Addison County Economic Development Corporation

Economic Report and Analysis

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Middlebury College

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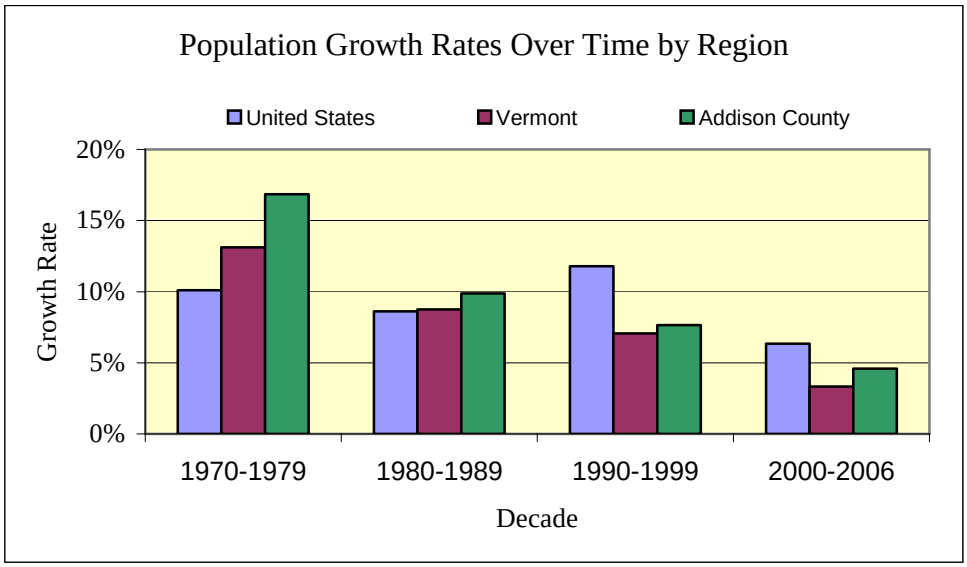
I. POPULATION

It is generally accepted that the level of population growth is influenced by numerous factors. These include but are not limited to: employment activities, favorability of structure for business and industry operations, cost of living, quality of life, and the relative attractiveness of the climate and/or the amenities.

Addison County's population growth has exceeded the Vermont state average during each of the last four decades. Compared to the national average, Addison County has begun to fall slightly behind since the 1990s, whereas it exceeded the United Sates' population growth from 1970-1989. Moreover, Addison County has mirrored the overall national trend of a decreasing population growth rate. Indeed, Woods and Poole Economics projects modest population growth for both Addison County and the State of Vermont in coming decades, and that Addison County will continue getting older as its younger population declines and that of its older residents keeps growing. Addison County currently stands out as one of the younger areas but will likely see an increase in the median age in future decades.



When population growth figures are further broken down, Addison County falls in the middle third (see Table 1, next page) for the years 2000-2006. The northwestern tier of Vermont has experienced tremendous population growth in recent years with Grand Isle, Lamoille, and Franklin Counties leading the way. The most current data suggest that Vermont lags slightly behind the national median population growth rate but just ahead of the New England average. Likewise, Addison County's population growth rate of 4.58% is well above both the New England and Vermont figures. The growth rate has been decreasing at a decreasing rate; nevertheless, the labor market has undoubtedly grown. As later analysis will prove, the market has generally met this new demand for jobs. The question remains: did new jobs attract domestic immigrants or did was the influx of people met by employers. That is to say, the direction of causality is uncertain. Woods and Poole also make growth projections; in these estimations, Addison County is expected to grow at 6.69% from 2006-2010, which ranks behind only Grand Isle County in this category.

Table 1: Population and Growth Rates 2000-2006, and 2006-2010 Projections[1]

Geographic Area	2000	2006	Growth 2000-2006	Projected Growth 2006-2010
United States	282,193,477	300,085,843	6.34%	3.92%
New England	13,953,025	14,358,387	2.91%	2.33%
Vermont	609,937	630,184	3.32%	3.55%
Grand Isle, VT	6,940	7,881	13.56%	8.08%
Lamoille, VT	23,342	24,929	6.80%	5.99%
Franklin, VT	45,597	48,499	6.36%	3.85%
Orleans, VT	26,346	27,921	5.98%	3.04%
Orange, VT	28,310	29,635	4.68%	3.72%
Addison, VT	**36,038**	**37,688**	**4.58%**	6.69%
Caledonia, VT	29,767	30,777	3.39%	3.40%
Chittenden, VT	146,973	151,596	3.15%	4.26%
Washington, VT	58,073	59,828	3.02%	1.37%
Essex, VT	6,463	6,614	2.34%	-0.23%
Windsor, VT	57,501	58,700	2.09%	3.60%
Bennington, VT	36,992	37,426	1.17%	3.58%
Rutland, VT	63,419	64,121	1.11%	1.38%
Windham, VT	44,176	44,569	0.89%	2.85%

The baby-boomers are affecting the median age of the country at-large, including Vermont. Since 1980, the population has been getting older, albeit at a slightly decreasing rate. Addison County was one of the youngest counties in the late 20th century but shows signs of ageing faster than Vermont as a whole. Woods and Poole predictions suggest that Addison County will have an average age of 43.57, roughly 1.75 years below the state median.

Table 2: Median Age from 1980-2020 (1=oldest, 14=youngest)[2]

Rank	1980	1990	2000	2005	2010	2020
1	Windsor	Essex	Windsor	Windsor	Windsor	Windham
2	Bennington	Windsor	Bennington	Bennington	Windham	Windsor
3	Windham	Bennington	Grand Isle	Windham	Bennington	Bennington
4	Rutland	Windham	Windham	Rutland	Rutland	Orange
5	Grand Isle	Rutland	Rutland	Essex	Orange	Rutland
6	Essex	Orleans	Orleans	Orleans	Orleans	Orleans
7	Washington	Grand Isle	Essex	Grand Isle	Essex	Caledonia
8	Caledonia	Washington	Orange	Orange	Washington	Washington
9	Orleans	Caledonia	Caledonia	Washington	Grand Isle	**Addison**
10	Orange	Orange	Washington	Caledonia	Caledonia	Lamoille
11	Franklin	Lamoille	Lamoille	Lamoille	**Addison**	Essex
12	Lamoille	Franklin	**Addison**	**Addison**	Lamoille	Grand Isle
13	**Addison**	**Addison**	Franklin	Franklin	Franklin	Franklin
14	Chittenden	Chittenden	Chittenden	Chittenden	Chittenden	Chittenden
average	30.0	33.7	38.6	41.2	43.4	45.4

[1] Woods and Poole Economics
[2] Ibid

In addition to the aforementioned factors of population growth, natural increases from the birth rate exceeding the death rate and increases in net migration are significant growth contributors. Table 3 indicates that Vermont is experiencing positive net migration, both internationally and domestically. Addison County's figures parallel those of the state. Additionally, the total natural increases from 2003-2004 were much smaller than those from 1990-1999. During that period, births nearly doubled deaths (4,019 births compared to 2,258 deaths) whereas in this interval from 2003-2004, births exceeded deaths by only 15.

Table 3: Components of Population July 1, 2003 - July 1, 2004[3]

Area	Total Pop. Change	Natural Increase			Net Migration		
		Total	Births	Deaths	Total	Net Int'l Migration	Net Internal Migration
Vermont	2,051	918	6,227	5,309	1,090	869	221
Addison	**200**	**15**	**299**	**284**	**182**	**56**	**126**
Bennington	-154	-19	323	342	-135	37	-172
Caledonia	349	-10	310	320	361	29	332
Chittenden	438	479	1,533	1,054	-52	487	-539
Essex	83	3	52	49	79	3	76
Franklin	418	223	607	384	190	29	161
Grand Isle	152	34	82	48	118	2	116
Lamoille	173	117	277	160	52	26	26
Orange	99	24	256	232	72	10	62
Orleans	254	22	289	267	232	15	217
Rutland	69	9	612	603	52	17	35
Washington	109	105	616	511	-3	87	-90
Windham	-134	5	444	439	-139	32	-171
Windsor	-5	-89	527	616	81	39	42

In short, Addison County's population is growing and getting older relatively quickly compared to the rest of the state. The gap between birth and death rates has been shrinking since the turn of the century and the county is attracting people from other states as well as abroad.

Eight of the 23 towns of Addison County have populations fewer than 1,000 while only four have populations over 2,000 (see Table 4, next page). Middlebury town, which is home to 22% of the total county-wide population, saw its population decrease over the past five years. Goshen town, Granville town, and Hancock experienced similar declines. On average, however, the population in Addison County grew 3.24% between 2000 and 2005. This was above the statewide growth of 2.1% during the same period.

[3] US Census Bureau: http://www.census.gov/popest/states/NST-comp-chg.html.

Table 4: Addison County Population by Town[4]

	July 1, 2000	July 1, 2005	% Change 2000-2005
Addison town	1,397	1,457	4.29%
Bridport town	1,237	1,275	3.07%
Bristol town	3,792	3,795	0.08%
Cornwall town	1,139	1,223	7.37%
Ferrisburg town	2,667	2,723	2.10%
Goshen town	227	224	-1.32%
Granville town	303	296	-2.31%
Hancock town	382	374	-2.09%
Leicester town	978	1,024	4.70%
Lincoln town	1,218	1,268	4.11%
Middlebury town	8,183	8,152	-0.38%
Monkton town	1,768	1,946	10.07%
New Haven town	1,669	1,815	8.75%
Orwell town	1,195	1,231	3.01%
Panton town	684	699	2.19%
Ripton town	556	586	5.40%
Salisbury town	1,090	1,129	3.58%
Shoreham town	1,225	1,305	6.53%
Starksboro town	1,903	1,928	1.31%
Vergennes city	2,740	2,763	0.84%
Waltham town	479	490	2.30%
Weybridge town	825	852	3.27%
Whiting town	381	410	7.61%
average	1,567	1,607	3.24%

[4] US Census Bureau: http://www.census.gov/popest/states/NST-comp-chg.html.

II. EDUCATION

Addison County Public Schools experienced a slight decline in enrollment of -0.29% from 2002-2006 using compounded annual growth rates (CAGR). This average decline has been impacted by a greater than average rate of decline from 2005-2006 of 0.69%. While Middlebury Senior #3, Vergennes #5, and Middlebury Union #3 lost a total of 100 students last year, the average decline among all public Addison County Schools and programs was 5 students, resulting in a net county loss of 139 students.

Table 5: Addison County Growth/Decline by School (2005-2006, 2002-2006)[5]

						05-'06	05-'06	02-'06
School Name	'02	'03	'04	'05	'06	**Inc/(Dec)**	**%Growth**	**CAGR**
Statewide Total:	**100,867**	**99,978**	**99,104**	**98,361**	**96,636**	(1,725)	-1.75%	-1.07%
Addison Central	139	136	126	137	138	1	0.73%	-0.18%
Addison Central SU	26	50	15	33	29	(4)	-12.12%	2.77%
Addison N. East SU	19	30	0	27	25	(2)	-7.41%	7.10%
Addison N West SU	28	32	25	30	32	2	6.67%	3.39%
Beeman Elementary	152	160	149	159	148	(11)	-6.92%	-0.66%
Bingham Memorial	88	98	95	89	88	(1)	-1.12%	0.00%
Bridport Central	127	123	126	123	107	(16)	-13.01%	-4.19%
Bristol Elementary	405	368	358	339	325	(14)	-4.13%	-5.35%
Ferrisburgh Central	227	208	212	198	204	6	3.03%	-2.64%
Granville Village *	24	18	10	0	0	0	*	*
Hancock Village	27	25	24	0	0	0	0.00%	0.00%
Leicester Central	97	88	75	78	72	(6)	-7.69%	-7.18%
Lincoln Community	123	109	109	111	120	9	8.11%	-0.62%
Middlebury ID #4	497	440	425	399	412	13	3.26%	-4.58%
Middlebury Sr. #3	726	735	754	744	704	(40)	-5.38%	-0.77%
Middlebury Union #3	308	336	347	333	307	(26)	-7.81%	-0.08%
Monkton Central	172	189	176	179	184	5	2.79%	1.70%
Mount Abraham #28	891	907	960	947	961	14	1.48%	1.91%
Orwell Village	167	167	168	168	151	(17)	-10.12%	-2.49%
Ripton Elementary	61	61	53	54	68	14	25.93%	2.75%
Robinson	205	196	181	164	147	(17)	-10.37%	-7.98%
Salisbury Comm.	87	93	96	106	104	(2)	-1.89%	4.56%
Shoreham Elem. ***	120	117	114	100	94	(6)	-6.00%	-5.92%
Vergennes #44 ***	345	331	329	293	269	(24)	-8.19%	-6.03%
Vergennes #5 ***	637	640	648	693	659	(34)	-4.91%	0.85%
Village School *	NA	NA	NA	37	43	6	16.22%	*
Weybridge Elem.	82	85	88	97	104	7	7.22%	6.12%
Whiting Village	24	28	29	31	35	4	12.90%	9.89%
					Average:	**(5)**	**-0.69%**	**-0.29%**

* Closed/no longer operates program ** Started operating after FY99 *** Combined/reconfigured

[5] Vermont Department of Education, "Table 6: Vermont Public School Enrollment 5 Year Comparison 2000-2001 Through 2005-2006." Updated 05/12/2006. Accessed 10/01/2006.

Table 6: Educational Growth/Decline by County[6]

	05-'06	02-'06
County	**Average %Growth**	**Average CAGR**
Statewide Total:	-1.75%	-1.07%
Addison	**-0.69%**	**-0.29%**
Bennington	-0.14%	-1.72%
Caledonia	12.26%	-0.01%
Chittenden	-3.56%	4.66%
Essex	-12.85%	2.98%
Franklin	5.05%	0.84%
Grand Isle	-4.51%	0.42%
Lamoille	2.58%	-0.40%
Orange	2.85%	1.62%
Orleans	0.77%	-0.77%
Rutland	-7.01%	-0.98%
Washington	-1.54%	0.45%
Windham	-1.54%	0.47%
Windsor	32.09%	-0.44%

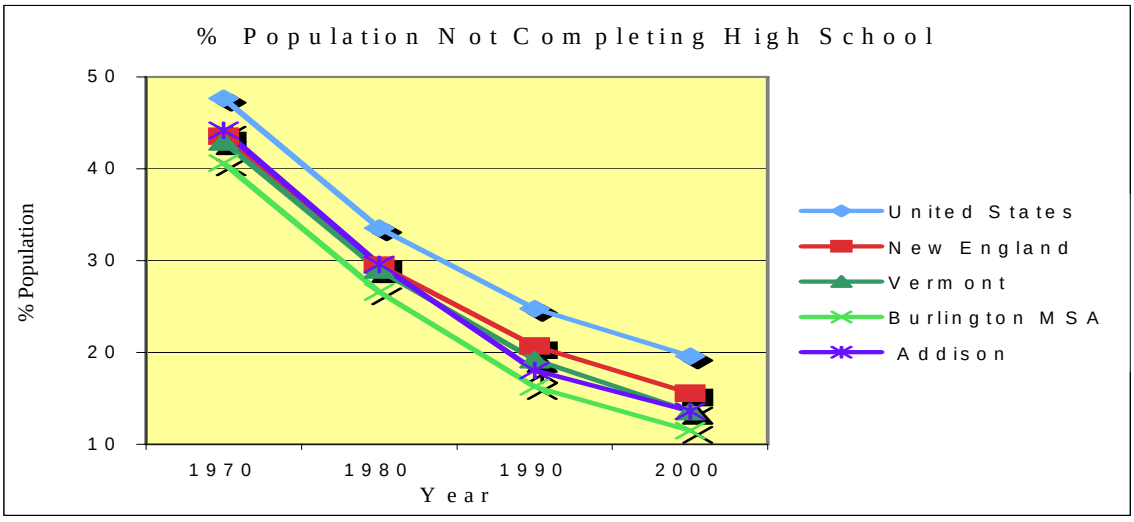
When compared with the 13 other Vermont counties, Addison County's slight decline in public school enrollment is not unusual. Also notable, statewide public school and programs enrollment has declined by 1,725 students from 2005-2006. Over the 5-year period 2002-2006, the CAGR state decline was 1.07%,

During both periods, Addison County's rate of decline has been, on average, less than the statewide percentage loss, and generally in line with neighboring counties.

While there has been a very slight decline in public school enrollment in Addison County over the last decade, the percent of the population above age 25 graduating high school and attaining a higher degree has increased in Addison County and is consistent with state and national trends.

Table 7: Percent Addison County Population (age 25 +) Not Completing High School

	1970	1980	1990	2000
United States	47.65	33.53	24.76	19.6
New England	43.54	29.5	20.71	15.57
Vermont	42.93	28.98	19.21	13.58
Burlington MSA	40.6	26.59	16.26	11.49
Addison	44.19	29.59	18.05	13.61



[6] Vermont Department of Education, "Table 6: Vermont Public School Enrollment 5 Year Comparison 2000-2001 Through 2005-2006." Updated 05/12/2006. Accessed 10/01/2006.

Table 8: Percent Addison County Population (age 25+) Completing High School Only

	1970	1980	1990	2000
United States	41.69	50.24	54.9	56
New England	44.36	51.34	53.66	53.76
Vermont	45.57	51.98	56.47	56.97
Burlington MSA	45.03	51.28	54.69	53.66
Addison	42.5	49.94	56.83	56.6

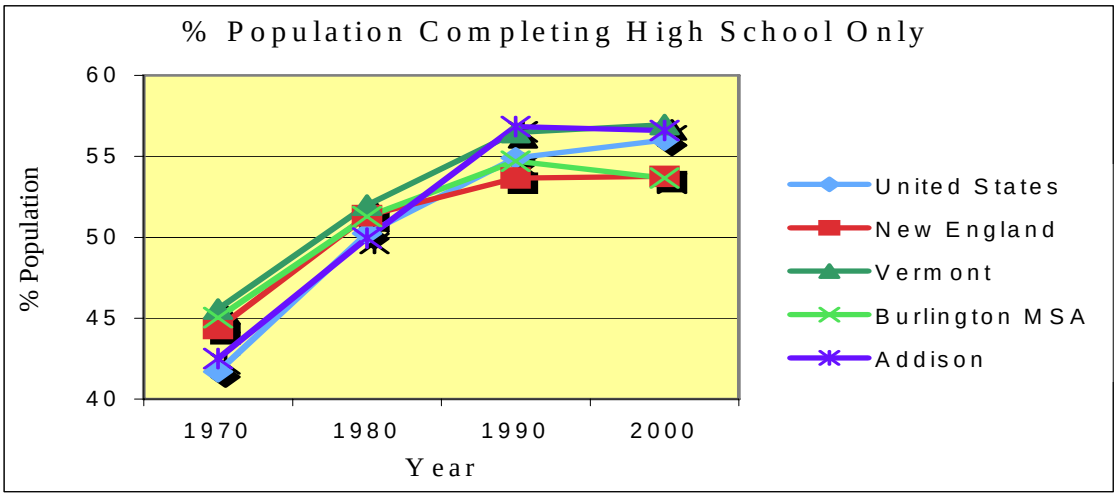
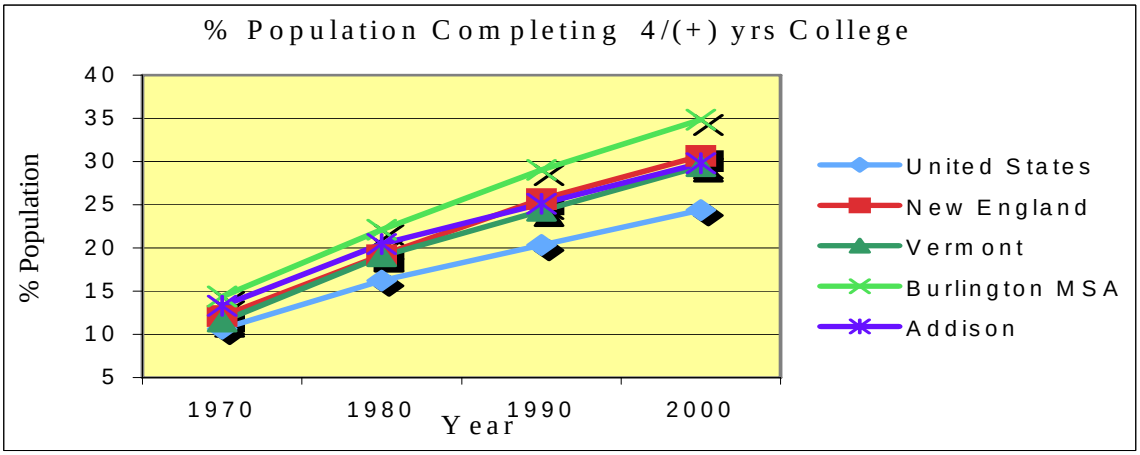


Table 9: % Population Completing 4-years of College or More

	1970	1980	1990	2000
United States	10.66	16.23	20.34	24.4
New England	12.1	19.16	25.64	30.67
Vermont	11.5	19.04	24.31	29.45
Burlington MSA	14.37	22.13	29.05	34.84
Addison	13.3	20.47	25.12	29.79



III. TECHNOLOGY

Despite its geographic obscurity, Vermont as a whole has maintained its position in the high-tech world. California's venture capital investments dwarf all others and makes up half of the country's total. Vermont, which ranks 31st in total venture capital investment actually had the highest growth between 2004-2005 with a 590% increase in venture funding. In fact, over the past five years, Vermont has given birth to 12,000 new corporations and issued 2145 patents to individuals and businesses.[7] In 2004 alone, Vermont issued 644 patents per million people in 2004, which places the state second in the country behind Idaho.

