

JOBS AND PEOPLE IV: TOWARDS A SUSTAINABLE ECONOMY

**A REPORT TO:
THE COMMUNITY AND ECONOMIC DEVELOPMENT OFFICE
CITY OF BURLINGTON, VERMONT**



NANCY BROOKS & RICHARD SCHRAMM

APRIL 2010

JOBS & PEOPLE IV:

Towards a Sustainable Economy

Nancy Brooks & Richard Schramm, Principal Authors
Bruce Seifer, Project Director

A Report to:
The Community and Economic Development Office
City Of Burlington, Vermont

April 2010

Prepared by:

**Students in “Seminar on Local Economic
Development”**
Department of Economics
University of Vermont, Spring 2007

Dafna Alsheh • Gregory Berck
Ari Diaconis • Colin Dowling
Nathaniel Flannery • Emily Landry
Danielle McGrath • Brian Mossey
Alex Noss • Kevin Ohashi
Gregory Perkins • Inza Rehlen
Brandon Rhone • Jonathan Roberts
Cristopher Scibilia-Carver • Ashley
Seamans • Danielle Storm • George
Takesian

Faculty:
Nancy Brooks

A Student Team from
“Community Economic Development”
Public Administration Program
Department of Community
Development & Applied Economics
University of Vermont, Fall 2007

Tim Benge
Thomas Benoit, Sr.
Emilie Kornheiser
Christine Phelan
Gwen Pokalo

Faculty:
Richard Schramm

We thank Ed Antczak of Burlington’s Community and Economic Development Office for his contribution of time, knowledge, and support during the creation of this report. Colin Dowling and Alison Flint, CEDO Interns, were a great help in the development of additional tables and in the analysis and editing of parts of the report. Denise Girard provided invaluable assistance with report formatting and preparation. We also appreciate the support we received from the University of Vermont’s Office of Community-University Partnerships and Service-Learning (CUPS), and from Kathleen McNamara, Service-Learning Teaching Assistant in the Seminar on Local Economic Development.

JOBS & PEOPLE IV

Table of Contents

Chart Index	i
Executive Summary	vii
Chapter One: Introduction	1-1
1.1 Purpose of the Report	1-1
1.2 Burlington's Development Goals	1-1
1.2.1 Sustainable Community Development	1-2
1.2.2 Community and Economic Development Goals and Priorities	1-2
1.2.3 Jobs and People	1-3
Chapter Two: Performance and Structure of the Regional Economy	2-1
2.1 The Overall Chittenden County Economy	2-1
2.1.1 Aggregate Employment	2-1
2.1.2 Unemployment	2-4
2.1.3 Income	2-9
2.1.4 Summary	2-17
2.2 Major Sectors within the Chittenden County Economy	2-18
2.2.1 Sectoral Employment	2-18
2.2.2 Residential Employment by Sector	2-23
2.2.3 Sectoral Earnings Levels and Growth	2-25
2.2.4 Analysis of Important Major Sectors	2-32
2.2.4.1 Manufacturing	2-32
2.2.4.2 Service	2-33
2.2.4.3 Retail	2-34
2.2.4.4 Wholesale	2-35
2.2.4.5 Information	2-36
2.2.4.6 Finance and Insurance	2-37
2.2.4.7 Educational Services	2-38
2.2.4.8 Professional and Technical Services	2-39
2.2.4.9 Health Care and Social Assistance	2-40
2.2.4.10 Accommodations and Food Services	2-41
2.2.4.11 Arts, Entertainment and Recreation	2-42
2.2.4.12 Government	2-43
2.2.5 Summary	2-49

Chapter Three: The Burlington Economy	3-1
3.1 Burlington Residents and Workforce	3-1
3.1.1 Population Levels, Growth and Birth Rates	3-1
3.1.2 The Aging Population	3-3
3.1.3 Changing Racial and Ethnic Diversity	3-4
3.1.4 College Students	3-5
3.1.5 Education	3-6
3.2 The Burlington Economy	3-9
3.2.1 Employment	3-9
3.2.1.1 Employment Levels and Growth by Industry	3-9
3.2.1.2 Industry Composition by Gender	3-12
3.2.2 Location Quotients and Shift-Share Analysis	3-13
3.3 Community Occupational Analysis	3-17
3.3.1 Employment by Occupation	3-17
3.3.1.1 Occupations by Gender	3-18
3.3.2 Residential Employment	3-19
3.3.2.1 Residents' Job Locations	3-19
3.4 Local Companies and the Community Economy	3-20
3.4.1 Employment by Company Size	3-20
3.4.2 Self-Employment and Working at Home	3-22
3.5 Tax Revenues	3-23
3.5.1 Sales Tax Information	3-23
3.5.2 Rooms and Meals Tax Information	3-24
3.6 Income, Wages and Poverty	3-25
3.6.1 Per Capita Income	3-25
3.6.2 Average Real and Nominal Wages	3-26
3.6.3 Average Wage Growth by Industry	3-27
3.6.4 Income Distribution	3-31
3.6.5 Poverty	3-32
3.6.5.1 Poverty Rates for Families and Individuals	3-32
3.6.5.2 Poverty Rates by Race	3-34
3.6.5.3 Poverty Trends	3-35
3.7 Unemployment	3-36
3.7.1 Average Unemployment	3-36
3.7.2 Unemployment by Age	3-37
3.7.3 Unemployment by Gender	3-38
3.8 Business Survey	3-39

Chapter Four: Recommendations	4-1
4.1 Economic Well-being	4-1
4.2 Burlington’s Economic Development Organization and Goals	4-2
4.3 Economic Development Methods	4-3
4.4 Recommendations	4-5
4.4.1 Regional Planning and Strategy	4-5
4.4.2 Infrastructure Development	4-6
4.4.3 Local First Chittenden County	4-6
4.4.4 Sectoral Development	4-7
4.4.5 Business Development/Support Methods and Priorities	4-9
4.4.6 Workforce Training, Development and Support	4-10
4.4.7 Going Beyond Employment and Income	4-11

Appendices

Chapter Two Appendix	A2-1
Chapter Three Appendix	A3-1

Supplements

Supplement A: 2008 Chittenden County Business Survey Results
Supplement B: Economic Summit Report

JOBS & PEOPLE IV

Chart and Graph Index

Chapter Two

2.1.1	Aggregate Employment 1980-2006	2-1
	Trends in Total Employment	2-2
	Total Private Employment, 1980-2006	2-3
	Trends in Total Private Employment, 1980-2006	
	Total Private Employment/Total Employment, 1980-2006	2-4
2.1.2	Employment Location for Chittenden County Residents	2-5
	Average Annual Unemployment Rate, U.S., New England, Chittenden County, Burlington, 1984-2006	2-6
	Unemployment by Age, 1990	2-7
	Percent Unemployment by Age, 1990	
	Unemployment by Age, 2000	2-8
	Percent Unemployment by Age, 2000	
	Unemployment by Gender, 2000	
	Unemployment Rates by Gender, 2000	2-9
2.1.3	Chittenden County and National Nominal and Real (inflation adjusted, in 2006 dollars) Per Capita Income, 1994, 2005	2-9
	Real Wages and Income for Chittenden County from 1990 to 2005 (in 2006 dollars)	2-10
	Real Per Capita Income Chittenden County, Vermont, U.S., 1982-2004	2-11
	Real Per Capita Income (2006 dollars) Chittenden County as a Percent of the U.S.	
	Wage Growth in Burlington, Chittenden County, Vermont, and the U.S. for 1990, 2000, and 2005	2-12
	Percent Increase in Wage Growth in Burlington, Chittenden County, Vermont, and the U.S. for 1990, 2000, and 2005	2-13
	Self-Employment Income as % of Total Earnings 1990-2005	2-14
	Farm Income as % of Total Earnings 1990-2005	
	Chittenden County Job Creation and Destruction 2002-2006	2-15
	Chittenden County, Net Job Changes by Sector, Annually 2002-2006	2-16
	Rate of Poverty for Individuals: Old North End, Burlington, Chittenden County, Vermont, and U.S. 1989, 1999	
	Rates of Poverty for Individuals 1989, 1999	2-17
2.2.1	Annual Employment in Chittenden County by Aggregate Sectors, 1990-2005	2-19
	Composition by Sector of Chittenden County Employment 1990 to 2006	2-21
	% Change Employment, Chittenden County 1990-2005	2-22
	Percentage Change in Employment: Chittenden County, 1990-2006	
2.2.2	Composition of Resident Employment by Sector, 2000	2-23
	Composition of Resident Employment by Sector, 2000	2-24

2.2.3	Composition of Earnings (Total Private Wages) by Sector, Dollar Amount, Chittenden County 1990, 1995, 2000, and 2005	2-25
	Composition of Earnings (Total Private Wages) by Sector, Percent of Total, Chittenden County 1990, 1995, 2000, and 2005	2-25
	Total Earnings by Sector as % of Total Earnings, Chittenden County	2-26
	Total Earnings by Sector as % of Total Earnings for Smaller Sectors, Chittenden County	
	Nominal Average Annual Wages by Industry, Chittenden County, 1990, 1995, 2000, 2005	2-27
	Average Annual Real Wages by Industry, Chittenden County, 1990, 1995, 2000, 2005	2-28
	Sectoral Rankings by Employment Importance, Employment Growth and Real Wages in Chittenden County by Aggregate Sectors, 1990-2005	2-29
	Wage Growth by Sector, Chittenden County, 1990-2005	2-30
	Indexed Average Annual Real Wage Growth by Sector, Chittenden County, 1990-2005	
	Indexed Average Real Wage Growth by Sector, Chittenden County, 1990-2005	2-31
2.2.4.1	Trends in Manufacturing 1990-2006	2-32
2.2.4.2	Trends in Service Sector Employment 1990-2006	2-33
2.2.4.3	Trends in Retail Trade 1990-2006	2-34
2.2.4.4	Trends in Wholesale Trade 1990-2006	2-35
2.2.4.5	Trends in Information Sector, 1990-2006	2-36
2.2.4.6	Trends in Finance and Insurance Sector, 1990-2006	2-37
2.2.4.7	Trends in Educational Services, 1990-2006	2-38
2.2.4.8	Trends in Professional and Technical Services, 1990-2006	2-39
2.2.4.9	Trends in Health Care and Social Assistance, 1990-2006	2-40
2.2.4.10	Trends in Accommodations and Food Services, 1990-2006	2-41
2.2.4.11	Trends in Entertainment and Recreation, 1990-2006	2-42
2.2.4.12	Trends in Government, 1990-2006	2-43
	% Change in Location Quotients: Chittenden County, 1998-2004	2-45
	Chittenden County Sectors of Increasing Industry Importance, 1998-2004	2-46
	Chittenden County Sectors of Decreasing Importance, 1998-2004	
	Shift Share Analysis (2000-2006) for Major Sectors in Chittenden County	2-47
	Sector Employment Concentration (2004) and Competitiveness (2000-2006)	2-48

2.2.5	Sectoral Rankings by Employment Importance, Employment Growth, Real Annual Wages, Export-Orientation and Competitiveness, Chittenden County, 1990-2005	2-49
--------------	--	------

Chapter Three

3.1.1	Population Growth for Burlington, Chittenden County, Vermont: 1970-2000	3-1
	Total Population: Burlington, Rest of Chittenden County, 1970-2000	3-2
	Population Growth Burlington, Chittenden County, Vermont Percent Change: 1970-2000, 1980-2000, 1990-2000	
	City and County Birth Rates, 1981-2003	
3.1.2	Age Trends, Burlington, 1970-2007	3-3
	Burlington Age Trends, 1970-2007	
3.1.3	Race and Ethnicity: Burlington, 1980-2007	3-4
	Burlington Racial Trends, 1970-2000	
3.1.4	College Students as % of Total Population: Burlington and Chittenden County, 1980-2000	3-5
3.1.5	Educational Attainment, 2000	3-6
	Percent Change in Educational Attainment, 1980-2000	3-7
	Burlington and Vermont Grades 9-12 Dropout Rate, 1997-2007	3-8
	Burlington and Vermont High School Dropout Rate, 1997-2007	
3.2.1.1	Structural Shifts in Burlington's Economy	3-9
	Annual Employment by Sector, Burlington 1990-2006	3-11
	Composition by Sector of Burlington Employment 1990-2006	
3.2.1.2	Industry of Employed Persons, by Gender: Burlington, 2000	3-12
3.2.2	Location Quotients: Burlington, 2004	3-13
	Burlington Employment Sectors	3-15
	Burlington Differential Shift, 2000-2006	3-16
3.3.1	Occupational Breakdown of Residents: Burlington, Chittenden County, Vermont, 2000	3-17
3.3.1.1	Composition of Occupational Employment by Gender, Burlington, 2000	3-18
	Percent Change in Occupational Employment by Gender, Burlington, 1990-2000	3-19
3.3.2.1	Employment Destinations: Burlington, 2000	3-20
3.4.1	Employment by Company Size, 2006	3-21
3.4.2	Self Employment and Working at Home, Burlington, 2000, 1990, 1980	3-22
3.5.1	Burlington Sales Tax Revenues, 2000-2006	3-23

3.5.2	Rooms and Meals Tax Revenues, FY 2001-2006 Indexed Rooms and Meals Tax Revenues, 2001-2006	3-24
3.6.1	Real Per Capita Income, 1979, 1989, 1999, Burlington, Chittenden County, Vermont	3-25
	Real Per Capita Income: Burlington, Chittenden County, Vermont, 1979,1989,1999 (2006 Dollars)	3-26
3.6.2	Average Annual and Nominal Wages, Burlington, Chittenden County, Vermont, U.S., 1990, 1995, 2000, 2006 (2006 Dollars)	3-26
	Average Real and Nominal Wages, Burlington, Chittenden County, Vermont, U.S., 1990, 1995, 2000, 2006 (2006 Dollars)	3-27
3.6.3	Burlington Average Wages by Industry, 1990, 2000, 2006 (2006 Dollars)	3-29
	Average Real Wages by Industry, Burlington, 1990-2006	3-30
3.6.4	Distribution of Household Income: Burlington Chittenden County, Vermont, 1999	3-31
3.6.5.1	Rates of Poverty, Individual vs. Family, 1999	3-32
	Rates of Poverty for Individuals, 1989, 1999	3-33
3.6.5.2	Individual and Family Poverty Rates by Race	3-34
	Burlington Poverty Rates by Race, 2000	
3.6.5.3	Burlington Poverty Trends	3-35
	Burlington Poverty Trends	
3.7.1	Annual Average Unemployment Rate, U.S., New England, Chittenden County, Vermont, Burlington, 1984-2006	3-36
3.7.2	Unemployment by Age: Burlington, 1990-2000	3-37
3.7.3	Unemployment Rates by Gender, 2000	3-38
	Labor Force Information by Gender, 2000	

Chapter Two Appendix

Total Employment Trends, 1980-2006	A2-1
Total Private Employment Trends, 1980-2006	A2-2
Workforce Demographics-Location	A2-3
Where Residents of Chittenden County Work	A2-4
Average Annual Unemployment Rate: U.S., New England, Chittenden County, Burlington, 1984-2006	A2-5
Per Capita Personal Income, 1990-2005	A2-6
Real Wages and Income for Chittenden County from 1990-2005	A2-7
Per Capita Income, 1982-2004	A2-8

Composition of Earnings (Total Private Wages) by Sector, Dollar Amount, Chittenden County, 1990-2005	A2-9
Wage Growth in Chittenden County, by Town, 1990, 2000, 2005	A2-10
Self Employment Income for Chittenden County, 1990-2005	A2-11
Self Employment Income for Vermont, 1990-2005	A2-12
Self Employment Income for the U.S., 1990-2005	A2-13
Trends in Total Private Employment	A2-14
Annual Employment by Sector (% of Total): Chittenden County, 1990-2006	A2-15
Recent Employment Trends: Burlington Labor Market Area, 2005-2006	A2-16
Composition of Resident Employment by Sector, 1990	A2-17
Composition of Earnings (Total Private Wages) by Sector, Dollar Amount, Chittenden County, 1990, 1995, 2000, 2005	A2-18
Composition of Earnings (Total Private Wages) by Sector, Percent of Total, Chittenden County, 1990, 1995, 2000, 2005	A2-19
Nominal Average Wage by Industry, Chittenden County, 1990-2005	A2-20
Average Annual Real Wages by Industry, Chittenden County, 1990-2005	A2-21
Total Manufacturing Employment (NAICS codes 31-33)	A2-22
Total Service Sector Employment (NAICS codes 22, 42-81)	A2-23
Total Retail Employment (NAICS codes 44-45)	A2-24
Total Wholesale Employment (NAICS codes 44-45)	A2-25
Total Information Sector Employment (NAICS code 51)	A2-26
Total Finance and Insurance Sector Employment (NAICS code 52)	A2-27
Total Professional and Technical Services Employment (NAICS code 54)	A2-28
Total Education Employment (NAICS code 51)	A2-29
Total Health Services and Social Assistance Employment (NAICS code 62)	A2-30
Total Arts, Entertainment, and Recreation Employment (NAICS code 71)	A2-31
Total Accommodations and Food Service Employment (NAICS code 72)	A2-32
Total Government Employment	A2-33
Location Quotients: Chittenden County, 1998	A2-34
Location Quotients: Chittenden County, 2004	A2-35, 36, 37
Job Creation and Destruction, Chittenden County, 2002-2006	A2-38
Job Creation and Destruction, Chittenden County, 2002-2006	A2-39

Chapter Three Appendix

Birth Rates: Burlington and Chittenden County, 1981-2003	A3-1
Population Burlington and Chittenden County, 1981-2003	A3-2
Educational Attainment: Burlington, Chittenden County, Vermont, U.S., 2000	A3-3
Educational Attainment: Burlington, 1980-2000	A3-4
Total Employment Trends, 1980-2006	A3-5
Annual Employment by Sector: Burlington, 1990-2006	A3-6
Annual Employment by Sector, Percent of Total Employment: Burlington 1990-2006	A3-7
Change in the Number of Jobs in Burlington, 1998-2005	A3-8, 9
Industry by Gender: Burlington, 2000	A3-10
Burlington and National Change in Employment by Industry, 2000, 2006	A3-11
Shift Share Table, 2000, 2006	A3-12
Occupational Breakdown of Residents: Burlington, 1980-1990	A3-13
Occupational Breakdown of Residents: Burlington, 1990-2000	A3-14
Occupation of Employed Persons by Gender: Burlington, 1990	A3-15

Occupations by Gender: Burlington, 2000	A3-16
Percent Change in Occupations by Gender: Burlington. 1990-2000	A3-17
Sales Tax Revenues by Chittenden County Municipality, FY 2000-2006	A3-18, 19
Average Nominal Wage, Burlington, Chittenden County, Vermont, U.S., 1990-2006	A3-20
Average Real Wage, Burlington, Chittenden County, Vermont, U.S., 1990-2006	A3-21
Average Nominal Wage by Industry, Burlington, 1990-2006	A3-22
Average Real Wage by Industry, Burlington, 1990-2006	A3-23
Average Annual Unemployment Rate: U.S., Vermont, New England, Chittenden County, Burlington, 1984-2006	A3-24
Unemployment by Age, Burlington Chittenden County, U.S., 2000	A3-25
Unemployment by Age for Burlington, Chittenden County, U.S., 1990	

Jobs and People IV: Towards a Sustainable Economy
A Strategic Analysis and Economic Plan for Burlington

This 195-page comprehensive report is the fourth in a series of *Jobs and People* Reports that date back to 1984. These studies examine the Burlington and regional economy in order to highlight trends in employment, income, earnings and demographic data, identify economic concerns and opportunities faced by the city, and lay out strategies to strengthen the local and regional economy.

Jobs and People IV updates the economic and demographic data on Burlington's local and regional economy presented in *Jobs and People III*, published in July 1994. That Report examined how growth and decline played out in the local and regional economy.

Jobs & People IV:

- presents and analyzes current levels and changes in the economic performance and structure of the regional economy (Chittenden County) of which the Burlington economy is a part;
- looks more closely at the economic and demographic condition of local Burlington residents and how well they are being served by the local and regional economy; and
- reviews current economic development programs in Burlington and recommends next steps that respond to changes in the local and regional economy, take advantage of emerging opportunities, and reduce the risks faced by the Burlington and surrounding economy.

Jobs & People IV closely examines the regional economy in which Burlington is embedded. Since Burlington residents shop and work outside of Burlington, and residents from outside Burlington work and shop in the City, it is essential that we understand the regional economy before we look more closely at the part of that larger economy that is situated within the City limits. The report also looks at the different industrial sectors that provide jobs, the quality of these jobs by sector, and the growth or decline in different sources of employment over the last two to three decades.

An analysis of the demographic characteristics of Burlington residents, the earnings of its businesses and the incomes of its residents, where residents are employed (sectors), the quality of the jobs they hold, and the prospects for growth or decline in different sources of employment is included.

The Report examines data from the last 20-30 years and proposes broad strategies to create and retain high quality jobs, prepare members of the labor force for work and better jobs, and proactively bring qualified workers and appropriate employment opportunities together.

Recommended strategies cover regional planning, infrastructure development, local purchasing, sectoral priorities, business development, workforce training and support, and comprehensive community economic development.

