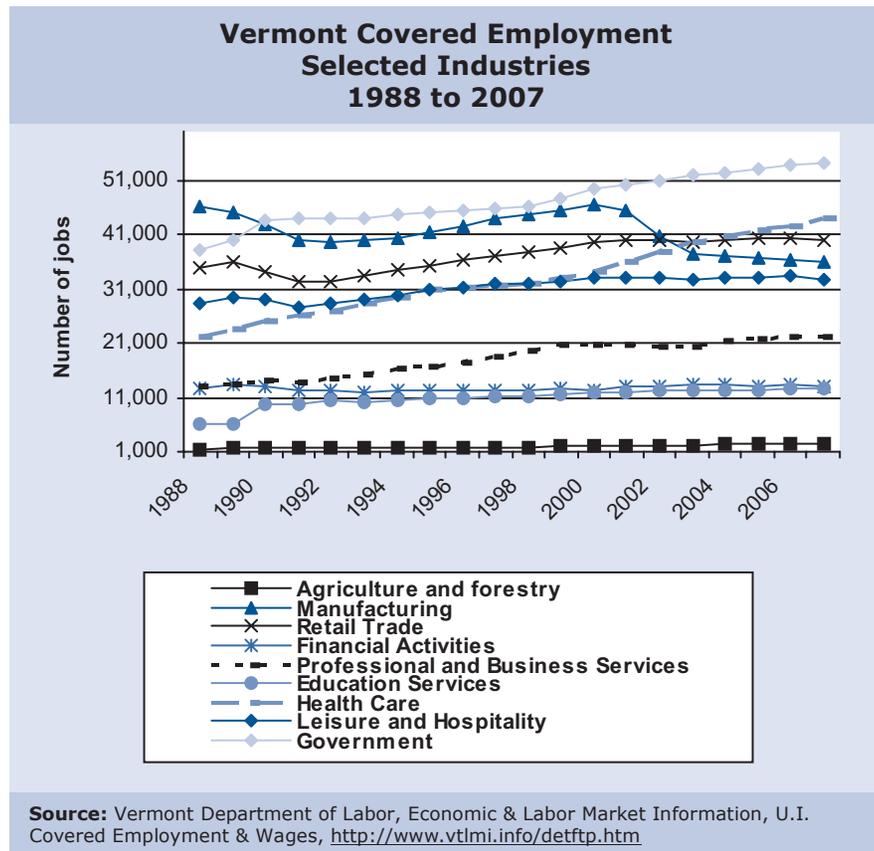
<sup>17</sup> U.S. Department of Commerce, International Trade Administration, Office of Trade and Industry Information, *Vermont: Exports, Jobs, and Foreign Investment*, September 2008. The 9% employment figure is based only on trade in merchandise and excludes, for example, trade in services and retail sales to visitors from abroad.

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<sup>18</sup> Vermont Department of Labor, Economic and Labor Information, *Covered Employment and Wages*, <http://www.vtلمي.info/indareanaics.cfm?areatype=10>

<sup>19</sup> Vermont Department of Labor, Economic & Labor Market Information, U.I. Covered Employment & Wages, <http://www.vtلمي.info/defftp.htm>

local) and retail, partially offset by small percentage declines in construction and finance jobs.<sup>20</sup> Mining (granite, marble and talc), a source of relatively high paying jobs, has also experienced employment reductions of 295 jobs since 1988. Employment in the fabrication sector has also declined since 1988 by 355 workers.<sup>21</sup> Other industrial sectors have largely retained their relative employment standings.<sup>22</sup>



*Trend number 4: Vermont has seen the expansion of many small companies in a number of niche areas. Many of these companies have aligned themselves in multiple ways with Vermont's quality of life and the Vermont "Brand." One of the more unusual ones is the growth in the captive insurance market, where Vermont is a national leader.*

As noted earlier, the state has few large employers, and the fortunes of two of the largest, IBM and the Fletcher Allen Health Care Hospital, are symptomatic of statewide trends. IBM, the largest private firm in the state, which provides approximately 25% of all manufacturing jobs, has been shrinking; employment is down from 8,500 workers in 2000 to 5,400 in 2008.<sup>23, 24</sup> The Fletcher Allen Hospital, the second largest private employer in the state, has grown by approximately 47% during the last 12 years to 5,384 full-time workers (or equivalent) in 2008. These two companies alone account for approximately 4% of all jobs in the state.<sup>25</sup>

On the other end of the employment spectrum, Vermont has made a name for itself with its many small-scale cottage industries, including artisanal and farmstead cheese producers, emerging wineries, microbreweries, specialty knitwear operators, gourmet food companies, nurseries, furniture makers and organic dairy farms. While these small firms make important contributions to the state's quality of life and "mystique," they employ very few workers and often pay lower wages.<sup>26</sup>

Vermont is also home to a group of larger companies, such as Cold Hollow Cider Mill, Cabot Creamery Cooperative, Ben & Jerry's, King Arthur Flour, Green Mountain Coffee Roasters, NRG Systems, Burton Snowboards, Vermont Country Store, Seventh Generation, Chroma Technology, Autumn

<sup>20</sup> Since 1988, there has been an increase in employment by just over 1,800 for specialty trade workers (e.g., plumbers, electricians) but an offsetting decline for workers involved in the construction of new buildings.

<sup>21</sup> Employment in marble and granite fabrication is tracked under the broader category of "Nonmetallic mineral product manufacturing." In 2007, 1,949 people were employed in this sector, down by 353 since 1988.

<sup>22</sup> Vermont Department of Labor, "Covered Employment and Wages."

<sup>23</sup> While employment at IBM's Essex Junction facility has declined, the value of its output has not. Computer and electronic manufacturing has increased its relative share of Vermont's gross state product from 4% in 1997 to 8% in 2006.

<sup>24</sup> Burlington Free Press, Dan Mclean, *IBM slipping as states No. 1 employer*. June 29, 2008.

<sup>25</sup> Ibid.

<sup>26</sup> According to data collected by the Vermont Economy Newsletter, the largest 100 private firms in the state employed over one-quarter of all workers in 2006 (n=64,200) and paid over one-third of all wages. *Vermont Economy Newsletter, The Importance of Vermont's Largest Employers*, August 2007.

Harp, Gardener's Supply, the Vermont Teddy Bear Company, Vermont Bicycle Tour (VBT), and Hubbardton Forge, which all play an important role in promoting the Vermont "brand" and are at the forefront of the corporate social responsibility movement. Many of these companies were established in the 1970s and 1980s by entrepreneurs, often born outside the state but educated in one of the state's colleges or universities. These entrepreneurs were attracted by Vermont's quality of life and who were intent on creating companies with missions that entailed more than bottom line calculations.<sup>27</sup> While the state and some localities have devoted considerable resources to promoting the development of emerging technologies and start-up companies, time will tell whether Vermont will see the same level of entrepreneurial success as it has in earlier years.

The captive insurance market is one of the fastest growing, yet less well known sectors in the Vermont economy. Companies in this sector form their own legal entities to insure themselves. According to the Captive

Insurance Division of the Vermont Department of Banking, Insurance, Securities and Health Care Administration (BISHCA), there are 4,000 captive insurance companies worldwide, 460 of which are based in Vermont. Beginning with 14 Vermont licenses in 1983, 823 licenses had been issued by 2007 (see Appendix, 4-7). According to BISHCA, this sector now provides approximately 1,400 direct

and indirect jobs and generates over \$23 million in revenues for the State.

As noted earlier, economic change can be tracked by examining employment trends or changes in the contributions made by different industries to the state's gross domestic product. In 2007, four sectors accounted for nearly 50% of Vermont's gross state product. These were government (14%), real estate (12%), manufacturing (12%) and health care (10%). This is a change from 1997 when manufacturing contributed the most to the state's gross domestic product (16%), followed by government (12%), real estate (12%), and retail trade (8%).<sup>28</sup>

<b>Vermont Gross Domestic Product By Industry 1997 to 2007</b>				
	<b>1997 (in millions)</b>	<b>Percent</b>	<b>2007 (in millions)</b>	<b>Percent</b>
Gross Domestic Product	\$15,167	100.0%	\$24,543	100.0%
Agriculture, forestry, fishing, hunting	280	1.8%	375	1.5%
Mining	25	0.2%	124	0.5%
Utilities	474	3.1%	733	3.0%
Construction	608	4.0%	1,111	4.5%
Manufacturing	2,461	16.2%	2,826	11.6%
Durable goods	1,761	11.6%	2,099	8.6%
Nondurable goods	699	4.6%	726	3.0%
Wholesale trade	794	5.2%	1,167	4.8%
Retail trade	1,265	8.3%	2,031	8.3%
Transportation and warehousing	348	2.3%	521	2.1%
Information	595	3.9%	997	4.1%
Finance and insurance	874	5.8%	1,442	5.9%
Real estate and rental and leasing	1,824	12.0%	3,023	12.3%
Professional and technical services	770	5.1%	1,438	5.9%
Management of companies	94	0.6%	33	0.1%
Administrative and waste services	275	1.8%	482	2.0%
Educational services	276	1.8%	527	2.1%
Health care and social assistance	1,134	7.5%	2,443	10.0%
Arts, entertainment, and recreation	130	0.9%	206	0.8%
Accommodation and food services	685	4.5%	1,092	4.4%
Other services, except government	378	2.5%	599	2.4%
Government	1,878	12.4%	3,373	13.7%
<b>Source:</b> U.S. Bureau of Economic Analysis				

<sup>27</sup> Vermont has a significant number of smaller companies in the wood related and specialty food sectors that share many of these same attributes. Their contributions are discussed in the Agriculture and Forestry chapters.