Table 10: Venture Capital Figures[8]

Geogrphic Area	Rank (total VC)	2005 V.C. Investments in Dollars	Investment %Change 2004-2005
California	1	10,426,500,000	4%
Massachusetts	2	2,375,400,000	-16%
Texas	3	1,087,400,000	-1%
New York	4	1,073,500,000	47%
Oklahoma	30	41,000,000	-36%
Vermont	31	35,200,000	590%
Kentucky	32	32,000,000	-33%

From 2000-2005, over $165 million dollars of private equity capital (venture capital, angel investment, and friends and family equity investment) was invested in Vermont businesses. The largest of these private equity investments were in the software, Internet/media and consumer sectors.[9] Vermont undoubtedly is at a disadvantage insofar as it is a difficult place to achieve scalability. Additionally, Vermont prides itself on social responsibility, both in and out of the business world, which frequently turns venture capitalists away. With that being said, Vermont still has shown tremendous growth in venture capital and looks to assert its legitimacy on the national scene.

According to Cyberstates, 6% of private sector workers in Vermont are employed by high-tech firms; this places the state 11th on the overall list. Vermont's technological concentration is backed by the high wages it offers these types of employees. High-tech employees in the private sector earn an average annual salary of $61,910, which nearly doubles the average of the overall private sector.

Vermont also has the highest percentage of its net exports from the high-tech industry. In fact, 84% of all exports come from the high-tech industry; this percentage places Vermont first on the national ranking.

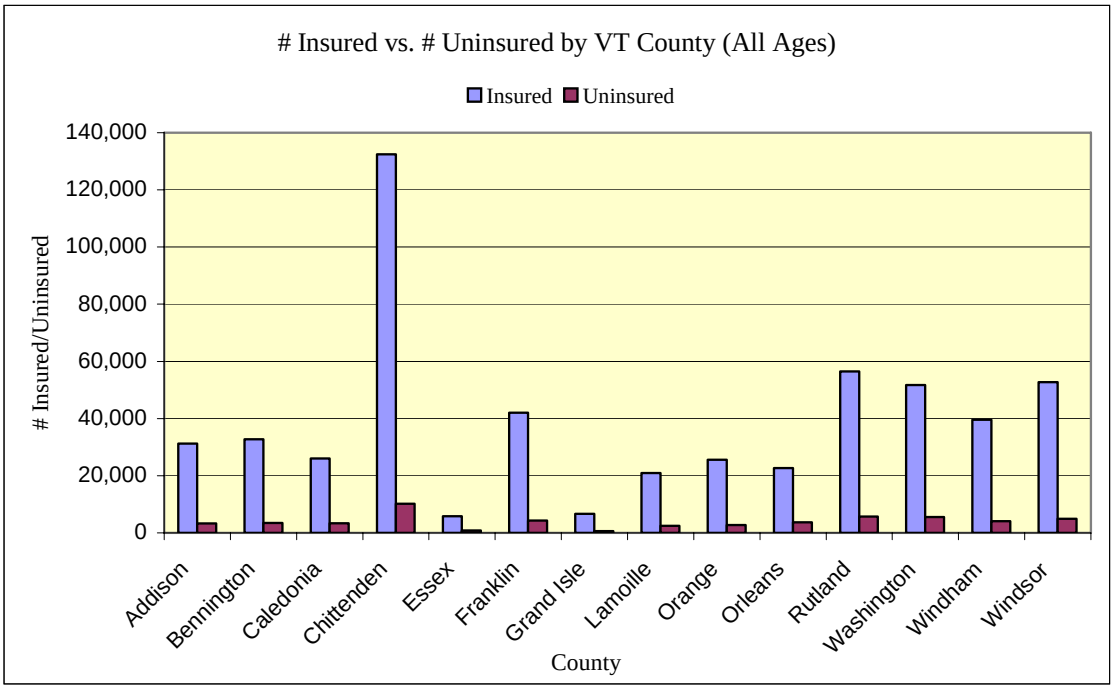
[7] Report: 2005 Vermont Entrepreneurial Economy.
[8] Cyberstates 2006: A complete state-by-state overview of the high-technology industry.
[9] Report: 2005 Vermont Entrepreneurial Economy.

IV. HEALTH INSURANCE

The Small Area Health Insurance Estimates (SAHIE) program provides model-based estimates of health insurance coverage for counties and states, including both public and private. These most recent data are from year 2000. We have also included the 90% confidence intervals—which, when added and subtracted from "number insured," for example, create a range of numbers. While the actual values in the "number insured" and "percent uninsured" are not exact, if we use the confidence intervals to create a range, we can be 90% sure that the actual value falls within that range.

Table 11: Health Insurance (All Ages)[10]

	Number insured	Number uninsured	90 percent C.I. (±)	Percent uninsured	90 percent C.I. (±)
United States	239,713,822	39,803,537	492,720	14.2	0.2
Vermont	546,373	54,907	4,740	9.1	1.0
Addison County	31,171	3,220	656	9.4	1.9
Bennington County	32,757	3,494	699	9.6	1.9
Caledonia County	25,955	3,349	578	11.4	2.0
Chittenden County	132,486	10,177	2,674	7.1	1.9
Essex County	5,788	793	137	12.1	2.1
Franklin County	42,002	4,252	927	9.2	2.0
Grand Isle County	6,643	598	156	8.3	2.2
Lamoille County	20,903	2,485	478	10.6	2.0
Orange County	25,618	2,724	577	9.6	2.0
Orleans County	22,605	3,631	538	13.8	2.1
Rutland County	56,475	5,715	1,128	9.2	1.8
Washington County	51,673	5,473	1,144	9.6	2.0
Windham County	39,546	4,064	844	9.3	1.9
Windsor County	52,750	4,933	1,060	8.6	1.8



[10] Source: U.S. Census Bureau, Small Area Health Insurance Estimates Program. July 21st, 2005.

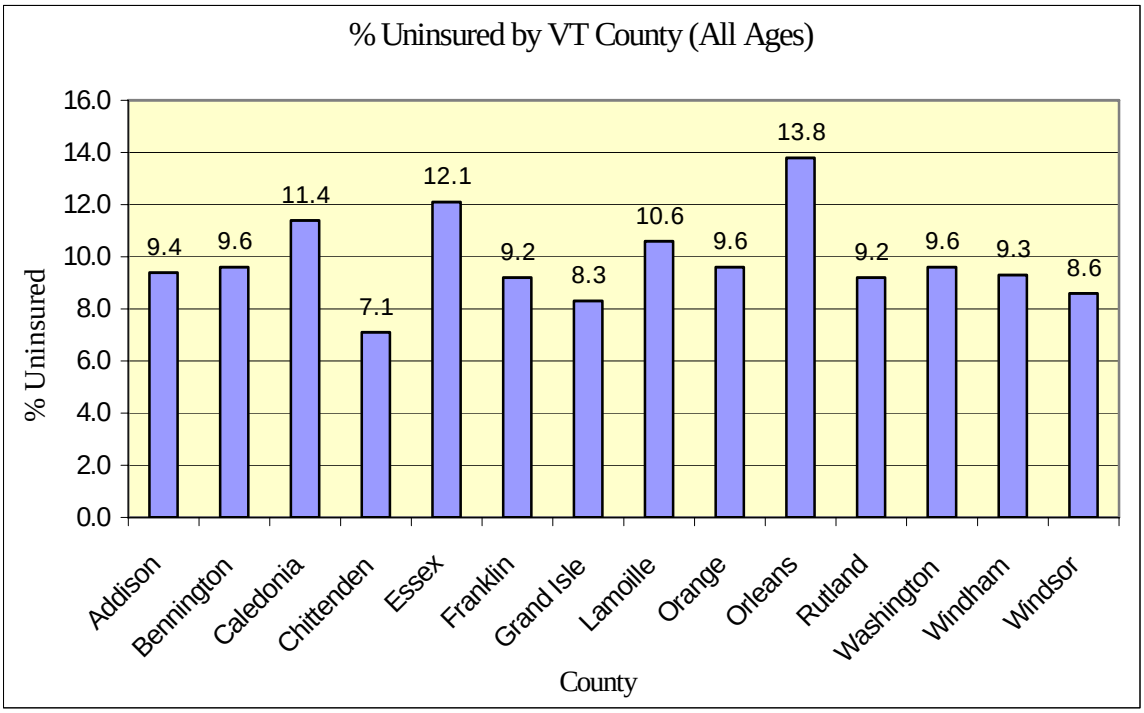
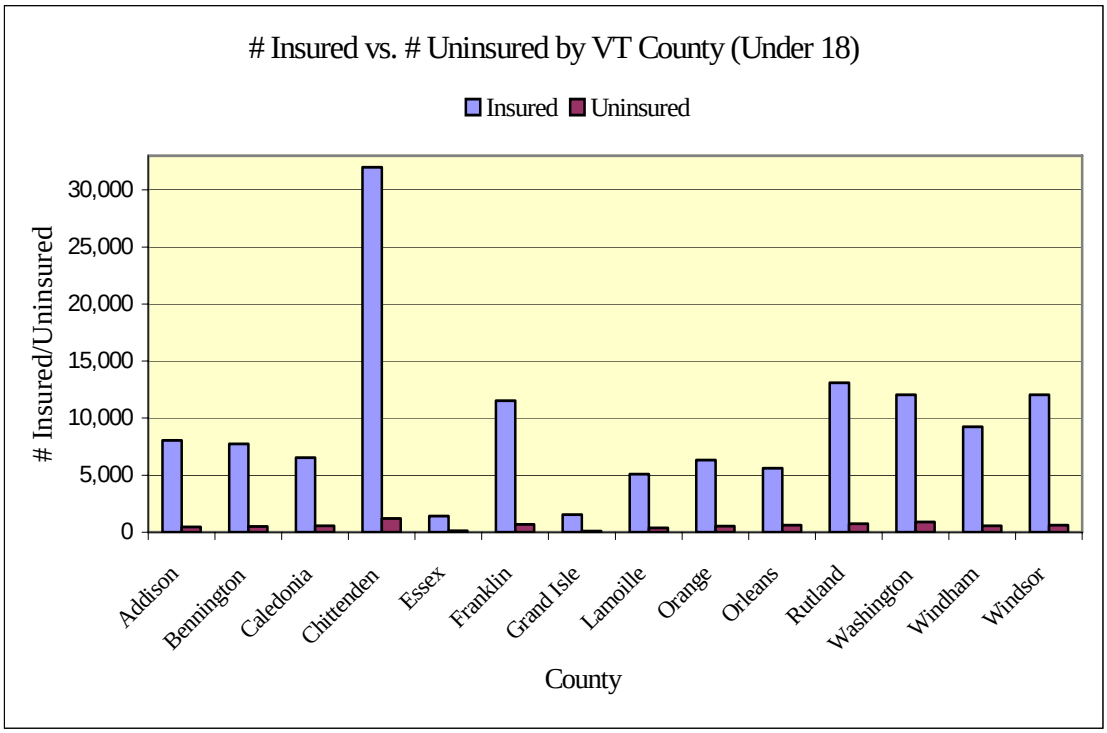
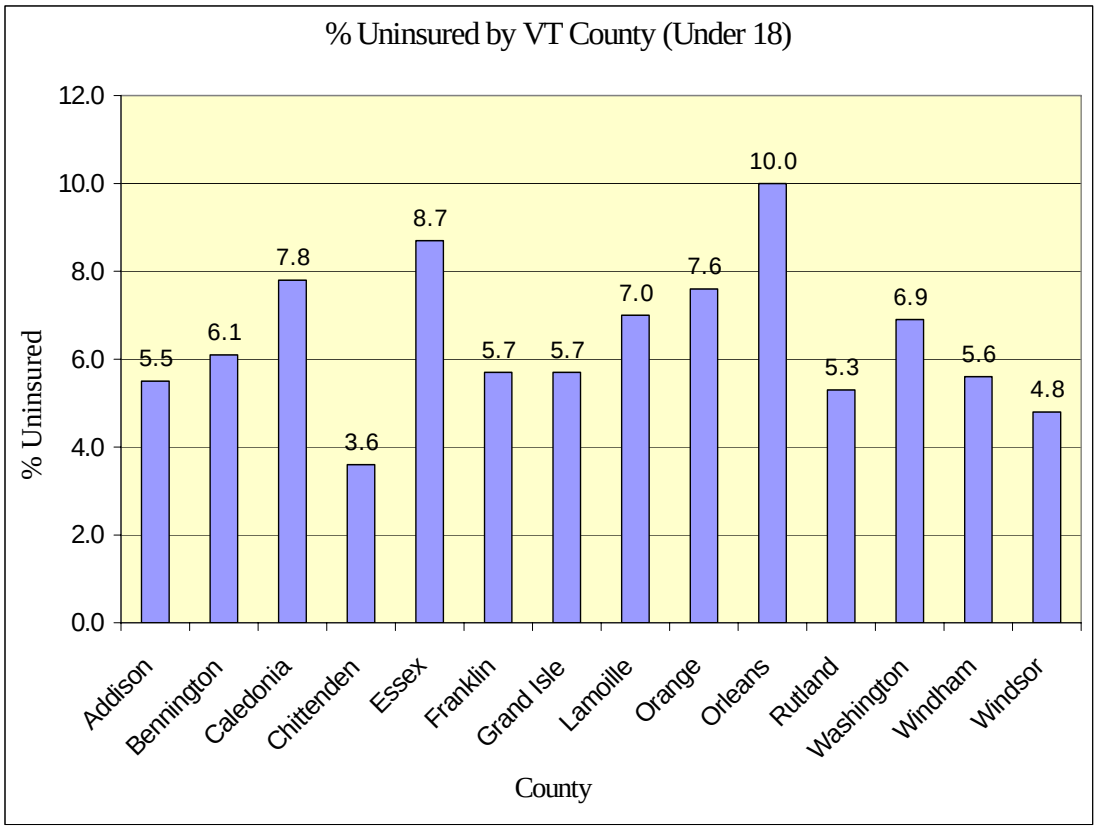


Table 12: Health Insurance (Under Age 18)[11]

	Number insured	Number uninsured	90 percent C.I. (±)	Percent uninsured	90 percent C.I. (±)
United States	63,696,617	8,617,432	244,607	11.9	0.3
Vermont	132,197	7,924	1,241	5.7	1.0
Addison County	8,033	464	207	5.5	2.4
Bennington County	7,729	501	211	6.1	2.6
Caledonia County	6,534	553	189	7.8	2.7
Chittenden County	31,974	1,189	732	3.6	2.2
Essex County	1,423	136	43	8.7	2.7
Franklin County	11,527	693	302	5.7	2.5
Grand Isle County	1,542	94	46	5.7	2.8
Lamoille County	5,075	379	147	7.0	2.7
Orange County	6,318	517	182	7.6	2.7
Orleans County	5,600	623	172	10.0	2.8
Rutland County	13,109	727	320	5.3	2.3
Washington County	12,060	895	335	6.9	2.6
Windham County	9,231	551	248	5.6	2.5
Windsor County	12,042	603	292	4.8	2.3

[11] Source: U.S. Census Bureau, Small Area Health Insurance Estimates Program. July 21st, 2005.


Insured vs. # Uninsured by VT County (Under 18)
Insured
Uninsured
Insured/Uninsured
30,000
25,000
20,000
15,000
10,000
5,000
0
Addison
Bennington
Caledonia
Chittenden
Essex
Franklin
Grand Isle
Lamoille
Orange
Orleans
Rutland
Washington
Windham
Windsor
County


% Uninsured by VT County (Under 18)
% Uninsured
12.0
10.0
8.0
6.0
4.0
2.0
0.0
5.5
6.1
7.8
3.6
8.7
5.7
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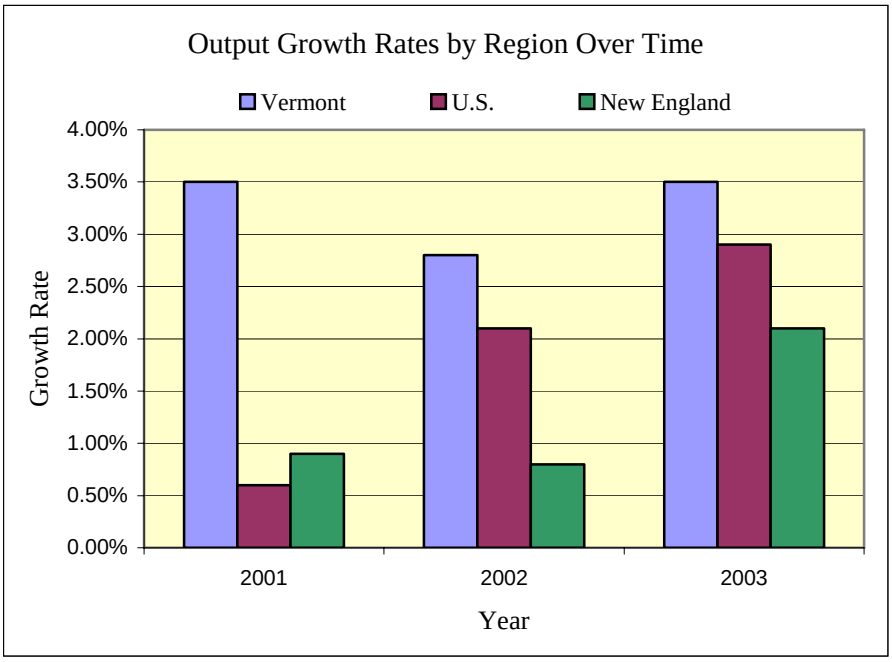
7.6
10.0
5.3
6.9
5.6
4.8
Addison
Bennington
Caledonia
Chittenden
Essex
Franklin
Grand Isle
Lamoille
Orange
Orleans
Rutland
Washington
Windham
Windsor
County

V. ECONOMIC ANALYSIS

1. Introduction
2. Labor Force
3. Employment
4. Personal Income

1. Introduction

In many ways Vermont has outperformed the rest of New England and the country on the whole during the past several years. Because Vermont largely avoided the recession resulting from the dot.com bubble burst in 2001, its economic well-being has been relatively high. From 2001-2004, Vermont was the fourth fastest growing economy in the country and finished 2004 with a Gross State Product of $22.1 billion. Recent years have proved that Vermont's growth is consistently outpacing that of the rest of the country. It is largely understood that increased output leads to a decrease in rates of unemployment; Vermont has substantiated this claim in recent years. In 2002, for example, Vermont had the fourth lowest rate of unemployment in the country (3.7%) which was significantly below the national average of 5.5%.[12] In 2005, Vermont's unemployment rate is at 3.5% whereas the nation is at 5.1% unemployment.