Chapter 1. Introduction**1.1 Purpose of the Report**

This is the fourth in a series of Jobs and People Reports that date back to 1984. These studies examine the Burlington and regional economy in order to present trends in employment, income, earnings and demographic data, identify economic concerns and opportunities faced by the city, and lay out strategies to strengthen the local and regional economy.

This report, *Jobs and People IV*, updates the economic and demographic data on Burlington's local and regional economy presented in Jobs and People III, published in July 1994. A lot has happened in the last 14 years with the national economy experiencing considerable economic growth in the late 1990s followed by a period of slower growth and decline since 2000. This Report examines how this growth and decline played out in the local and regional economy.

This Report:

- presents and analyzes current levels and changes in the economic performance and structure of the regional economy (Chittenden County) of which the Burlington economy is part;
- looks more closely at the economic and demographic condition of local Burlington residents and how well they are being served by the local and regional economy; and
- reviews current economic development programs in Burlington and recommends next steps that recognize changes in the local and regional economy, takes advantage of emerging opportunities, and reduces the risks faced by the Burlington and surrounding economies.

Jobs and People IV updates and analyzes the economic and demographic data presented in the previous Report but does not re-create the questionnaires of regional businesses nor the resident and business focus groups that provided additional data for that Report. The results of a smaller Burlington business survey are included in Chapter 4. The data issues resulting from changes in industry classifications required considerable attention so the decision was made to focus primarily on the data update and analysis in this Reportⁱ.

1.2 Burlington's Development Goals

Economic development is part of a larger goal of sustainable community development. Even though this Report focuses on the economic dimensions of community development, it's essential that the impacts of economic development strategies on these larger goals be kept in mind.

1.2.1 Sustainable Community Development

Officials in Burlington’s government, when discussing the long-term goals of the City, often refer to the goal of a Sustainable Burlington. This goal essentially places the social, economic, cultural and physical development of the City within a larger ecological system that has limits in the resources it can provide and the waste that it can absorb. Consequently, all development activities must satisfy an environmental/ecological impacts test along with measures of economic and social sustainability. These sustainability goals are often referred to as the four “E”s:

- Environment – preservation and enhancement of the natural environment/ecological system upon which the community relies
- Economic Development – creation of a vital economy that produces needed goods and services, provides quality jobs, full employment, adequate and equitable incomes, and uses resources efficiently
- Social Equity and Community – provision of equal opportunities, and an enhanced sense of community and place, for all individuals
- Education – promoting high quality education for youth and opportunities for life-long learning for all

1.2.2 Community and Economic Development Goals and Priorities

Within the context of sustainable development, Burlington’s Community and Economic Development Office (CEDO) has the following specific goals and prioritiesⁱⁱ:

- The quality of life in Burlington is enhanced by a strong, diverse and vital downtown
 - Burlington’s waterfront is developed as a cultural, recreational, social and economic resource for the entire community
 - Businesses that offer essential goods and services are located within the City, readily available to all residents
 - The startup and expansion of businesses are nurtured, including the support of a readily accessible core of centrally-located business services
 - Burlington’s 200+ acre agricultural breadbasket – home to market farming, community supported agriculture, community gardens, farmer training, and composting – thrives
 - Burlington continues to generate a strong, diverse base of locally-owned enterprises
 - Sites with real or perceived contamination issues are redeveloped into productive use
 - Quality employment supports and opportunities are available for those who are traditionally underserved, and workers are earning a living wage
 - Transportation needs are addressed, traffic congestion reduced, access in and around the downtown improved, and greater use of alternative modes of transportation promoted
 - Burlington’s competitive advantages are maximized by supporting the development of targeted industries including tourism, telecommunications intensive businesses, the environmental technology industry, financial services, specialty foods, media, printing and publishing, the arts, and sustainable natural resource promotion
-

- New cooperative relationships are developed between the City and other communities in the region to strengthen the regional economy for the benefit of all

1.2.3 Jobs and People

Economic development focuses on the economic well-being of households, neighborhoods and the larger community. Improving economic well-being, however, involves a wide variety of strategies that strive, for example, to reduce costs of living, help people get into the labor market and prepare them for livable wage employment, support existing and new businesses that create and retain good jobs for those who need them, effectively and fairly link people and employment opportunities, ensure credit at reasonable rates for qualified individuals and organizations, and provide public services that improve the quality of life of residents without excessive taxation.

This Jobs and People Report concentrates on employment and income: the achievement of full employment and quality jobs, adequacy of income and reduction of poverty, equity of income and wealth distribution, and economic stability and security. Towards this end, the Report highlights strategies to create and retain high quality jobs, prepare members of the labor force for work and better jobs, and proactively bring qualified workers and appropriate employment opportunities together. This is a critical part of community economic development but it is only a part. Ultimately employment concerns and strategies have to be linked to efforts to create other forms of income, reduce the costs to residents of energy, healthcare, and other goods and services, make credit available for household and small business investment, and provide needed public services to enhance the quality of life for Burlington residents. And all of these strategies must be linked to the larger effort of creating a Sustainable Burlington.

This report examines data from the last 20-30 years and:

- Presents key measures of individual, household and community economic well-being in Burlington and the surrounding Chittenden County
- Examines the employment opportunities in the regional and local economy that, to a large extent, determine the levels and distribution of income experienced by local residents
- Reviews past and current programs and policies directed at strengthening employment and income; and
- Proposes broad strategies to help guide future policy and program decisions.

In Chapter 2 this Report looks closely at the regional economy in which Burlington is embedded. Since Burlington residents shop and work outside of Burlington, and residents from outside Burlington work and shop in the City, it is essential that we understand the regional economy before we look more closely at the part of that larger economy that is situated within the City limits. In this chapter we ask how well that economy has served regional residents in terms of full employment, adequate and fair incomes, poverty levels and other measures of performance. We also look at the different industrial sectors that provide jobs, the quality of these jobs by sector, and the growth or decline in different sources of employment over the last two or three decades.

Chapter 3 looks more closely at the demographic characteristics of Burlington residents, the earnings of its businesses, the income of its residents, where residents are employed (sectors), the quality of the jobs they hold, and the prospects for growth or decline in different sources of employment.

Finally, Chapter 4 presents lessons drawn from the analysis of the regional and Burlington economies and links these lessons to Burlington's past, current and proposed economic development policies and programs. The goal of this chapter is to provide a broad strategic framework to help guide policy and program decisions in the future.

Endnotes

ⁱWhen *Jobs and People III* was published in July 1994 the classification systems for coding industries and occupations were different from what are now used. In the late 1990s the industry coding system was changed from Standard Industrial Classification (SIC) to North American Industrial Classification System (NAICS) and a similar change was made for occupation level data. Consequently, the industry and occupational level data in *Jobs and People IV* are not directly comparable to the data in *Jobs and People III*. In an effort, though, to provide CEDO and other users of this data with the ability to do time series analysis, we have taken advantage of secondary data sources such as the Vermont Department of Labor's Covered Employment and Wages Program that has reclassified older SIC data into NAICS. Any industry or occupational data appearing in this report, regardless of the year, has been converted to the current classification standards.

An Excel file has been created for each chapter in this report. The Excel files provide some additional information, more detail on sources and NAICS and SIC code numbers for all industry and occupational data. Perhaps most importantly, the Excel files show all of the calculations underlying the tables and charts in this report. While this particular document may become dated as time passes, we hope the Excel files will make it easy to keep the data up-to-date and for users to build on these datasets.

Not only have industry and occupation classification systems changed since the early 1990s, but the philosophy of community and economic development has changed and the benchmarks that measure a healthy economy have evolved too. For example, a strong manufacturing sector used to be a key measure of success for a community but now the information and arts sectors are identified as crucial ingredients in a "creative economy" that stimulates economic growth and development. *Jobs and People IV* primarily, but not exclusively, updates the charts and tables from *Jobs and People III* and thus provides a rich foundation of data that has been traditionally tracked to measure the well-being of an economy. In addition, we have augmented this report with more data on the Information, Arts and related sectors than appeared in *Jobs and People III*. Specifically, we added 2 digit NAICS data for Information (NAICS 51), Professional and Technical Services (NAICS 54) and Arts, Entertainment and Recreation (NAICS 71). We expect that users of the data will continue the process of making sure that the data collected and reported is the most relevant to understanding the issues and concerns facing Burlington and Chittenden County.

ⁱⁱ*From How Burlington Became an Award Winning City: An Historical Summary of Burlington's Economic Development Efforts with a Vision for the Future 1983-2008, CEDO, Burlington, Vermont (2008)*

Chapter 2. Performance and Structure of the Regional Economy

The economic well-being of Burlington residents depends in large part on the strength of the regional economy of which Burlington is a part. This regional economy provides a source of employment and goods and services for Burlington's workforce and households. With Chittenden County representing the bulk of this regional economy, and providing a geographical and political entity where data is available, we begin by looking at the overall Chittenden economy. We then look at major industrial sectors and subsectors to try to identify areas of concern and opportunity.

2.1 The Overall Chittenden County Economy

We address the following questions about the aggregate Chittenden County economy:

- What is the total employment generated by establishments within the County, how has this changed over time, and how does this differ from total *private* (non-governmental) employment?
- If we make the assumption that most residents both live and work in Chittenden County, to what extent has the employment generated by local establishments met the total need for employment (unemployment rates)?
- How does this total employment translate into income for County residents?

2.1.1 Aggregate Employment

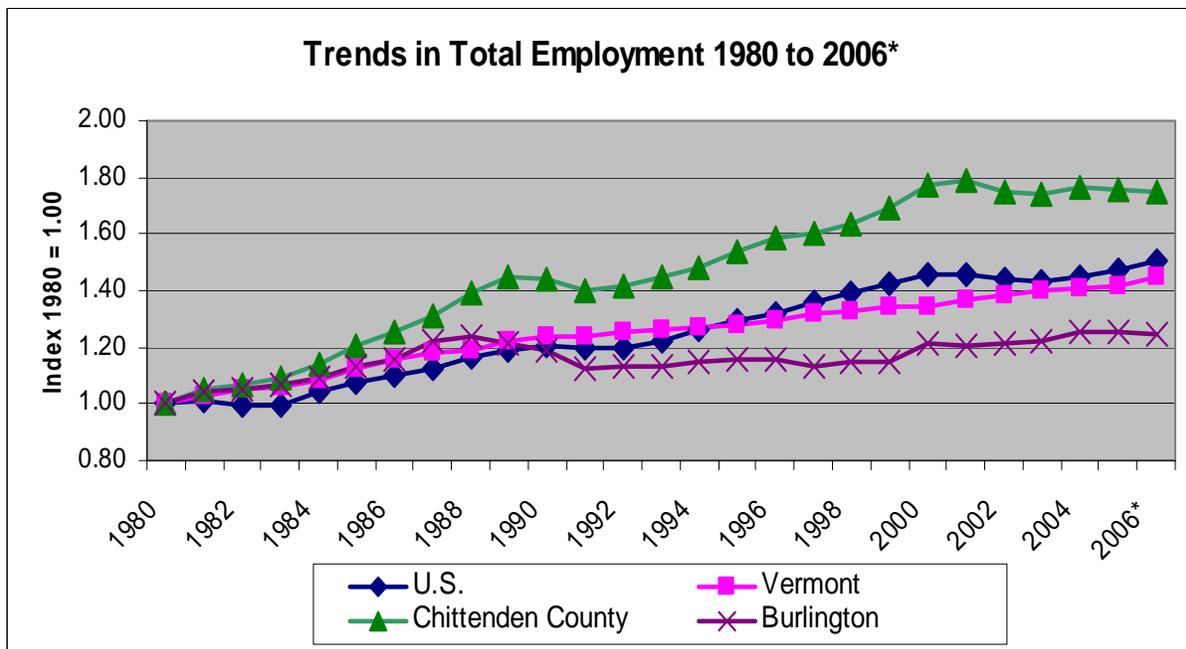
The governmental, private non-profit and business enterprises of Chittenden County offer employment to County and non-county residents. The total employment provided by these establishments in 1980, 2000 and 2006 is shown in the table below.

Area	1980	2000	1980-2000 Change (%)	2006	2006-2000 Change (%)
Chittenden County	53,849	95,354	77%	94,208	-1.2%
Burlington	25,966	31,493	21%	32,377	2.8%
Vermont	249,700	335,800	34%	361,000	7.5%
USA (in 1000s)	90,528	131,785	46%	136,174	3.3%
Chittenden w/o Burlington	27,883	63,861	129%	61,831	-3.2%

Total employment growth in Chittenden County is impressive. Between 1980 and 2000, total employment in Chittenden County grew more than one and a half times faster than the country, and twice as fast as the state. Employment provided by Burlington businesses within the County, however, grew more slowly, presumably reflecting limitations in the physical capacity of the City to provide the space needed for new and/or expanding enterprises as compared to the County. This difference in employment growth is even more vivid when we look at the employment growth rate of the County less the City. From 1980 to 2000 employment in this area grew by 129 percent or almost four times faster than the state of Vermont.

Employment trends since 2000 are less impressive as County employment fell while, over the same period, employment in Burlington, the state and the country were increasing.

These trends are shown in the graph below. The annual employment data behind the graphs can be seen in Chapter 2, Appendix 1.



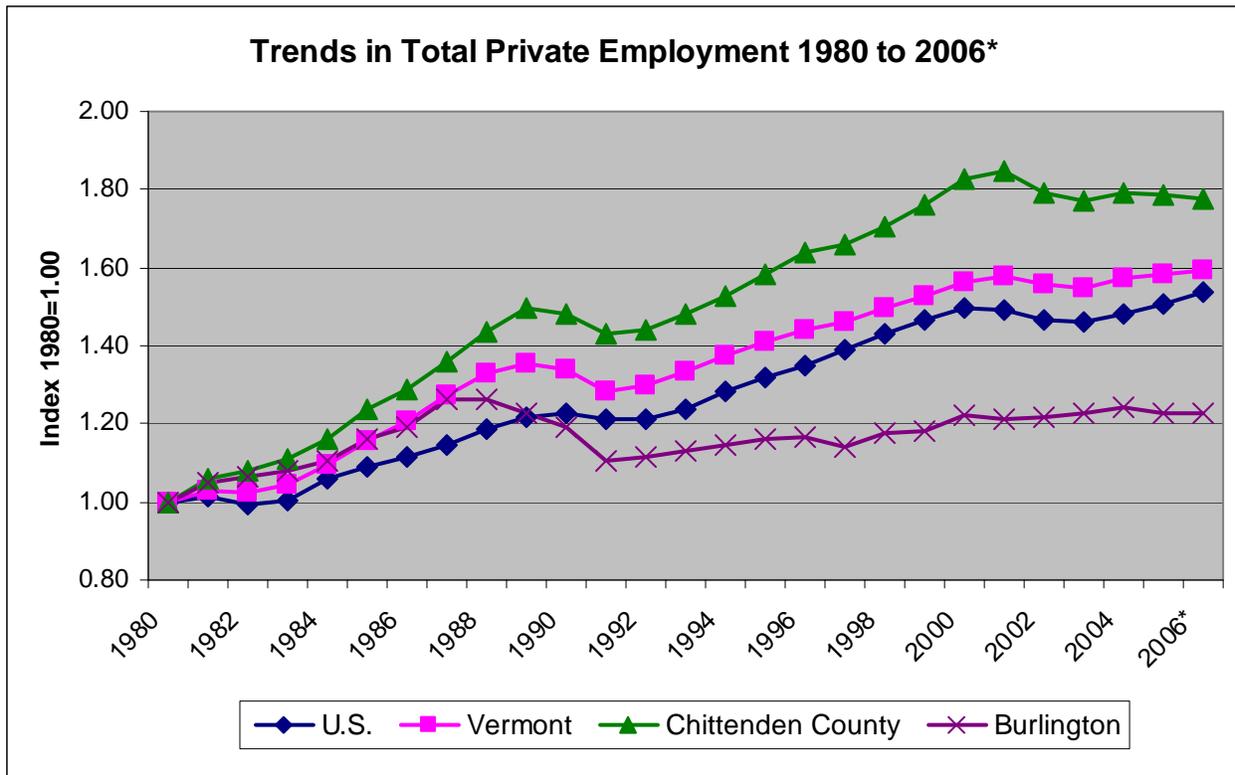
***Note:** 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.

When governmental organizations are removed, total private employment (see table on page 3) follows a pattern similar to total employment. Chittenden County private employment grows rapidly (83% between 1980 and 2000) and then levels off after 2000; the same pattern but with faster growth (133%) characterizes the part of Chittenden County outside of Burlington. The 1980-2000 growth rates are faster than both the state (34%) and the country (49.7%). Burlington private employment grows slower than all of these entities (22% from 1980-2000) and its growth slows almost to a standstill from 2000-2006.

Total Private Employment, 1980-2006

Area	1980	2000	1980-2000 Change (%)	2006	2006-2000 Change (%)
Chittenden County	44,879	82,107	83.0%	79,757	-2.86%
Burlington	20,208	24,653	22.0%	24,771	.478%
Vermont	159,571	249,100	56.1%	253,950	1.95%
USA (in 1000s)	74,154	110,996	49.7%	114,184	2.87%
Chittenden w/o Burlington	24,671	57,454	133%	54,986	-4.30%

Total private sector employment is graphed below; the underlying annual data is in Chapter 2, Appendix Table 2.



*Note: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.

In looking at total and private employment, it's interesting to examine the relative importance of public establishment employment at the city, county, state and national levels. Although we only compare three years, and need to be somewhat cautious about generalizing, this data indicates that the ratio of private employment to total employment is relatively stable at the city and county level, varies over time at the state level, and is growing at the national level.

Total Private Employment/Total Employment, 1980-2006

	1980	2000	2006
Chittenden County	83.3%	86.1%	84.7%
Burlington	77.8%	78.3%	76.5%
Vermont	63.9%	74.2%	70.3%
U.S.A.	81.9%	84.2%	88.9%

The differences across entities are more dramatic. The state of Vermont has the lowest percentage of private employment (63-74%), perhaps reflecting the fact that Vermont has more non-profits per capita than any other state (Putnam). Burlington has a somewhat higher percentage of private employment (76-78%), and Chittenden County and the USA percentages are the highest and in the same range (82-89%). We will look more closely at the importance of public sector employment in Burlington and Chittenden County later.

2.1.2 Unemployment

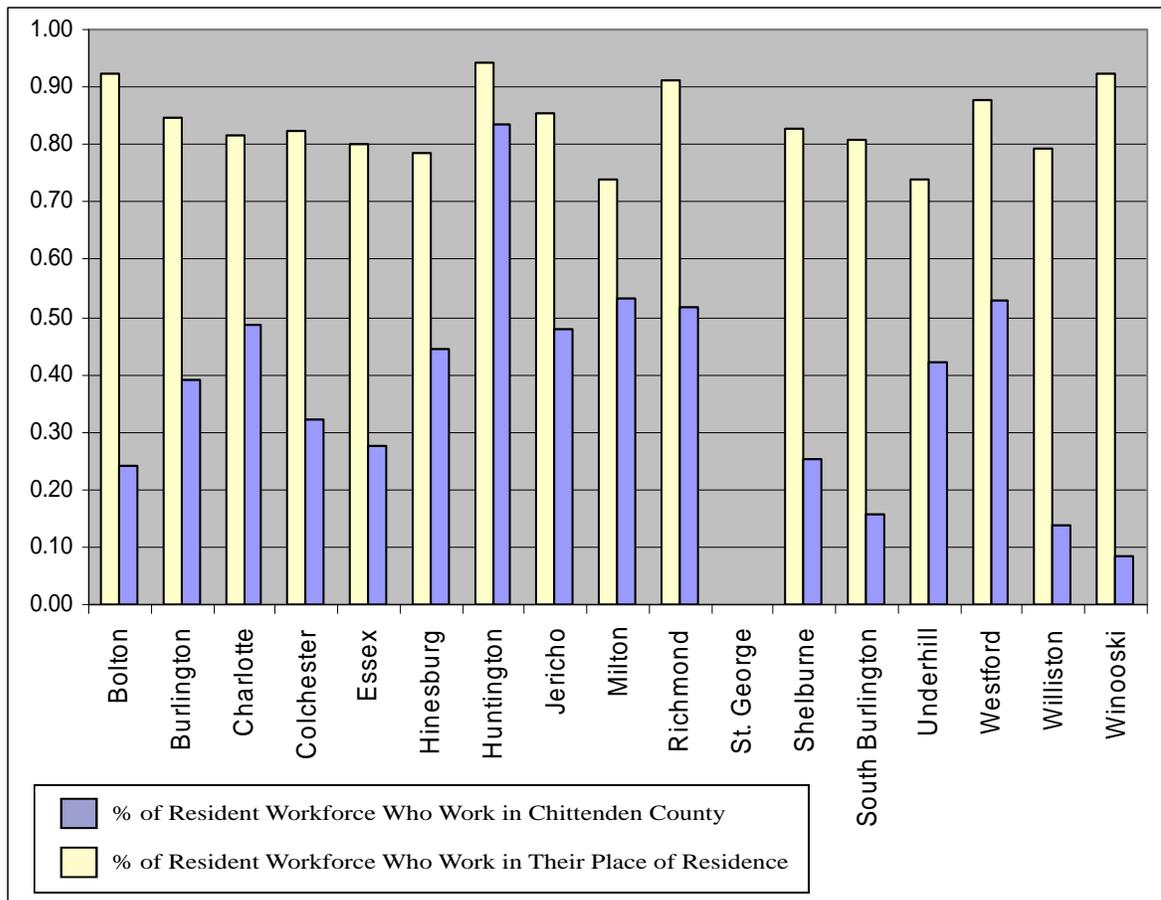
We can now ask how well has this total supply of jobs met the demand or need for jobs?