<sup>28</sup> U.S. Bureau of Economic Analysis, "Gross Domestic Product by State." <http://www.bea.gov/regional/gsp/>

*Trend number 5: Since the end of the 1990s, the number of tourists and their spending has been either flat or growing quite slowly.*

Over the years, a complex network of businesses (retail, lodging, dining, the arts, recreation, artisans) and government agencies have come together to form Vermont's tourist industry. This is a sector that depends on Vermont's distinct natural environment. A study by Economic & Policy Resources, Inc. estimates that visitors spent \$1.57 billion dollars in Vermont in 2005 (a nominal increase of 3.8% since 2003), and provided the basis for approximately 12% or just over 36,000 jobs in the state and nearly \$200 million in tax and fee revenues.<sup>29</sup> Vermont received 13.4 million visitors in 2005, of which 15% were Canadian.<sup>30</sup> With the decline in the last few years in the value of the U.S. dollar, one would expect to see a growing influx of Canadian visitors.

Statistics like the ones cited above reinforce the impression that tourism plays a key role in Vermont's economy. In many ways, the tourist industry is similar to Vermont's export sector. It brings new money into the state, with a corresponding multiplier effect. Tourism generates tax revenues from people from other states and it creates jobs, a fair number of which are dispersed throughout the more rural areas of the state. Tracking the impact of tourism over time is a challenge as each measure captures different dimensions of tourism with their own limitations.

The sector that most closely captures employment in tourism is "leisure and hospitality." In 1988, approximately 28,000 Vermonters were working in this sector according to the Vermont Department of Labor. By 2007, the number of jobs had increased to almost 33,000.<sup>31</sup> Most of this growth occurred during the 1990s. Over the last decade employment has been largely flat. These numbers come with several important caveats. First, the self-employed are not included in the employment numbers. Data from the U.S. Bureau of Economic Analysis indicates that there are many such people working in this

<sup>29</sup> Economic & Policy Resources, Inc. *The Travel and Tourism Industry in Vermont: A Benchmark Study of the Economic Impact of Visitor Spending on the Vermont Economy-2005*. Sponsored by the Vermont Department of Tourism and Marketing.

<sup>30</sup> Out of all visitors to Vermont in 2005, Economic & Policy Resources estimates that 78% were tourists; the remainder came to Vermont for business reasons.

<sup>31</sup> The Vermont Department of Labor, Economic & Labor Market Information Center.

sector, most in very small businesses.<sup>32</sup> Second, many sectors in the Vermont economy serve tourists, but are not officially classified in the leisure and hospitality category—for example, retail, real estate, education, and transportation.<sup>33</sup> While these factors suggest that the employment number should be greater than the 33,000 reported by the Vermont Department of Labor, it is also important to remember that many of the people who purchase services in the leisure and hospitality sector are Vermonters, therefore adding an upwards bias to the tourism employment numbers.

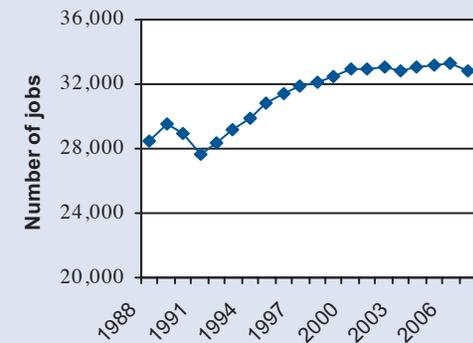
Receipts from hotels, motels and campgrounds provide another proxy for the volume of tourists, business travelers, and convention goers, but just as in the case above with leisure and hospitality, Vermonters themselves stay in the state's various accommodations. At the same time, taxable room receipts will underestimate tourism because many tourists do not stay overnight, may own second homes in the state or stay with friends or relatives.<sup>34</sup>

<sup>32</sup> The U.S. Census Bureau reports that there were just over 900 Vermont firms listed under "Accommodations and food service" in 2002 with no paid employees, almost one-half of all establishments in this sector. But these 900 businesses, operated by self-employed Vermonters, accounted for only 3% of all sales in the sector. While the Bureau of Economic Analysis's category, "accommodations and food service" is not the same as the VDOL's "leisure and hospitality," there would be significant overlap in these two areas.

<sup>33</sup> Economic & Policy Resources Incorporated estimates that approximately one-third of all expenditures in restaurants, bars, recreation and entertainment are from visitors from other states. See, *The Travel and Tourism Industry in Vermont: A Benchmark Study of the Economic Impact of Visitor Spending on the Vermont Economy-2005*.

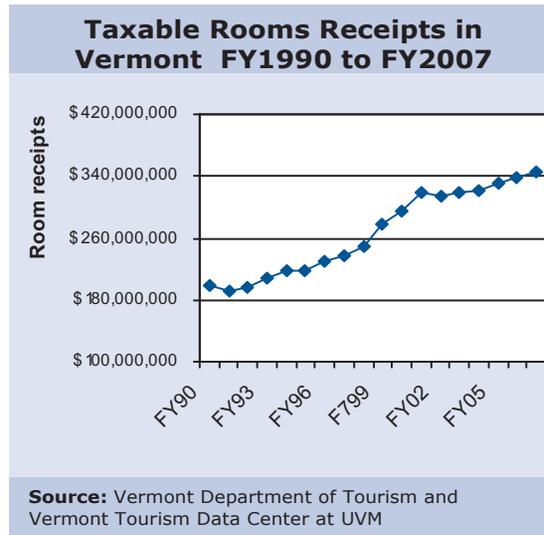
<sup>34</sup> Economic & Policy Resources estimated that just over 88% of lodging receipts come from out of state people and that in 2003, there were 31,000 vacation homes in Vermont owned by residents of another state or country. *The Travel and Tourism Industry in Vermont: A Benchmark Study of the Economic Impact of Visitor Spending on the Vermont Economy-2005*.

**Covered Employment in Vermont's Leisure and Hospitality Industry 1988 to 2007**



Source: Vermont Department of Labor, Economic and Labor Market Information

The data on taxable room receipts parallels the employment data, stronger growth in receipts during the 1990s, followed by a period of more modest growth. Between 1999 and 2007, tax receipts from lodging increased by just 17%, an increase that disappears in inflation adjusted terms. In comparison, during the 1990s, receipts increased by nearly 50%.



The Bureau of Economic Analysis publishes data on gross state product by industrial sector, and the picture that emerges from this source is somewhat more encouraging. In inflation adjusted dollars (base year of 2000), the “accommodation” sector grew from \$451 million in 1997 to \$502 million in 2006, an increase of just over 10% during this period.

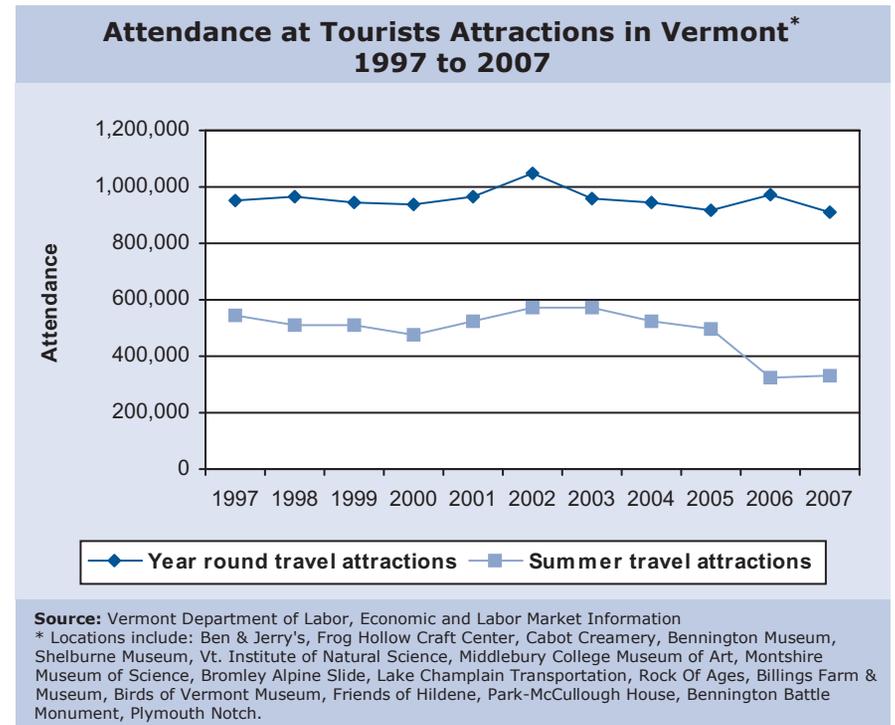
Measures of tourism, based upon what people do in Vermont, suggest that the volume of tourists has not increased in recent years. For example, the use of state parks and attendance at historical sites has been declining for the last decade (see Appendix, 4-8, 4-9).<sup>35</sup> Also, the number of hunting and fishing licenses for non-Vermont residents has been declining for a number of years (see Appendix, 4-10).<sup>36</sup>

Vermont also has a host of private sector tourist sites, such as Ben and Jerry’s (the state’s most popular tourist attraction) as well as Cabot Creamery, Shelburne Museum, Bromley Alpine Slide, Rock of Ages, Billings Farm & Museum, to name just a few. The Vermont Department of

<sup>35</sup> The historical sites included in the chart in the appendix include: Bennington Battle Monument, Chimney Point State Historic Site, Chester Arthur Historic Site, Old Constitution House, Eureka Schoolhouse Historic Site, Hubbardton Battlefield, Hyde Log Cabin, Justin Morrill Homestead, Mount Independence Historic Site, Plymouth Notch Historic Site.

<sup>36</sup> There has been an increase in the number of fishing licenses issued to Vermonters over the last few years.