Vermont is positioned to continue to maintain this level of growth and can expect to enjoy economic well-being so long as the job market can keep pace.

[12] Report: 2005 Vermont Entrepreneurial Economy

2. Labor Force

Increasing from 2001-2002, 2002-2003 , and 2004-2005 (1.72%, 1.60%, and 1.15% respectively) Addison County's labor force has also seen years of decline-- 0.22% from 2003-2004, and recently, a decline of 1.86% between 2005 and 2006.

Percent growth or decline in Addison County's labor force has generally followed patterns also reflected in percent growth or decline in New England, Vermont, and in Burlington MSA—though growth has always been stronger, and decline less extreme.

Averaging monthly data from 2006 (through October) to create an expected annual rate of growth for 2006, it appears Addison County will experience a decline of 1.86% since 2005, while the United States, New England, Vermont, and Burlington MSA will be characterized by growth ranging from 1.0 – 2.03.

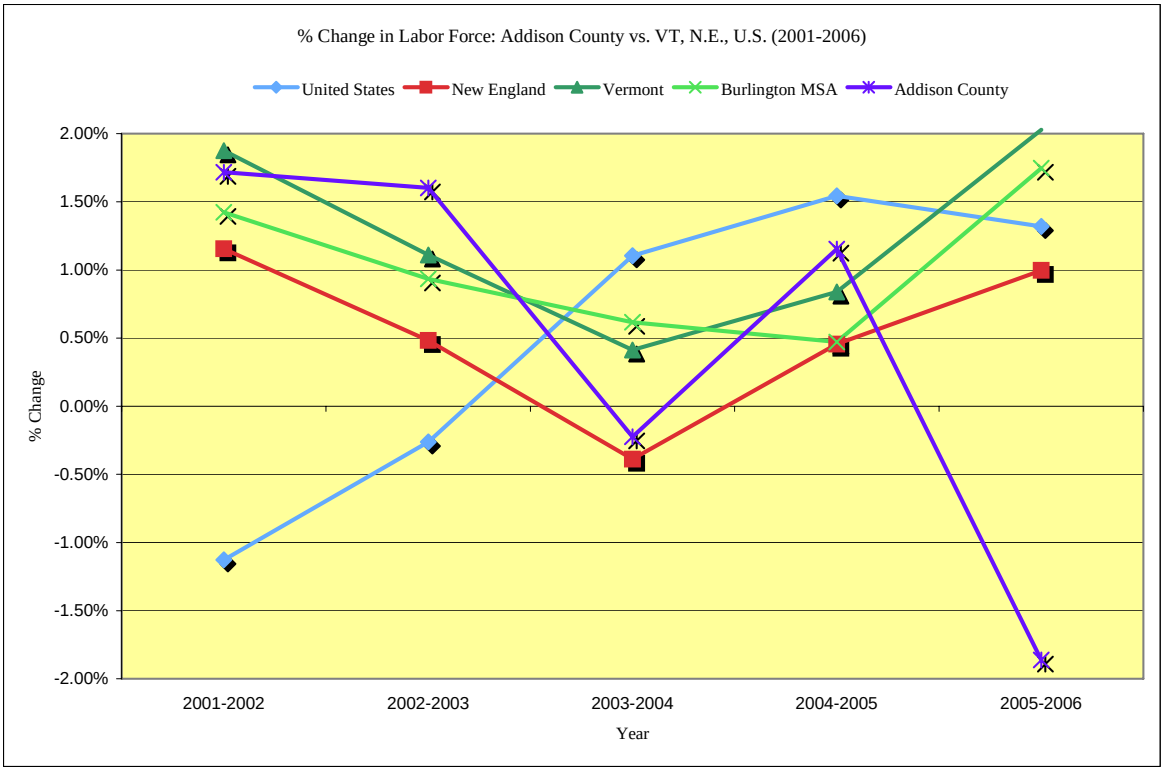
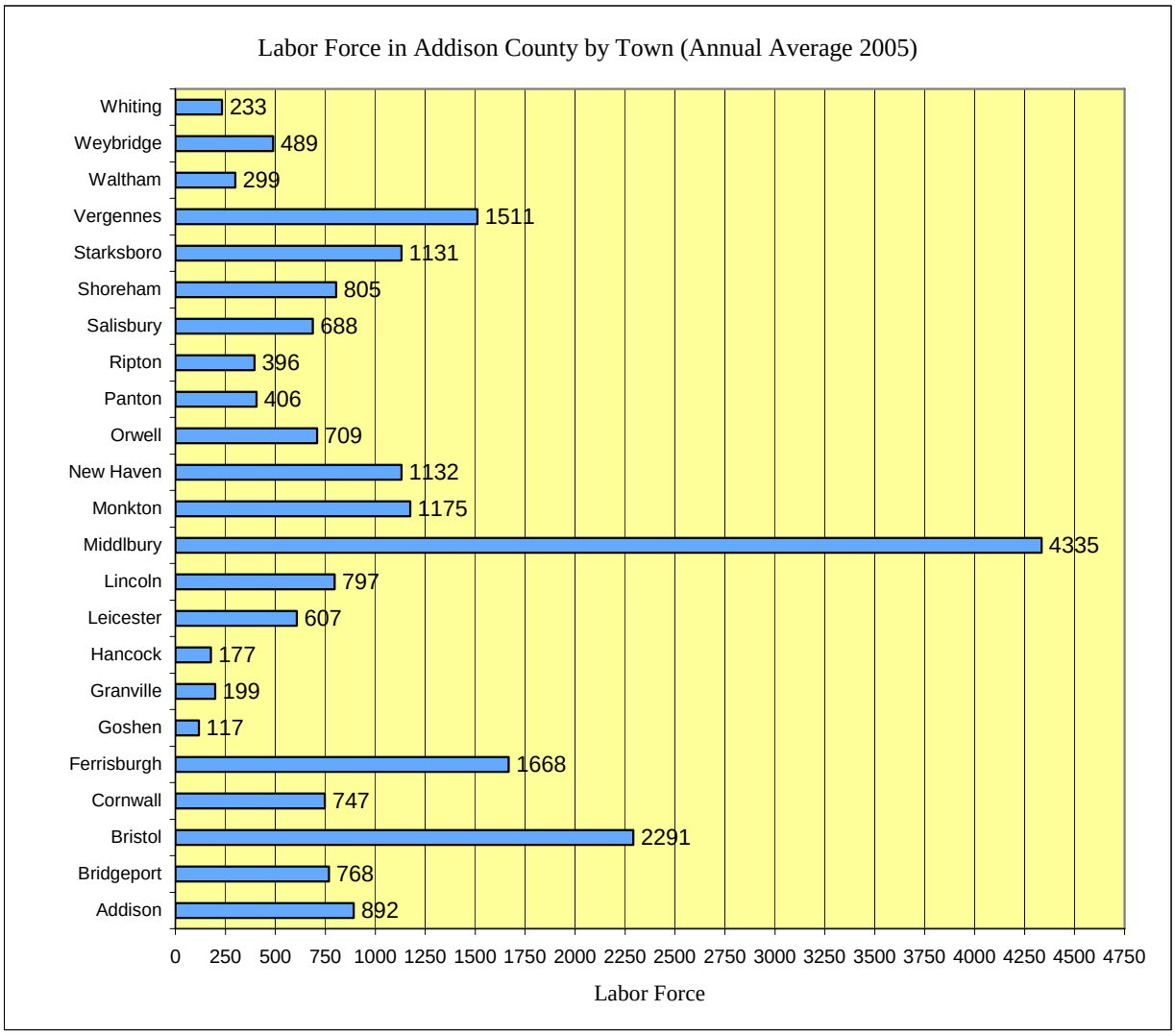


Table 12: % Change in Labor Force[13]

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
United States	-1.13%	-0.26%	1.10%	1.54%	1.32%
New England	1.16%	0.48%	-0.39%	0.46%	1.00%
Vermont	1.87%	1.11%	0.41%	0.84%	2.03%
Burlington MSA	1.42%	0.93%	0.62%	0.47%	1.75%
Addison County	1.72%	1.60%	-0.22%	1.15%	-1.86%

[13] US Census Bureau: http://www.census.gov/popest/states/NST-comp-chg.html.

Using the data recorded in 2005, the size of the labor force in all towns within Addison County is graphed below. The data range from 117 in Goshen to 4335 in Middlebury.



Below are data which capture the workplace state and county for every Addison County resident and the resident state and county for every Addison County worker.

Table 13: Addison County Resident Workers by Workplace State/County

Residence State-County Name	Workplace State-County Name	Count	Residence State-County Name	Workplace State-County Name	Count
Addison Co. VT	Addison Co. VT	13,070	Addison Co. VT	Hampshire Co. MA	3
Addison Co. VT	Chittenden Co. VT	3,969	Addison Co. VT	Broome Co. NY	3
Addison Co. VT	Rutland Co. VT	777	Addison Co. VT	Jefferson Co. NY	3
Addison Co. VT	Washington Co. VT	204	Addison Co. VT	Ulster Co. NY	3
Addison Co. VT	Windsor Co. VT	124	Addison Co. VT	Harris Co. TX	3
Addison Co. VT	Essex Co. NY	35	Addison Co. VT	Adams Co. WI	3
Addison Co. VT	Orange Co. VT	28	Addison Co. VT	Columbia Co. WI	3
Addison Co. VT	Franklin Co. VT	26	Addison Co. VT	Contra Costa Co. CA	2
Addison Co. VT	Clinton Co. NY	15	Addison Co. VT	New Haven Co. CT	2
Addison Co. VT	Onondaga Co. NY	15	Addison Co. VT	Windham Co. CT	2
Addison Co. VT	Fulton Co. GA	14	Addison Co. VT	Broward Co. FL	2
Addison Co. VT	Lamoille Co. VT	14	Addison Co. VT	Columbia Co. GA	2
Addison Co. VT	Grafton Co. NH	13	Addison Co. VT	Tazewell Co. IL	2
Addison Co. VT	Washington Co. NY	13	Addison Co. VT	De Soto Parish LA	2
Addison Co. VT	Kit Carson Co. CO	8	Addison Co. VT	Norfolk Co. MA	2
Addison Co. VT	Albany Co. NY	8	Addison Co. VT	Merrimack Co. NH	2
Addison Co. VT	New York Co. NY	8	Addison Co. VT	Sullivan Co. NH	2
Addison Co. VT	Westchester Co. NY	8	Addison Co. VT	Franklin Co. NY	2
Addison Co. VT	Bennington Co. VT	8	Addison Co. VT	Oneida Co. NY	2
Addison Co. VT	Suffolk Co. MA	7	Addison Co. VT	Saratoga Co. NY	2
Addison Co. VT	Hillsborough Co. NH	7	Addison Co. VT	Wake Co. NC	2
Addison Co. VT	Nassau Co. NY	7	Addison Co. VT	Allegheny Co. PA	2
Addison Co. VT	Windham Co. VT	7	Addison Co. VT	Luzerne Co. PA	2
Addison Co. VT	JAPAN	7	Addison Co. VT	Caledonia Co. VT	2
Addison Co. VT	CANADA	6	Addison Co. VT	Orange Co. VA	2
Addison Co. VT	Hartford Co. CT	5	Addison Co. VT	Richmond city VA	2
Addison Co. VT	Middlesex Co. MA	5	Addison Co. VT	US VIRGIN ISLANDS	2
Addison Co. VT	Eagle Co. CO	4	Addison Co. VT	PAKISTAN	2
Addison Co. VT	St. Lawrence Co. NY	4	Addison Co. VT	MEXICO	2
Addison Co. VT	Richland Co. SC	4	Addison Co. VT	District of Columbia	1
Addison Co. VT	Orleans Co. VT	4	Addison Co. VT	Knox Co. ME	1
Addison Co. VT	Summit Co. CO	3	Addison Co. VT	Sussex Co. NJ	1
Addison Co. VT	Tolland Co. CT	3	Addison Co. VT	Schenectady Co. NY	1
Addison Co. VT	Essex Co. MA	3	Addison Co. VT	Washington Co. RI	1

For Addison County residents, the most frequent county of work is Addison County, with 13,070 workers. Chittenden County (3,969) is the second most frequent, followed by Rutland County (777), Washington County (204), and Windsor County (124). Notable out-of-state workplaces include border counties in New York and New Hampshire, and Kit Carson County, Colorado. Notable international workplaces include Japan (7) and Canada (6).

Table 14: Addison County Workers by State/County of Residency

Workplace State-County Name	Residence State-County Name	Count
Addison Co. VT	Addison Co. VT	13,070
Addison Co. VT	Chittenden Co. VT	935
Addison Co. VT	Rutland Co. VT	775
Addison Co. VT	Essex Co. NY	548
Addison Co. VT	Windsor Co. VT	133
Addison Co. VT	Washington Co. VT	64
Addison Co. VT	Franklin Co. VT	59
Addison Co. VT	Washington Co. NY	42
Addison Co. VT	Lamoille Co. VT	21
Addison Co. VT	Orange Co. VT	21
Addison Co. VT	Grand Isle Co. VT	16
Addison Co. VT	Middlesex Co. MA	14
Addison Co. VT	Pennington Co. SD	14
Addison Co. VT	New York Co. NY	11
Addison Co. VT	Fairfield Co. CT	10
Addison Co. VT	Cobb Co. GA	10
Addison Co. VT	Essex Co. MA	10
Addison Co. VT	Clinton Co. NY	10
Addison Co. VT	Orleans Co. NY	10
Addison Co. VT	Los Angeles Co. CA	8
Addison Co. VT	St. Lawrence Co. NY	8
Addison Co. VT	Arkansas Co. AR	7
Addison Co. VT	Ada Co. ID	7
Addison Co. VT	Cumberland Co. ME	7
Addison Co. VT	District of Columbia	6
Addison Co. VT	Collier Co. FL	6
Addison Co. VT	Somerset Co. ME	6
Addison Co. VT	Windham Co. VT	6
Addison Co. VT	Outagamie Co. WI	6
Addison Co. VT	New Haven Co. CT	5
Addison Co. VT	Harrison Co. IN	5
Addison Co. VT	Chester Co. PA	4
Addison Co. VT	Warren Co. NY	3
Addison Co. VT	Merrimack Co. NH	2
Addison Co. VT	Caledonia Co. VT	2
Addison Co. VT	Berkshire Co. MA	1
Addison Co. VT	Monroe Co. PA	1

Those working in Addison County commute from far fewer locations than Addison County residents commute to. Most Addison County workers also live in Addison County (13,070) or in nearby Vermont Counties. Next most frequent resident state/county locations are Chittenden County (935), Rutland County (775), Essex County, NY (548), and Windsor County (133).

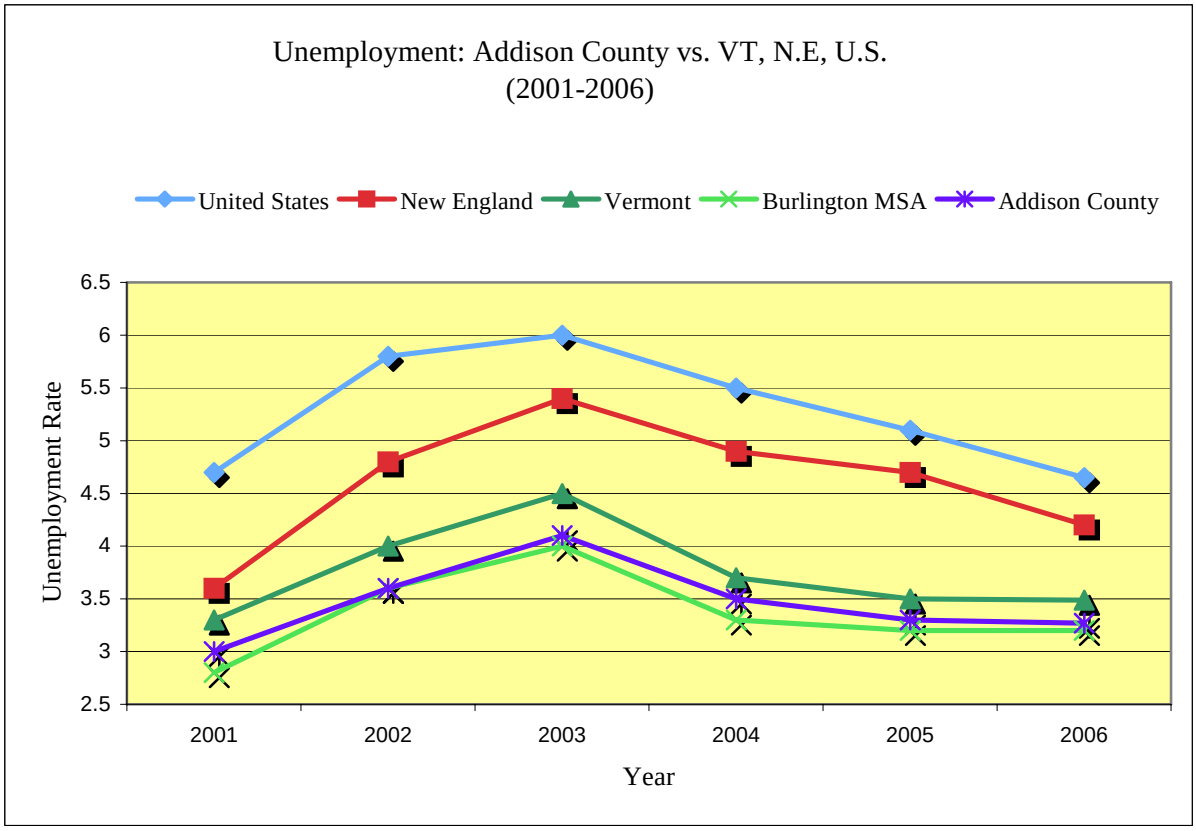
Notable out-of-state resident counties include counties in New York, Massachusetts, South Dakota, Connecticut, and Georgia.

3. Unemployment

The unemployment rate is a measure of those who are unemployed, but actively seeking work at the prevailing wage. The unemployment rate is a traditional measure of economic success or distress; and is calculated: (Unemployed Workers / Total Labor Force) x 100. This calculation, along with any traditional measure of unemployment, is far from perfect. Often, the unemployment rate can provide deceiving results—particularly in rural areas where the indicator does not capture the following conditions:

1. Underemployment: workers with several part-time jobs or one job that does not provide adequate/desired remuneration.
2. Disguised Unemployment: workers with "jobs" but essentially little work or income.
3. Discouraged Workers: workers not actively seeking work because they have simply given up.