Total Unemployment

When we look at unemployment in Chittenden County we are moving to data about County residents rather than County employers. Given that some residents might be employed outside of the County and some establishments may employ people who do not reside within the County, there is not necessarily a complete correspondence between the two sets of employment data.

The chart below (data is given in Chapter 2, Appendices 3 and 4) suggests that the assumption that most individuals who live in Chittenden County also work there is reasonable. For most communities, the percentage is approximately 80 percent or greater, and the percentages seem reasonably consistent across different communities within the County. Although approximate, we will assume a reasonable connection between County resident unemployment and employment in County establishments.

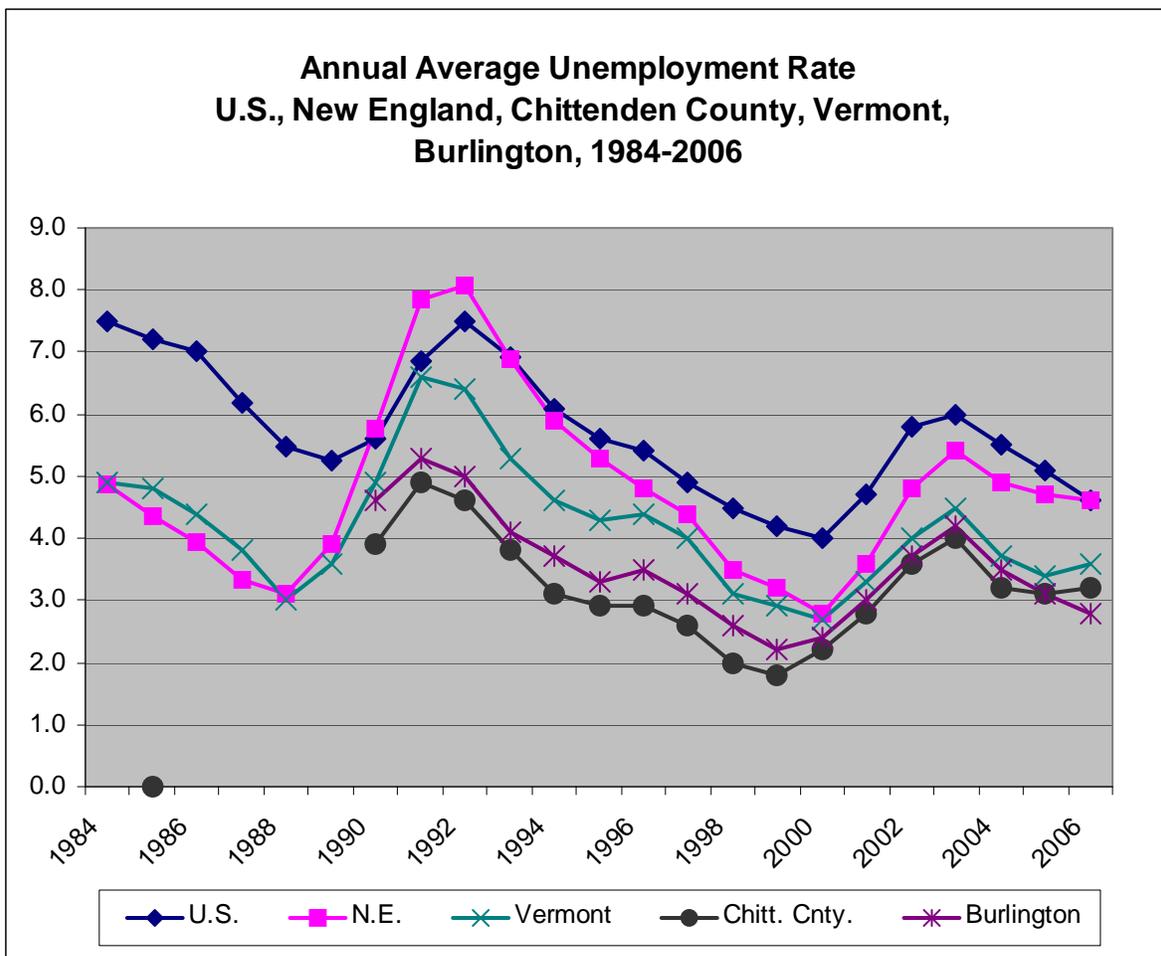
Employment Location for Chittenden County Residents



Source: U.S. Census, 2000 Minor Civil Division/County-to-Minor Civil Division/County Worker Flow Files

The graph below charts the annual average unemployment rate in Chittenden County along with Burlington, the state of Vermont, New England and U.S. unemployment levels for 1984-2006 (1990-2006 for Chittenden and Burlington – see note to table). The full average unemployment table can be seen in Chapter 2, Appendix 5.

Unemployment rates for Chittenden County are consistently lower than Vermont, New England and the U.S., and lower than Burlington for all years except 2006. This speaks well for the Chittenden economy and suggests that residents are usually able to find work; the quality of those jobs, however, is another question. We address that later on.



This section shows unemployment rates in the U.S, New England, Chittenden County, Vermont, and Burlington from 1984 to 2006. The data was gathered from the Bureau of Labor Statistics. However, data for Chittenden County and Burlington between the years of 1984 and 1989 could not be found.

Unemployment by Age Group

The distribution of the unemployed across age ranges in Chittenden County, compared to the U.S. and Burlington, is shown in the tables below. The age distribution of County unemployment follows the U.S. fairly closely in 1990 but in 2000 is much more likely to include younger people in Chittenden than in the U.S. For example, those between the ages of 16 and 24 constituted 36.5% of the unemployed in Chittenden in 1990 compared to 33.2% nationally; however, in 2000, this younger population made up 50.5% of the Chittenden unemployed compared to only 37.1% nationally. A similar shift occurred in Burlington. While overall unemployment rates may be low in the County, and not considered a major problem, the fact that over half of those unemployed are between 16 and 24, and that this percentage has been growing, may need attention. While it may reflect a change in the population age distribution, it may also indicate a change in the availability of jobs that young people can or want to fill.

It is important to remember when looking at these tables that the percentages do not show the percentage of unemployed in the age group, but instead the percentages of the total unemployed that are from different age groups.

Unemployment by Age: 1990
Percent Unemployment by Age: Burlington, Chittenden County

	16-19	20-24	25-54	55-64	Total
Burlington	192	394	731	74	1,409
Chittenden Cty.	589	634	1,912	172	3,350
U.S.	1,211,850	1,374,257	4,530,663	494,297	7,792,248

	16-19	20-24	25-54	55-64
Burlington	13.6%	28.0%	51.9%	5.3%
Chittenden Cty.	17.6%	18.9%	57.1%	5.1%
U.S.	15.6%	17.6%	58.1%	6.3%

Source: U.S. Census Bureau U.S. Census 1990: Labor Force Characteristics, Table 173

Unemployment by Age: 2000
Percent Unemployment by Age: Burlington, Chittenden County, U.S., 2000

	16-19	20-24	25-54	55-64	Total
Burlington	298	332	526	59	1,222
Chittenden Cty.	760	941	1,278	196	3,367
U.S.	1,474,882	1,466,888	4,251,038	484,631	7,947,286

	16-19	20-24	25-54	55-64
Burlington	24.4%	27.2%	43.0%	4.8%
Chittenden Cty.	22.6%	27.9%	38.0%	5.8%
U.S.	18.6%	18.5%	53.5%	6.1%

Source: U.S. Census Bureau, U.S. Census 2000: (SF3), Table QT-P24

Unemployment by Gender

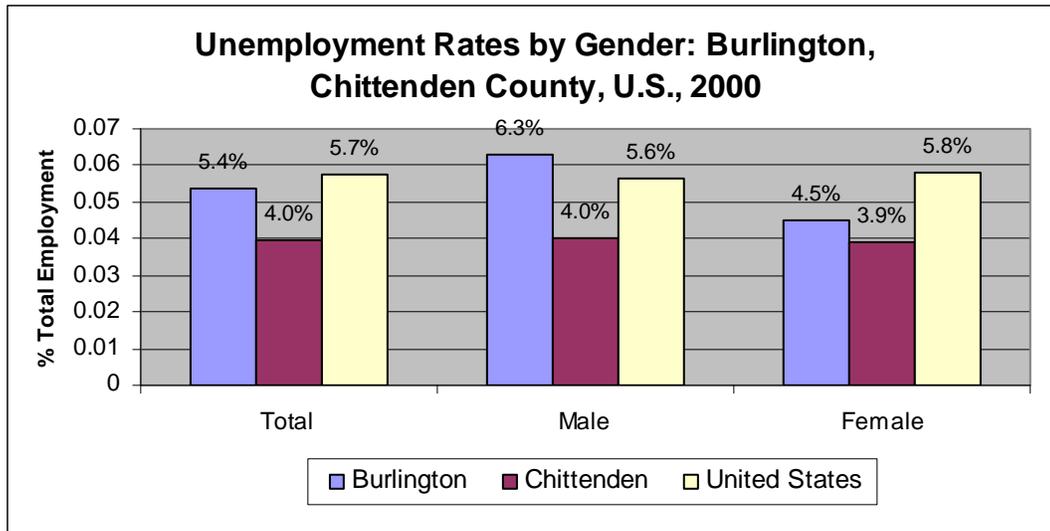
The unemployment rates of men and women in the County, Burlington, and the U.S., for the year 2000, are shown in the table and graph below. In Chittenden, not only is the overall rate of unemployment low compared to the nation (4.0% versus 5.7%) but the unemployment rates of men and women are fairly close (4.0% and 3.9% respectively).

Unemployment by Gender: 2000

	United States	Chitt. Cty.	Burlington
TOTAL:	217,168,077	116,010	33,294
MALE	104,982,282	55,834	15,787
In labor force	74,273,203	44,110	11,394
In Armed Forces	987,898	351	77
Civilian	73,285,305	43,759	11,317
Employed	69,091,443	41,981	10,599
Unemployed	4,193,862	1,778	718
Not in labor force	30,709,079	11,724	4,393
FEMALE	112,185,795	60,176	17,507
In labor force	64,547,732	40,446	11,246
In Armed Forces	164,239	51	6
Civilian	64,383,493	40,395	11,240
Employed	60,630,069	38,806	10,736
Unemployed	3,753,424	1,589	504
Not in labor force	47,638,063	19,730	6,261

	United States	Chitt. Cty.	Burlington
Male	5.6%	4.0%	6.3%
Female	5.8%	3.9%	4.5%
Total	5.7%	4.0%	5.4%

Source: U.S. Census Bureau, U.S. Census 2000, Employment Data, Table P43



Source: U.S. Census Bureau, U.S. Census 2000, Employment Data, Table P43

2.1.3 Income

While the employment data for Chittenden County is generally impressive, we still need to ask how well these total jobs translated into income for households. Although household income can come from sources other than employment (dividends, rents, etc.), we focus on income from employment (wages, salaries). We also look at income from self-employment.

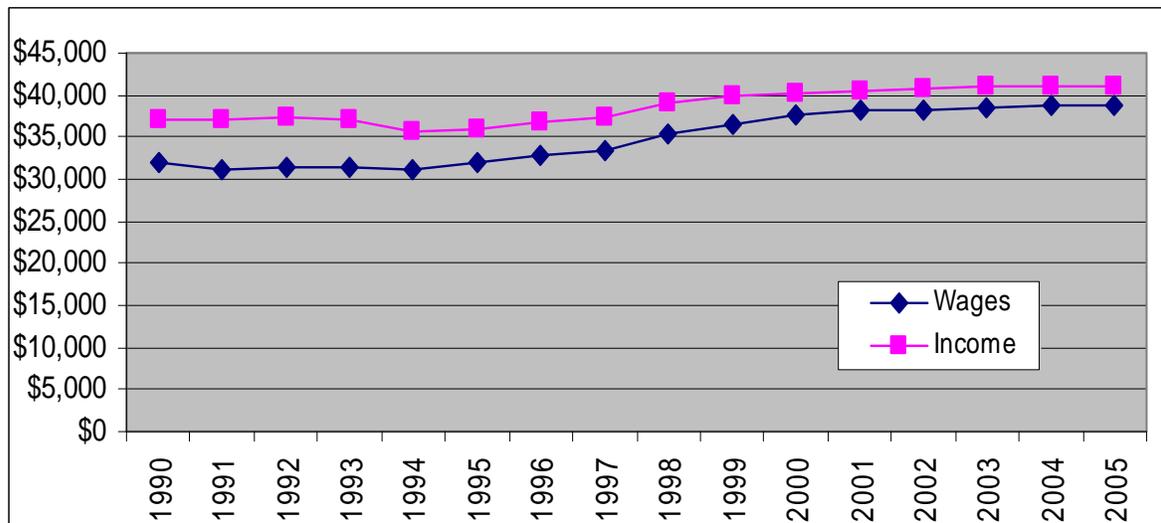
Personal Income

Nominal and real (inflation adjusted) per capita personal income levels in Chittenden County, compared to Vermont and the U.S., for 1990 and 2005, are shown in the table below. The levels for each year in the period are shown in Chapter 2, Appendix 6. While personal income includes more than wages and salaries, changes in personal income over time is a reasonable proxy for changes in income from labor. This can be seen in the graph below. In this graph wages and personal income have followed similar trends, and the difference between the two figures appears to have grown smaller over time. The data this chart is based on can be found in Chapter 2, Appendix 7.

Chittenden County, Vermont, and National Nominal and Real (inflation-adjusted, in 2006 dollars) Per Capita Income 1990, 2005

	Chittenden County		Vermont		U.S.	
	Nominal (\$)	Real (\$)	Nominal (\$)	Real (\$)	Nominal (\$)	Real (\$)
1990	20,710	31,945	17,820	27,574	19,477	30,043
2005	37,501	38,709	32,717	33,771	34,471	35,581
Change (%)	81%	21%	83%	22%	77%	18%

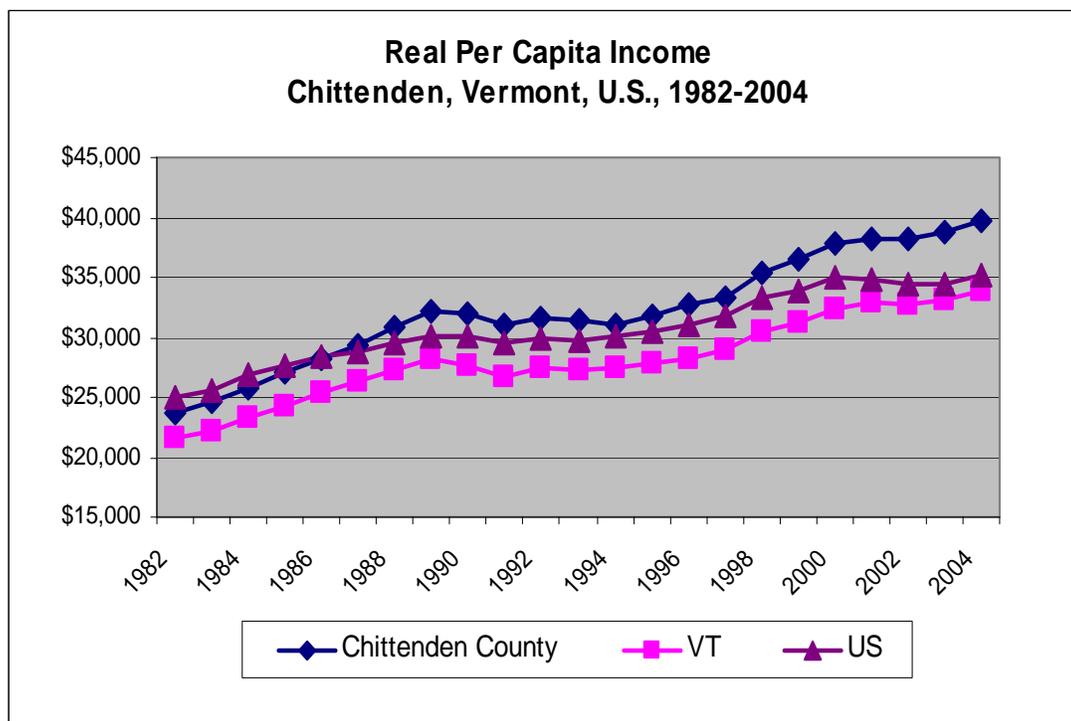
**Real Wages and Income for Chittenden County from 1990 to 2005
(in 2006 dollars)**



Sources:

Regional Economic Information System Bureau of Economic Analysis
 U.S. Department of Commerce Bureau of Economic Analysis Personal Income Summary Data Table CA04
 Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor,
 Economic & Labor Market Information Office, Covered Employment and Wages

Chittenden County residents’ average per capita personal income was higher than both the state and the U.S., and it grew, along with Vermont, faster than the nation. The changes over time can be seen in the graph below, showing the change in real (inflation-adjusted) per capita personal income from 1982 to 2004 in 2006 dollars. The data for this chart is found in Chapter 2, Appendix 8, and nominal average income or growth rate can be seen in Chapter 2, Appendix 6.



Source: Bureau of Economic Analysis, U.S. Department of Commerce; Regional Economic Information System; Table CA1-3 <http://www.bea.gov/regional/reis/CA1-3fn.cfm>

When we look at real personal income starting in 1982 and going to 2004, we see Chittenden real incomes higher than Vermont throughout this period and higher, and growing faster, than the U.S. after 1986. (See Chapter 2, Appendix 6). The relationship of Chittenden personal incomes to the U.S. is shown below.

REAL PER CAPITA INCOME (2006 Dollars): Chittenden as a % of the US							
1982	1983	1984	1985	1986	1987	1988	1989
0.9507331	0.96053257	0.95810237	0.9779103	0.9950136	1.0211207	1.0417749	1.0701944
1990	1991	1992	1993	1994	1995	1996	1997
1.0633054	1.0536899	1.0526518	1.0529842	1.0316165	1.0439851	1.0544778	1.046104
1998	1999	2000	2001	2002	2003	2004	
1.062865	1.078743	1.0802815	1.0989403	1.1086336	1.1238089	1.1256884	

Wages

Over the period of 1990 to 2005, total private wages generated by Chittenden County businesses grew from \$1,577,930,000 (1990) to \$3,163,371,000 (2005), a doubling in 15 years or an annual rate of about 7% (see Chapter 2, Appendix 9).

Average annual wages in Chittenden County rose from \$24,044 in 1990 to \$34,327 in 2000, a 4.3% annual growth rate, and to \$39,766 in 2005 at a slower annual growth rate of 3.2%. This was faster than the growth in the consumer price index between 1990-2000 (3.2%) and between 2000-2005 (2.7%) (See Chapter 2, Appendix 10 (this table also shows the growth in wages for different towns in Chittenden County)).

From 1990 to 2000, average annual wage growth in Chittenden County and Burlington was less than average growth nationally and greater than average growth in Vermont. Wage levels were also greater than average wages nationally or within Vermont, a trend that continued from 2000 to 2005.

While Burlington and Chittenden County wage increase rates did not slow as much as they did nationally from 2000 to 2005, Vermont was able to overtake Chittenden County in having a higher percent of wage increase. Given Chittenden County's significantly higher average wages than Vermont overall, however, as long as wage increases remain stable, this should not be a cause for concern.