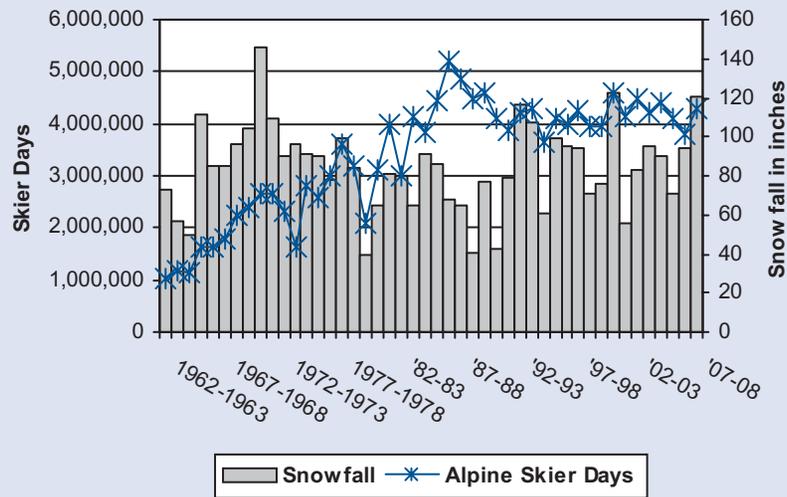
Labor has been tracking attendance at nine year-round and nine summer tourist locations since the 1990s. The trends are consistent with those reported earlier. The last decade has not seen an increase in attendance at Vermont’s best-known sites. More specifically, in 2007, 1.2 million people attended one of the 18 year-round and summer tourist sites in comparison to 1.5 million in 1997.



For many visitors, tourism means skiing. As of 2008, Vermont had 20 Alpine ski resorts and 30 Nordic cross country ski centers. Even with the substantial expansion in snow making capabilities, the ski industry’s fortunes are largely tied to snow fall levels. While the Green Mountains may be covered with snow in the winter, snowfalls in neighboring states are what often prompt many to travel to Vermont to ski, snowboard, or snowmobile. This connection between skiers and snowfall levels can be seen in the chart below. The chart also shows a sharp expansion in skier days during the 1980s, and then more recently, no noticeable trend is observable.

As noted above, there is no single measure that captures trends in Vermont's tourism sector that is not subject to qualifications. However, each of the trends reveals a similar picture of an industry that's important to the economic prospects of the state, but one that has been somewhat flat in recent years.

**Total Alpine Skier Days in Vermont  
And Seasonal Snowfall for Burlington  
1962 to 2007**

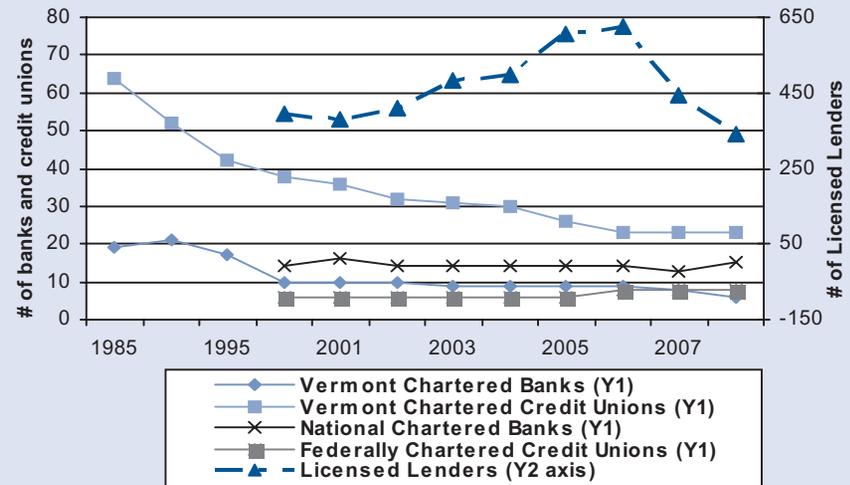


Source for Skier Days: Vermont Ski Areas Association;  
Source for Snowfall: National Weather Service, NOAA,  
[http://www.erh.noaa.gov/btv/climo/BTV/monthly\\_totals/snowfall.shtml](http://www.erh.noaa.gov/btv/climo/BTV/monthly_totals/snowfall.shtml)

**Trend number 6:** The banking industry has undergone substantial change in the last twenty years including: a) the decline in the number of state chartered banks and state chartered credit unions; b) the growth of banks chartered elsewhere; and c) the emergence of many licensed non-bank lenders. Recently, the number of foreclosures has increased significantly, but Vermont still has one of the lower foreclosure rates in the country.

Every industrial sector in Vermont has experienced substantial change in its competitive environment and its makeup. Few sectors, however, have changed as much and have experienced as many problems as banking. As is true nationally, there are now many more companies that offer loans and other banking services than was the case just 20 years ago. These include state chartered banks and credit unions, banks and credit unions chartered by other states, federal chartered credit unions and banks (savings and loans and commercial banks), mortgage brokers, debt adjusters, trust companies, money transmitters, check cashing companies

**Number of Financial Firms Licensed to Offer Loans in Vermont  
1985 to 2008**



Source: Vermont Department of Banking, Insurance, Securities and Health Care Administration.

and motor vehicle and retail installment sales companies.<sup>37</sup> Nearly 5,000 Vermonters were employed in the banking sector in 2007 (just under 2% of all covered employees).<sup>38,39</sup> Since 1988, there has been a loss of just over 600 jobs in this sector, although the volume of output has increased substantially.<sup>40</sup> Consolidation and automation have been prime factors responsible for the employment reductions.

Employment reductions are not the only changes occurring in the mortgage and loan industry in Vermont. Over the last 40 years, the number of independent Vermont chartered banks headquartered in the state has declined from 30 banks in 1960 to only 6 in 2008. Similarly, the number of state chartered credit unions has also declined from just over 70 in 1973 to 23 in 2008.<sup>41</sup> While the remaining Vermont chartered banks and credit unions have largely grown in size during this period, the introduction of banks from outside of the state and the rapid expansion of licensed lenders and mortgage brokers has been the most prominent change in the state's financial landscape. In 1985, there were only 30 non-bank lenders licensed to make loans in Vermont. By 2008, the number had increased to 339, although it had been as high as 626 in 2006.<sup>42,43</sup> In 2007, there were eight non-Vermont chartered banks with branches in the state. Prior to the introduction of interstate banking in the 1980s, there were no such banks in the state.

Whether the long-term loss of Vermont chartered banks and credit unions represents a threat to the state's economy is open to debate. Nationwide, banks and other mortgage lenders today are experiencing acute financial strains with several institutions declaring bankruptcy or

being sold off at fire-sale prices. According to BISHCA, Vermont chartered banks and credit unions did not issue subprime loans, the cause of many of the difficulties seen in other states. Indeed, out of all mortgages issued in 2005 in the state, only 15% were subprime (issued by mortgage companies and out of state banks). This was the lowest rate in the nation.<sup>44</sup> This does not mean that Vermont homeowners are not experiencing problems, however. The number of foreclosures is up to 1,209 in 2007, an increase of 352 from the year before. Even with the rise in foreclosures, as of the summer of 2008, the state still had one of the lowest rates of foreclosure in the country.<sup>45</sup>

*Trend number 7: Many of Vermont's best jobs are tied to the export market. Depending upon which years are compared, exports have either increased or decreased in the last decade. While exports to Canada still dominate, exports to Asian countries are becoming more important.*

Vermont's small size dictates that many of the products consumed will be produced elsewhere, either in other states or in foreign countries. To do otherwise would substantially increase the cost of living. But at the same time, imports displace jobs such as we have seen in recent years in the granite, furniture, and machine tools industries. However, by participating in the global marketplace, Vermonters benefit not only from lower prices, access to a greater range of products, but also in the creation of new jobs, either through exports or direct foreign investment in local companies. In the latter case, foreign owned companies employed almost 10,000 workers in 2006, just under one quarter of which were in manufacturing.<sup>46</sup>

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<sup>37</sup> Examples include the Federal Reserve Board, U.S. Comptroller of the Currency, banking agencies from other states.

<sup>38</sup> These numbers exclude those working in the insurance and security industries.

<sup>39</sup> From 1997 to 2006, the value of the output in the banking sector nearly doubled, although employment levels declined. U.S. Bureau of Economic Analysis.

<sup>40</sup> Vermont Department of Labor, "Covered Employment and Wages."

<sup>41</sup> The Merchants Bank is now the largest state chartered bank headquartered in Vermont.

<sup>42</sup> According to BISHCA, the number of loans originated by non-bank lenders has increased from 3,562 (total amount of \$156,689,936) in 1985 to 56,559 (total amount of \$2,057,195,680) in 2007.

<sup>43</sup> The number of mortgage brokers, individuals or entities who facilitate loan acquisitions, more than doubled between 2000 (n=152) and 2006 (n=341), but with the present depressed conditions in the industry, the number has fallen in 2008 to 272.

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<sup>44</sup> CNN.Com from Fortune, "Subprime mortgages: State by State. [http://money.cnn.com/magazines/fortune/storysupplement/subprime\\_statebystate/](http://money.cnn.com/magazines/fortune/storysupplement/subprime_statebystate/)

<sup>45</sup> Vermont Department of Banking, Insurance, Securities and Health Care Administration, "Preface to the annual report of the banking Commissioner" (June 2008). [http://www.bishca.state.vt.us/BankingDiv/annual\\_report/index\\_bank\\_annualrpt.htm](http://www.bishca.state.vt.us/BankingDiv/annual_report/index_bank_annualrpt.htm)

<sup>46</sup> U.S. Department of Commerce, Bureau of Economic Analysis. Figures exclude bank employment.

In 2007, Vermont companies exported \$3.43 billion of merchandise to other countries.<sup>47,48</sup> On a per capita basis, Vermont's exports were the second highest in the country.<sup>49</sup> Since 2001, the value of exports has increased by just over 21%.<sup>50</sup> However, if instead, the comparison is between 1999 and 2007, the value of exports has declined by 14%.