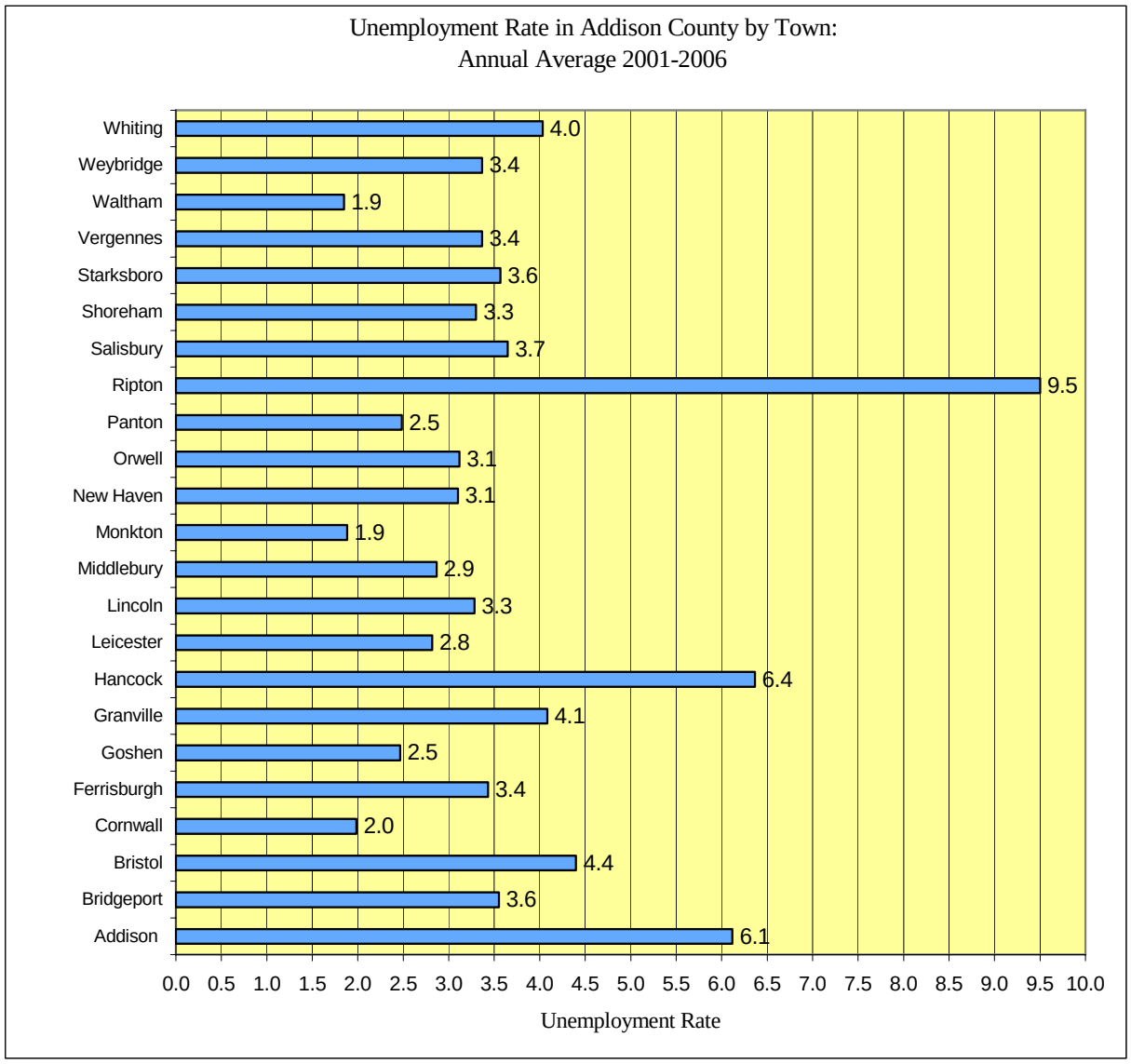
Since 2001, Addison County has maintained an average annual level of unemployment significantly lower than that in the United States and New England, slightly lower than in Vermont, and just above the unemployment rate in Burlington MSA. Since 2001, these figures have been gradually converging.



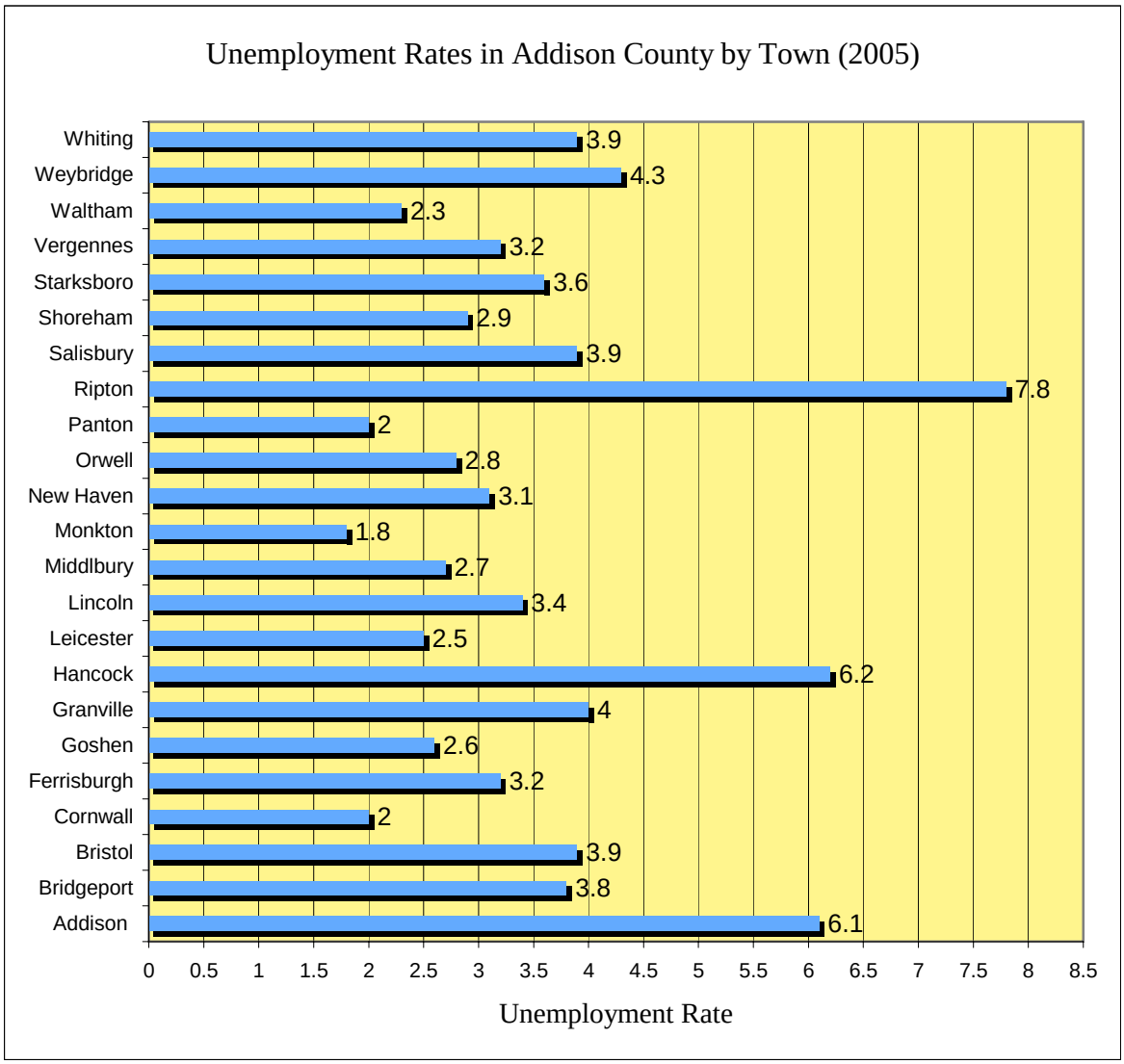
In 2005, the unemployment rate in Addison County was 3.3. Averaging the data available in 2006 (through October), the unemployment rate appears unchanged in 2006. This data for Addison County, as well as for the United States, New England, Vermont, and Burlington MSA are tabled below.

Among towns within Addison County, the averages of annual average unemployment rates from 2001 through 2006 vary greatly. While Waltham, Monkton, and Cornwall have averaged rates of 1.9%, 1.9%, and 2% respectively, Ripton has averaged an unemployment rate of 9.5% over the same period.

As may be discerned from the graphs above, the majority of towns within Addison County have averaged rates lower than in the United States, New England, and in Vermont.



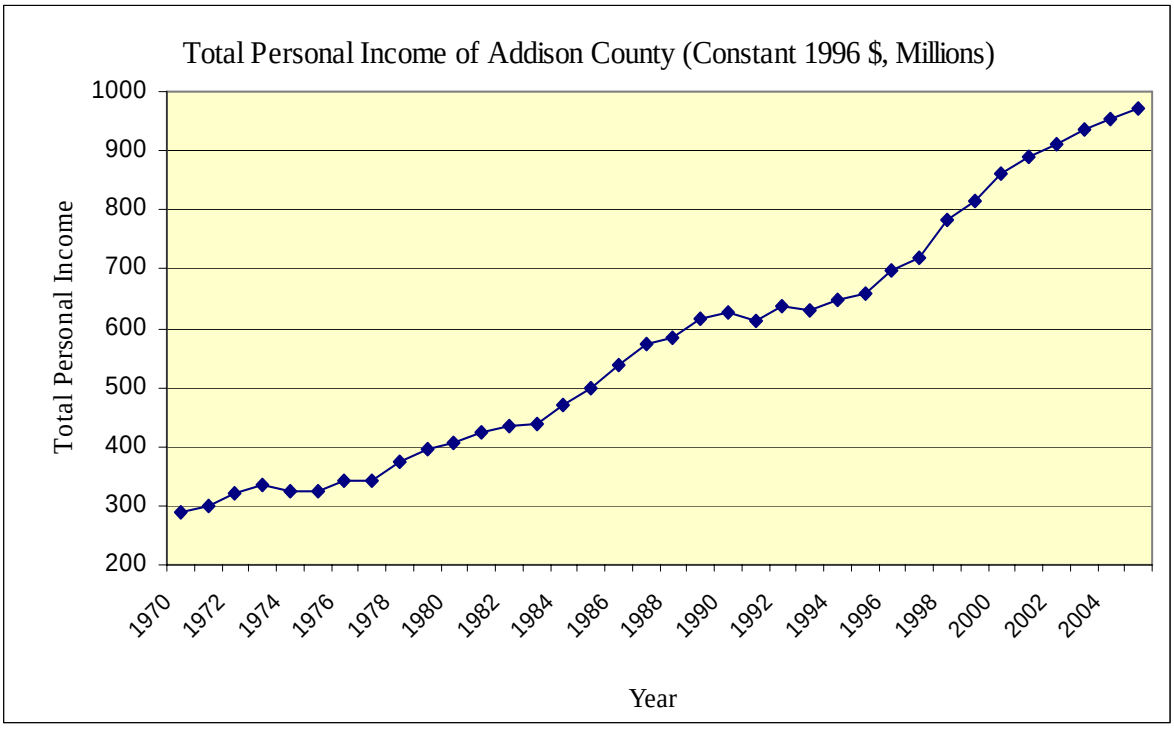
The data from 2005 are much in line with the 2001-2005 averages. Most notably, Ripton's unemployment rate has fallen significantly below its 5-year average. While 2005 rates vary slightly from the towns' 5-year averages, the divergences are, in most cases, slight.



4. Personal Income

Total personal income is the income received by persons from all sources, that is, from participation in production, from both government and business transfer payments, and from government interest, which is treated like a transfer payment. Persons consist of individuals, nonprofit institutions serving individuals, private uninsured welfare funds, and private trust funds. Personal income is the sum of wages and salaries, other labor income, proprietors' income, rental income of persons, dividend income, personal interest income, and transfer payments less personal contributions for social insurance.

In 2005, Addison County had a TPI of $972,633,000 (measured in 1996 dollars), which ranks it eighth in Vermont. Addison County's TPI accounted for 5.60% of the state's Total Personal Income.



From 1970-2005, Addison County's average TPI growth outpaced the State of Vermont, New England, and the United States. On average, this growth rate has stayed relatively smooth, with the exception of the early 1990s when growth flattened out and even went negative 1991 and 1993. Wages and salaries has remained about 45% of Total Personal Income during this same time period; this percentage has experienced minimal fluctuation.

Geographic Area	TPI Average Growth 1970-2005
United States	3.08%
New England	2.84%
Vermont	3.30%
Addison	3.70%

The Census Bureau reports poverty and median income figures with confidence intervals. In general, poverty in Addison County is moderate compared to the rest of the country. The poverty thresholds are determined by the number of persons living in a household. For example, in 2004, the weighted average poverty thresholds ranged from $15,067 for three person household to $39,048 for a nine person household. The median income for Addison County, according the Bureau of Labor Statistics is $46,677.

ADDISON COUNTY POVERTY (2004)

All ages in poverty:

2,688 (90% confidence interval 2,062 to 3,314)
7.6% (90% confidence interval 5.8% to 9.4%)

Under age 18 in poverty:

674 (90% confidence interval 483 to 864)
8.4% (90% confidence interval 6.1 to 10.8)

Ages 5-17 in families in poverty:

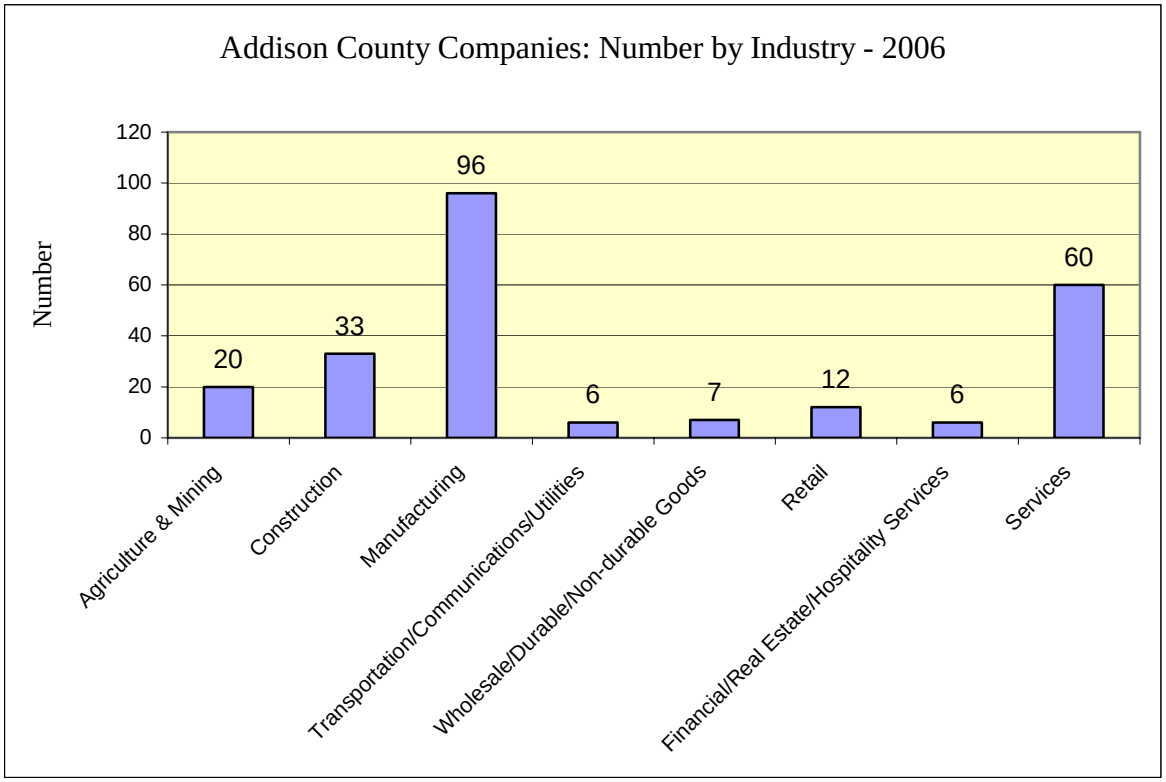
355 (90% confidence interval 231 to 479)
5.9% (90% confidence interval 3.8 to 7.9)

VI. SECTOR ANALYSIS

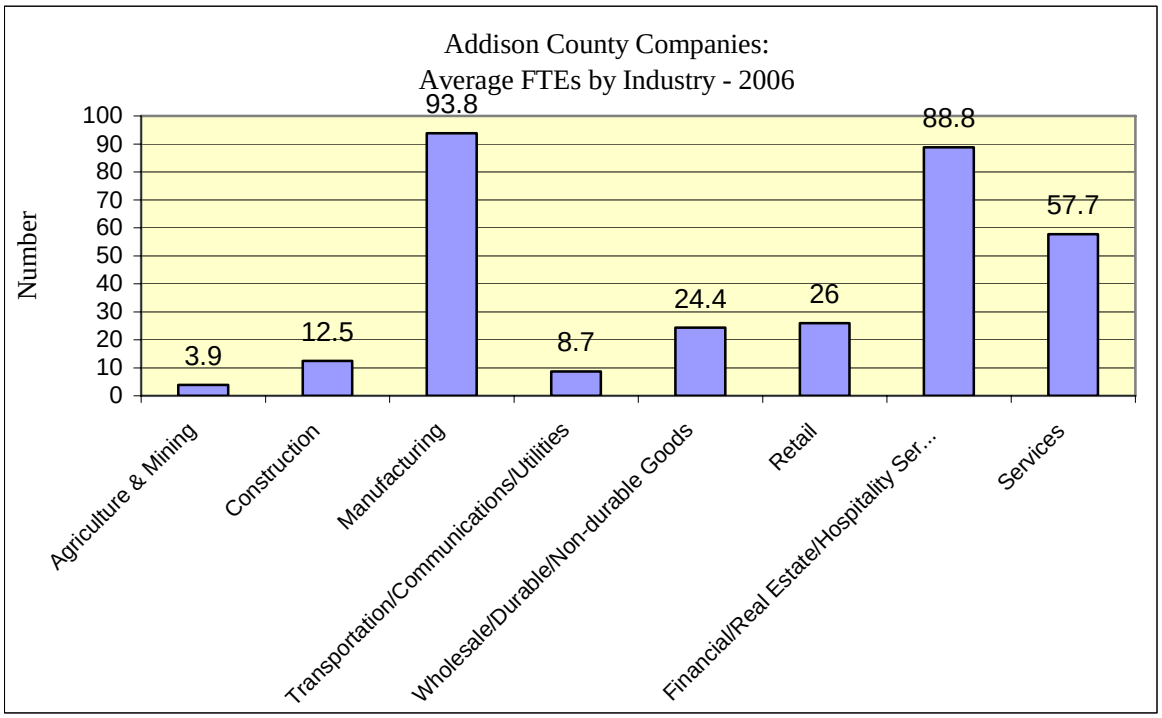
1. **Introduction**
2. **Agriculture**
3. **Construction**
4. **Transportation, Communications, Utilities**
5. **Manufacturing**
6. **Wholesale Trade**
7. **Retail Trade**
8. **Finance, Insurance, Real Estate**
9. **Services**

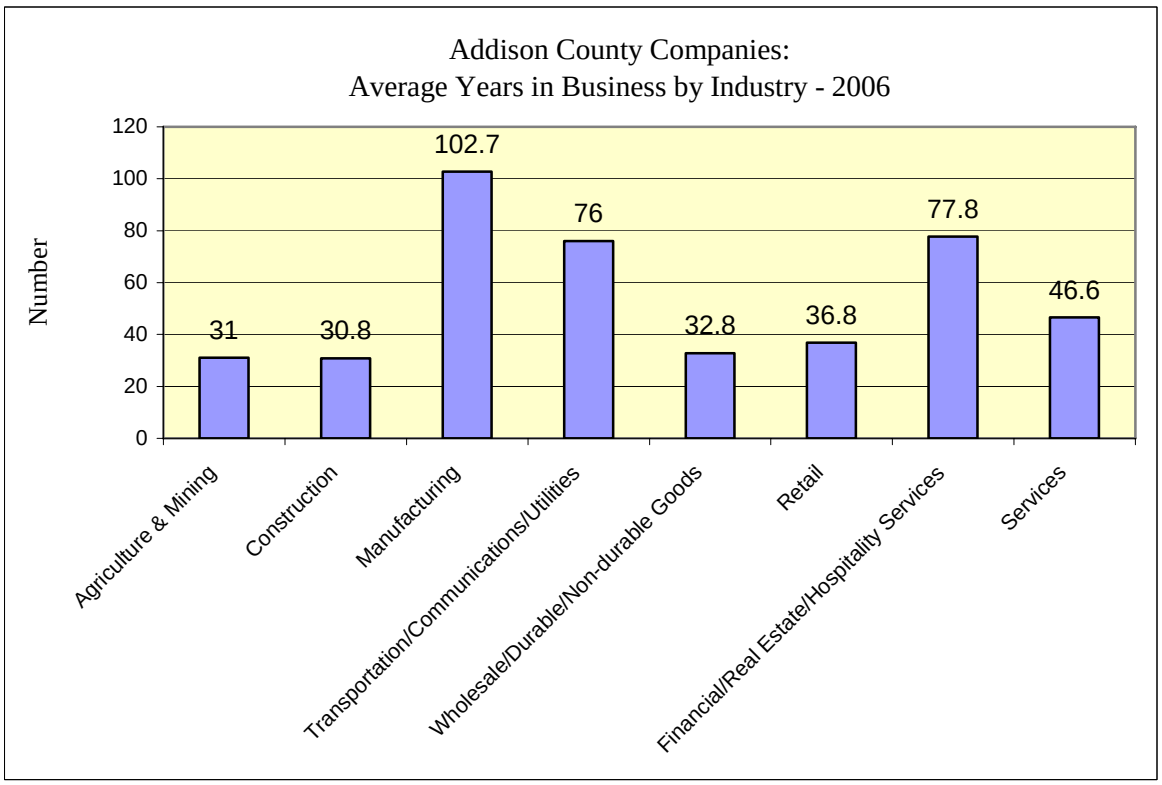
1. Introduction

Breaking down Addison County's economy by sector will facilitate more useful analysis. The Vermont Business Magazine's 2006 Infobank Database and Woods and Poole Economics use slightly different classifications for each sector. From VBM, four different segments were aggregated to achieve one "manufacturing" category. Additionally, business to business services was combined with health/professional/education services to generate a collectively exhaustive "services" variable. For simplicity, mining and farm categories were was added to Woods and Poole's "agricultural services." Additionally, the two data sets have slightly different definitions for the finance/insurance/real estate/hospital sector and hence may result in slight reporting inconsistencies. In the end, eight sectors emerged as important economic divisions which warrant further study; these include: agriculture, construction, manufacturing, transportation/communications/utilities, wholesale trade, retail trade, finance/insurance/real estate, and services.