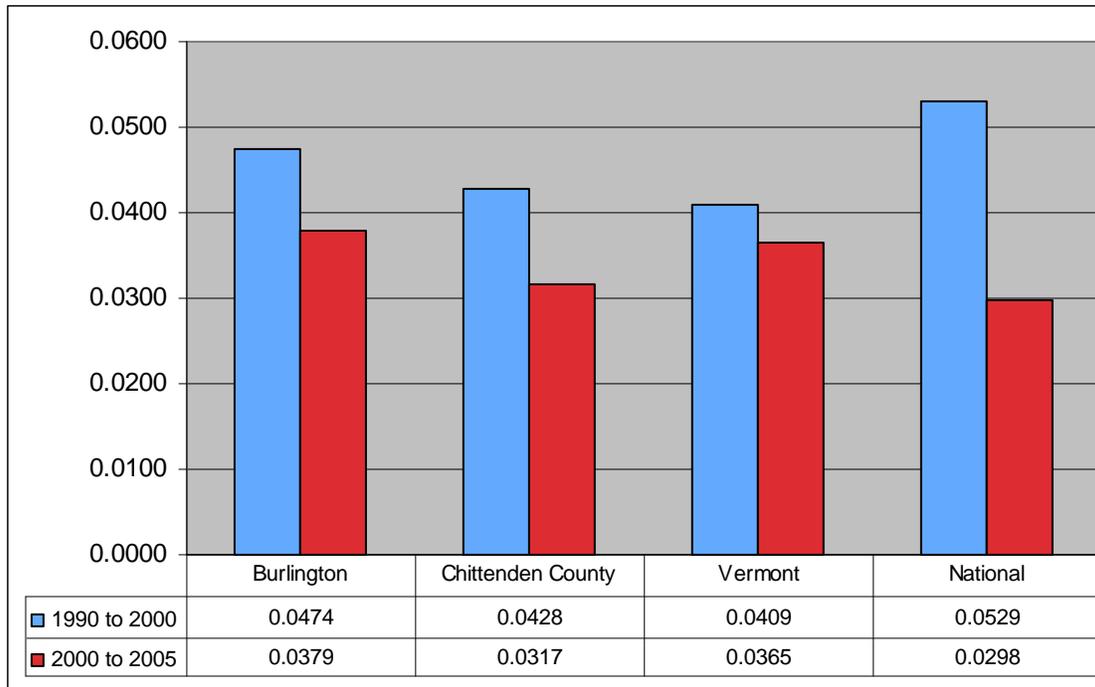
**Wage Growth in Burlington, Chittenden County, Vermont, and the U.S.
for 1990, 2000, and 2005**

	Burlington	Chittenden County	Vermont	National
1990	\$22,948	\$24,044	\$20,531	\$21,028
2000	\$33,835	\$34,327	\$28,925	\$32,155
2005	\$40,240	\$39,766	\$34,199	\$36,953

Sources:

Vermont Department of Labor, Economic and Labor Market Information,
Employment and Wages Report, Covered Employment & Wages (QCEW), National
Average Wage Index <<http://www.ssa.gov/OACT/COLA/AWI.html#Series>>

Percent Increase in Wage Growth in Burlington, Chittenden County, Vermont, and the U.S. for 1990, 2000, and 2005



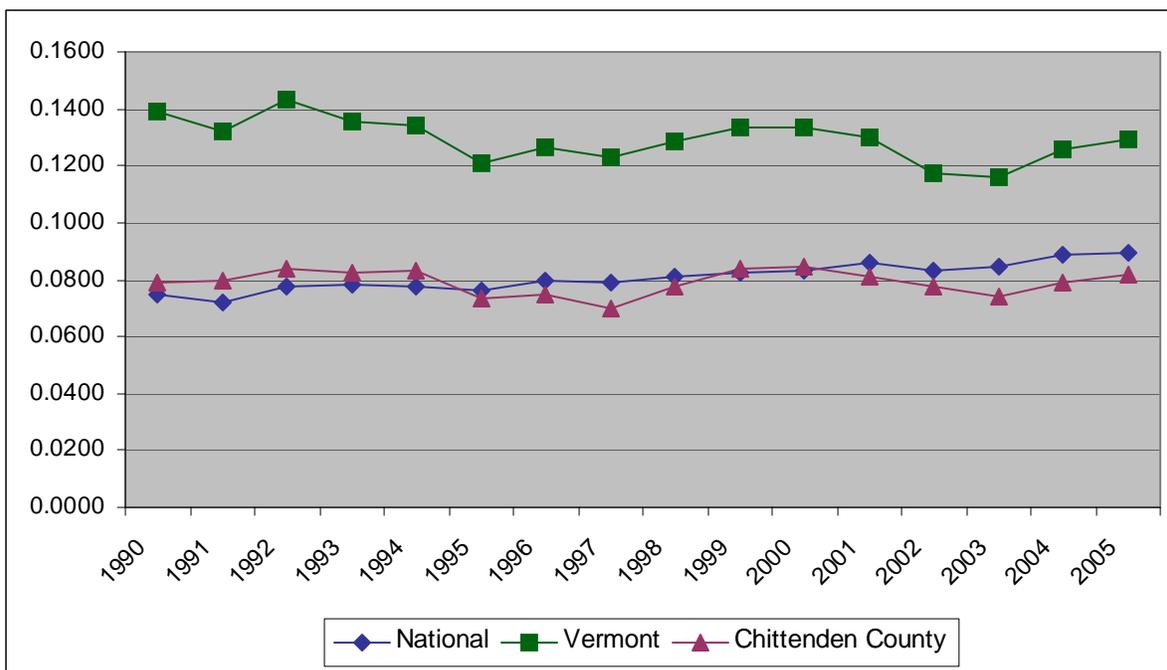
Source: Vermont Department of Labor, Economic and Labor Market Information, Employment and Wage Report

Self-Employment Income

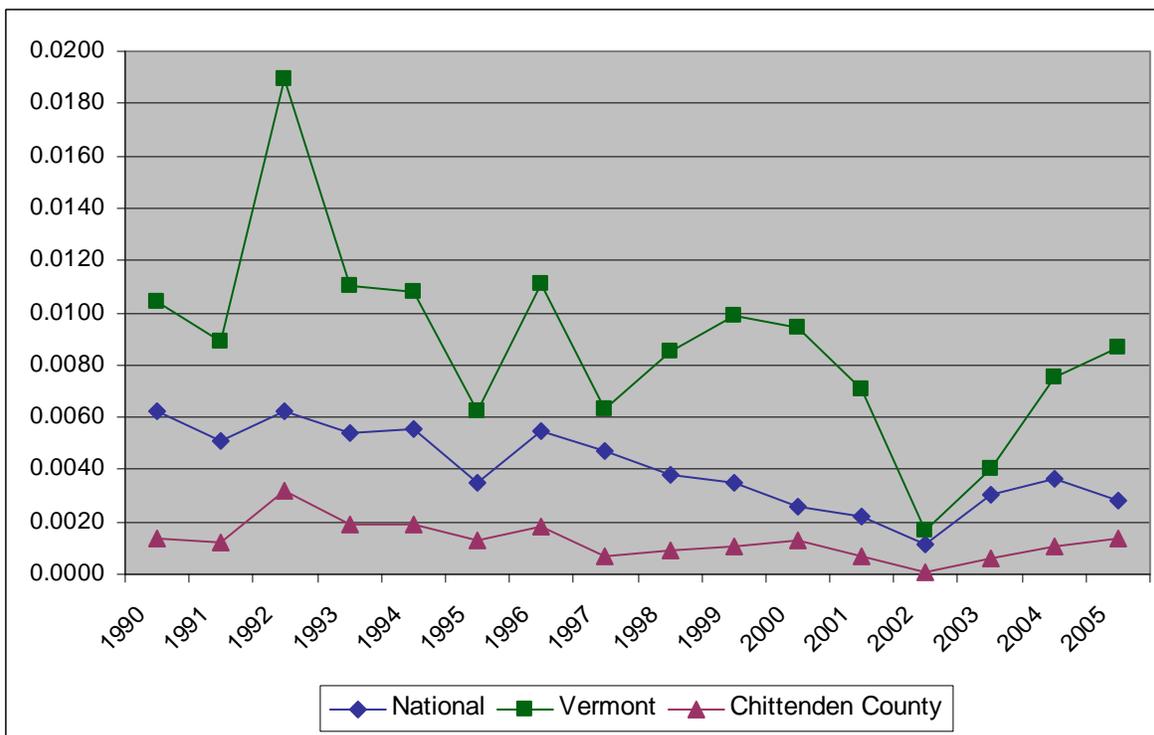
The total self-employment or proprietor’s income for Chittenden County in 2005 was \$440,472,000 of which only \$7,814,000 was farm self-employment. This self-employment income was 8.16% of total earnings. The trend in the self-employment income as a percentage of total earnings has been steady over the period from 1990-2005, running at approximately 8%.

When compared to Vermont and the rest of the country, the proportion of total self-employment income as a percentage of total income in Chittenden County has been steady with the national rate, while somewhat below the Vermont percentage. Chittenden County is below the national average and significantly below the rest of Vermont in the percentage of self-employment income from farming. For more detail on total earnings for farm, non-farm, and total self employment, refer to Chapter 2, Appendices 11-13.

Self-Employment Income as % of Total Earnings 1990-2005



Farm Income as % of Total Earnings 1990-2005



Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional economic profiles, Table CA30

Income Stability

While income levels are essential, it's also important to consider job turnover and other factors that make local residents subject to changes in income. Data below on job creation and destruction, and the losses and gains in jobs that result, is one indicator of the extent to which job and income stability needs attention.

Job Creation and Destruction

Establishments start-up and shutdown, expand or contract, so that jobs are continually created and eliminated. The table below shows the total number of jobs created and jobs eliminated, and the net job change, for different aggregate sectors over the four year period 2002-2006 in Chittenden County.

Chittenden County Job Creation and Destruction, 2002-2006

1st Q 2002 to 1st Q 2006	Gross Job Creation	Gross Job Loss	Net Job Change
Total	31,167	30,546	621
Private Ownership	27,927	28,541	-614
Government	3,239	2,006	1,233
Goods Producing	4,213	6,653	-2,440
Service Providing	23,714	21,889	1,828

Source: Vermont Department of Labor, Job Destruction and Creation Annual Statewide and County Reports, www.vtلمي.info/lmipub.htm#9. See also tables in Chapter 2, Appendix 36.

This process of job creation and destruction is dramatic, with jobs created or destroyed in any one year sometimes reaching 10% or more of average employment, and the totals for a four year period are quite impressive. At the same time, however, the net change in jobs created in some sectors is much more modest. Total and private establishments, and service providing establishments, while creating and destroying 1,000's of jobs over this period, experienced relatively smaller net changes in jobs overall. The net gains and losses in government and goods producing sectors, however, are higher relative to job creation and destruction indicating a clear upward or downward trend. The well established shift from goods producing to service providing jobs is also apparent.

Net job changes each year by sector are also interesting (see table below). 2002 was a year of contraction for all sectors except government. Total, private and service providing establishments bounced back in 2003 and 2004, with noticeable slowing in 2004. The government sector continued to generate net jobs each year although at lower levels, and goods procuring establishments continued to shrink their employment albeit at levels less dramatic than in 2002.

Chittenden County, Net Job Changes by Sector, Annually 2002-2006

Net Job Change, Yearly, by Sector	1 st Q 2002 to 1 st Q 2003	1 st Q 2003 to 1 st Q 2004	1 st Q 2004 to 1 st Q 2005	1 st Q 2005 to 1 st Q 2006	Total Net Job Change
Total	-835	679	706	71	621
Private Ownership	-1,599	462	579	-56	-614
Government Ownership	763	217	126	127	1,233
Goods Producing	-1,519	-348	-217	-356	-2,440
Service Providing	-80	810	797	301	1,828

Poverty

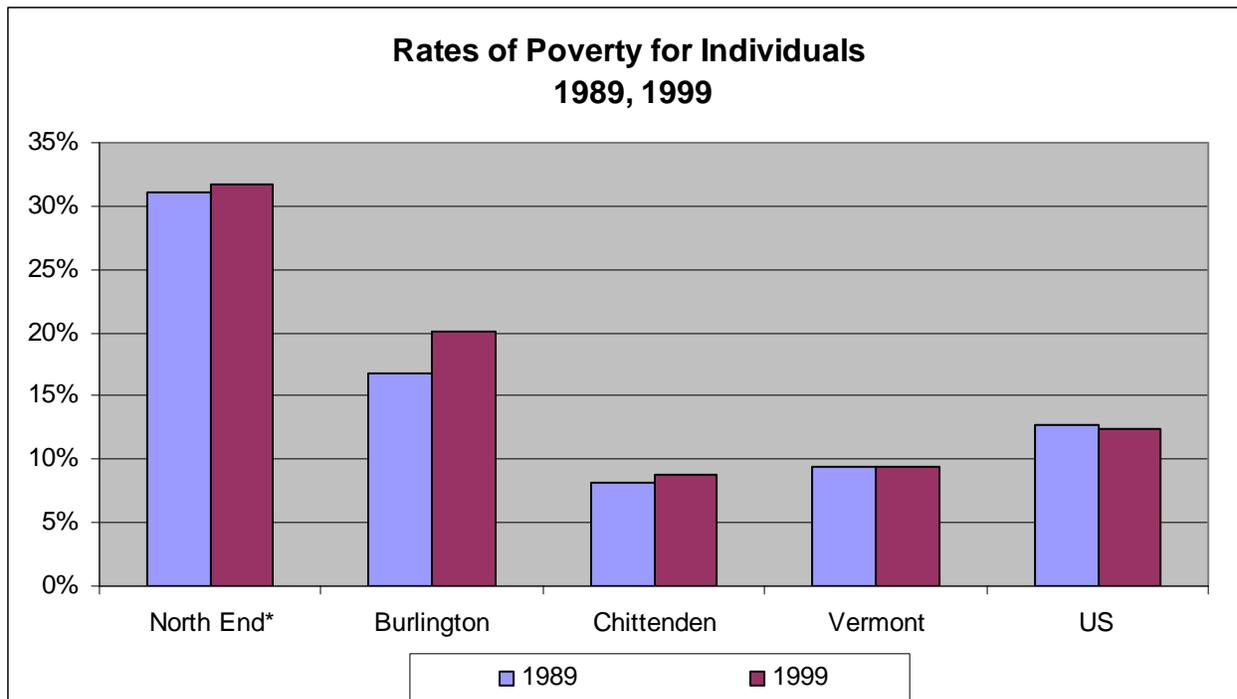
Individual poverty rates in Chittenden County have been consistently lower than rates in Burlington, the state of Vermont and the U.S. in 1989 and 1999, as were family poverty rates in 1999 (see table and graph below). There was a slight increase in the poverty rate in Chittenden County over this period; however, much of this increase is likely the result of increasing poverty rates in Burlington, which will be discussed further in Chapter 3.

Rate of Poverty for Individuals: Old North End, Burlington, Chittenden County, Vermont, U.S., 1989, 1999

	North End*	Burlington	Chittenden County	Vermont	U.S.
1989 Individual	31.05%	16.79%	8.21%	9.48%	12.76%
1999 Individual	31.76%	20.03%	8.80%	9.44%	12.38%
1999 Family	21.95%	10.43%	4.90%	6.25%	9.16%

*North End Consists of Burlington Census Tracts 3, 4, and 5

Source: U.S. Census Bureau **1989:** U.S. Census 1990 (SF3) Series P117 **1999:** U.S. Census 2000 (SF3) Series P87 **1999:** U.S. Census 2000 (SF3) Series P90



*North End Consists of Burlington Census Tracts 3,4, and 5

2.1.4 Summary

Looking at employment, unemployment, and income at the County level, the Chittenden economy has, for the most part, performed very well over the period of 1990 to 2006.

- Total and private employment for the County has grown significantly faster than Vermont and the U.S. between 1990 and 2006.
- Unemployment rates have been consistently lower than Vermont, New England and the U.S. between 1990 and 2006.
- The unemployment rate of men and women in the workforce was low and essentially the same level in 2000. The age distribution of those unemployed, however, revealed a high and growing percentage of people between 16 and 24 among the unemployed.
- Average annual per capita income in Chittenden since 1996 is higher than the state and the U.S. and, along with Vermont, growing faster than the U.S.
- Average annual wages grew faster than the consumer price index (1990-2005) and remained above the national average. Even as national wages grew more slowly from 2000 to 2005 than from 1990 to 2000, regional wages remained stable throughout this time period.
- Self-employment was a stable and important source of income (8% of total), following national rather than State trends (which are more dependent on farm income).

- Job creation and destruction in the economy in recent years, and the resulting need for workers to shift jobs, was significant, but still resulted in a net increase in jobs. That the jobs disappearing were often higher paying than the new jobs arriving is clearly a concern.
- The County individual poverty rate was lower than Burlington, Vermont, New England and the U.S. in 1989 and 1999; the family poverty rate, shown only for 1999, followed the same pattern.

2.2 Major Sectors within the Chittenden County Economy

We turn now to major sectors within the larger Chittenden County economy and ask a second set of questions:

- How much employment is provided by establishments within each major sector? How important is this employment as a percentage of total employment generated in the County? How has this changed over time?
- How much employment growth has been demonstrated by each major sector? How do these growth rates compare across sectors, and to the growth of the total economy?
- How has major sectoral employment translated into income? What wages and profits are generated in different sectors?
- What major sectors should be the focus of policy attention based on employment levels, growth and income?

2.2.1 Sectoral Employment

The question now is what types of employment are being provided by different categories of private and public establishments in Chittenden County? We begin to address this question by looking at major sectors of employment. We are especially interested in which sectors provide the most employment and which are growing or shrinking.

The following table examines employment levels in nineteen different industrial sectors in five year increments from 1990 to 2005, and the percentage growth over the entire period. It also looks at an aggregation of sectors into the “Service Providing” category since this collection represents a substantial source of employment (footnote on sectors included). The table ranks different sectors in terms of the percentage of total employment provided and by their relative rates of growth.

Annual Employment in Chittenden County by Aggregate Sectors, 1990-2005

Description	1990	1995	2000	2005	90-05	Empl.	Growth
Total Employment	77,548	82,617	95,354	94,799	22.2%	Rank*	Rank**
Service Providing*	47,487	52,421	59,832	62,273	31.1%		
Manufacturing	14,359	13,985	16,759	12,418	-13.5%	4	16
Construction	4,417	4,296	5,305	5,213	18.0%	7	12
Natural Resources & Mining	146	232	212	180	23.2%	18	11
Wholesale Trade	3,193	3,227	3,048	3,370	5.54%	9	14
Retail Trade	10,274	10,603	12,139	12,918	25.7%	2	8
Utilities	390	375	291	248	-36.4%	17	17
Transportation & Warehousing	1,909	2,127	2,488	2,489	30.4%	12	6
Information	2,090	2,344	2,651	2,371	13.4%	13	13
Finance & Insurance	3,479	3,466	3,546	3,567	25.2%	8	9
Real Estate, Rental & Leasing	987	1,177	1,211	1,221	23.7%	16	10
Professional, Scientific & Technical Services	3,905	4,264	6,014	5,925	51.7%	6	3
Administrative, Support & Waste Services	n/a	2,677	n/a	n/a	?	11	
Educational Services	1,485	1,825	2,296	2,194	47.7%	14	4
Health Care & Social Assistance	8,167	9,832	11,031	12,762	56.3%	3	2
Arts, Entertainment & Rec.	967	1,146	1,490	1,595	64.9%	15	1
Accommodations & Food Services	6,786	6,739	6,851	7,056	3.98%	5	15
Other Services	2,206	2,598	3,150	2,802	27.0%	10	7
Government Total	11,138	11,683	13,247	14,715	32.1%	1	5

*based on 2005 levels (except for admin, support & waste services where used 1995)

**based on growth rates from 1990-2005

From the table above we see that the following sectors in Chittenden County provide significant employment and are growing at an above average rate (both rankings 10 or below):

- Government
- Retail
- Health Care and Social Assistance
- Professional, Scientific and Technical Services
- Finance and Insurance

The following sectors are important employers but they are growing slowly or declining:

- Manufacturing (declining)
- Accommodations and Food Services (growing slowly)
- Construction (growing slowly)
- Wholesale Trade (growing slowly)
- Other Services (growing at a moderate rate)

The following sectors are growing but are not currently very important sources of employment in the County:

- Arts, Entertainment and Recreation
- Educational Services
- Transportation and Warehousing
- Real Estate, Rentals and Leasing

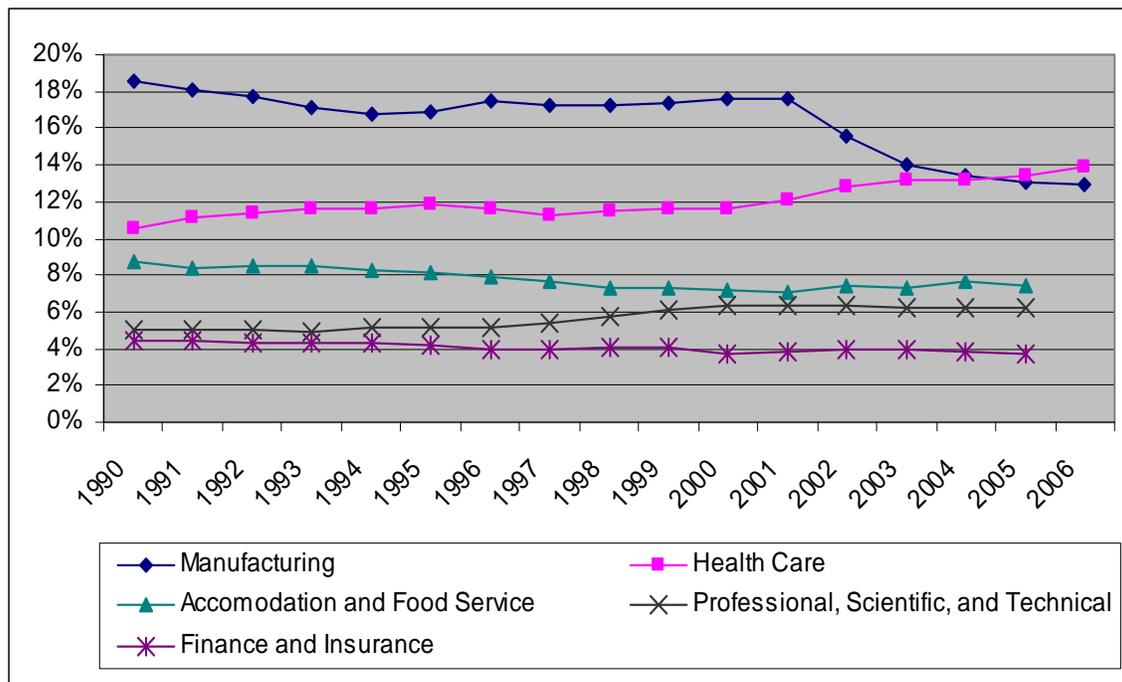
The remaining sectors (Utilities, Natural Resources and Mining, and Information) are neither significant employers nor growing at a rate that suggest that they will become important employers at the County level in the near future. However, several of these sectors may become important in certain locations within the County, such as information technology in Burlington.