The great bulk of Vermont's exports are in manufacturing, nearly three quarters of which are in the "computer and electronic products" sector.<sup>51</sup> This statistic reinforces the leading role that a single firm like IBM plays in the fortunes of the state. Manufacturing exports accounted for an estimated 9% of the state's private sector employment, the third highest in the U.S.<sup>52</sup> Besides computer related products, other important export products in 2007 included machinery (\$161 million), transportation equipment (\$124 million), and processed foods (\$85 million).<sup>53</sup>

In 2007, Vermont exported merchandise to 145 countries, the largest of which was Canada (\$1.3 billion). While exports to Canada still dominate the state's export market, they have declined considerably as a percent of all exports over a reasonably short period of time. In 1999, 62% of Vermont's exports went to Canada. By 2007, this percent had fallen to 39%. In its place, exports to Hong Kong have risen rapidly from \$31 million in 1999 to \$345 million in 2007. In 2007, exports had also increased, most by substantial amounts, to South Korea (\$261

million), Malaysia (\$243 million), Taiwan (\$211 million), Singapore (\$173 million), China (\$155 million) and Ireland (\$130 million).<sup>54, 55</sup>



*Trend number 8: Many of the jobs that have been created in Vermont over the last twenty years (as well as many that may be created in the next decade) are in occupations and industries that have historically paid less than state averages. Jobs that pay above the state average levels will require advanced training, certification, and college degrees. High paying jobs for people with more limited formal education will be fewer in number.*

Measuring job growth is easier in many ways than measuring job quality. Whether we are producing more "good" than "bad" jobs is a question with a strong subjective dimension. One approach is to track compensation levels over time. Over the last twenty years, average nominal weekly earnings in Vermont have more than doubled (from \$320 in 1986 to \$676 in 2006), but when adjusted for inflation, the growth has been modest. In constant 2006

<sup>47</sup> U.S. Department of Commerce, International Trade Administration: <http://tse.export.gov/MapFrameset.aspx?MapPage=SEMapWorldDisplay.aspx&UniqueURL=tonlqpbexhfw55hbyvfu35-2008-10-11-10-4-10>

<sup>48</sup> The value of exports only includes merchandise shipped from Vermont. Many items are not included, such as sales to non-Americans in retail-whole trade, professional and educational services and tourism. For example, the Vermont Department of Tourism and Marketing estimates that 2.7 million Canadians visited Vermont in 2007, and their spending would not be included as part of Vermont's exports.

<sup>49</sup> Congressional Quarterly: State Fact Finder.

<sup>50</sup> Ibid

<sup>51</sup> U.S. Department of Commerce, International Trade Administration.

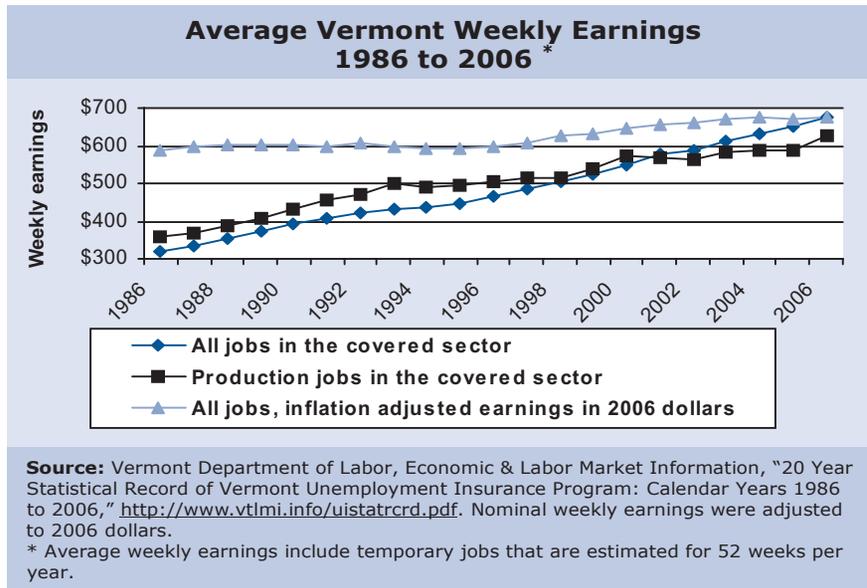
<sup>52</sup> U.S. Department of Commerce, International Trade Administration. *Vermont: Exports, Jobs, and Foreign Investment*, September 2008. [http://www.ita.doc.gov/td/industry/oteal\\_state\\_reports/vermont.html](http://www.ita.doc.gov/td/industry/oteal_state_reports/vermont.html)

<sup>53</sup> Ibid

<sup>54</sup> U.S. Department of Commerce, International Trade Administration

<sup>55</sup> The value of exports to China are likely higher than shown since some of the merchandise lands first in other Asian countries before being shipped to China.

dollars, real weekly earnings have grown from \$589 in 1986 to \$676 in 2006, an increase of just 14% during this twenty-year period of time. However, since the end of the 1990s, inflation adjusted weekly earnings have increased more quickly than in earlier years. It's important to note that weekly earnings exclude the value of fringe benefits, an increasingly important component of total compensation. Thus, even if real weekly earnings remain relatively flat, it is still possible for total compensation to increase.



Another approach that provides insights into the types of jobs being created in Vermont is to identify sectors that have grown and those that have declined the most since 1988, and then evaluate whether the wages paid in these areas are either above or below state averages. Among the 13 industries that have experienced gains of at least 2,000 employees between 1986 and 2006, seven had average wages less than the state average, one was equal, and five were greater. Among the declining industries, there were six that had a net loss of at least 500 employees over the period between 1986 and 2006, of which five paid wages that were higher than state averages. While no attempt has been made to aggregate total wage gains or losses from the selected industries in the following table, the data suggests that among the key industries that are losing employment, most offer wages that are above state averages, while among those that are adding employees, most offer wages below state averages.

***Trend number 9:** The health care sector is an increasingly important source of jobs and income for the state. Health care provides some of the very best jobs in the state, but also many jobs that offer little in the way of occupational advancement or employment stability.*

<b>Change in Covered Employment in Vermont 1988 through 2006 Total Increase 53,165</b>		
	<b>Employment Change 1988 to 2006</b>	<b>Average Wages as a % of State Averages</b>
<b>Growth Industries<sup>1</sup></b>		
1. Local government	9,083	- 11%
2. Ambulatory health care	8,592	+ 13%
3. Social assistance	6,974	- 53%
4. Retail trade	5,592	- 32%
5. Professional and technical services	5,582	+ 61%
6. Leisure and entertainment	4,902	- 53%
7. State government	3,651	+ 22%
8. Administrative and waste services	3,543	- 26%
9. Educational services	3,289	=
10. Hospitals	2,951	+ 28%
11. Administrative and support services	2,827	- 32%
12. Specialty trade contractors	2,036	+ 34%
13. Transportation and warehousing	2,011	- 5%
<b>Declining Industries<sup>2</sup></b>		
1. Manufacturing	-9,783	+ 34%
2. Construction buildings	-1,721	+ 8%
3. Heavy and civil engineering construction	- 560	+ 32%
4. Credit and related activities	-512	+ 23%
5. Executive, legislative and general state government	- 532	+ 26%
6. General merchandise stores	-1,039	- 47%
<b>Source:</b> Vermont Department of Labor. "Covered Employment and Wages." ( <a href="http://www.vtlmi.info/indareanaics.cfm">http://www.vtlmi.info/indareanaics.cfm</a> )		
1. Industries that recorded a gain of at least 2,000 employees between 1988 and 2006 are selected.		
2. Industries that recorded a loss of at least 500 employees between 1988 and 2006 are selected.		

The previous table only presents the statistics from a limited number of industries, but what we do see raises concerns for Vermonters without advanced degrees. Health care and professional and technical industries are expanding, and both offer a substantial number of relatively high paying jobs, but these “good” jobs require at least a college or technical degree. It is clear that as the state plans for the future, education and training will be critical if Vermonters are to maintain their rising standard of living.

The Vermont Department of Labor publishes projections through 2014 of the number of annual job openings and the current wage rates that are associated with each occupation. The occupational picture that emerges is consistent with the above analysis of Vermont’s industries.

Job openings reflect both the growth in occupational demand as well as turnover in a particular occupation. In any given year, occupations with the greatest number of annual job openings will often be the ones with the most workers. The list below shows the 15 occupations in Vermont that are predicted to have the most job openings in the coming decade.<sup>56</sup>

***Occupations with the Most Job Openings***

	<i>Current</i>	<i>Predicted</i>
	<u>Employment</u>	<u>Annual Openings</u>
1. Cashiers	9,215	438
2. Retail salespersons	11,243	436
3. Personal and health care aides	5,167	419
4. Waiters and waitresses	5,688	321
5. Registered nurses	5,741	235
6. Customer service representatives	4,075	186
7. Child care workers	3,733	157
8. Booking, accounting and auditing clerks	6,956	156
9. Janitors-cleaners, except maids-housekeepers	5,369	134
10. Carpenters	6,430	128
11. Home health aides	2,391	125
12. Counter attendants, cafeteria, food concession	1,640	122
13. First-line supervisors and managers in retail	4,690	119
14. Elementary school teachers	4,212	116
15. Food preparation and serving workers	3,758	116

Out of this list of 15 occupations, only one-third offer annual earnings higher than the state median. Similar trends exist in other states; low-wage service jobs such as cashiers, retail clerks, health aids and wait staff are both plentiful and subject to high levels of job turnover.