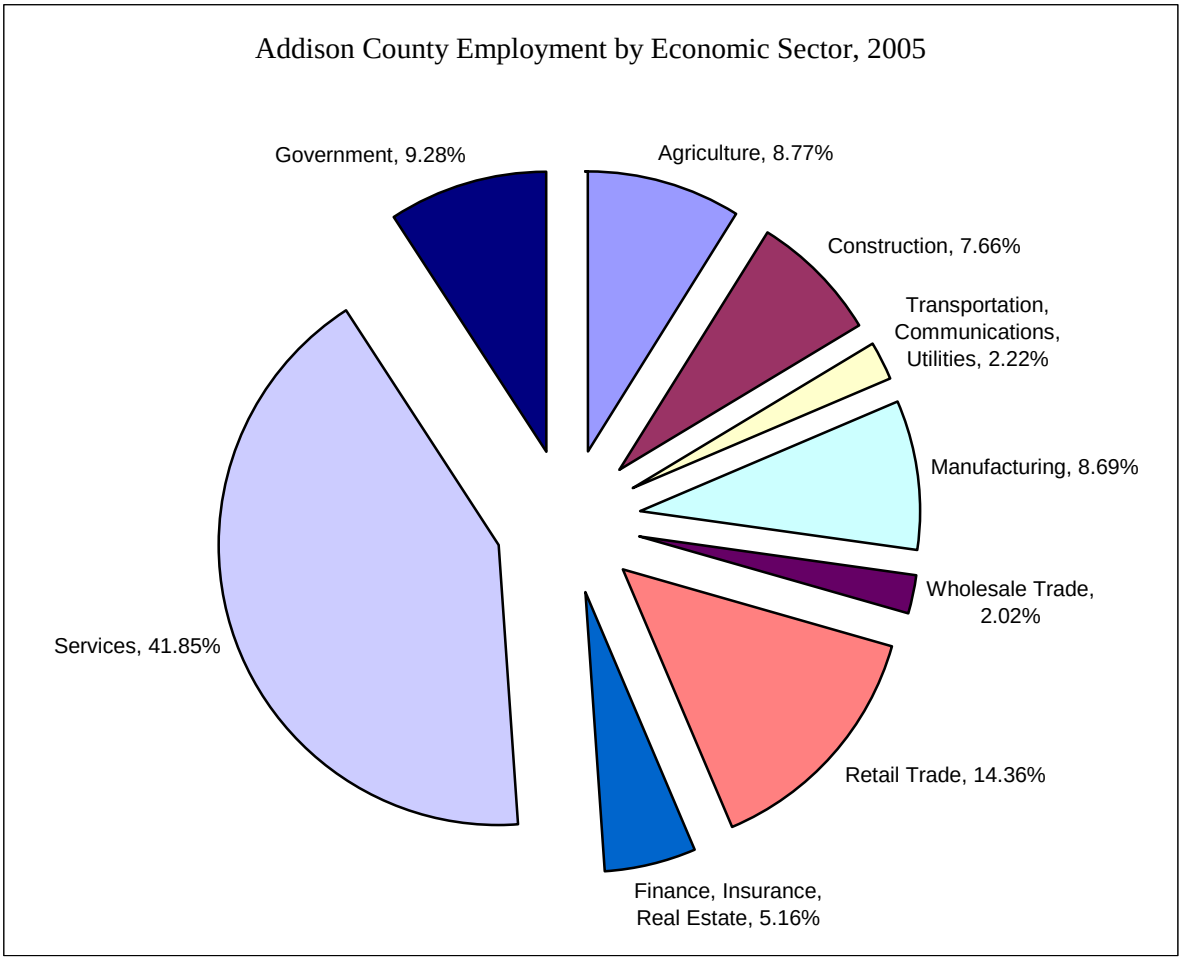


According to VBM, the manufacturing and services have the most number of businesses, whereas the manufacturing and finance/real estate /hospitality segments dominate the employment realm; each of those sectors average over 85 full-time employees. Addison County, on the whole, houses long-lasting businesses. All of the sectors average over 20 years in business.



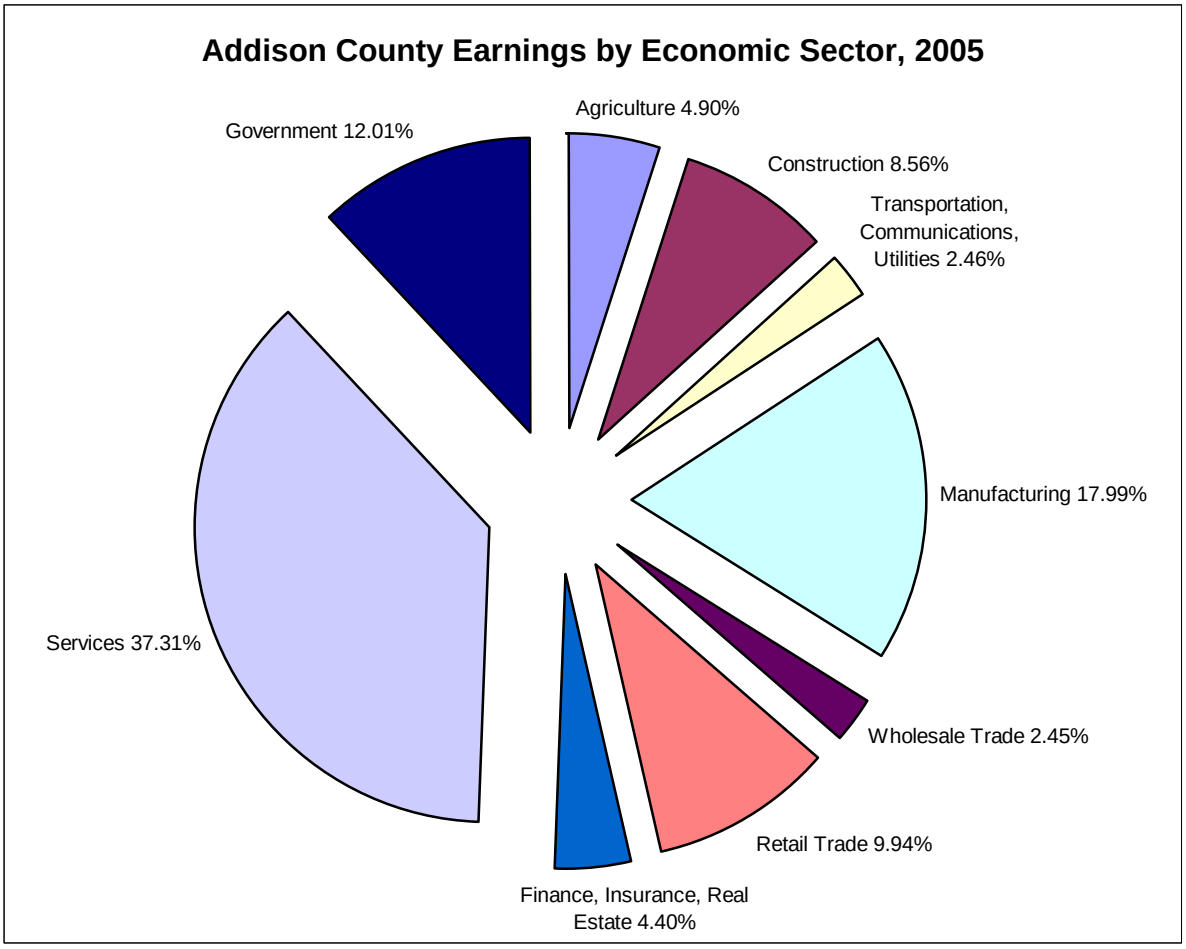


Analyzing *Addison County Employment by Economic Sector, 2005* (below) further shows that the services are employing a large percentage of all the Addison County workers. 41.85% of total employment is in the services sector; a percentage which nearly triples the next closest employers (retail trade). The transportation/communications/utilities sector and the wholesale trade sector both employ a minimal number of workers. The remaining sectors are fairly evenly distributed ranging from 5.16% to 9.28%. For the remaining analysis, government will be ignored as it the only public sector.



Earnings data by sector is often used as a surrogate variable for output by sector at the regional level. Therefore, it shall be used as a macroeconomic indicator for production.

The services still dominate Addison County earnings, but not by as much as in the employment category (see next page). Not surprisingly, manufacturing has the biggest gap between employment and earnings. That is to say, while it accounts for only 8.69% of employment in Addison County, it is responsible for 17.99% of the county's total output. Agriculture experienced similar gains and shows that these two sectors produce a substantial amount based on the technology and machines that the employees leverage.



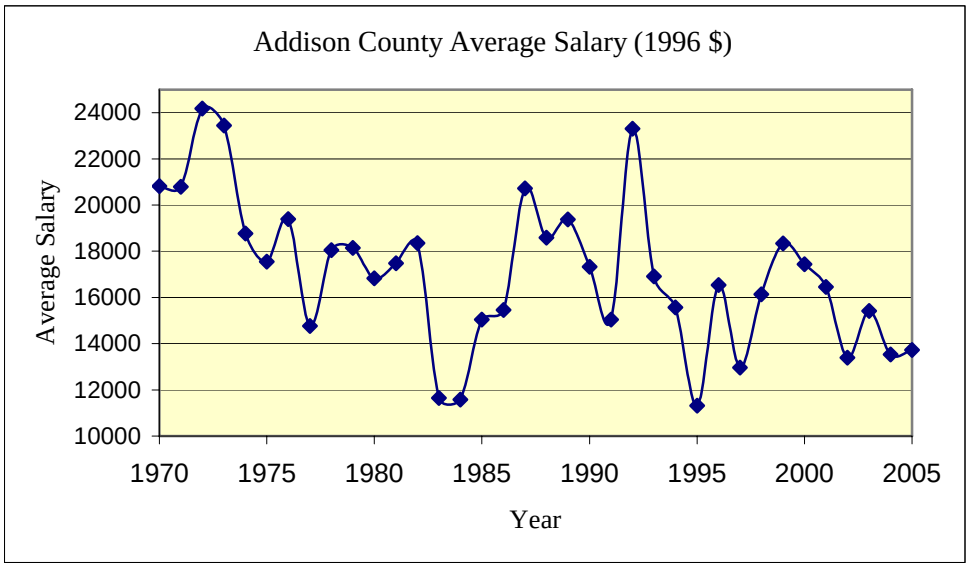
Woods and Poole's classifications will be used for the remainder of sector analysis. Its economic data reporting is consistent and should yield the most reliable results. Additionally, The Census Bureau's data on Location Quotients will be used to supplement the sector analysis, with the caveat that its sectors are not identical to those of Woods and Poole.

All graphs in the individual sector analyses were derived from Woods and Poole Economics.

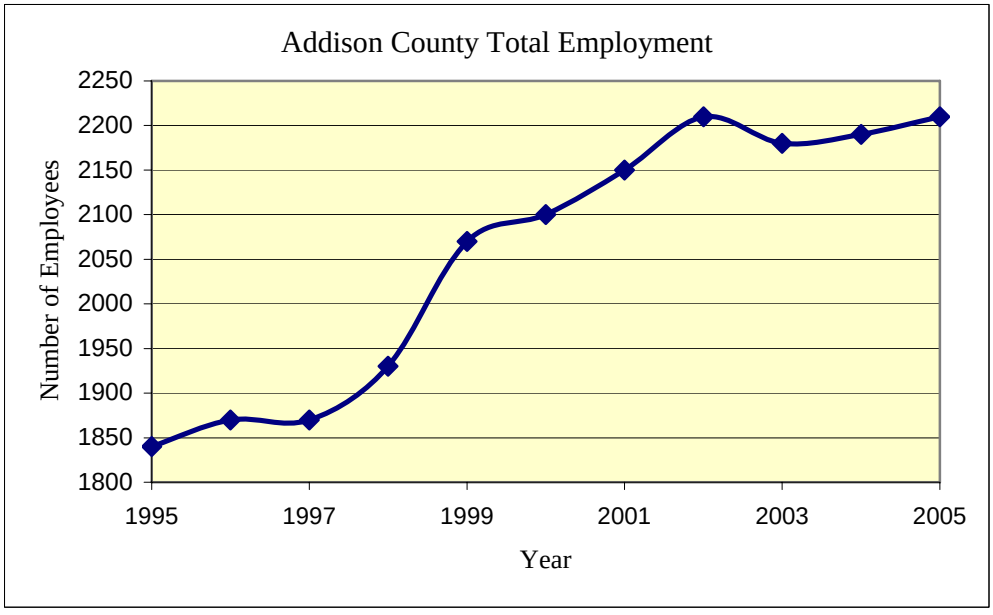
All location quotients were taken from the Bureau of Labor Statistics.

2. Agriculture

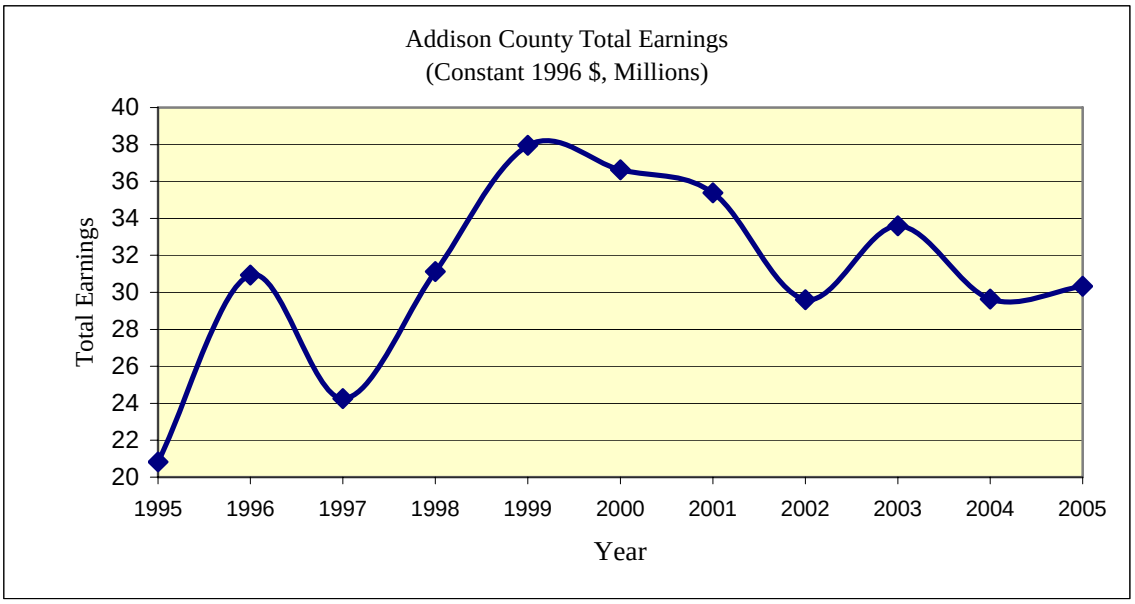
Mining, farm services, and general agriculture all fall under the umbrella of the agriculture sector. Mining is usually its own sector under SIC, but its figures were less than .1% of the totals. Therefore, they have been included in the agriculture sector for simplicity. Since 1970, agricultural workers have experienced a decline in the real value of their salaries, meaning the workers are generally worse off today than they were in 1970. The average salary peaked in 1972 and in 1992; agriculture workers earned, on average $23,446.81 in 1972 and $23,308.57 in 1992. Woods and Poole predicts that the average salary will increase at a moderate rate during the next 15 to 20 years.



With the exception of 1997 and 2003, the agricultural work force has increased during the past decade. In 1995, the sector employed 1840 workers, whereas it employed 2210 workers in 2005. There has been an average annual growth in employment of 1.60% over the past decade.



Total earnings have outpaced employment since 1996 with an average annual growth rate of 2.72%. Agriculture sector earnings have fluctuated more so than employment, yet the sector, on average, has seen an impressive annual growth rate. The $37.96 million in earnings (measured in constant 1996 dollars) from 1999 was the highest value over the past decade.



The location quotient for the agriculture sector is 5.0[14]. This means that compared to the base region of Vermont, Addison County is home to a relatively large amount of agricultural production (see below formula). That is to say, agriculture is highly concentrated in Addison County.

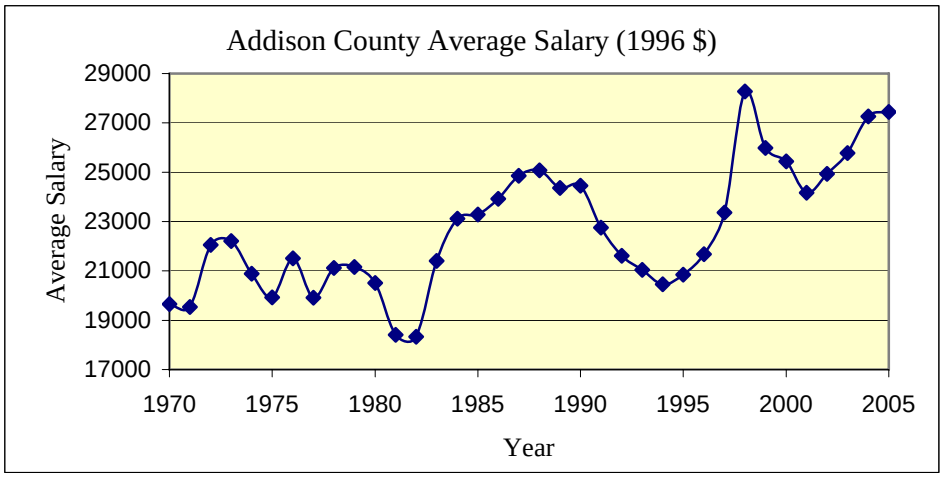
$$LQ = \frac{AddisonEmployment(agriculture) \Big/ VermontEmployment(agriculture)}{TotalAddisonEmployment \Big/ TotalVermontEmployment}$$

[14] Taken from the US Census Bureau, as are all of the location quotients.