The collection of sectors under the category “Service Providing” generated 60% of all Chittenden County jobs in 1990, rising to 65% by 2005, reflecting a job growth rate of 31.1% over this 15 year period, almost 9% higher than the growth rate of total employment. The service providing sectors consist of private jobs in NAICS sectors 22,42,44-45,48-49,51-56,61-62,71-72,81.

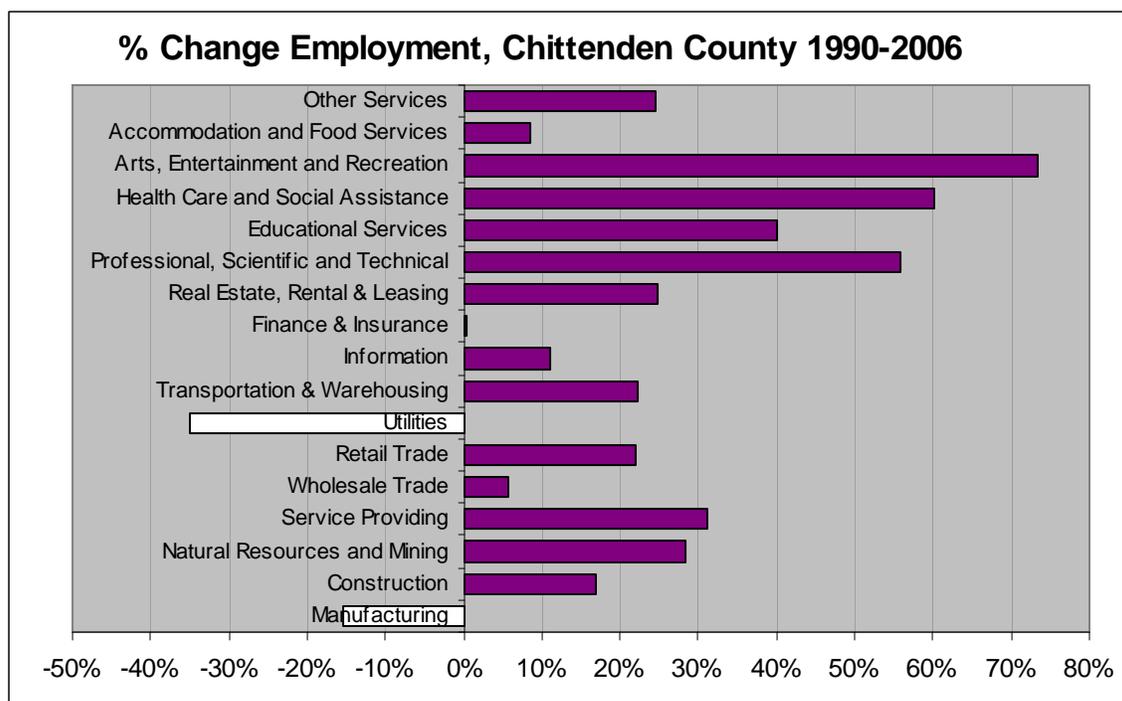
Annual employment data by major sectors, 1990-2006, is in the Chapter 2 Appendix, Table 15. Very recent changes in major sectors in the Burlington Labor Market are shown in Table 16 in the Appendix.

The graph below shows changes in how much employment is provided by various sectors as a percent of total employment. This chart highlights sectors that were major employers and whose share of total employment changed by fifteen percent or more. The table and graph on the following page highlight the total changes in employment for each of the aggregate sectors from 1990 to 2006.

Composition by Sector of Chittenden County Employment 1990 to 2006*



*Note: 2006 data is an average of quarters 1, 2 and 3 only.



Percentage Changes in Employment: Chittenden County, 1990-2006

EMPLOYMENT CATEGORY	1990	2006	% Change
Manufacturing	14,359	12,132	-15.51%
Construction	4,417	5,161	16.85%
Natural Resources & Mining	146	187	28.31%
Service Providing	47,487	62,276	31.14%
Wholesale Trade	3,193	3,379	5.84%
Retail Trade	10,274	12,535	22.01%
Utilities	390	253	-35.04%
Transportation & Warehousing	1,909	2,334	22.28%
Information	2,090	2,322	11.10%
Finance & Insurance	3,479	3,492	0.38%
Real Estate, Rental & Leasing	987	1,231	24.76%
Professional, Scientific & Technical	3,905	6,086	55.84%
Educational Services	1,485	2,081	40.16%
Health Care & Social Assistance	8,167	13,072	60.06%
Arts, Entertainment & Recreation	967	1,676	73.29%
Accommodation & Food Services	6,786	7,371	8.63%
Other Services	2,206	2,749	24.63%
Total	112,247	138,340	23.25%

Source: U.S. Census Bureau: “County Business Patterns, Chittenden County, Vermont;” <<http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>>; Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment & Wages

2.2.2 Residential Employment by Sector

The analysis above highlights sector employment importance and growth rates. It's also important at this stage to ask in which sectors residents of Chittenden County and Burlington work, since residents may work within and outside the County and Burlington. The table below shows resident employment by major sector of Burlington, Chittenden County and Vermont residents.

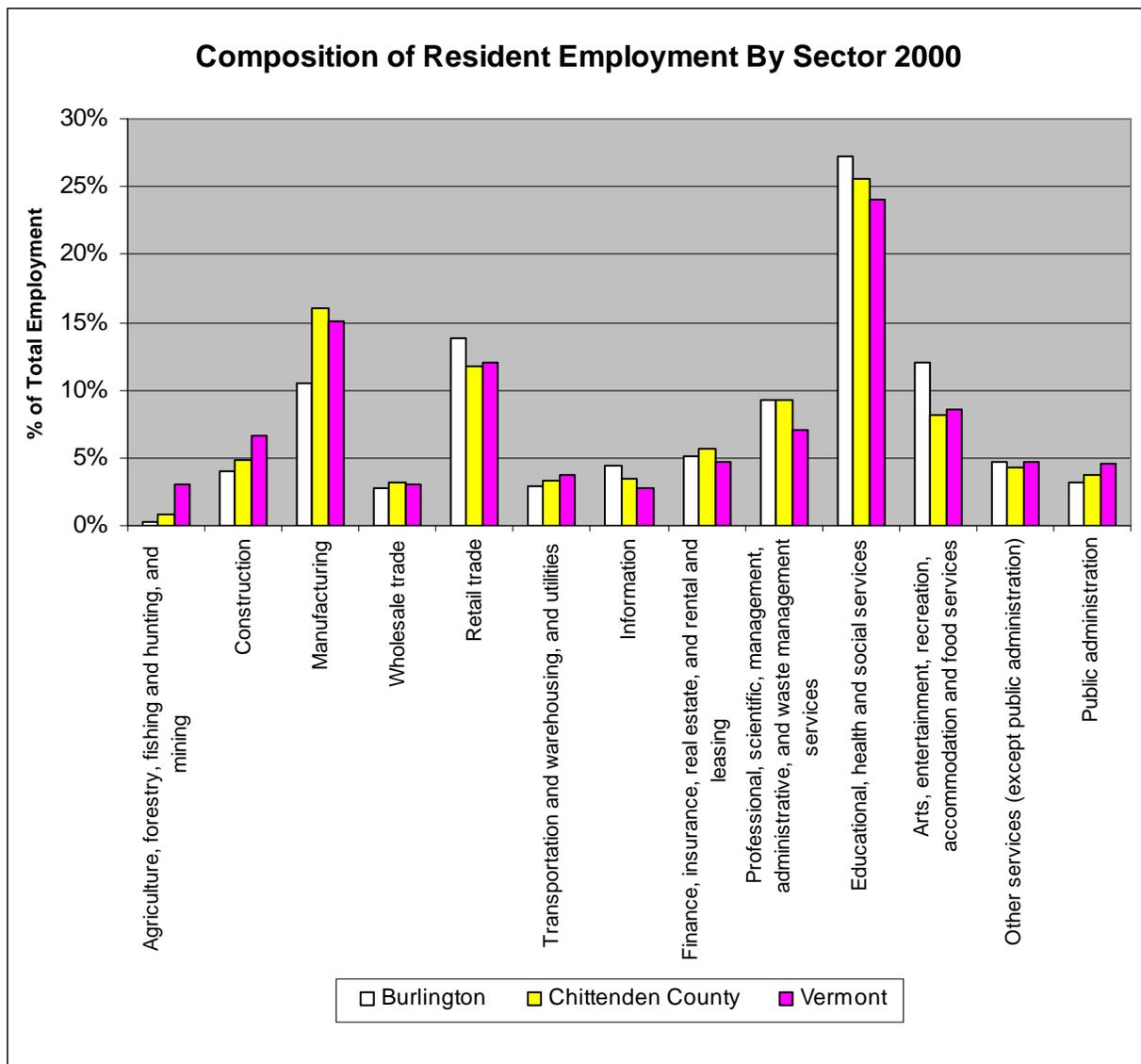
Composition of Resident Employment by Sector: 2000

This table explores the composition of employment by residents living in Burlington, Chittenden County and Vermont. The data in previous tables is establishment-based.

DESCRIPTION	Burlington		Chittenden County		Vermont	
	Count	%	Count	%	Count	%
Employed Persons 16 yrs. & over	21,335	100.00%	80,787	100.0%	317,134	100.00%
Agri., forestry, fishing and hunting, & mining	68	0.30%	649	0.8%	9,643	3.00%
Construction	850	4.00%	3,852	4.8%	21,155	6.70%
Manufacturing	2,242	10.50%	12,938	16.0%	47,767	15.10%
Wholesale trade	568	2.70%	2,592	3.2%	9,901	3.10%
Retail trade	2,949	13.80%	9,534	11.8%	38,027	12.00%
Transportation and warehousing, & utilities	614	2.90%	2,671	3.3%	11,783	3.70%
Information	945	4.40%	2,781	3.4%	8,425	2.70%
Finance, insurance, real estate, rental & leasing	1,086	5.10%	4,556	5.6%	14,819	4.70%
Professional, scientific and Technical services	1,990	9.30%	7,521	9.3%	22,437	7.10%
Educational, health and social services	5,798	27.20%	20,663	25.6%	76,381	24.10%
Arts, entertnmt., rec., accommodation & food svcs	2,551	12.00%	6,569	8.1%	27,237	8.60%
Other services (except public administration)	997	4.70%	3,486	4.3%	14,963	4.70%
Public administration	677	3.20%	2,975	3.7%	14,596	4.60%

Source: U.S. Census Bureau, 2000 Census DP-3

The patterns of resident employment are generally similar across the different sectors as shown in the graph below. The major differences (1% or more residents employed in the sector) are that the County lags the State in agriculture, forestry, fishing, hunting, mining, and construction, and leads the State in professional, scientific and technical services as well as educational, health and social services. Burlington lags the State in agriculture et al, construction, manufacturing, and public administration and leads in retail trade, information, education, health and social services, and arts, entertainment, recreation, and food and accommodation services, one of the only changes from 1990 levels. A full table of values from 1990 is in Chapter 2, Appendix 17. We will look at these difference in Burlington’s resident employment in Chapter 3.



Source: U.S. Census Bureau, 2000 Census DP-3

2.2.3 Sectoral Earnings Levels and Growth

We now ask how these different sector jobs translate into income. The tables below are shortened versions of the full Composition of Earnings tables which can be found in Chapter 2, Appendices 18 and 19.

**Composition of Earnings (Total Private Wages) by Sector, Dollar Amount,
Chittenden County 1990, 1995, 2000, and 2005**

	Construc- tion	Informa- tion	Financial Activities	Manufac- turing	Retail	Prof. & Tech. Svc.	Arts, Entrtmnt. & Rec.	Services	Wholesale	Total Private Income
1990	\$109,626	\$55,672	\$110,577	\$541,405	\$149,069	\$126,362	\$9,352	\$923,742	\$89,420	\$1,577,930
1995	\$122,561	\$71,551	\$143,353	\$580,158	\$181,744	\$150,765	\$15,545	\$1,206,943	\$104,923	\$1,913,075
2000	\$196,894	\$106,294	\$177,071	\$843,688	\$251,236	\$284,467	\$26,441	\$1,775,667	\$127,922	\$2,820,694
2005	\$217,775	\$112,351	\$236,181	\$751,832	\$307,922	\$349,126	\$27,193	\$2,178,442	\$175,223	\$3,163,371

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

*Data is in 1,000s of nominal dollars

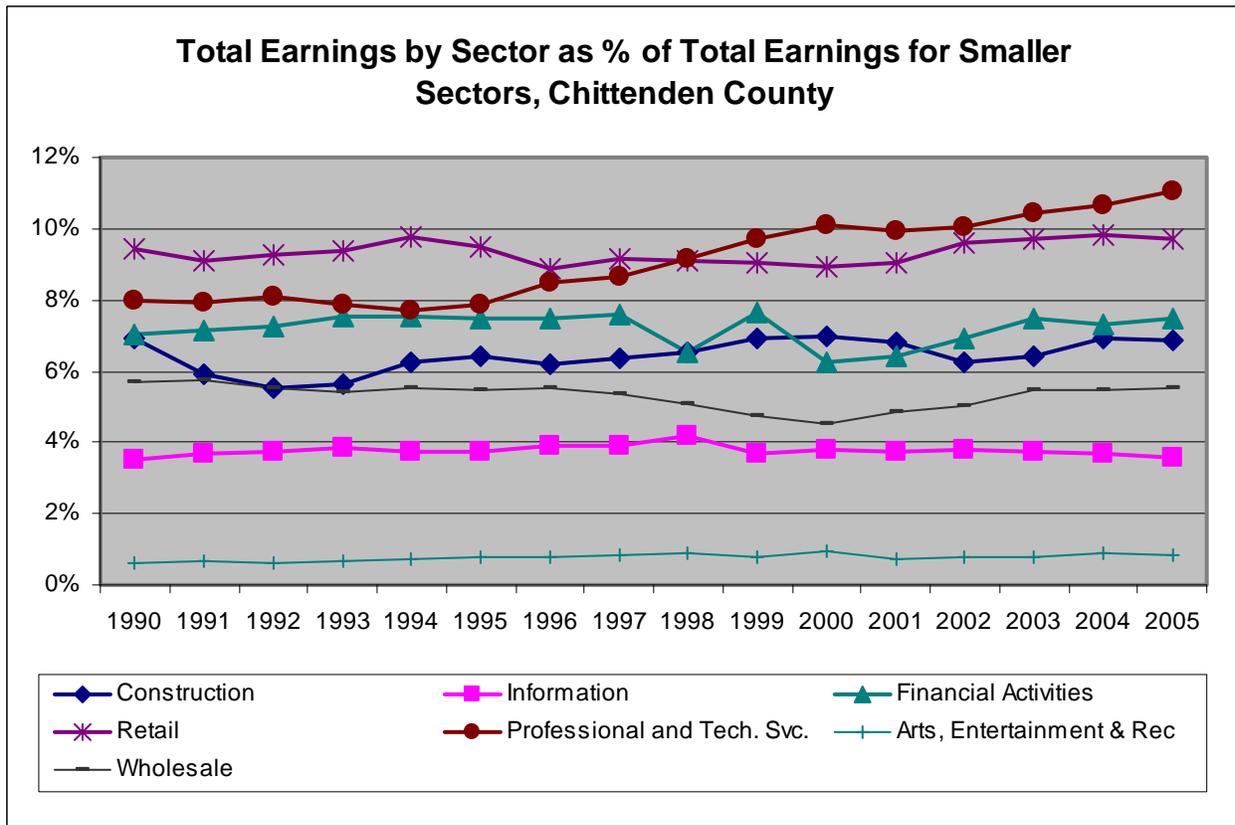
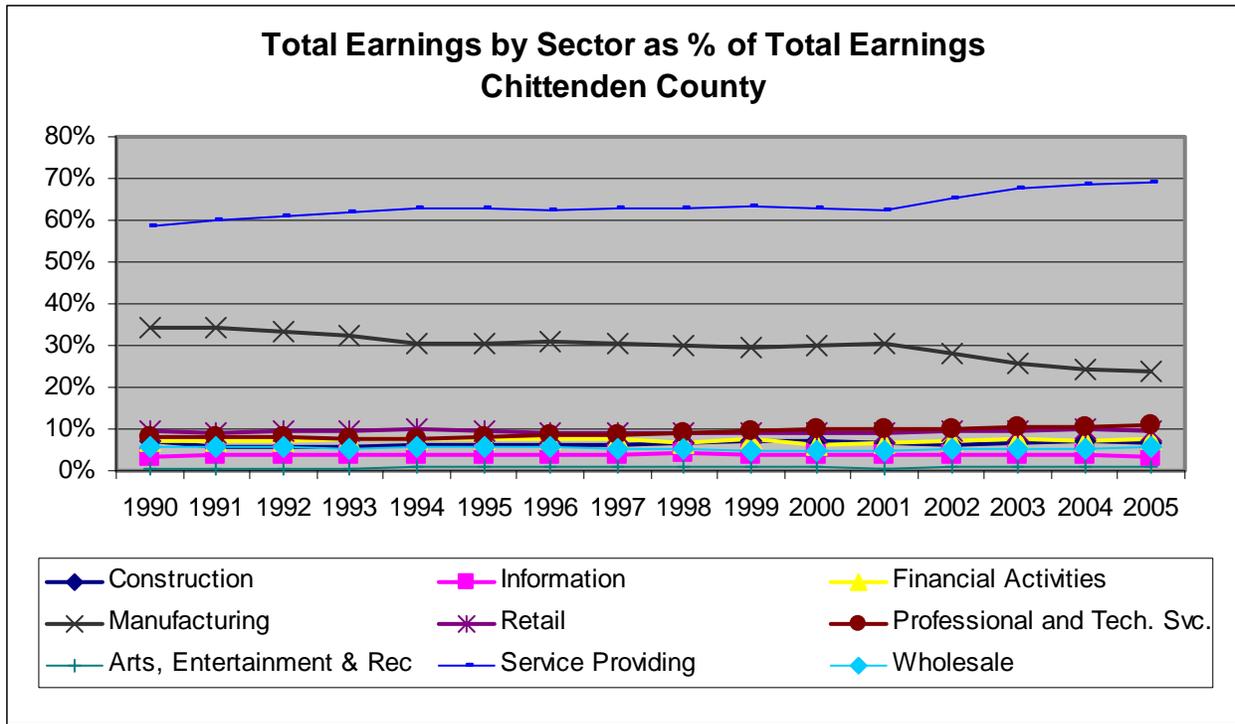
**Services includes a number of subsectors from the other sectors such as retail as well as other areas including health and education services.

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages, www.vtlni.info/indareanaics.cfm

**Composition of Earnings (Total Private Wages) by Sector, Percent of Total,
Chittenden County 1990, 1995, 2000, and 2005**

	Construc- tion	Informa- tion	Financial Activities	Manufac- turing	Retail	Prof. & Tech. Svc.	Arts, Entmnt. & Rec.	Other Services	Whole- sale
1990	0.0695	0.0353	0.0701	0.3431	0.0945	0.0801	0.0059	0.5854	0.0567
1995	0.0641	0.0374	0.0749	0.3033	0.095	0.0788	0.0081	0.6309	0.0548
2000	0.0698	0.0377	0.0628	0.2991	0.0891	0.1009	0.0094	0.6295	0.0454
2005	0.0695	0.0371	0.0731	0.244	0.0982	0.1067	0.0089	0.6849	0.0547
% change 90-05	-0.91%	0.66%	6.54%	-30.73%	3.04%	37.82%	45.04%	18.19%	-2.26%

See Notes and Sources Above



Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages, www.vtlmi.info/indareanaics.cfm

Based on the sectors shown, manufacturing, professional and technical services, retail, finance, and construction respectively provide the most total private wages, while arts and recreation, professional and technical services, and, to a lesser extent, finance and retail sectors demonstrated the highest growth between 1990 and 2005.

The collection of subsectors in the “Service” sector generated more total private wages than any of the other sectors alone, and grew faster than almost all other sectors (except for arts and professional and technical services).