Another approach to understanding future labor market trends is to identify the *fastest* growing occupations in Vermont, although this doesn’t mean that they will be plentiful; growth rates reflect the base or size of the beginning number. An analysis of the 14 *fastest* growing occupations suggests two trends. First, many of these new jobs will be in the health care sector. Second, nine of these fastest growing occupations have annual earnings well above the state median, while five are below. Again, these results have important implications for workforce training; many of the fastest growing jobs require advanced degrees and/or certification. These occupations include:

***Fastest Growing Jobs with relatively high earnings potential***

- Computer software engineers
- Community social service specialists
- Pharmacists
- Network and data communication analysts
- Substance abuse and behavioral disorder counselors
- Medical and public health social workers
- Mental health and substance abuse social workers
- Translators
- Veterinarians

Among this group of the *fastest* growing occupations, five offered relatively low earnings:

***Fastest Growing Jobs with relatively low earnings potential***

- Home care aids
- Pharmacy technicians
- Home health aids
- Veterinarian technicians
- Medical assistants

<sup>56</sup> Vermont Department of Labor, Vermont Labor Market Information Center. <http://www.vtlmi.info/oic.cfm>

**Trend Number 10:** Vermont has been fortunate in experiencing unemployment rates that are traditionally much lower than national rates, but like the rest of the country, faces the dual problems of rising income inequality and poverty rates, which have abated little.

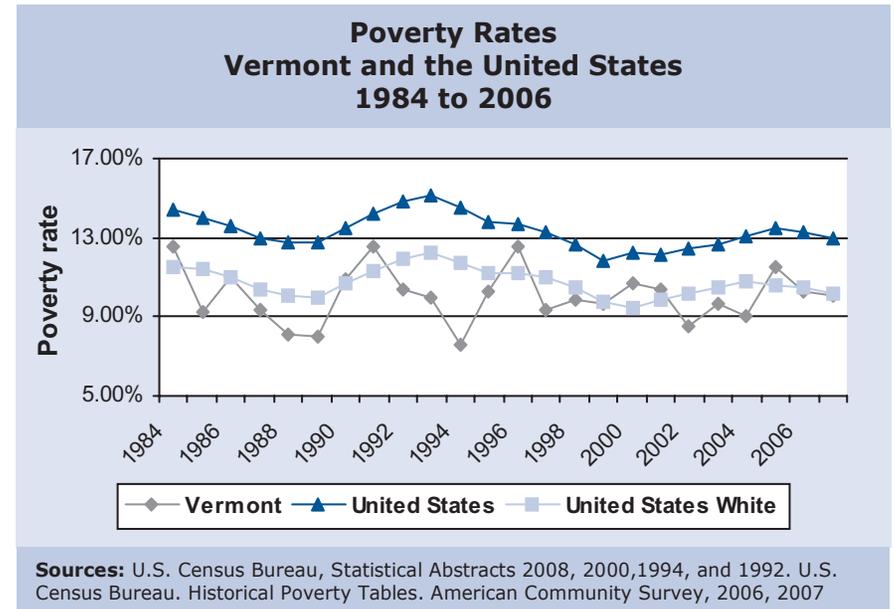
As noted earlier, measures of income place the state largely in the middle range of the country, while in 2007, rates of poverty (7.6%) and unemployment (3.9%) were considerably lower, and have been for the last 25 years.<sup>57</sup> In 2007, only 18 states had lower rates of unemployment and only New Hampshire had a lower poverty rate. Since 1980, Vermont's unemployment rate has slowly trended downwards, with the notable exceptions of three recessions. Like the unemployment rate, Vermont's poverty rate since 1983 has remained well below national levels, but unlike the unemployment rate, it shows no long-term trend.

While the rate of poverty is relatively low, still approximately 61,000 Vermonters were recorded as living at or below the poverty level in 2007.<sup>58</sup>



<sup>57</sup> U.S. Census Bureau, Poverty: <http://www.census.gov/hhes/www/poverty/histpov/perindex.html>. U.S. Department of Labor, Bureau of Labor Statistics, News. February 28, 2008. Table 1. Employment status of the civilian noninstitutional population 16 years of age and over by region, division, and state, 2006-07 annual average: <http://www.bls.gov/news.release/pdf/srgune.pdf>

<sup>58</sup> U.S. Census Bureau, Poverty: <http://www.census.gov/hhes/www/poverty/histpov/perindex.html>. U.S.

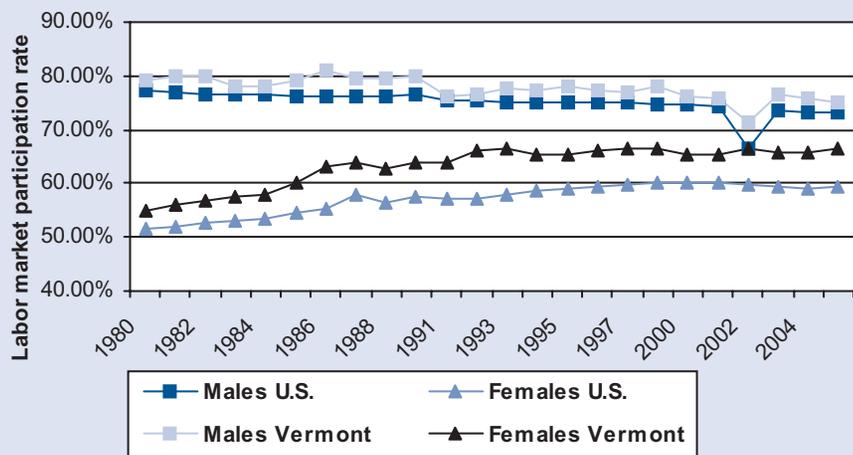


**Trend Number 11:** Women have experienced rising labor market participation rates that are well above national levels, and they are playing a vital role in maintaining Vermont's relative income standard.

As noted in Chapter 1, demographics play a key role in the state's statistical profile. Compared to the rest of the U.S., Vermont has a higher proportion of two parent families, more highly educated people and fewer young adults, all of which combine to generate lower rates of poverty and unemployment. These favorable unemployment and poverty rates also can be explained by the unusually high percent of the population over 16 years of age that is in the labor force (at 67.8%, the ninth highest in the nation in 2007).<sup>59</sup> Vermont has not always been number one in this area, but for the last decade it has ranked among the top ten states annually.

<sup>59</sup> Department of Labor, Bureau of Labor Statistics, News. February 28, 2008. Table 2. Employment-population ratios of persons 16 years of age and over by region, division, and state, 2006-07 annual averages: <http://www.bls.gov/news.release/pdf/srgune.pdf>

### Labor Market Participation Rates Males and Females in Vermont and in the United States 1980 to 2005\*



Source: U.S. Census Bureau, Statistical Abstracts 1983 through 2008  
\* Labor market participation rate is defined as the percentage of the population 16 years and older that is either working or actively looking for work.

Perhaps the most notable change in the labor market over the last half-century has been the rising rate of labor force participation for women, especially married women with children. Nationally, just over 30% of women 16 years and older were in the labor force in 1950 (either employed or actively seeking work), but by 2005, the participation rate had climbed to just under 60%. A host of factors can explain this change, including rising wages for women, changing preferences about work and careers, the passage of antidiscrimination legislation in the 1960s, declining birthrates, rising divorce rates, greater accessibility of jobs outside of traditional fields, labor saving household technology, and the attempts by households to improve or maintain living standards. In Vermont, the labor force participation rate among women has risen from 55% in 1980 to almost 67% in 2005, a much higher rate than nationally (59%).<sup>60</sup>

<sup>60</sup> Source: U.S. Census Bureau, Statistical Abstracts 1983 through 2008.

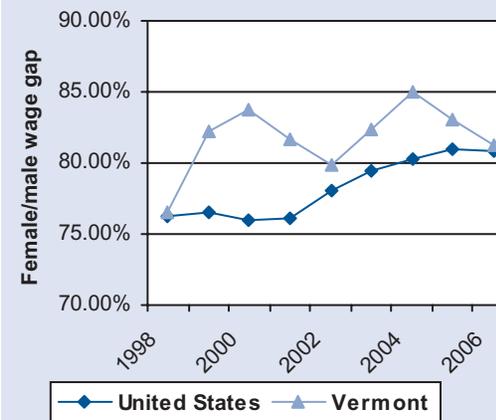
Women play an increasingly important role in sustaining Vermont's economy. Yet their wages, as is the case nationally, lag behind men. Data from the 2000 Decennial Census indicated that, on average, Vermont women who work full-time year-round earn 78% of the median earnings of males (\$25,322 vs. \$32,457).<sup>61</sup> Between 1998 and 2006, the earnings gap between men and women narrowed. Part of the remaining earnings gap can be explained by the decisions women make prior to entering the labor

market (e.g., choice of a college major) or their choice of occupations (e.g., work in jobs that are consistent with family responsibilities or lower paying fields that offer a higher degree of social responsibility or some other non-monetary benefits). Even after controlling for these and other factors, most research studies conclude that there is still a residual gap, which is typically explained as the impact of gender discrimination. Comparatively speaking, Vermont fares well in this regard; in 2004 only two states had smaller gender wage gaps.

Labor force participation rates for men, both statewide and nationally, have fallen modestly, although the trend for Vermont males is that they remain slightly more likely to be working than their counterparts outside of the state. The existence of more generous Social Security and disability benefits, the growth of private pensions, the rise of "forced" labor force withdrawals and life style considerations all play a key role in this pattern.