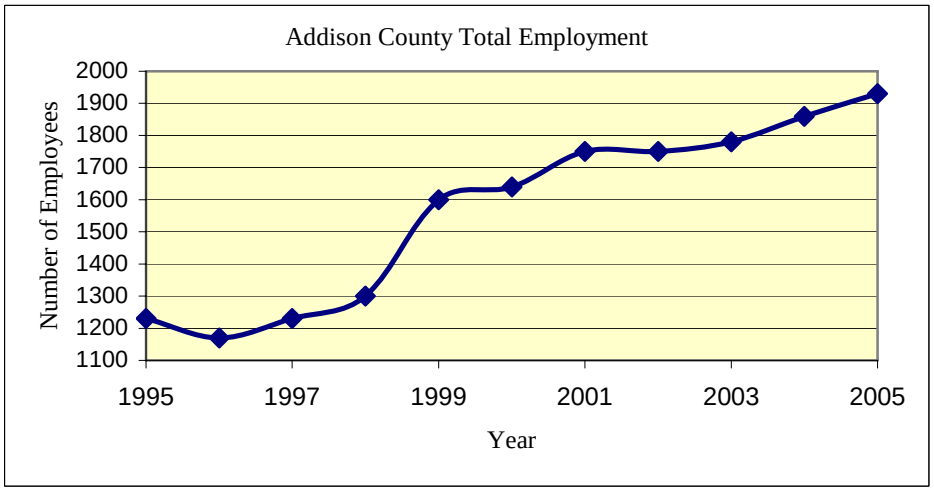
3. Construction

The term construction includes new work, additions, alterations, reconstruction, installations, and repairs. Three broad types of construction activity are covered: (1) building construction by general contractors or by operative builders; (2) heavy construction other than building by general contractors and special trade contractors; and (3) construction activity by other special trade contractors.

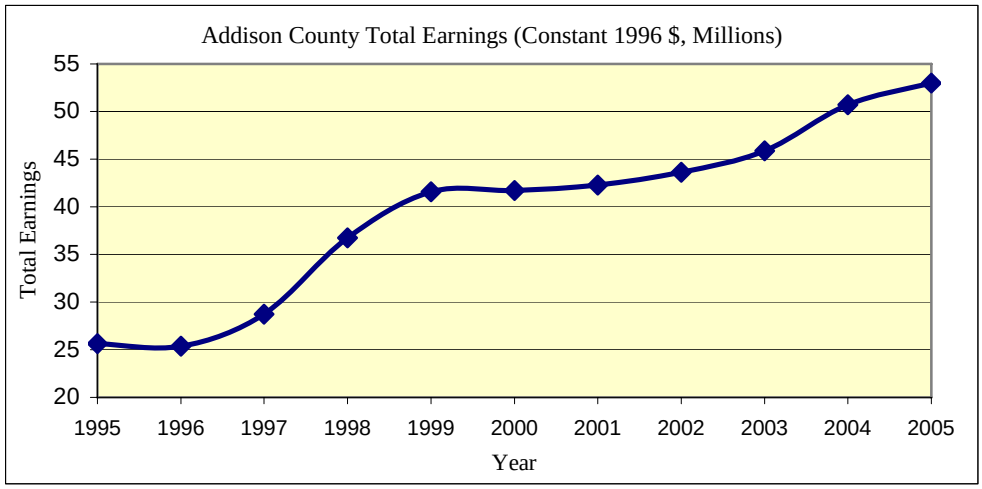
During the 1970s, the construction industry's average salary was relatively constant. In the 1980s, however, the average salary increased considerably, as it did in the later half of the 1990s. From 1970 to 2005, the industry saw an average annual growth rate of 39.6%. In 1998, the average annual salary peaked at $28,276.92. The construction worker's average salary has been climbing steadily after a considerable drop following the 1998 high.



Total employment in the sector has increased consistently and dramatically in the past decade. In fact, on average, the work force has grown at 4.32% year. In 1995, the sector employed 1230 people, whereas in 2005, it employed 1930 workers.



Total earnings during this past decade have also increased at a swift pace. Since 1995, total earnings in the industry have grown at n average of 7.31% per year. From 1996-2005, the industry achieved positive growth in every year, with a high growth of 27.91% in 1998. In 2005, the sector's total earnings were $52.97 million.

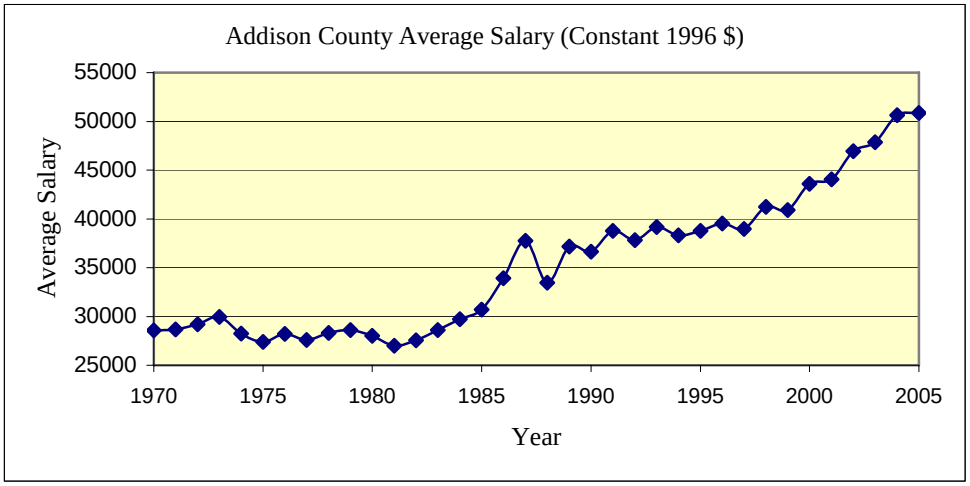


The location quotient for the construction sector is .99. When the location quotient equals 1.00, it means that Addison County has a share of the activity in accordance with Vermont as a whole. In practice, this is nearly impossible to achieve. Therefore, construction is distributed evenly in Addison County as it is in the whole state.

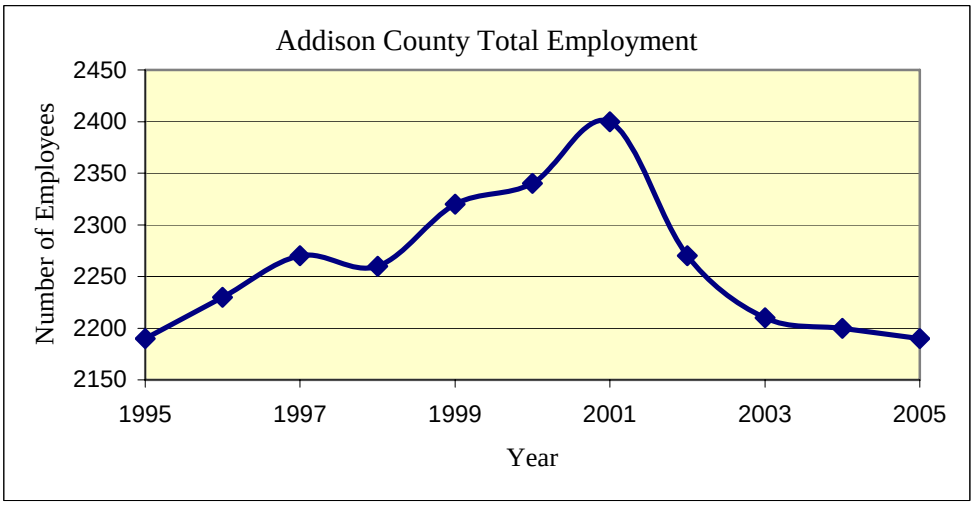
4. Manufacturing

The manufacturing division includes establishments engaged in the mechanical or chemical transformation of materials or substances into new products. These establishments are usually described as plants, factories, or mills and characteristically use power driven machines and materials handling equipment. A further breakdown of the manufacturing sector is forthcoming.

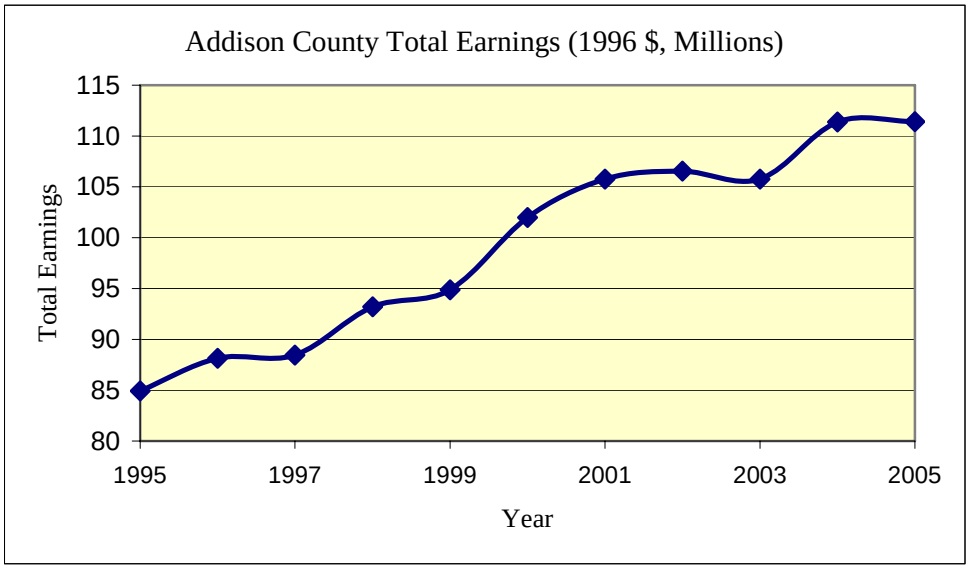
In 1970, the average salary for a worker in the manufacturing sector was $28,581.92. By 2005, the average salary had increased, in constant 1996 dollars to $50,867.58, a rise of 77.9%. The average salary remained fairly steady during the 1970s and then experienced consistent growth throughout the remainder of the century.



Comparing employment in the manufacturing sector in 1995 with employment in the manufacturing sector in 2005 yields an uninteresting result. In fact, the two employment figures are identical. Yet, during that period, the total number of employees actually increased to 2400 in 2001 before returning to the 1995 and 2005 number of 2190.



Total earnings, on the other hand, have grown during the past 10 years. Whereas the average annual growth rate of employment was .28%, the average annual growth rate of earnings was 2.90%. The upward trend indicates an increase in output per worker because without the total number or employees changing, the total earnings increased from roughly $85 million to $111.4 million.

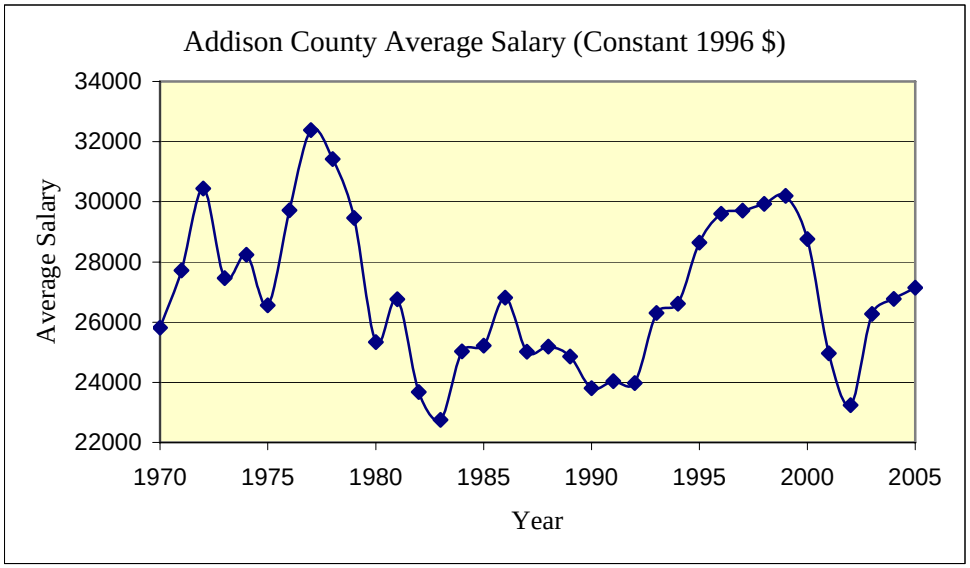


The location quotient for the manufacturing sector is 1.17, indicating that manufacturing is relatively concentrated in Addison County compared to the state as a whole.

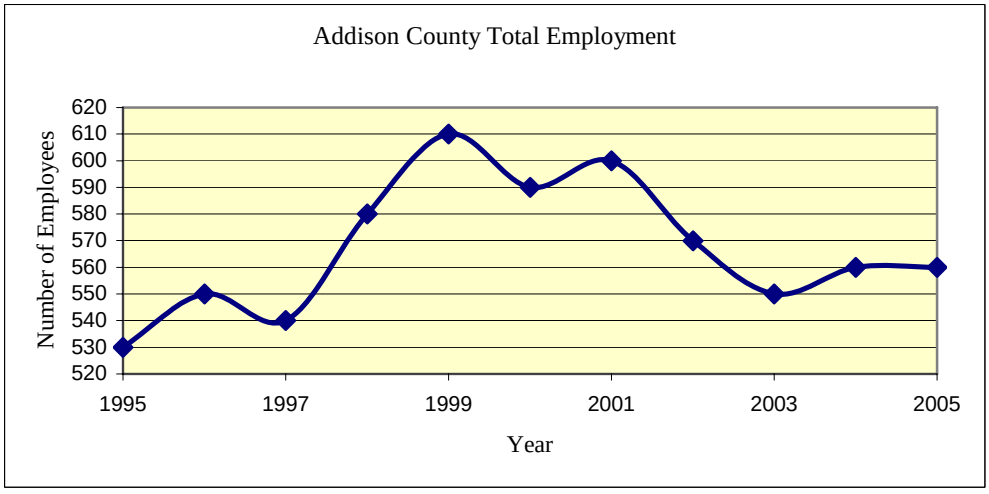
5. Transportation, Communications, and Public Utilities

This division includes establishments providing, to the general public or to other business enterprises, passenger and freight transportation, communications services, or electricity, gas, steam, water or sanitary services, and all establishments of the United States Postal Service.

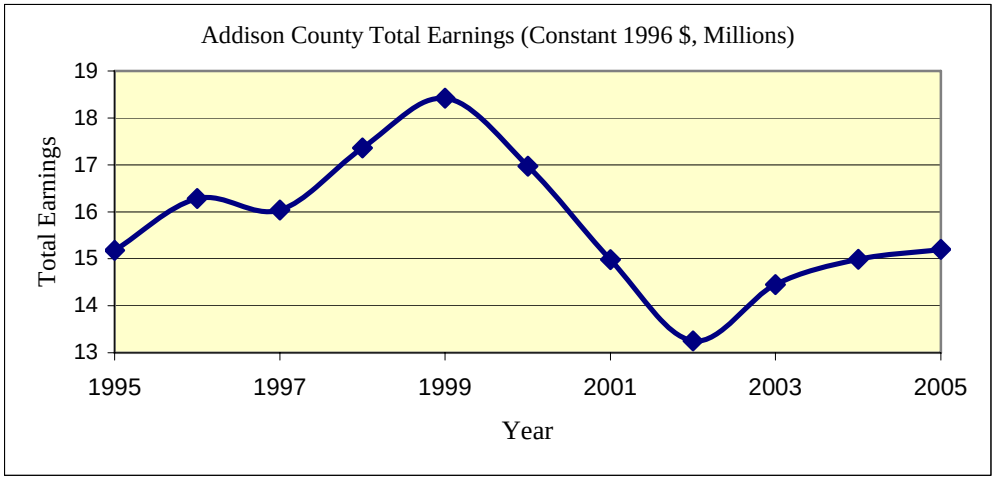
The average salary in the transportation, communications, and public utilities sector has fluctuated a great deal during the past 35 years. There was a range of $10,000 between the high (in 1977) and low (in 1983) average annual salaries. In 2005, the average annual salary for a worker in this sector was $27,142.86.



The work force in the transportation, communications, and public utilities sector is smaller than most of the other sectors. Over the years 1995-2005, the employment grew at an average annual rate of .93%. The total number of employees peaked in 1999 at 610.



Total earnings between 1995 and 2005 grew at an average annual rate of 1.37%. With modest earnings and minimal fluctuation, the two endpoints are nearly identical ($15.18 million in 1995 and $15.20 million in 2005). Just as employment did, earnings peaked in 1999 at $18.42 million.

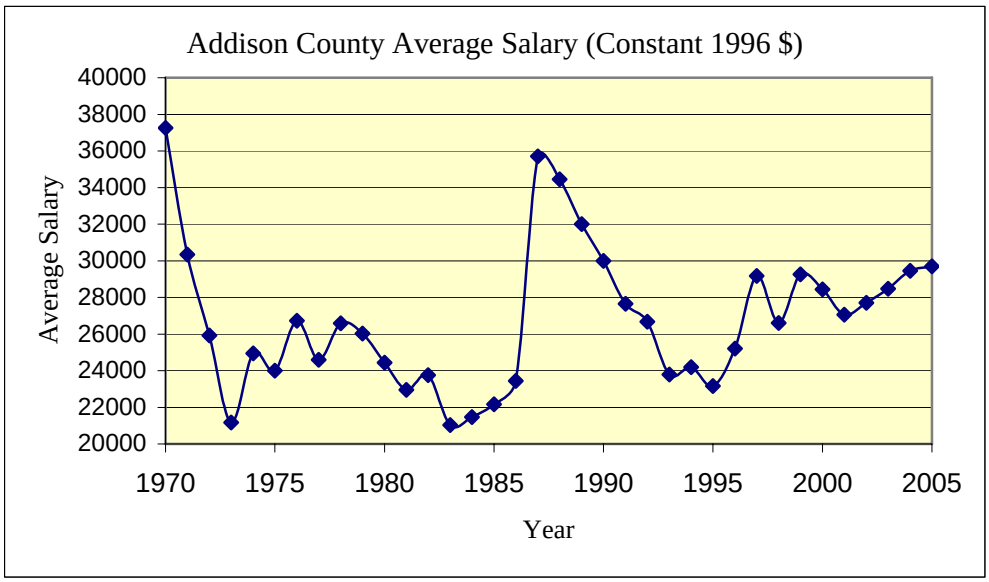


The location quotient for the transportation, communications, and public utilities sector is not reported.