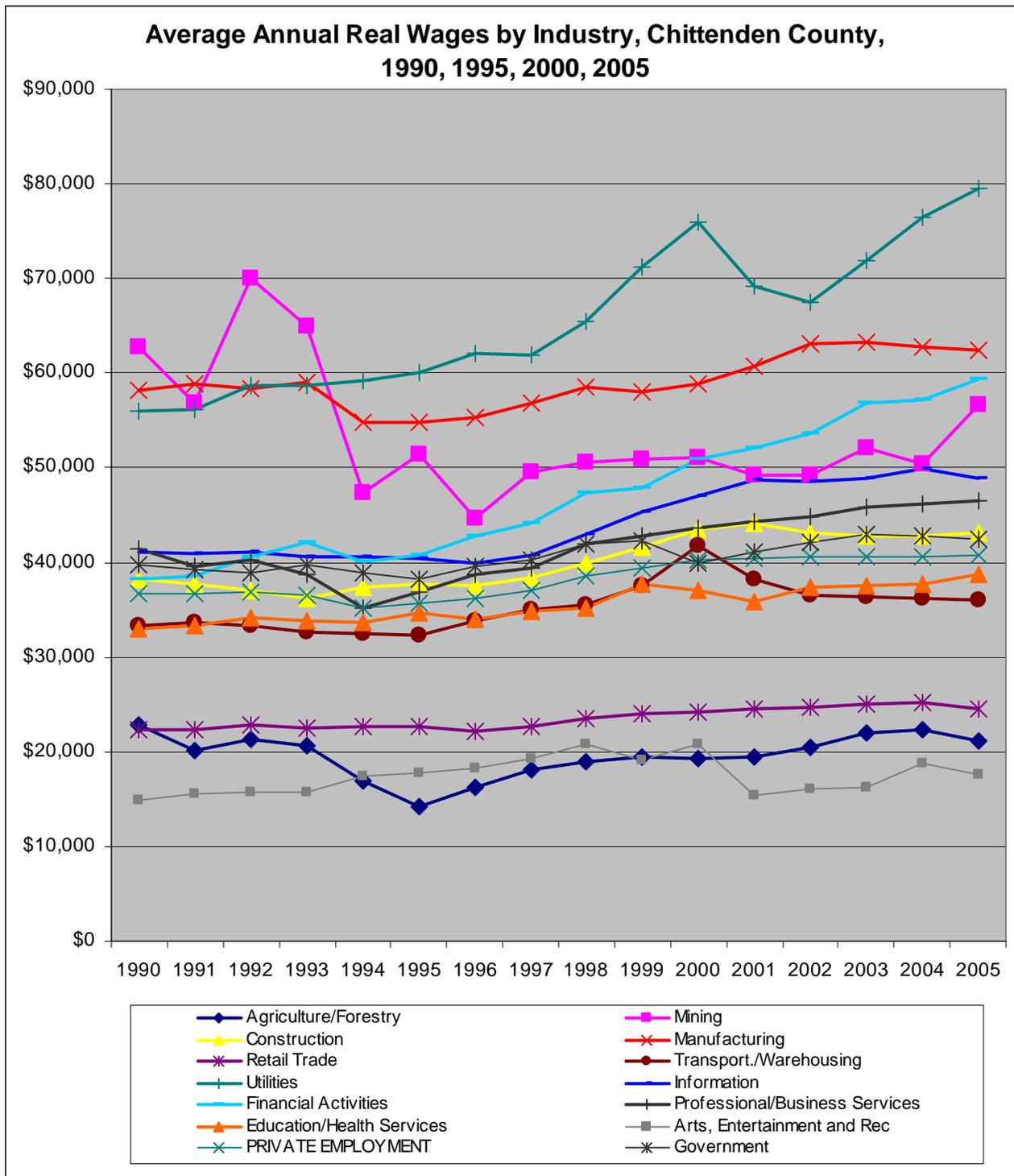
Total wages are important, but we must also ask how that translates into annual wages per employee. Full versions of the following tables of nominal and real average wage by industry are shown in Chapter 2, Appendices 20 and 21.

**Nominal Average Annual Wage by Industry, Chittenden County,
1990, 1995, 2000, 2005**

	1990	1995	2000	2005
Agriculture	\$14,855	\$10,755	\$16,421	\$20,421
Mining	\$40,744	\$38,925	\$43,642	\$54,916
Construction	\$24,819	\$28,526	\$37,118	\$41,774
Manufacturing	\$37,704	\$41,486	\$50,344	\$60,544
Retail Trade	\$14,509	\$17,141	\$20,696	\$23,836
Transport./Warehousing	\$21,643	\$24,384	\$35,621	\$34,935
Utilities	\$36,329	\$45,367	\$64,941	\$77,067
Information	\$26,636	\$30,520	\$40,102	\$47,376
Financial Activities	\$24,761	\$30,878	\$43,461	\$57,478
Professional/Business	\$26,879	\$27,824	\$37,303	\$45,005
Education/Health Services	\$21,380	\$26,229	\$31,624	\$37,455
Art, Entertainment & Rec	\$9,668	\$13,482	\$17,749	\$17,059
Private Employment	\$23,761	\$26,970	\$34,354	\$39,501
Government	\$25,731	\$28,914	\$34,163	\$41,208
Average Employment	\$24,044	\$27,245	\$34,327	\$39,766

Source: Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages. www.vtlmi.info/indareanaics.cfm

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.



Source: Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages. www.vtlmi.info/indareanaics

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

When we look at annual wages, both nominal and real, we find considerable variation across sectors. Annual real wages in 2005 (in 2006 dollars) range from a high of \$79,553 in utilities to a low of \$17,603 in arts, entertainment and recreation. When we combine a ranking by real and nominal annual wages with levels of employment and employment growth (see tables on the following pages), we see considerable variation across different sectoral performance measures as well.

Sectoral Rankings by Employment Importance, Employment Growth and Real Wages in Chittenden County by Aggregate Sectors, 1990-2005

Description	2005 Employment	90-05 Employ. Growth	2005 Annual Wages*	Employ. Rank	Growth Rank	Wage Rank
Manufacturing	12,418	-13.5%	\$62.5	4	16	2
Construction	5,213	18.0%	\$43.1	7	12	7
Natural Resources & Mining	180	23.2%	\$21.0, \$56.7***	18	11	4, 12***
Wholesale Trade	3,370	5.54%		9	14	
Retail Trade	12,918	25.7%	\$24.6	2	8	11
Utilities	248	-36.4%	\$79.6	17	17	1
Transportation & Warehousing	2,489	30.4%	\$36.1	12	6	10
Information	2,371	13.4%	\$48.4	13	13	5
Finance & Insurance	3,567	25.2%	\$59.3	8	9	3
Real Estate, Rental & Leasing	1,221	23.7%		16	10	
Profes., Scient. & Tech. Services	5,925	51.7%	\$46.5	6	3	6
Admin., Support & Waste Services	n/a	?		11		
Educational Services	2,194	47.7%	\$38.7**	14	4	9**
Health Care & Social Assistance	12,762	56.3%	\$38.7**	3	2	9**
Arts, Entertainment & Recreation	1,595	64.9%	\$17.6	15	1	13
Accommodations & Food Services	7,056	3.98%		5	15	
Other Services	2,802	27.0%		10	7	
Government Total	14,715	32.1%	\$42.5	1	5	8

*Nominal annual wages in \$1,000s

**Education and health sector combined

***Separate agriculture and mining annual wages and ranking

Wage Growth by Sector: Chittenden County, 1990-2005

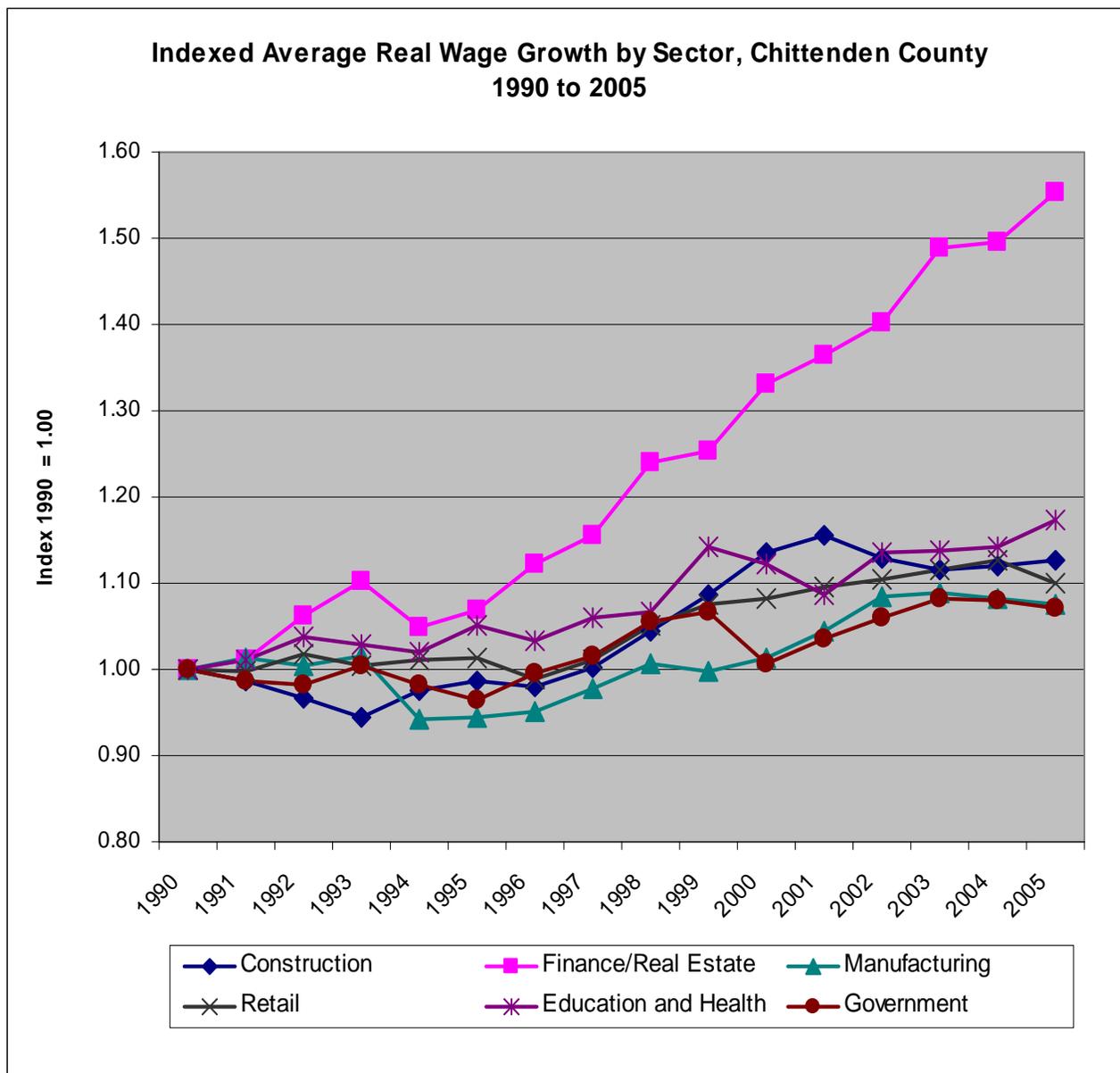
Average Annual Real Wages by Sector*, Chittenden County 1990 to 2005						
	Construction	Finance/Real Estate	Manufacturing	Retail	Education & Health	Government
1990	\$38,282	\$38,193	\$58,127	\$22,380	\$32,978	\$39,689
1991	\$37,755	\$38,582	\$58,901	\$22,309	\$33,348	\$39,174
1992	\$37,025	\$40,553	\$58,409	\$22,802	\$34,220	\$38,958
1993	\$36,123	\$42,081	\$59,032	\$22,489	\$33,918	\$39,828
1994	\$37,357	\$40,094	\$54,816	\$22,640	\$33,656	\$38,943
1995	\$37,735	\$40,846	\$54,879	\$22,675	\$34,697	\$38,248
1996	\$37,502	\$42,862	\$55,317	\$22,152	\$34,081	\$39,513
1997	\$38,371	\$44,132	\$56,775	\$22,613	\$34,926	\$40,290
1998	\$39,954	\$47,336	\$48,473	\$23,529	\$35,195	\$41,919
1999	\$41,616	\$47,858	\$58,019	\$24,067	\$37,683	\$42,295
2000	\$43,455	\$50,881	\$58,939	\$24,229	\$37,023	\$39,996
2001	\$44,199	\$52,135	\$60,668	\$24,507	\$35,857	\$41,104
2002	\$43,189	\$53,592	\$63,074	\$24,732	\$37,445	\$42,044
2003	\$42,724	\$56,873	\$63,278	\$24,970	\$37,500	\$42,977
2004	\$42,864	\$57,117	\$62,847	\$25,208	\$37,654	\$42,875
2005	\$43,122	\$59,332	\$62,497	\$24,605	\$38,663	\$42,537

Indexed Average Annual Real Wage Growth by Sector, Chittenden County 1990 to 2005						
	Construction	Finance/Real Estate	Manufacturing	Retail	Education & Health	Government
1990	1.00	1.00	1.00	1.00	1.00	1.00
1991	.99	1.01	1.01	1.00	1.01	.99
1992	.97	1.06	1.00	1.02	1.04	.98
1993	.94	1.10	1.02	1.00	1.03	1.00
1994	.98	1.05	.94	1.01	1.02	.98
1995	.99	1.07	.94	1.01	1.05	.96
1996	.98	1.12	.95	.99	1.03	1.00
1997	1.00	1.16	.98	1.01	1.06	1.02
1998	1.04	1.24	1.01	1.05	1.07	1.06
1999	1.09	1.25	1.00	1.08	1.14	1.07
2000	1.14	1.33	1.01	1.08	1.12	1.01
2001	1.15	1.37	1.04	1.10	1.09	1.04
2002	1.13	1.40	1.09	1.11	1.14	1.06
2003	1.12	1.49	1.09	1.12	1.14	1.08
2004	1.12	1.50	1.08	1.13	1.14	1.08
2005	1.13	1.55	1.08	1.10	1.17	1.07

Source: Vermont Department of Labor, Economic & Labor Market Information, www.vtlmi.info/indareanaics.cfm

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

***Note:** Income listed in real 2006 dollars. See previous table for nominal data.



Source: Vermont Department of Labor, Economic & Labor Market Information, www.vtlni.info/indareanaics.cfm

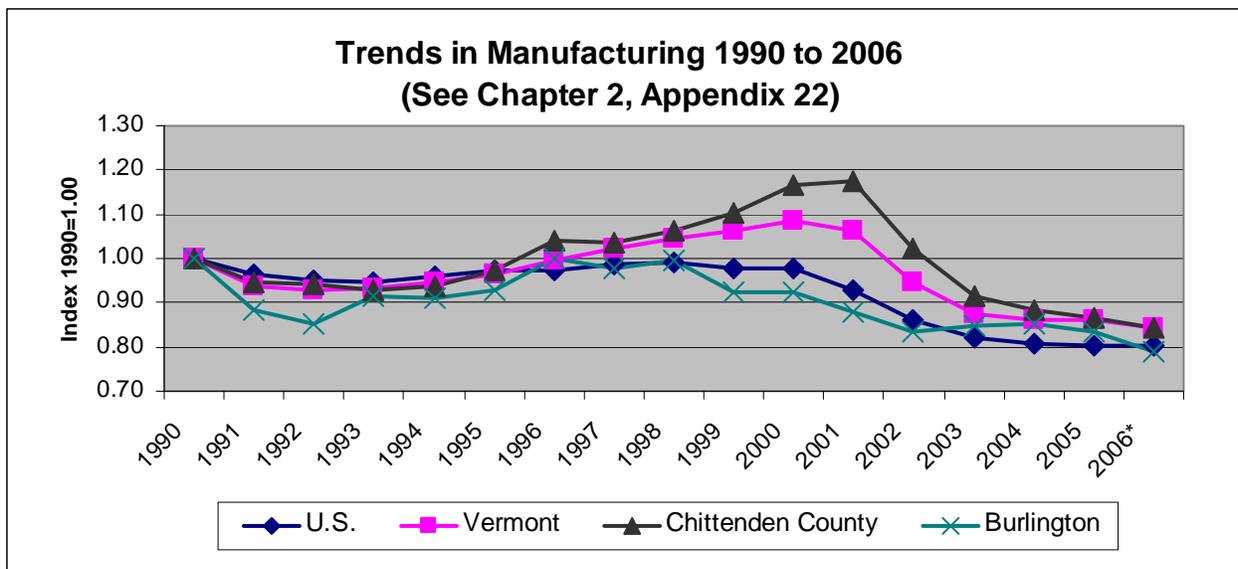
2.2.4 Analysis of Important Major Sectors

The previous analysis identified sectors that stood out as important sources of employment, higher employment growth rates, and/or higher producers of income. In this section we look at these identified sectors in more detail.

2.2.4.1 Manufacturing

The manufacturing sector, albeit in decline, is an important source of high paying jobs. Job retention in this sector must be included in any economic development strategy. The trends in manufacturing for Vermont, Chittenden County, and Burlington, between 1990 and 2006, coincide with U.S. trends with some important exceptions. Despite similar ending points, manufacturing in Vermont and particularly in Chittenden County demonstrated growth when the national trend was either level or in decline (1995-2001). In 2000/2001, a national recession caused manufacturing on all fronts to decline, with the most striking decline in Chittenden County. The overall impression is that Vermont, Chittenden County and Burlington area are doing slightly better than average in this declining sector.

In the context of its overall economy, the job loss in manufacturing has been offset with job gains elsewhere (mainly in service providing sectors—see below). Chittenden County experienced a 28% decline in manufacturing employment between 2000 and 2006, while total employment only declined 2%. Similarly, Vermont realized a 22% decline in manufacturing, but a 2% increase in total employment; and Burlington a 17% decline in manufacturing, and a 0.5% increase in total employment. Likewise, the U.S. experienced a 22% decline in manufacturing, but a 3% increase in total employment.

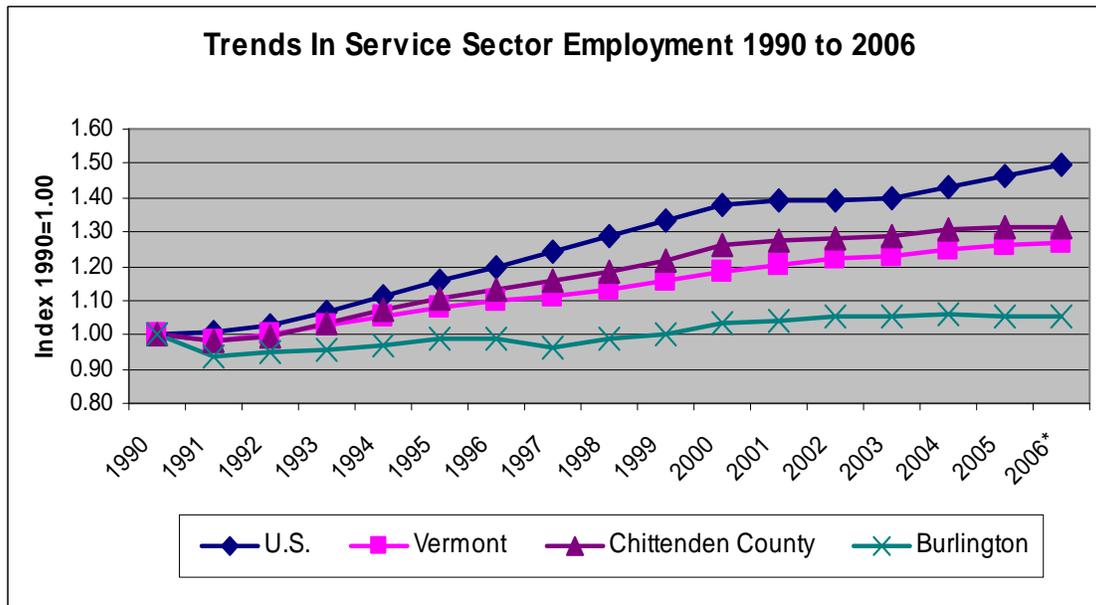


Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market information in cooperation with the U.S. Bureau of Labor Statistics Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current; United States: <http://data.bls.gov/cgi-bin/surveymost?ce>

2.2.4.2 Service

The service providing sectors are a major source of employment in Chittenden County. The service sector generated 66% of the County jobs in 2005 compared to 41% nationally. Although annual wages in these jobs are, on average, low, the magnitude of jobs provided require that a strategy to increase the income and quality of these jobs be included in an economic development plan.

County service employment grew slightly faster than the state of Vermont but significantly slower than the U.S. over the 1990-2006 period. The leveling of jobs since 2003 while the U.S. level grew deserves a closer look. (Data for the following graph is in Table 23 in the Chapter 2 Appendix. The service providing sectors consist of private jobs in NAICS sectors 22,42,44-45,48-49,51-56,61-62,71-72,81.)