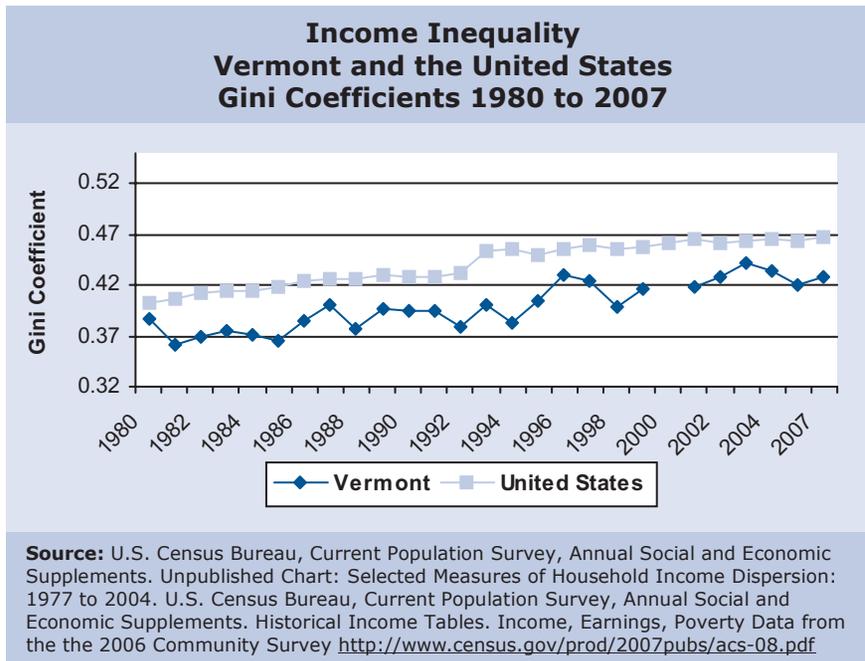
<sup>61</sup> U.S. Census 2000 Summary file, "Median Earnings and Earnings Gap of Full-Time, Year-Round Workers Age 16 Years and Over by State Listing."

### Female-Male Weekly Earnings Gap 1998 to 2006



Source: U.S. Department of labor, Bureau of Labor Statistics  
Current Population Survey: Highlights of Women's Earnings (1998 to 2006)  
\* The gap is measured by comparing median

*Trend Number 12: The gap between the well off and the poor has been rising in Vermont, as it has been nationally, but the level of income inequality is considerably less in the state.*



Vermont has considerably lower levels of income inequality than the country as a whole, suggesting that the gap between the very well off and the poor is not quite so large as it is in most other states. But like the country as a whole, the gap between those at the top and those at the bottom of the income distribution has widened over time. According to a widely used measure of inequality, the Gini coefficient, Vermont's 2007 index of inequality was .428 compared to .467 for the nation as a whole.<sup>62, 63</sup> This was the seventh lowest in the nation.

<sup>62</sup> The Gini coefficient is a statistical measure of income concentration ranging from 0 to 1. A measure of 0 indicates perfect equality in which all people receive equal shares of income, while a 1 indicates perfect inequality, where a single individual has all the income.

<sup>63</sup> U.S. Census Bureau, *Income, Earnings, and Poverty Data from the 2007 American Community Survey, Table 5 Gini Coefficients and Shares of Income by Quintile in the past 12 months by State: 2007.*

There is some debate among economists and other policy analysts about the extent to which income inequality has changed over the past three decades, but the bulk of the evidence suggests that income differences have become more unequal.<sup>64</sup> While there are reasonable criticisms of the Gini Index and the underlying income measures upon which it is constructed, since 1980 household income has been trending towards more inequality, in both the nation and in Vermont, although less so in Vermont. For example, in 1980, the top quintile received 43% and 44% of household income in Vermont and the U.S. respectively. By 2007, Vermont had reached 47% and the U.S. 50%. At the other end up the spectrum, Vermont's bottom quintile received 4.1% of all state income compared to 3.4% nationally. Back in 1980, the respective percentages were 4.7% in Vermont and 4.2% in the U.S. (see Appendix, 4-11).

The Vermont Department of Taxes provides summary data on tax filers and reveals a substantial increase in the number of well off Vermonters since 2000. The data for those with higher incomes is more complete than lower income residents who may not file a return, although in not filing, they would be excluded from receiving the benefits of certain programs. Between 2000 and 2006, there was a 60% increase in the number of personal tax returns in the over \$100,000 income category; nearly 30,000 returns fell into this bracket.<sup>65</sup>

What explains these trends? Analysts point to the impact of globalization, changes in household composition, higher levels of immigration, the decline in unions, changing tax policy, industrial restructuring, changing norms of wealth accumulation for individuals, and technological change with differential impacts on the well and less well educated. Whatever the cause, many social observers are deeply concerned about this trend towards greater concentrations of wealth and the consequences for the social fabric and the quality of life for individuals at all levels of society.

<sup>64</sup> *The Vermont Economy Newsletter* has published several articles in recent years questioning whether inequality has worsened. See for example, "The Rich Get Richer and So Do the Poor," February 2006, "Is the Vermont Middle Class Shrinking," May 2007.

<sup>65</sup> Vermont Department of Taxes. <http://www.state.vt.us/tax/statisticsincome2000.shtml>

The most notable trends in the Vermont economy include:

1. Various measures of income have historically lagged behind national levels, but in more recent years, the incomes of Vermonters are close to or slightly above national averages.
2. Employment growth in recent years has slowed from earlier years. A disproportionate share of this growth has occurred in the Burlington-South Burlington Labor Market.
3. Over the last twenty years, increasing numbers of Vermonters are finding jobs in health care, retail, professional services and government, while jobs in manufacturing are declining. Other industrial sectors have seen smaller employment changes.
4. Vermont has seen the expansion of many small companies in a number of niche areas. Many of these companies have aligned themselves in multiple ways with Vermont's quality of life and the Vermont "Brand." One of the more unusual and fast growing sectors in Vermont is the Captive Insurance Market, where Vermont is a national leader.
5. Since the end of the 1990s, the number of tourists and their spending has been either flat or growing quite slowly.
6. The banking industry has undergone substantial changes in the last twenty years including: a) the decline in the number of state chartered banks and state chartered credit unions; b) the growth of banks chartered elsewhere; and c) the emergence of many licensed non-bank lenders. Recently, the number of foreclosures has increased significantly, but Vermont still has one of the lower foreclosure rates in the country.
7. Many of Vermont's best jobs are tied to the export market. Depending upon which years are compared, exports have either increased or decreased in the last decade. While exports to Canada still dominate, exports to Asian countries are becoming more important.
8. Many of the jobs that have been created in Vermont over the last twenty years (as well as many that may be created in the next decade) are in occupations and industries that have historically paid less than state averages. Jobs that pay above the state average will require advanced training, certification, and college degrees. High paying jobs for people with more limited formal education will be fewer in number.

9. The health care sector is an increasingly important source of jobs and income for the state. Health care provides some of the very best jobs in the state, but also many jobs that offer little in the way of occupational advancement or employment stability.
10. Vermont has been fortunate in experiencing unemployment rates that are traditionally much lower than national rates, but like the rest of the country, faces the dual problems of rising income inequality and poverty rates, which have abated little.
11. Women have experienced rising labor market participation rates that are well above national levels, and they are playing a vital role in maintaining Vermont's relative income standard.
12. The gap between the well off and the poor has been rising in Vermont, as it has been nationally, but the level of income inequality is considerably less in the state.

**For the appendices, and for pdf versions of this report, please visit the Council on the Future of Vermont's website; [www.futureofvermont.org](http://www.futureofvermont.org). or visit Vermont Council on Rural Development at [www.vtrural.org](http://www.vtrural.org).**

## **The Appendix for this chapter contains the following charts:**

1. Vermont Personal Income, 1970 – 2007
2. Median Income of Households in 2006 dollars, 1984 to 2006
3. Median Family Income for a Four Person Family, 1987 to 2005
4. Self-Employment as a Percent of all Employment in Vermont, 1997 to 2006
5. Vermont, Number of Non-farm Proprietors, 1970 to 2006
6. Employment and Wage Growth in the Burlington-South Burlington, Labor Market Areas, 1978 to 2006
7. Vermont Captive Insurance Companies, 1983 to 2007
8. Vermont State Park Usage, 1987 to 2007
9. Attendance at Vermont Historic Site, 1999 to 2007
10. Number of Hunting and Fishing Licenses, Residents and Non-Residents, 1988 to 2006
11. Household Income: Lowest and Highest Quintiles, Vermont and the United States, 1980 to 2004
12. Vermont, per - capita dividends, Percent of U.S., 1970 to 2006
13. Vermont Per - capita Interest Percent of U.S., 1970 to 2006
14. Mass Layoffs in Vermont per Year, 1996 to 2007
15. Union Affiliation: Percent of Employed in Vermont and the United States, 2000 to 2007

# Vermont in Transition:

*A Summary of Social Economic and Environmental Trends*

*A study by*

**Center for Social Science Research at Saint Michael's College**

Vince Bolduc, Ph. D. and Herb Kessel, Ph. D.

*for the*

**Council on the Future of Vermont**

December 2008

## Chapter 4: ECONOMY ~ APPENDIX

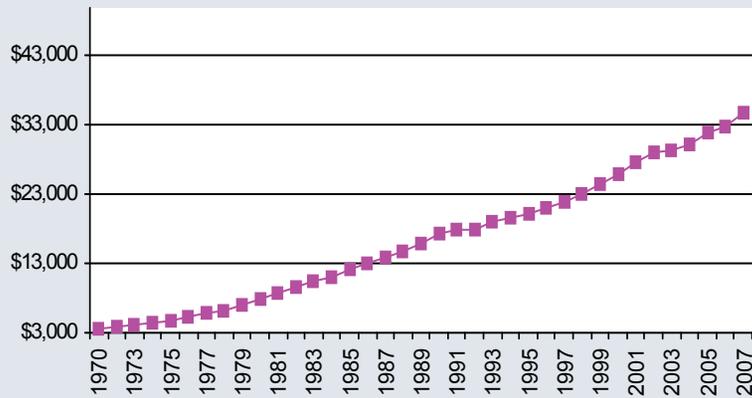
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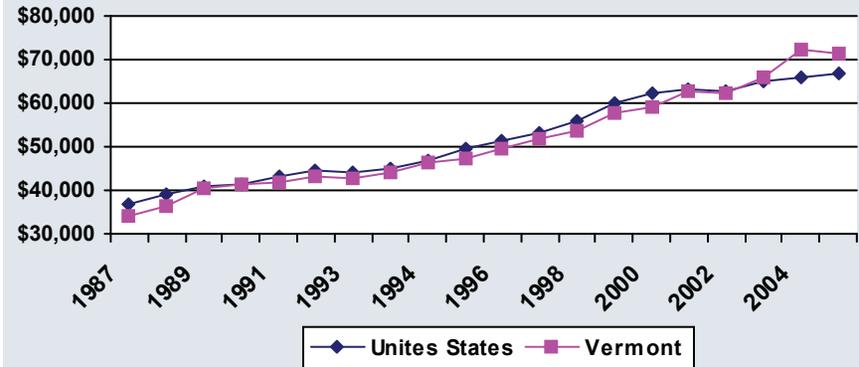
**Vermont Council on  
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(802) 223-6091  
vcrd2@sover.net;  
<http://www.vtrural.org>