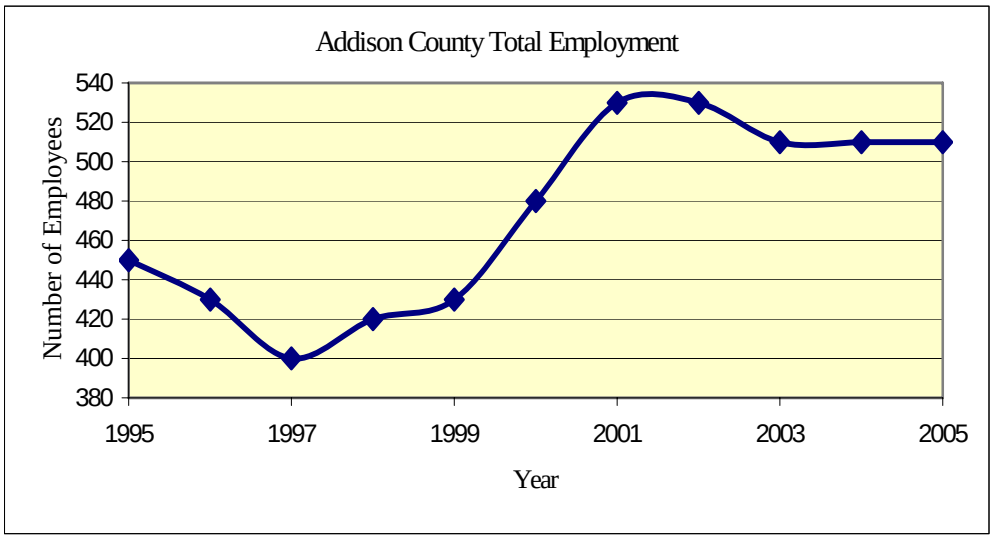
6. Wholesale Trade

This division includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, construction contractors, or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

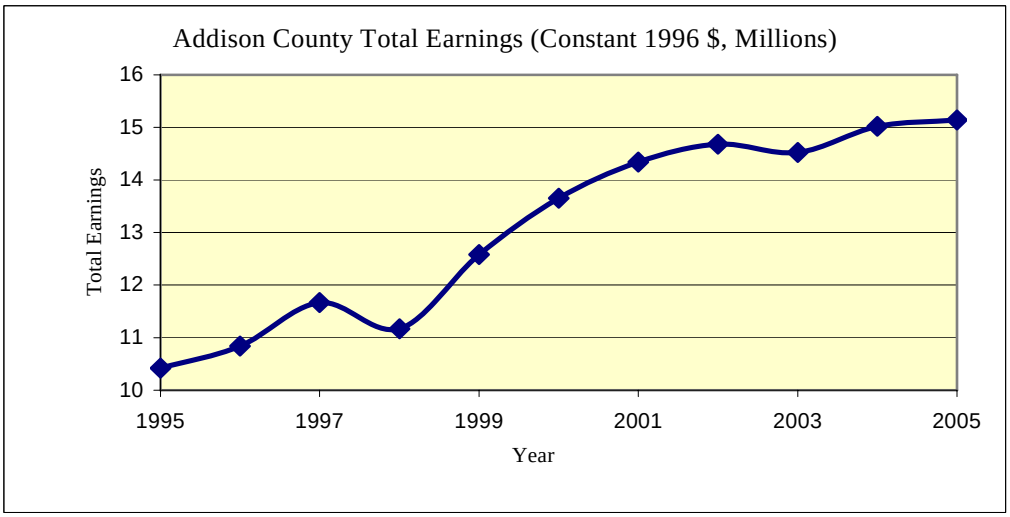
The average salary in the wholesale trade sector has actually decreased, in real terms, since 1970. After a sharp drop from 1970 to 1973 of $16,073.52, average salaries remained low through the mid 1980s. In 2005, the average annual salary of worker in the wholesale trade was $29,686.27. This figure is 20.3% below the $37, 250.00 average 1970 salary.



Total employment has, on average, increased at a moderate pace over the past 10 years. Like the transportation, communications, and public utilities sector, a relatively few workers are employed in the wholesale trade segment. Employment has grown at an average annual rate of 1.10%; it peaked in 2001 and 2002 with 530 employees.



From 1995 to 2005, total earnings have grown consistently, at an average annual pace of 2.98%. With $10.42 million in 1995 earnings, the wholesale trade sector experienced only two years of negative growth, 1998 and 2003. In 2005, the segment had total earnings of $15.14 million. Woods and Poole predicts moderate growth over the next 10 to 15 years, primarily because of low expected increases in the work force. By 2020, Woods and Poole predicts the sector will report earnings of $17.40 million.

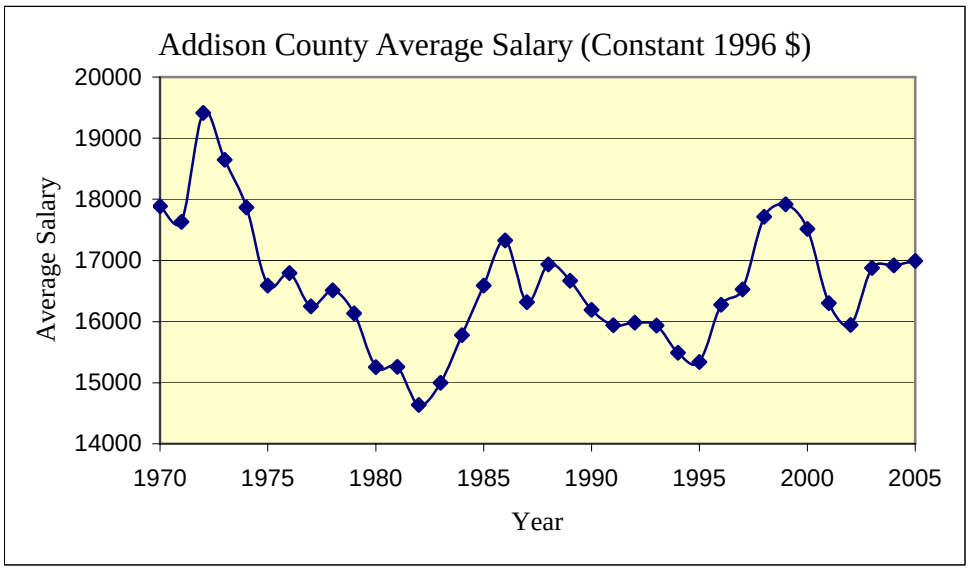


The location quotient for the wholesale trade sector is 1.58. This suggests that wholesale trade is relatively concentrated in Addison County compared to the base region of the State of Vermont. Out of all eight sectors, the wholesale trade segment has the second highest location quotient behind agriculture's 5.0.

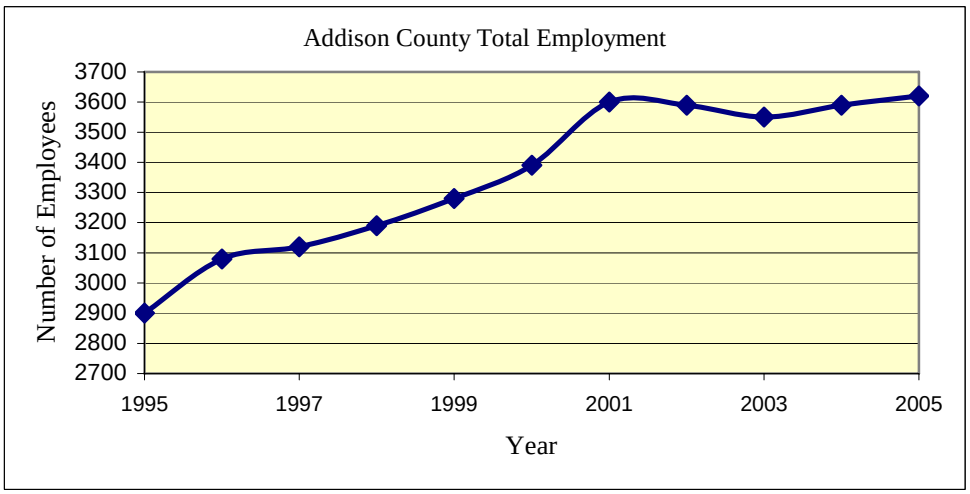
7. Retail Trade

This division includes establishments engaged in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods. In general, retail establishments are classified by kind of business according to the principal lines of commodities sold (groceries, hardware, etc.), or the usual trade designation (drug store, cigar store, etc.).

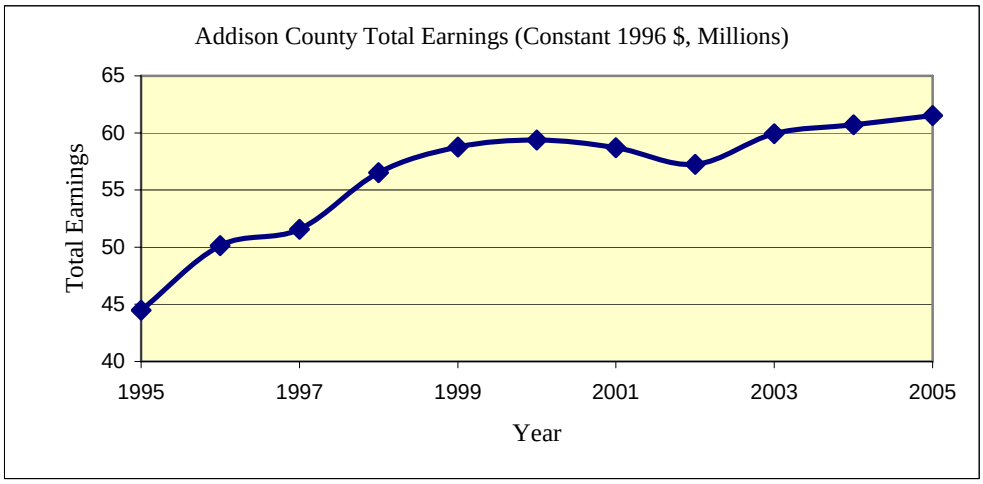
Average salaries in the retail trade sector have decreased over the past 35 years. With a peak annual salary of $19,415.38 in 1972, workers began to be worse off as the turn of the century approached. The average salary reached a new low in 1982, as employees could expect to make only $14,639.78 annually. In 2005, the average salary for a retail trade worker was $16,994.48.



Total employment in the retail trade sector has increased in all but two years over the past decade. On average, the annual growth rate of employment for this time period was 2.19%. The 2005 total number of employees was 3620, an all-time high.



Total earnings grew at a slightly higher average annual rate of 3.12%. With the exception of 2001 and 2002, total earnings grew positively during the past decade. The 2005 figure of $61.52 million places the retail trade sector third behind services and manufacturing. With the services sector encompassing so many different types of businesses, its numbers may be slightly inflated. This suggests that the retail trade is indeed a substantial segment of Addison County's economy.

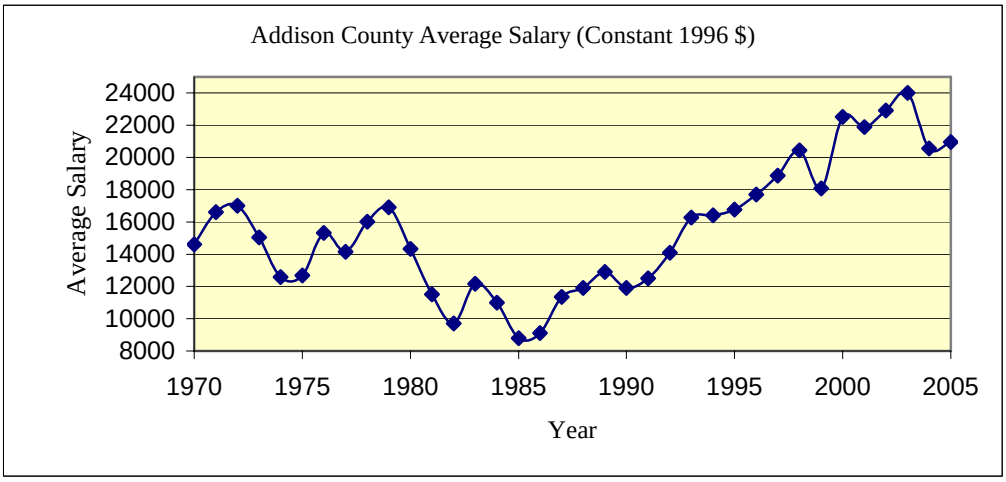


The location quotient for the retail trade sector is 1.02. As previously discussed, this is about as close to the equal concentration of 1.0. Therefore, in practice, Addison County has a share of retail trade in accordance with its share of the Vermont base.

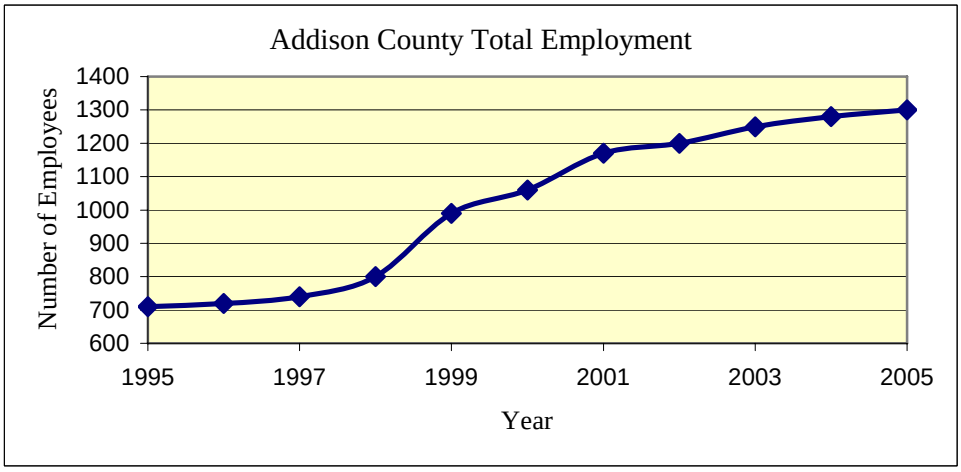
8. Finance, Insurance, and Real Estate

This division includes establishments operating primarily in the fields of finance, insurance, and real estate. Finance includes depository institutions, non-depository credit institutions, holding (but not predominantly operating) companies, other investment companies, brokers and dealers in securities and commodity contracts, and security and commodity exchanges. Insurance covers carriers of all types of insurance and insurance agents and brokers. Real estate includes owners, leasers, lessees, buyers, sellers, agents, and developers of real estate

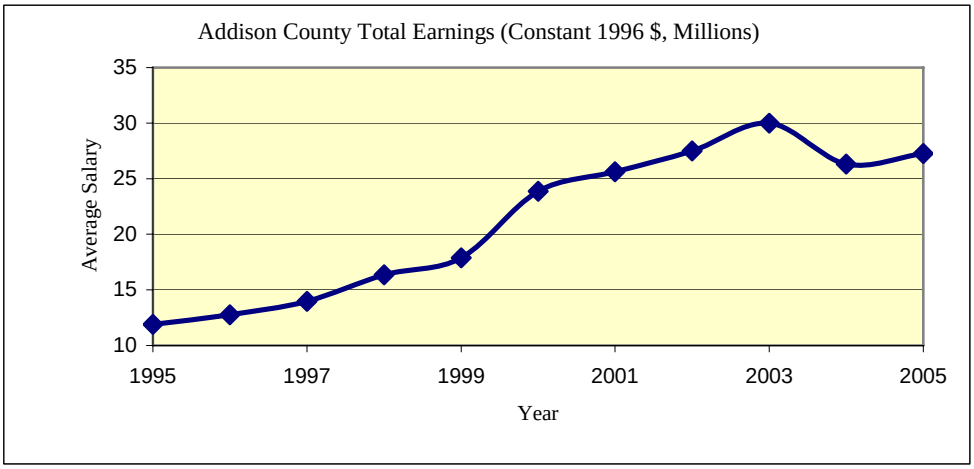
The last 35 years of the finance, insurance, and real estate sector was characterized by two distinct halves. From 1970 through 1985, this segment of Addison County's economy experienced a decline in the average salary from $14,605.26 in 1970 to $8,793.65 in 1985. From that point on, however, the average salary rose considerably and more than doubled by the turn of the century. In 2005, the average salary for this sector was $20,961.54. Woods and Poole's projections indicate continued growth over the next 10 to 15 years.



From 1995 to 2005, total employment in the finance, insurance, and real estate sector increased without fail. In fact, the number of employees grew at an average annual rate of 6.10%. In 2005, there were 1300 workers employed in this sector.



Total earnings in this sector also grew considerably during the years 1995 through 2005. On average, the sector experienced 8.80% growth in total earnings in the finance, insurance, and real estate sector. In 2005, earnings were 27.25 million, up more than $15 million from 1995. Woods and Poole predicts that earnings will continue to rise based on an influx of workers in the segment.

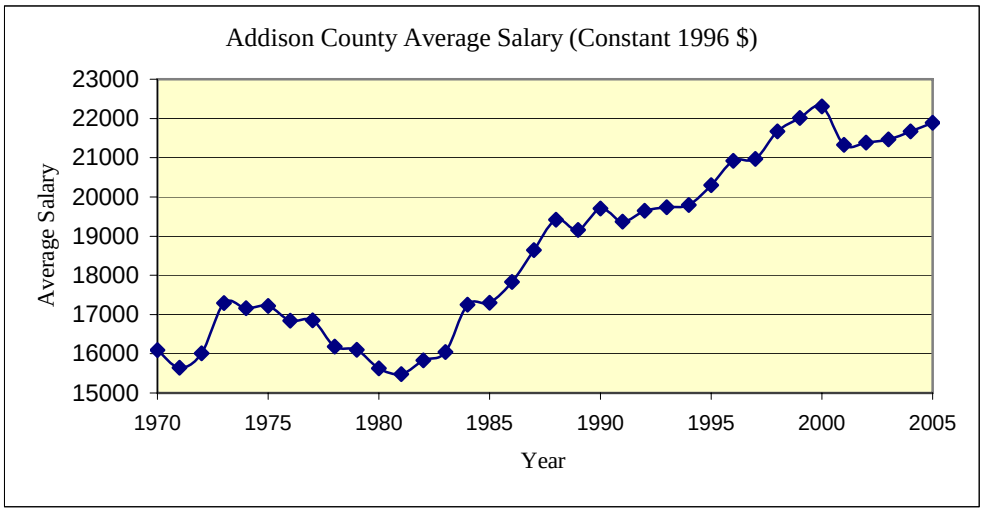


The location quotient for the finance, insurance, and real estate is actually reported as two different numbers; one number represents the location quotient for finance and insurance, the other for real estate. The difference between these numbers was minimal, however. A location quotient of .68 for finance and insurance, and a location quotient of .73 for the real estate industry suggest that the sector, on the whole, is relatively less concentrated in Addison County.

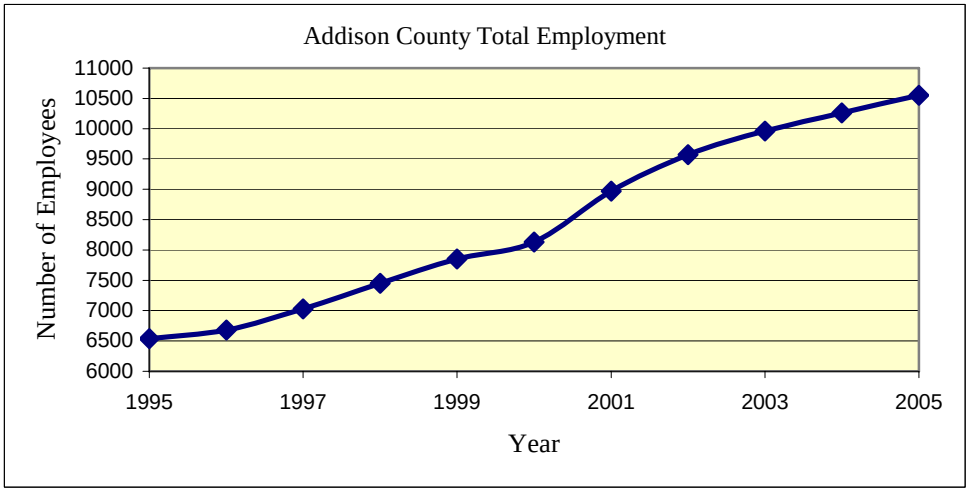
9. Services

This division includes establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations. Hotels and other lodging places; establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; educational institutions; membership organizations, and other miscellaneous services, are included. Essentially, services involve all other output that is not a part of a different sector.