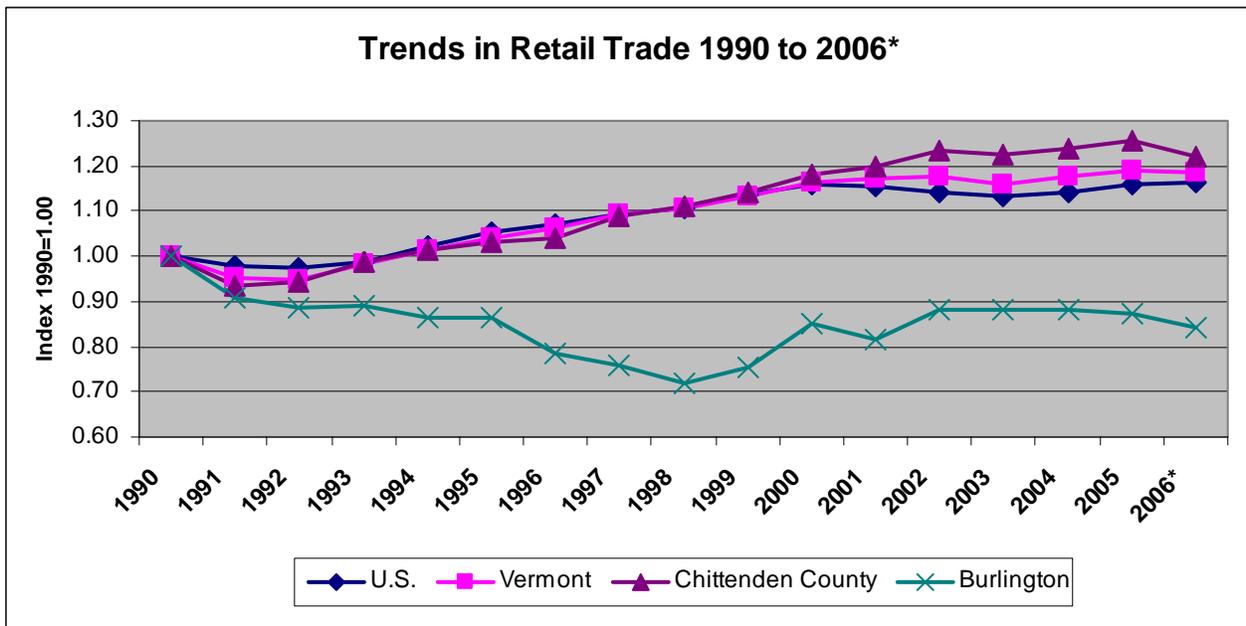


Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics; Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current; United States: <http://data.bls.gov/cgi-bin/surveymost?ce>

2.2.4.3 Retail

Retail employment grew from 10,274 in 1990 to 12,918 in 2005, at an annual rate of approximately 1.7%, and currently generates 16% of Chittenden County jobs. Because of its importance as a source of jobs and its growth, efforts to develop career paths and enhanced wages in this sector are well worth continuing.

Retail employment growth mirrored the state and national pattern up until 2000 but both have grown faster than the national trend since then. The County’s retail growth may have been in part the cause of the fall in Burlington’s retail employment through 1998. Burlington’s partial recovery of retail jobs most likely reflects the City’s success in revitalizing its commercial downtown. (Data for the graph below is in Table 24 in the Chapter 2 Appendix.)

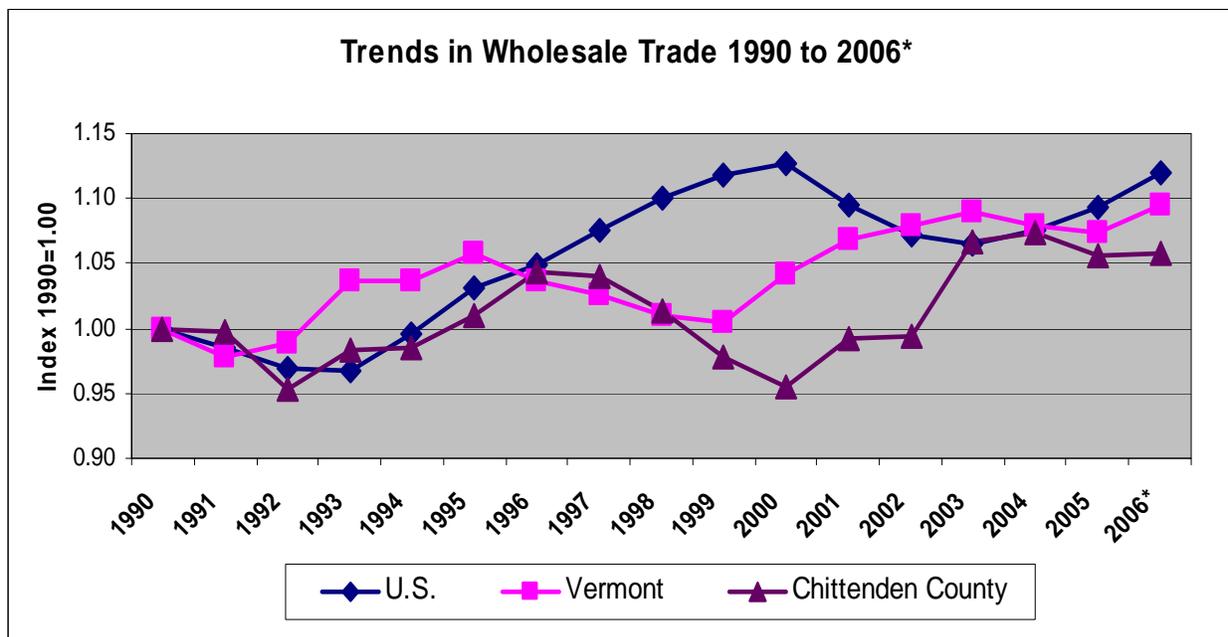


***Note:** 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3.

Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics; Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current; United States: <http://www.bls.gov/iag/iaghome.htm>

2.2.4.4 Wholesale

Wholesale sector employment in Chittenden County has grown only 6% between 1990-2005, rising from 3,193 (1990) to 3,379 (2005) with many fluctuations in between, as seen in the graph below. However, even with its recovery in 2003-2006, this sector provided only 3.5% of jobs in the County. (The data for this chart can be found in Table 25 in the Chapter 2 Appendix.)



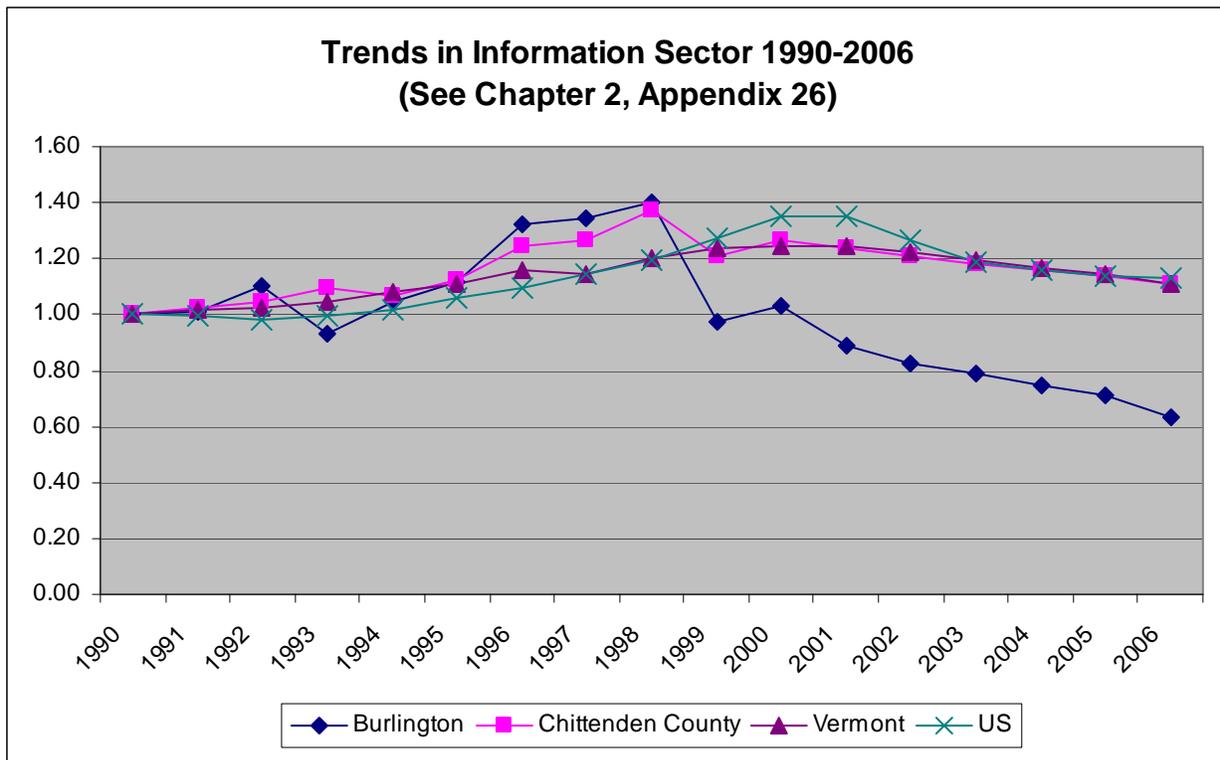
*Note: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3.

Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics.; Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current; United States: <http://data.bls.gov/cgi-bin/surveymost?ce>

2.2.4.5 Information

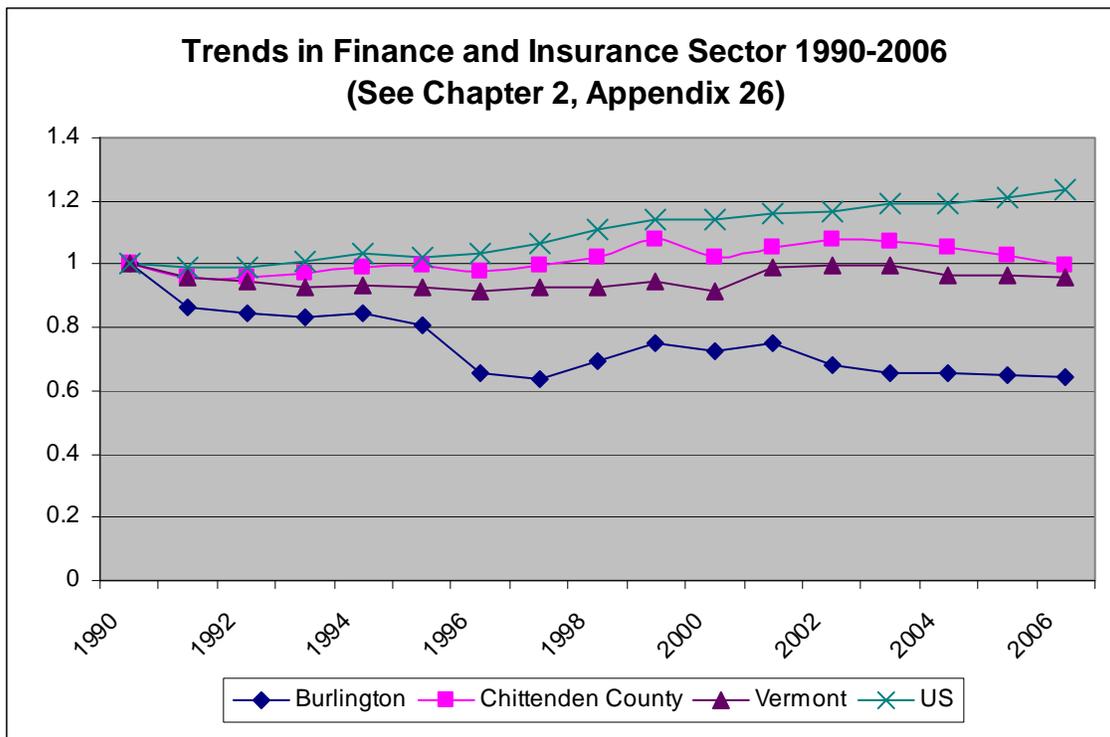
Chittenden County’s information sector, and Vermont’s as well, have grown more or less in line with the information sector nationally, albeit in a somewhat more stable fashion. This sector only provides 2.5% of County jobs and its growth has been moderate over the 1990-2006 period (11.1%). However, average wages in this sector are among the highest available (around \$50,000 in 2006) so attention to this sector is clearly merited.

While Chittenden County jobs in this sector have grown since 1990, by 2006 Burlington jobs in this sector declined to only 60% of 1990 employment levels in this sector. This decline may in part reflect a movement of information sector establishments from Burlington to the County outside the City. This sector will be discussed more in Chapter 3.



2.2.4.6 Finance and Insurance

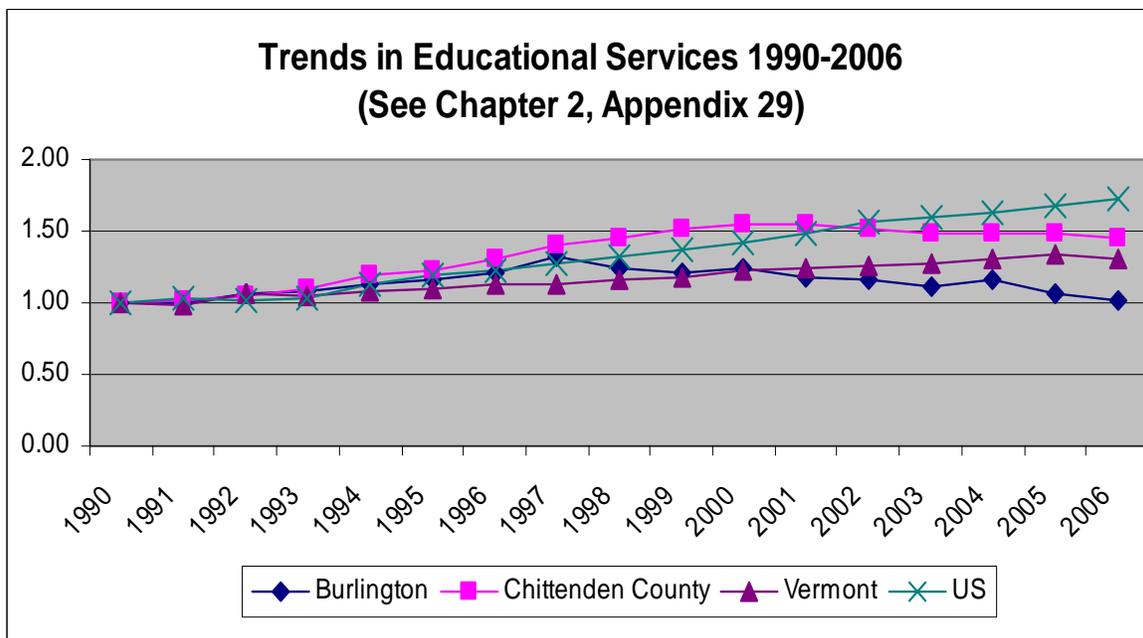
While growth in the finance and insurance sectors has increased nationally since 1990, Chittenden County and the state of Vermont have seen virtually no growth with 2006 levels essentially the same as in 1990. Burlington has done significantly worse, falling to below 65% of 1990 employment levels by 2006. While employment in this sector has not grown and only 3.8% of County employment is in finance and insurance, these jobs have high average wages (almost \$60,000 in 2006) and have experienced significant wage growth over time, (about 50% since 1990); therefore, they are well worth preserving and expanding.



2.2.4.7 Educational Services

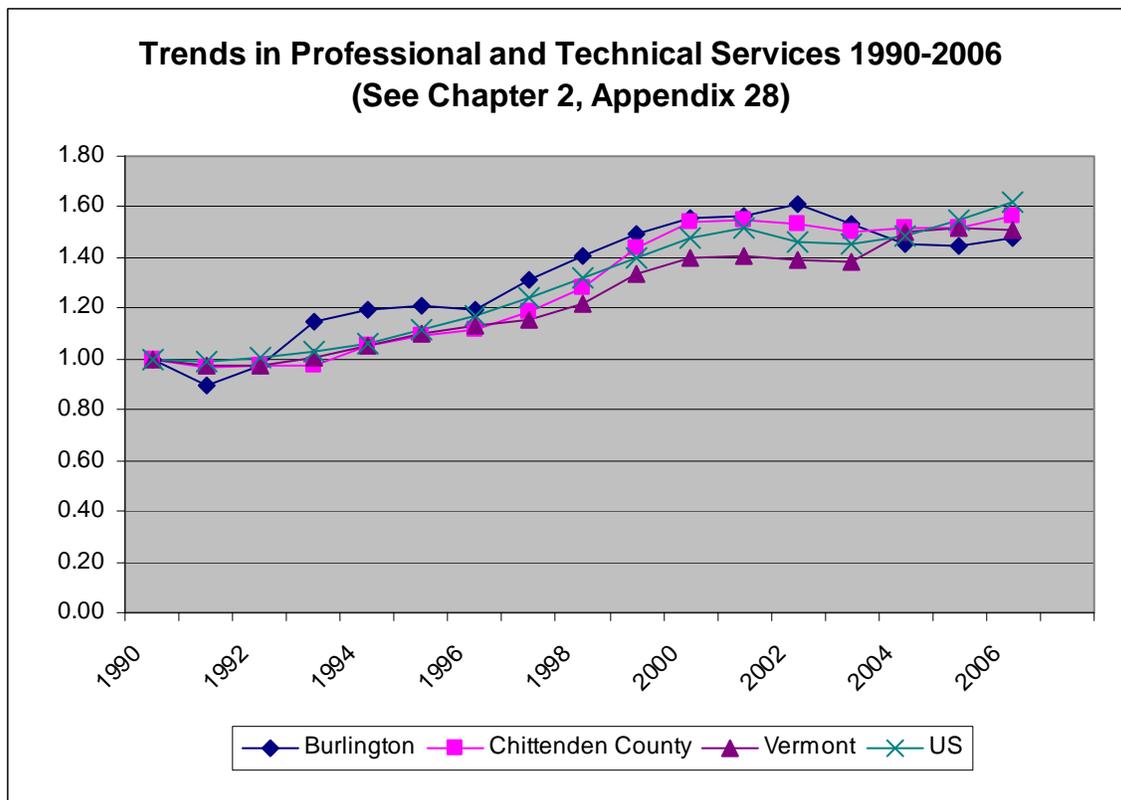
While the State and nation have had relatively steady increases in educational service jobs since 1990, in Chittenden County growth has declined slowly since 2000. In Burlington, employment in educational services has decreased by 30% since 1997, and as of 2006 the number of individuals employed in Educational Services fields is approximately the same as it was in 1990.

Educational service jobs represent a relatively small source of employment in Chittenden County (about 2.3% in 2006) with modest average real wages (education and health services together paid an average of about \$39,000 in 2006).



2.2.4.8 Professional and Technical Services

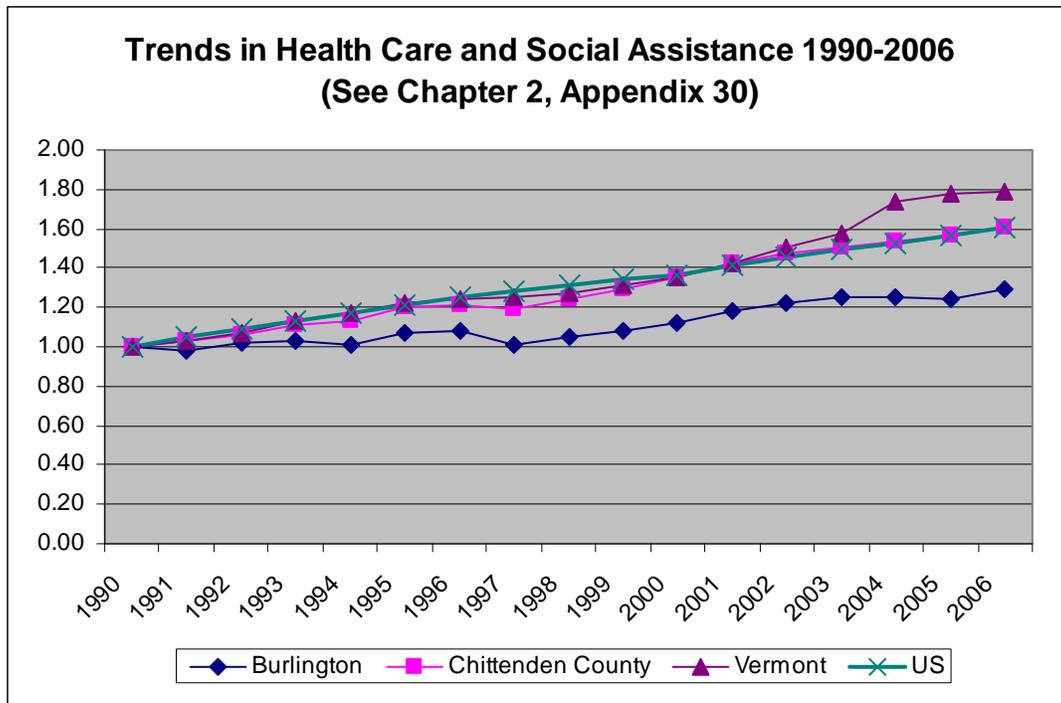
Burlington, Chittenden County, Vermont, and the U.S. have all experienced relatively stable and very significant growth in the Professional and Technical Services industry since 1990 (over 50% growth in employment over the 1990-2006 period). In Chittenden County, this sector provided over 6% of total employment in 2006, with these jobs paying good real wages (about \$48,000 in 2006) with modest wage growth since 1990 (about 20%).



2.2.4.9 *Health Care and Social Assistance*

Until 2002 Chittenden County, Vermont, and the United States had very similar increases in the number of individuals employed in the Health Care and Social Assistance fields. In recent years, however, Chittenden County has remained at the national level of growth while Vermont has grown faster. While the growth rate of the sector in Burlington is lower, when that lower rate is applied to a large employment base (the regional medical center, Fletcher Allen, is in Burlington), the total new jobs created since 1997 becomes significant.