**Chart 4-1  
Vermont Personal Income  
1970 to 2007**



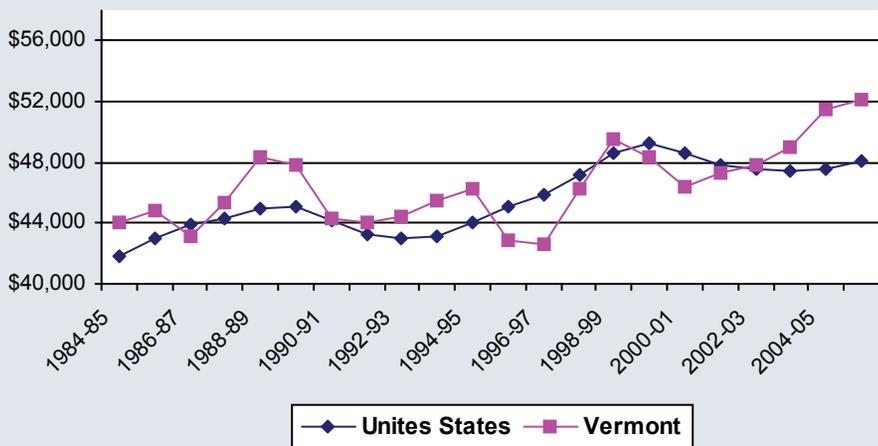
Source: U.S. Bureau of Economic Analysis

**Chart 4-3  
Median Family Income  
for a Four Person Family, Vermont and U.S.  
1987 to 2005**



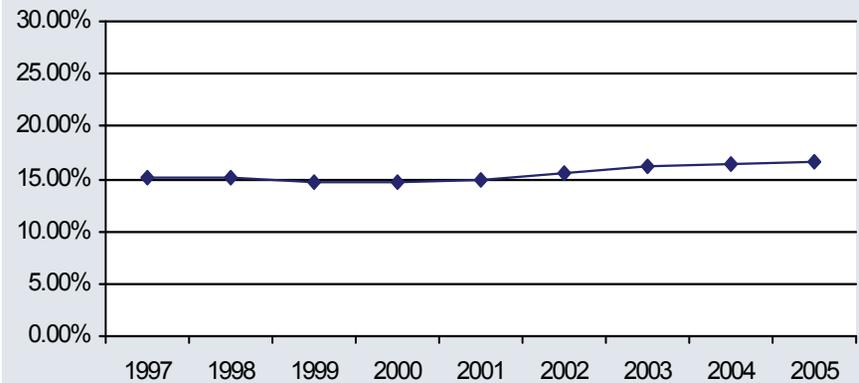
Source: U.S. Census Bureau: <http://www.census.gov/hhes/www/income/4person.html>

**Chart 4-2  
Median Income of Households in 2006 dollars  
(Two-year moving average) Vermont and U.S.  
1984 - 2006**



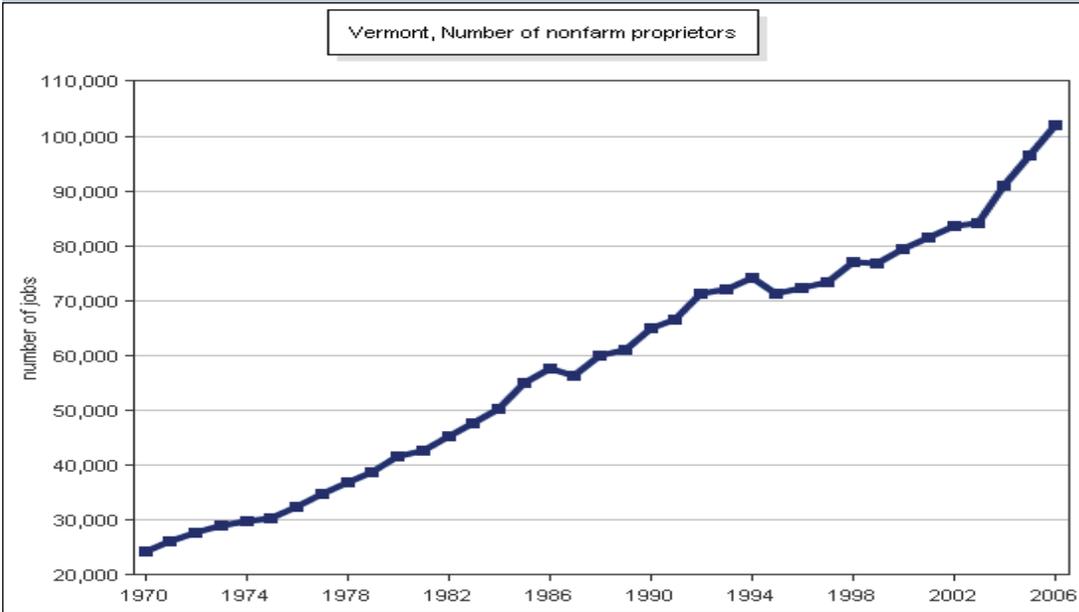
Source: U.S. Census Bureau. Historical Income Tables-Households

**Chart 4-4  
Self-Employment as a Percent of all Employment in  
Vermont  
1997 - 2006 (2005: n= 59,550)**



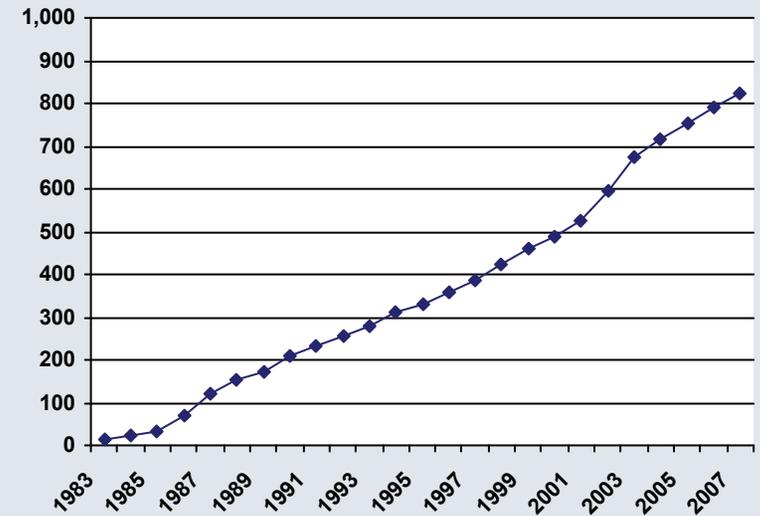
Source: U.S. Economic Census: Nonemployer Statistics Vermont. 1997 - 2005

**Chart 4-5  
Vermont, Number of Non-farm Proprietors  
1970 to 2006**



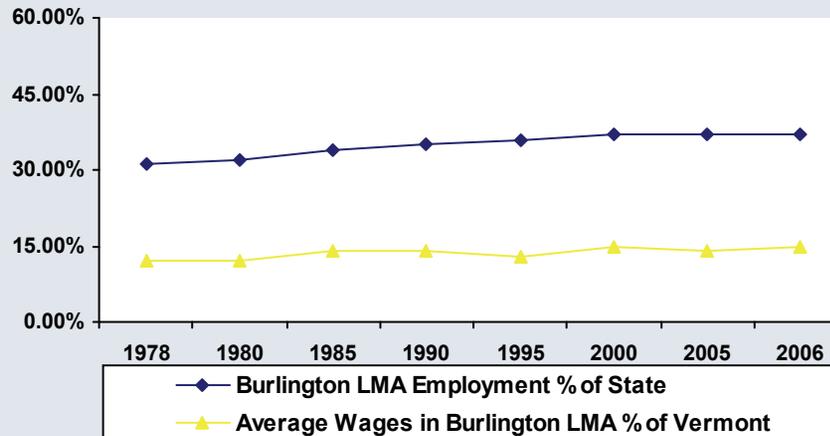
Source: U.S. Bureau of Economic Analysis

**Chart 4-7  
Vermont Captive Insurance Companies  
1983 to 2007**



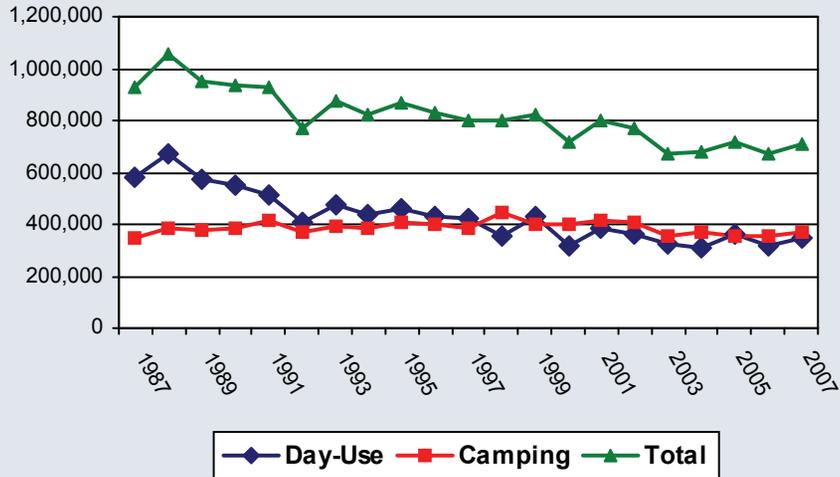
Source: Vermontcaptive.com (<http://www.vermontcaptive.com/basics/TheNumbers.cfm>)