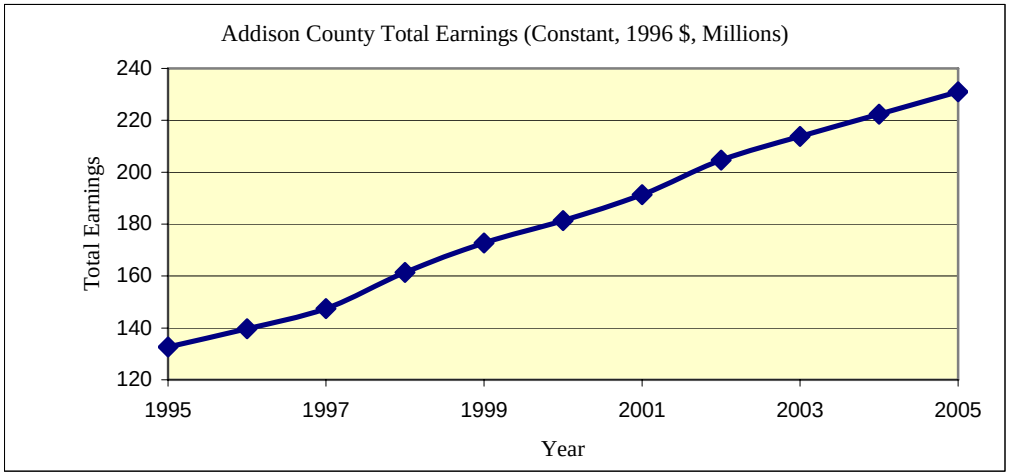
The largest sector has experienced moderate yet consistent growth in average salaries. From an average annual salary of $16,093.90 in 1970 to an average annual salary of $21,892.89 in 2005, the segment's average salary has grown at an average annual rate of .92%.



The segment which employs the most number or people has grown its workforce at a remarkably consistent pace; from 1995 to 2005, total employment grew at an average annual rate of 4.60%. Every year, the number of employees has increased. From 2000 to 2001, the sector gained just under 1000 new employees.



Total earnings have increased in a similar manner as total employment. It has grown at an average annual rate of 5.55% and is just short of doubling in ten years. The sector that produces 37.31% of the county's total output had earnings of $230.97 million.



The Bureau of Labor Statistics reports a location quotient for more thorough breakdown of the services sector. For example, educational services' location quotient is 3.26, whereas administrative services' location quotient is .50. Therefore, it is difficult to generalize and draw conclusions about relative concentration for this classification of the service.

APPENDIX 1 – Definitions

1.) SIC 01-09: FARM AND AGRICULTURAL SERVICES (AND MINING)

A. Farms

This division includes establishments primarily engaged in agricultural production, forestry, commercial fishing, hunting and trapping, and related services.

The classification of agricultural production covers establishments (e.g., farms, ranches, dairies, greenhouses, nurseries, orchards, hatcheries) primarily engaged in the production of crops, plants, vines, or trees (excluding forestry operations); and the keeping, grazing, or feeding of livestock for the sale of livestock or livestock products (including serums), for livestock increase, or for value increase. Livestock as used here includes cattle, sheep, goats, hogs, and poultry. Also included are animal specialties, such as horses, rabbits, bees, pets, fur-bearing animals in captivity, and fish in captivity. Agricultural production also includes establishments primarily engaged in the operation of sod farms, cranberry bogs, and poultry hatcheries; in the production of mushrooms, bulbs, flower seeds, and vegetable seeds; and in the growing of hydroponic crops.

Farms are the establishment units generally utilized for the purpose of industrial classification of agricultural production. A farm may consist of a single tract of land or a number of separate tracts which may be held under different tenures. For example, one tract may be owned by the farm operator and another rented. It may be operated by the operator alone or with the assistance of members of the household or hired employees, or it may be operated by a partnership, corporation, or other type of organization. When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a farm.

B. Agricultural Services

The classification of agricultural services includes establishments primarily engaged in supplying soil preparation services, crop services, landscape and horticultural services, veterinary and other animal services, and farm labor and management services.

The classification of forestry covers establishments primarily engaged in the operation of timber tracts, tree farms, or forest nurseries; in the gathering of forest products; or in performing forestry services. Logging establishments are classified in Manufacturing, Industry 2411.

The classification of fishing and hunting and trapping covers establishments primarily engaged in commercial fishing (including shellfish and marine products); in operating fish hatcheries and fish and game preserves; and in commercial hunting and trapping.

C. Mining

This division includes all establishments primarily engaged in mining. The term mining is used in the broad sense to include the extraction of minerals occurring naturally: solids, such as coal and ores; liquids, such as crude petroleum; and gases such as natural gas. The term mining is also used in the broad sense to include quarrying, well operations, milling (e.g., crushing, screening, washing, flotation), and other preparation customarily done at the mine site, or as a part of mining activity.

Exploration and development of mineral properties are included. Services performed on a contract or fee basis in the development or operation of mineral properties are classified separately but within this

division. Establishments fswhich have complete responsibility for operating mines, quarries, or oil and gas wells for others on a contract or fee basis are classified according to the product mined rather than as mineral services.

Mining operations are classified, by industry, on the basis of the principal mineral produced, or, if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The mining of culm banks, ore dumps, and tailing piles is classified as mining according to the principal mineral product derived.

The purification and distribution of water is classified in Transportation and Public Utilities, Industry 4941, and the bottling and distribution of natural spring and mineral waters is classified in Wholesale Trade, Industry 5149.

Crushing, grinding, or otherwise preparing clay, ceramic, and refractory minerals; barite, and miscellaneous nonmetallic minerals, except fuels, not in conjunction with mining or quarrying operations, are classified in Manufacturing, Industry 3295. Dressing of stone or slabs is classified in Manufacturing, Industry 3281, whether or not mining is done at the same establishment.

* * *

2.) <u>SIC 15-17: CONSTRUCTION</u>

This division includes establishments primarily engaged in construction. The term construction includes new work, additions, alterations, reconstruction, installations, and repairs. Construction activities are generally administered or managed from a relatively fixed place of business, but the actual construction work is performed at one or more different sites. If a company has more than one relatively fixed place of business from which it undertakes or manages construction activities and for which separate data on the number of employees, payroll, receipts, and other establishment-type records are maintained, each such place of business is considered a separate construction establishment.

Three broad types of construction activity are covered: (1) building construction by general contractors or by operative builders; (2) heavy construction other than building by general contractors and special trade contractors; and (3) construction activity by other special trade contractors. Special trade contractors are primarily engaged in specialized construction activities, such as plumbing, painting, and electrical work, and work for general contractors under subcontract or directly for property owners. General contractors usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project that require special skills or equipment. General contractors thus may or may not have construction workers on their payroll.

Building construction general contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building construction projects. Operative builders who build on their own account for resale are also included in this division. However, investment builders who build structures on their own account for rental are classified in Real Estate, Major Group 65, but separate establishments primarily engaged in construction for the investment builder are classified in this division.

General contractors and special trade contractors for heavy construction other than building are primarily engaged in the construction of highways; pipelines, communications and power lines, and

sewer and water mains; and other heavy construction projects. Special trade contractors are classified in heavy construction other than building if they are primarily engaged in activities such as grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching; cable laying; conduit construction;underwater rock removal; pipeline wrapping; or land clearing and leveling.

Other special trade contractors undertake activities of a type that are either specialized to building construction or may be undertaken for building or nonbuilding projects. These activities include painting (including bridge painting and traffic lane painting) and electrical work (including work on bridges, power lines and power plants).

Force account construction is construction work performed by an establishment primarily engaged in some business other than construction, for its own account and use, and by employees of the establishment. This activity is not included in this division, but is classified according to the primary activity which is or will be performed in the establishment. However, construction work performed as the primary activity of a separate establishment of an enterprise for the enterprise's own account is included in this division.

The installation of prefabricated building equipment and materials by general and special trade contractors is classified in this division. Similar installation work performed as a service incidental to sale by employees of an establishment manufacturing or selling prefabricated equipment and materials is classified according to the primary activity in the Manufacturing or Trade Divisions. Establishments primarily engaged in the distribution and construction or installation of equipment often present classification problems. Since value added is not available for distinguishing the relative importance of sales versus installation or construction activities, payroll or employment may be used as measures yielding approximately the same results.

On this basis, separate establishments primarily engaged in the sale and installation of the following illustrative types of structures or integral parts of structures generally site assembled, are classified in construction rather than in trade:
a. Steel work on bridges or buildings; b. Elevators and escalators; c. Sprinkler systems; d. Central air-conditioning and heating equipment; e. Communications equipment; and f. Insulation materials.

On the other hand, establishments primarily engaged in the sale and installation of the following illustrative types of preassembled equipment are classified in trade rather than in construction:
a. Major household appliances, such as refrigerators, dishwashers, clothes washers and dryers, stoves and ranges; and b. Partitions for banks, stores, and restaurants.

* * *

3.) <u>SIC 20-39: MANUFACTURING</u>

The manufacturing division includes establishments engaged in the mechanical or chemical transformation of materials or substances into new products. These establishments are usually described as plants, factories, or mills and characteristically use power driven machines and materials handling equipment. Establishments engaged in assembling component parts of manufactured products are also considered manufacturing if the new product is neither a structure nor other fixed improvement. Also included is the blending of materials, such as lubricating oils, plastics resins, or liquors.

The materials processed by manufacturing establishments include products of agriculture, forestry, fishing, mining, and quarrying as well as products of other manufacturing establishments. The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become a raw material for an establishment engaged in further manufacturing. For example, the product of the copper smelter is the raw material used in electrolytic refineries; refined copper is the raw material used by copper wire mills; and copper wire is the raw material used by certain electrical equipment manufacturers.

The materials used by manufacturing establishments may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another which is under the same ownership. Manufacturing production is usually carried on for the wholesale market, for interplant transfer, or to order for industrial users, rather than for direct sale to the domestic consumer.

There are numerous borderline cases between manufacturing and other divisions of the classification system. Specific instances will be found in the descriptions of the individual industries. The following activities, although not always considered as manufacturing, are so classified:

Milk bottling and pasteurizing;
Fresh fish packaging (oyster shucking, fish filleting);
Apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others;
Publishing;
Ready-mixed concrete production;
Leather converting;
Logging;
Wood preserving;
Various service industries to the manufacturing trade, such as typesetting, engraving, plate printing, and preparing electrotyping and stereotype plates, but not blueprinting or photocopying services;

Electroplating, plating, metal heat treating, and polishing for the trade;
Lapidary work for the trade;
Fabricating of signs and advertising displays.

There are also some manufacturing-type activities performed by establishments which are primarily engaged in activities covered by other divisions, and are, thus, not classified as manufacturing. A few of the more important examples are:

Agriculture, Forestry, and Fishing. Processing on farms is not considered manufacturing if the raw materials are grown on the farm and if the manufacturing activities are on a small scale without the extensive use of paid labor. Other exclusions are threshing and cotton ginning.
Mining. The dressing and beneficiating of ores; the breaking, washing, and grading of coal; the crushing and breaking of stone; and the crushing, grinding, or otherwise preparing of sand, gravel, and nonmetallic chemical and fertilizer minerals other than barite are classified in Mining.
Construction. Fabricating operations performed at the site of construction by contractors are not considered manufacturing, but the prefabrication of sheet metal, concrete, and terrazzo products and similar construction materials is included in the Manufacturing Division.
Wholesale and Retail Trade. Establishments engaged in the following types of operations are included in Wholesale or Retail Trade: cutting and selling purchased carcasses; preparing feed at grain elevators and farm supply stores; stemming leaf tobacco at wholesale establishments; and production of wiping rags. The breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or

bottling products, such as liquors or chemicals, is also classified as Wholesale or Retail Trade. Also included in Retail Trade are establishments primarily engaged in selling, to the general public, products produced on the same premises from which they are sold, such as bakeries, candy stores, ice cream parlors, and custom tailors.
Services. Tire retreading and rebuilding, sign painting and lettering shops, computer software production, and the production of motion picture films (including video tapes) are classified in Services. Most repair activities are classified as Services. However, some repair activity such as shipbuilding and boatbuilding and repair, the rebuilding of machinery and equipment on a factory basis, and machine shop repair are classified as manufacturing.

* * *

4.) SIC 40-49: TRANSPORTATION AND PUBLIC UTILITIES

This division includes establishments providing, to the general public or to other business enterprises, passenger and freight transportation, communications services, or electricity, gas, steam, water or sanitary services, and all establishments of the United States Postal Service.
For many of the industries in this division, the establishments have activities, workers, and physical facilities distributed over an extensive geographic area. For this division, the establishment is represented by a relatively permanent office, shop, station, terminal, or warehouse, etc. that is either (1) directly responsible for supervising such activities or (2) the base from which personnel operate to carry out these activities.

Many of the industries are engaged in various related activities. For example, establishments of communications, pipeline, and utility enterprises include a variety of activities, such as power generation, pumping, transmission, and distribution. Establishments primarily engaged in such activities are all classified in this division. Establishments primarily engaged in new or replacement construction for establishments of these types of enterprises are classified as operating establishments in Division C, Construction. Locations engaged in activities such as sales of electric appliances to household consumers are classified in Division G, Retail Trade.

The establishments classified in this division furnish services to the general public or to other business enterprises; establishments which furnish similar services only to other establishments of the same enterprise are classified as auxiliary to the establishments or units of the enterprise which they serve. However, separate establishments primarily engaged in long-distance trucking, stevedoring, water transportation, or pipeline transportation are classified according to their activity and not as auxiliaries, even though they serve only establishments of the same enterprise.

* * *

5.) SIC 50 and 51: WHOLESALE TRADE

This division includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, construction contractors, or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The chief functions of establishments included in Wholesale Trade are selling goods to trading establishments, or to industrial, commercial, institutional, farm, construction contractors, or

professional business users; and bringing buyer and seller together. In addition to selling, functions frequently performed by wholesale establishments include maintaining inventories of goods; extending credit; physically assembling, sorting, and grading goods in large lots; breaking bulk and redistribution in smaller lots; delivery; refrigeration; and various types of promotion such as advertising and label designing.

The principal types of establishments included are: (1) merchant wholesalers-wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, truck distributors, retailer cooperative warehouses, terminal elevators, cooperative buying associations, and assemblers, buyers or cooperatives engaged in the marketing of farm products; (2) sales branches and sales offices (but not retail stores) maintained by manufacturing, refining or mining enterprises apart from their plants or mines for the purpose of marketing their products; and (3) agents, merchandise or commodity brokers, and commission merchants.

Establishments primarily engaged in selling merchandise to construction contractors, institutions, industrial users, or businesses are included in Wholesale Trade with a few exceptions. These exceptions are made necessary because of sales to both the general public for personal or household consumption and to businesses, industrial users, or construction contractors. These exceptions are lumber yards; paint, glass, and wallpaper stores, typewriter stores; stationery stores; and gasoline service stations which are classified in Retail Trade, Division G.

However, establishments that sell similar products only to institutions, industrial users, and establishments that sell merchandise for use exclusively by business establishments or to other wholesalers are classified in Wholesale Trade. Establishments primarily engaged in selling such merchandise as plumbing equipment; electrical supplies; used automobile parts; and office furniture are classified in Wholesale Trade, even if a higher proportion of their sales is made to individuals for household use. Establishments primarily engaged in the wholesale distribution of used products are classified on the basis of the products sold.

Guidelines for the classification of establishments primarily engaged in the wholesale distribution and construction or installation of equipment manufactured by other establishments are outlined in the Introduction to Division C, Construction.

* * *

6.) <u>SIC 52-59: RETAIL TRADE</u>

This division includes establishments engaged in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods. In general, retail establishments are classified by kind of business according to the principal lines of commodities sold (groceries, hardware, etc.), or the usual trade designation (drug store, cigar store, etc.). Some of the important characteristics of retail trade establishments are: the establishment is usually a place of business and is engaged in activities to attract the general public to buy; the establishment buys or receives merchandise as well as sells; the establishment may process its products, but such processing is incidental or subordinate to selling; the establishment is considered as retail in the trade; and the establishment sells to customers for personal or household use. Not all of these characteristics need be present and some are modified by trade practice.

For the most part, establishments engaged in retail trade sell merchandise to the general public for personal or household consumption. Exceptions to this general rule are lumber yards; paint, glass, and wallpaper stores; typewriter stores; stationery stores; and gasoline service stations which sell to both the general public for personal or household consumption and to businesses. These types of stores are classified in Retail Trade even if a higher proportion of their sales is made to other than individuals for personal or household consumption.
However, establishments that sell these products only to institutional or industrial users and to other wholesalers and establishments that sell similar merchandise for use exclusively by business establishments are classified in Wholesale Trade.

Establishments primarily engaged in selling such merchandise as plumbing equipment; electrical supplies; used automobile parts; and office furniture are classified in Wholesale Trade, even if a higher proportion of their sales is made to individuals for personal or household consumption.
Buying of goods for resale to the consumer is a characteristic of retail trade establishments that particularly distinguishes them from the agricultural and extractive industries. For example, farmers who sell only their own produce at or from the point of production are not classified as retailers.

Processing incidental or subordinate to selling often is conducted at retail stores. For example, restaurants prepare meals, and meat markets cut meat. Separate establishments selling merchandise for personal or household consumption which has been manufactured by other establishments of the same company are classified in Retail Trade.

Chain store warehouses are considered auxiliary to the retail establishment served and are classified on the basis of the activity carried on by such retail stores.

Establishments primarily engaged in the retail sale of used motor vehicles, trailers, and boats are classified in Major Group 55; those selling used mobile homes are classified in Industry 5271; those selling used automobile parts are classified in Wholesale Trade, Industry 5015; and those selling all other used merchandise are classified in Industry Group 593. Establishments primarily engaged in non-store retailing are classified in Industry Group 596.

Location Quotient Analysis

Location quotient analysis indicates which industries have a comparatively larger (or smaller) presence in the local economy. Industries with a location quotient greater than one indicate relatively high production of a good or service; therefore, it is likely that some amount is being exported.

What is a Location Quotient?

Location quotients (LQ) are fractions that compare the concentration of employment in a particular industry at different geographical levels. For this document, location quotients have been calculated that compare regional employment concentrations to national employment concentrations in the same industry. A ratio below 1.0 means that the region has a lower percentage of employment than the national average. A ratio equal to 1 means that the region has the same percentage as the national average and above 1.0 means that the region has a greater share of employment than the state average.

Location quotients can help to determine whether an area is importing or exporting services. A LQ >1 can mean that a region is producing more of a particular product than the local population can consume and is probably exporting the excess. A LQ<1 can mean that there is a leakage in the local economy and that there are not enough workers in a particular industry to meet local demand so the region must import. Importing is very costly to an economy and may represent a major economic

opportunity for increasing local wealth. Finally, it must be noted that LQ's do not in themselves prove anything. They are but a simple tool to highlight possible areas of concern.

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8.) <u>Finance, Insurance and Real Estate (FIRE)</u>

This division includes establishments operating primarily in the fields of finance, insurance, and real estate. Finance includes depository institutions, non-depository credit institutions, holding (but not predominantly operating) companies, other investment companies, brokers and dealers in securities and commodity contracts, and security and commodity exchanges. Insurance covers carriers of all types of insurance, and insurance agents and brokers. Real estate includes owners, lessors, lessees, buyers, sellers, agents, and developers of real estate. Establishments primarily engaged in the construction of buildings for sale (operative builders) are classified in Construction, Industry 1531.

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9.) <u>Services</u>

This division includes establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations. Hotels and other lodging places; establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; educational institutions; membership organizations, and other miscellaneous services, are included.

Establishments which provide specialized services closely allied to activities covered in other divisions are classified in such divisions.