**Chart 4-6: Employment and Wage Growth in the Burlington-South Burlington Labor Market Areas  
1978 to 2006**



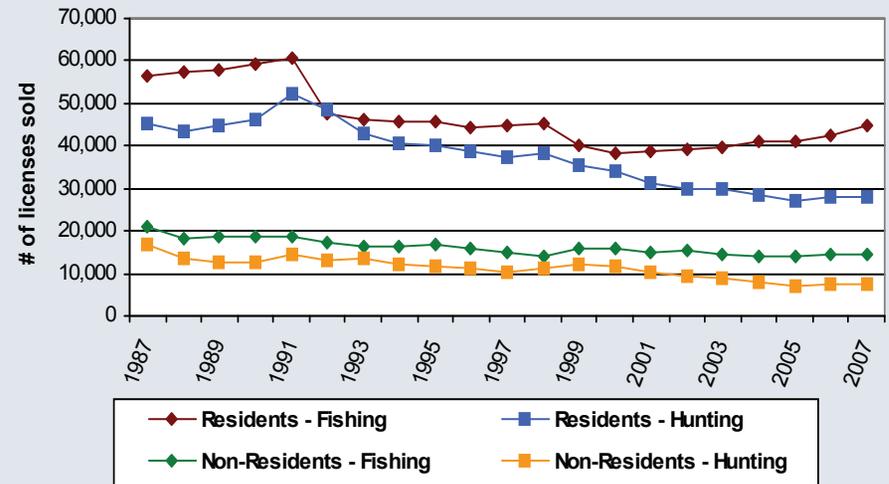
Source: Vermont Department of Labor. "U.I. Covered Employment & Wages."

**Chart 4-8  
Vermont State Park Usage  
1987 to 2007**



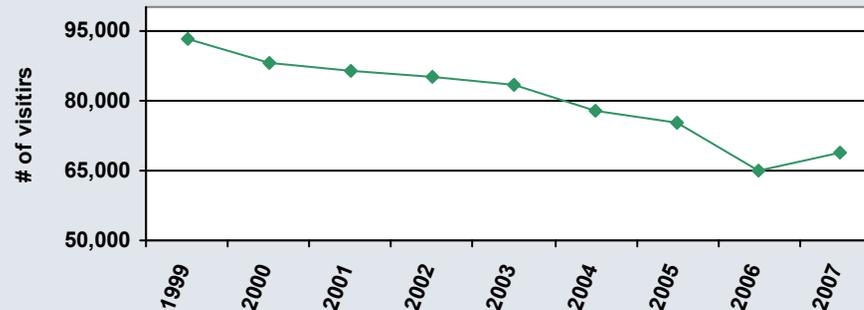
**Source:** Department of Forests, Parks & Rec., Craig Whipple: Director of State Parks

**Chart 4-10  
Number of Hunting and Fishing Licenses  
Residents and Non-Residents  
1988 to 2007**



**Source:** Vermont Department of Fish and Wildlife

**Chart 4-9  
Attendance at Vermont Historic Site\*  
1999 to 2007**



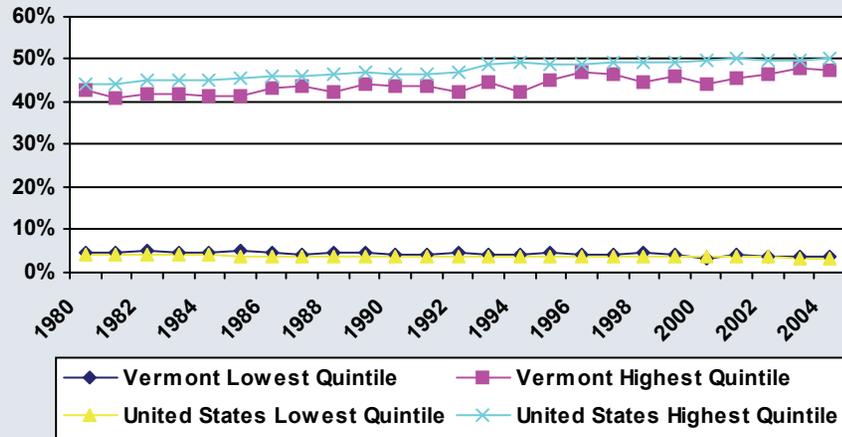
\*Sites Include:

Bennington Battle Monument  
Chester Arthur Historic Site  
Eureka Schoolhouse Historic Site  
Hyde Log Cabin  
Mount Independence Historic Site

Chimney Point State Historic Site  
Old Constitution House  
Hubbarton Battlefield  
Justin Morrill Homestead  
Plymouth Notch Historic Site

**Source:** University of Vermont, Vermont Tourism Data Center.  
[www.uvm.edu/tourismresearch](http://www.uvm.edu/tourismresearch)

**Chart 4-11: Household Income: Lowest and Highest Quintiles, Vermont and the United States 1980 to 2004**



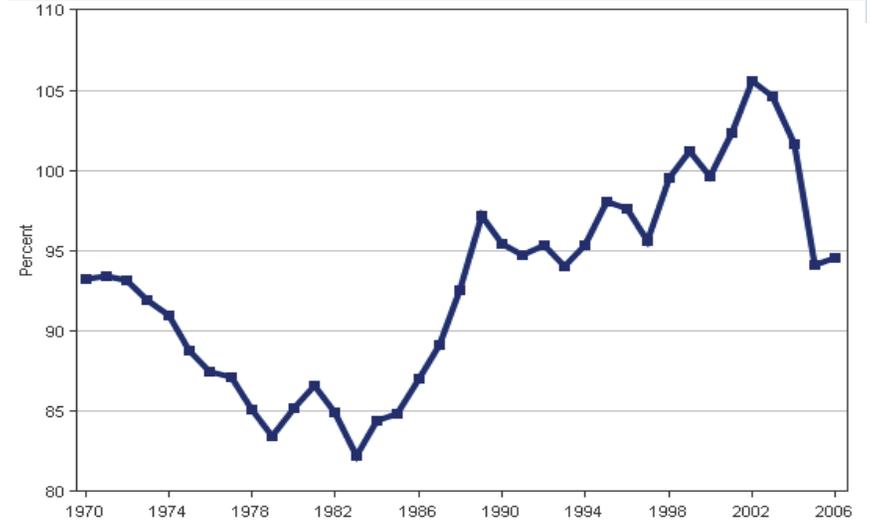
**Source:** U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements. Unpublished Chart: Selected Measures of Household Income Dispersion: 1977 to 2004. U.S. Census Bureau. 2008 Statistical Abstracts of the United States, "Income, Expenditures, Poverty, &

**Chart 4-12: Vermont: per - capita dividends, Percent of U.S. 1970 to 2006**



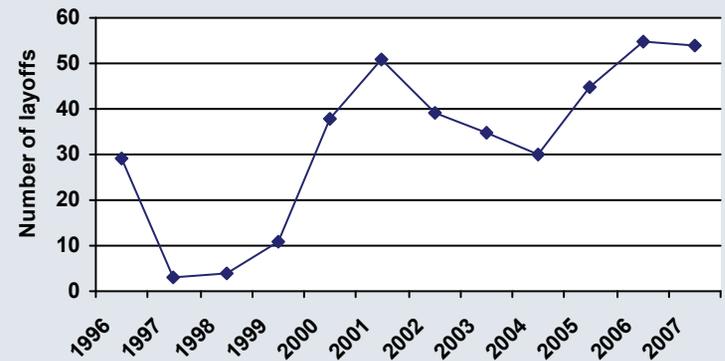
**Source:** U.S. Bureau of Economic Analysis

**Chart 4-13 Vermont: Per - capita Interest Percent of U.S. 1970 to 2006**



**Source:** U.S. Bureau of Economic Analysis

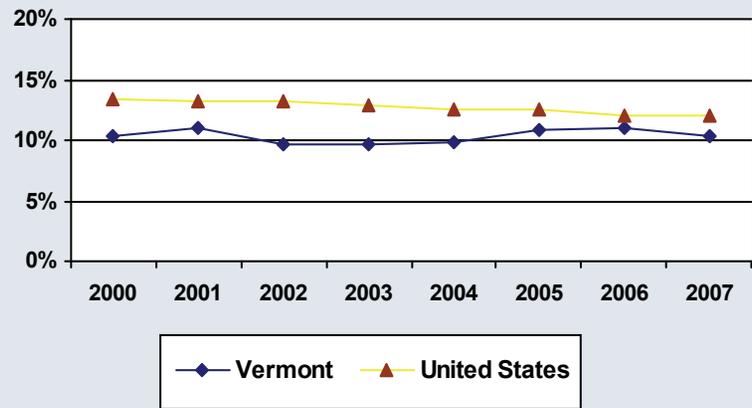
**Chart 4-14 Mass Layoffs in Vermont per Year\* 1996 to 2007**



\* Mass Layoffs are defined by the U.S. Department of Labor as a situation when 50 or more persons file claims for unemployment insurance against a firm or institution during a consecutive 5-week period.

**Source:** U.S. Department of Labor, Bureau of Labor Statistics. <http://data.bls.gov/PDQ/servlet/SurveyOutputServlet>

**Chart 4-15**  
**Union Affiliation: Percent of Employed**  
**in Vermont and the United States**  
**2000 to 2007**



**Source:** U.S. Department of Labor. "Union Affiliation data from the Current Population Survey."