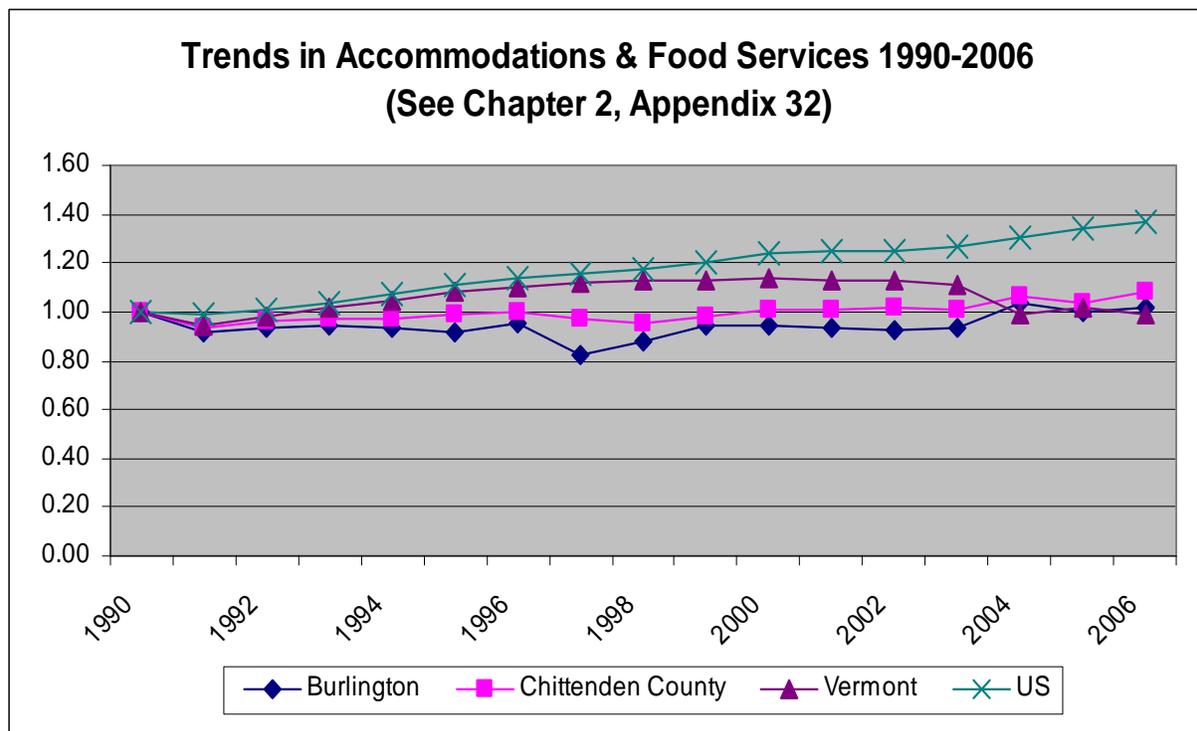
Health care and social assistance provide a substantial number of jobs in Chittenden County (13.4% of total employment), with a significant rate of growth (60.4% over the 1990-2006 period). Although this sector’s average annual real wages are modest (\$39,000 in the combined education/health index), the sector pays significantly more on average than the retail sector which employs even more of the County’s workers, and offers employment opportunities that might provide a next step for some retail workers.



2.2.4.10 Accommodations and Food Services

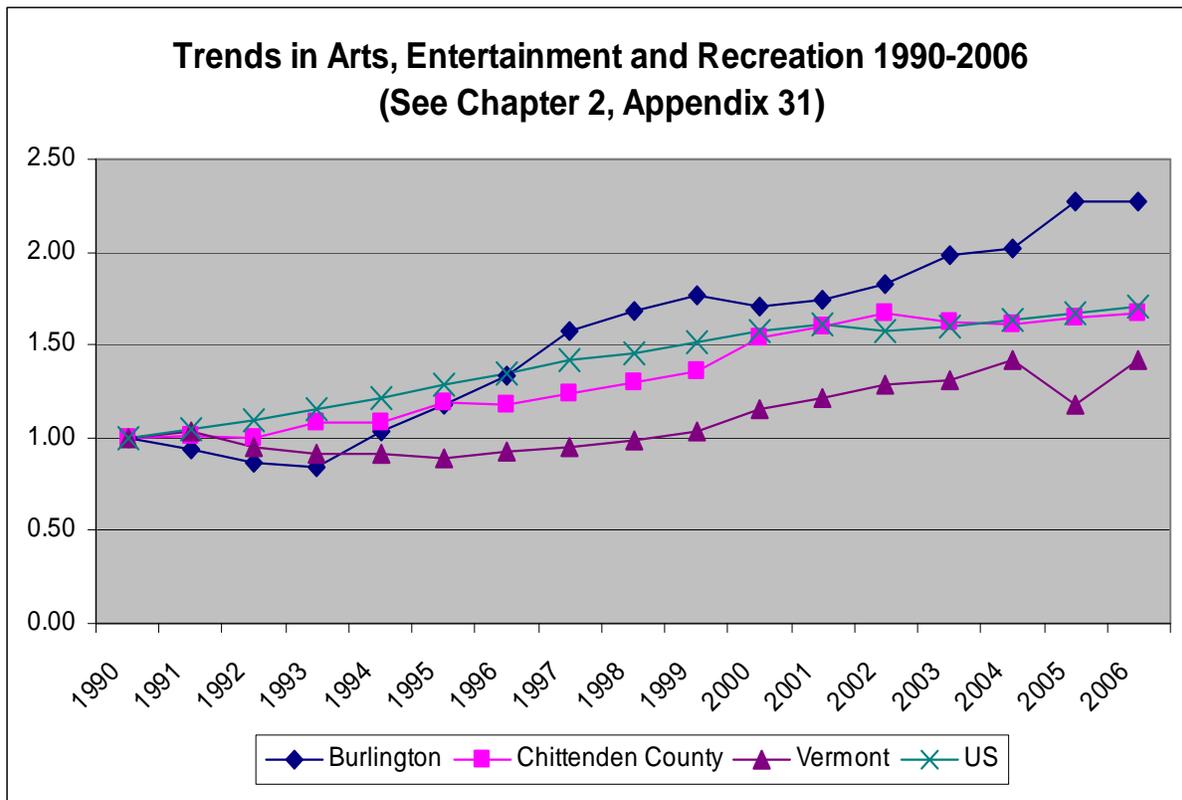
The United States has experienced steady and consistent growth throughout this time period for this industry. Vermont followed the U.S. until the late 1990's, when growth stagnated and then fell after the year 2000. Chittenden County and Burlington have experienced minimal growth in this sector, remaining at approximately the same employment levels which existed in 1990.

Although accommodation and food service jobs have not been growing in Chittenden County, this sector provides employment for a significant number of workers (over 7% in 2006).



2.2.4.11 Arts, Entertainment and Recreation

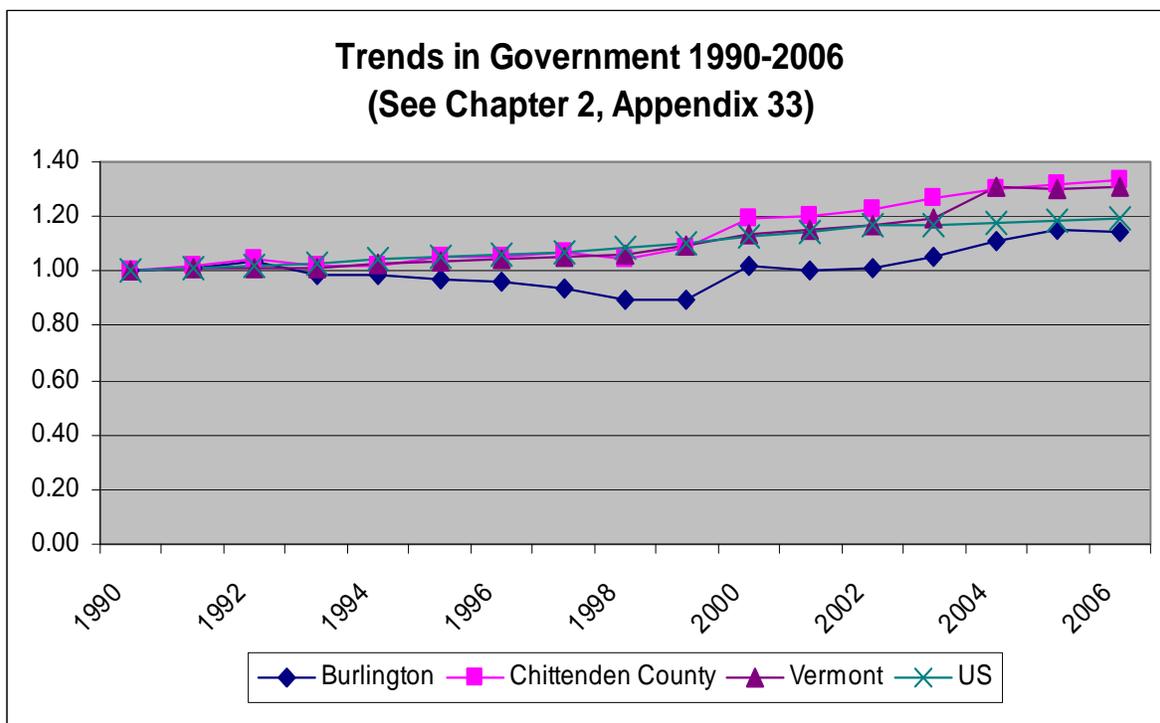
Although relatively few are employed in the arts, entertainment and recreation sector in Chittenden County (1.7% of total employment in 2006), this sector has demonstrated strong growth (73.4% over the 1990-2006 period) closely following the national trend. This growth is even more impressive within Burlington (around 130%). While this sector pays abysmal average real annual wages (below \$20,000), because of its important contribution to the cultural and recreational life of County and City residents, it is essential that steps be taken to support the growth and increased remuneration of those working in this sector.



2.2.4.12 Government

Chittenden County, Vermont, and the U.S. maintained slow but steady and similar percentage increases in governmental employment from 1990 to 2000. After then, the County and State grew faster than national trends, rising over 30% during the 1990-2006 period. Burlington declined until 2000, but then grew above the national rate through 2006.

Government jobs are important in Chittenden County, representing 15.5% of total employment in 2006. These jobs pay an annual average real wage of about \$42,000 (2006). Government job growth has occurred since 1994 in spite of ups and downs in the overall economy.



Location Quotient Analysis

Employment Concentration by Major Sector

A location quotient is a measure of the extent to which an area specializes in a particular industry. It is defined as the percentage of total employment in that area engaged in a particular industry divided by the corresponding percentage for that industry for the nation as a whole. For example, an LQ of 1.24 in the Arts, Entertainment and Recreation sector (2004) means that the percentage of total employment in this sector in Chittenden County is 24% higher than the percentage of national employment in that sector; in other words, Arts, Entertainment and Recreation is, on a percentage basis, more important in Chittenden County than it is nationally.

Location quotients have several uses.

First, they can be used to estimate the extent to which a particular sector in a community exports some of its goods or services. A sector with a location quotient higher than one is seen as producing more than needed by the locality (based on the average employment percentage nationally) and therefore likely to be exporting this excess. This, of course, assumes that the needs of a locality for particular goods and services is the same locally as it is nationally so that an $LQ > 1$ indicates production beyond needs. It also assumes that localities do not differ in their ability to produce different goods or services. Since both of these assumptions are questionable, we use LQs in this fashion with caution and only to identify possible export sectors or subsectors. We do consider that this possibility grows the further the LQ is above one.

Second, they can be used to estimate the potential for growth of a sector with LQs lower than 1 seen as sectors where businesses might startup or expand. The assumption here is that all localities have more or less the same need for goods and services (and thus for employment in those sectors that provide them). If this is true, a locality with a sector that has an LQ of .5 is considered to be under-producing that good or service relative to the need of the locality and thus a candidate for expansion. This underlying assumption is questionable especially for smaller localities. Identifying low LQ sectors, especially subsectors, however, may suggest areas for expansion that can then be looked at in more depth.

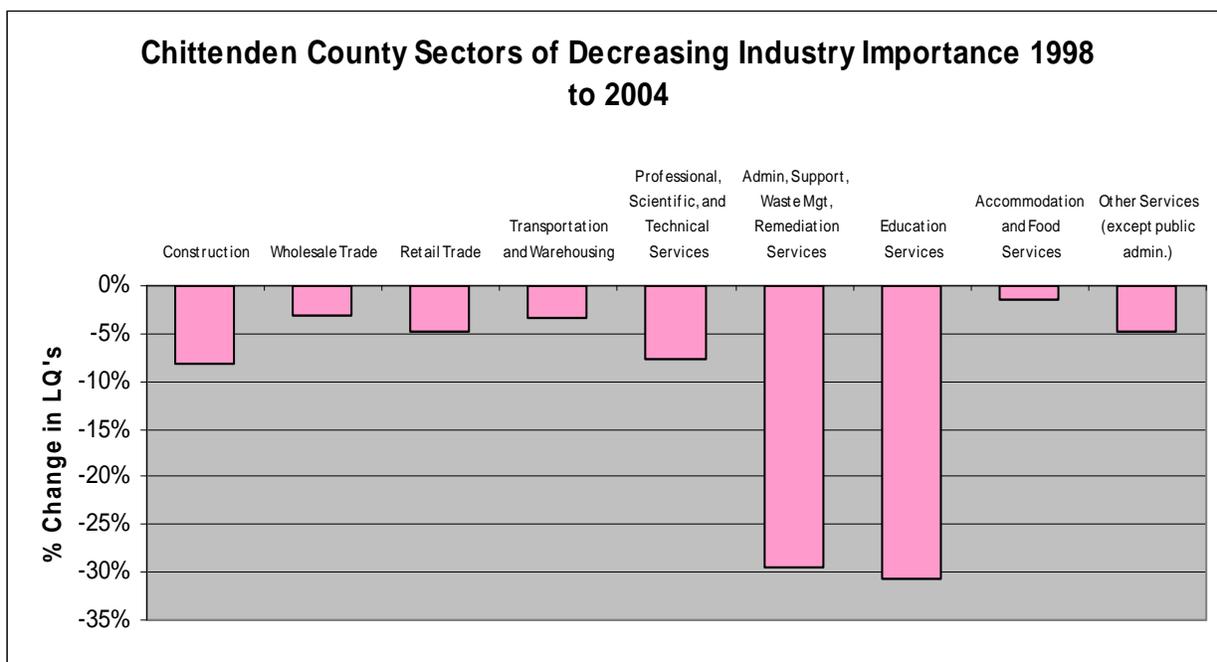
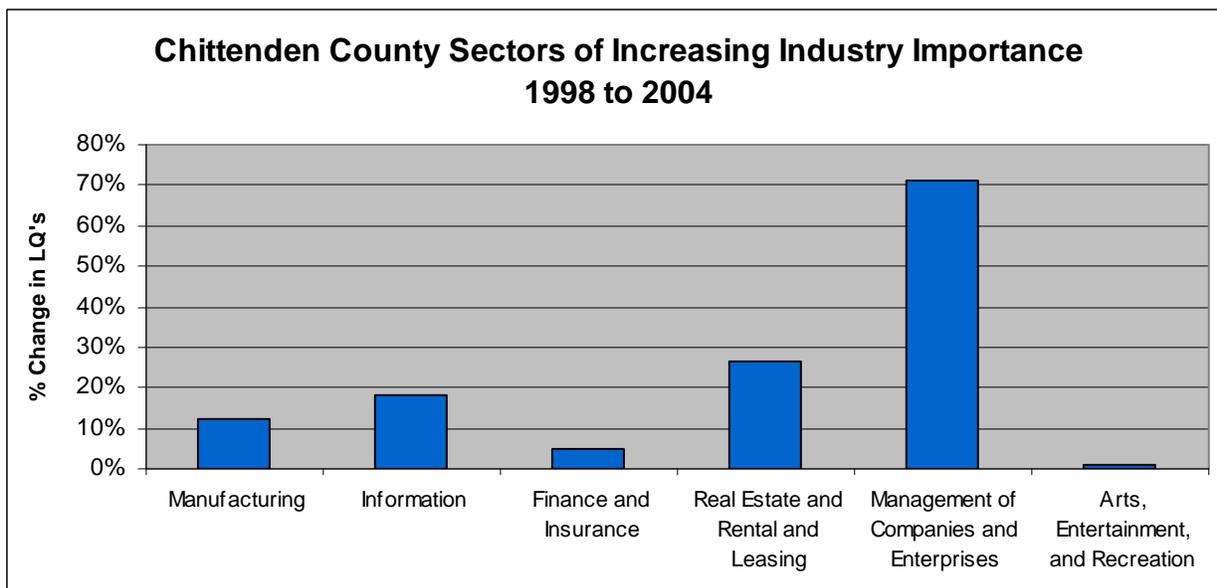
Finally, changes in location quotients measure changes in the importance of a sector's employment locally, relative to employment in that sector nationally. Thus, for example, the decline in the LQ for retail trade between 1998 and 2004 of 1.11 to 1.06 (see table below) means that either the importance of retail locally has declined, or it has risen nationally (or both).

The tables below show the location quotient by industry for 1998 and 2004, as well as the percent change between these two years. For more specific information on location quotients for jobs within each industry for these years, refer to Chapter 2, Appendices 34 and 35. Chapter 2, Appendix 35 also shows the location quotients for all of the 2-digit NAICS categories and the sub-sectors with relatively high location quotients for 2004.

% Change in Location Quotients: Chittenden County, 1998-2004

CHITTENDEN COUNTY LOCATION QUOTIENT			
DESCRIPTION	1998	2004	% change
Construction	1.21	1.11	-8.22%
Manufacturing	1.28	1.44	12.49%
Wholesale Trade	0.90	0.88	-3.21%
Retail Trade	1.11	1.06	-4.73%
Transportation and Warehousing	0.67	0.65	-3.45%
Information	1.05	1.24	17.99%
Finance and Insurance	0.81	0.85	5.09%
Real Estate and Rental and Leasing	0.70	0.88	26.42%
Professional, Scientific, and Technical Services	1.06	0.98	-7.73%
Management of Companies and Enterprises	0.51	0.87	71.10%
Admin, Support, Waste Mgt, Remediation Services	0.62	0.44	-29.47%
Education Services	2.18	1.51	-30.75%
Arts, Entertainment, and Recreation	1.23	1.24	0.89%
Accommodation and Food Services	0.93	0.91	-1.48%
Other Services (except public admin.)	0.77	0.73	-4.83%

Source: U.S. Census Bureau; "1998 and 2004 County Business Patterns, Chittenden County Vermont;" <<http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>>



Source: U.S. Census Bureau; “1998 and 2004 County Business Patterns, Chittenden County Vermont;” <<http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>>

Shift Share Analysis

Shift share is a way to compare growth in local industries to national overall and industry specific growth. The rate of growth of a local sector, like educational services, will reflect the growth of the overall national economy, the growth of the educational services sector nationally relative to the growth of the national economy (proportional shift), and the growth of the local educational services sector relative to the growth of that sector nationally (differential shift). In the world of shift share, a locality is more likely to grow if it has jobs in sectors with positive proportional and differential shifts.

The *proportional shift* of a sector is the difference between the rate of growth of the national sector and the rate of growth of the overall economy – is this sector growing faster or slower than the economy overall - and the *differential shift* is the difference between the rate of growth of the local sector and the rate of growth of that sector nationally - essentially a quantification of the differences between the local and national sector growth rates shown in all of the sector graphs (see section 2.2.4 above).

These two types of shifts for major sectors in Chittenden County are shown in the table below.

Shift Share Analysis (2000-2006) for Major Sectors in Chittenden Economy

Employment Sector	Proportional Shift	National Sector Growing Faster than Overall Economy?	Differential Shift	Local Sector Growing Faster than National?
Construction	.101	Yes	-16	No
Manufacturing	-.213	No	-7.5	No
Wholesale	-.018	No	6.8	Yes
Retail	-.031	No	-2.4	No
Transportation	-.020	No	17.8	Yes
Information	-.021	No	5.1	Yes
Finance, Insurance	.052	Yes	-8.6	No
Real Estate	.106	Yes	14.5	Yes
Professional, Scientific & Technical Services	.065	Yes	-.9	No
Educational Services	.181	Yes	-32.3	No
Health Care & Social Services	.141	Yes	18.9	Yes
Arts, Entertainment & Recreation	.046	Yes	5.5	Yes
Accommodations & Food Services	.109	Yes	11.1	Yes

Sectors that are growing faster than the national economy and where the local sector is also growing faster than the same sector nationally (Yes-Yes in the above table) are Real Estate, Health Care and Social Services, Arts, Entertainment and Recreation, and Professional, Scientific and Technical Services. From a shift share and potential job growth perspective, these sectors deserve special attention. Sectors that are competitive locally but not growing as fast as the national economy (No-Yes), i.e. doing well in spite of how the sector is doing nationally, include Wholesale, Transportation, and Information. This status suggests that local conditions faced by these sector and/or actions taken by local firms in these sectors may be favorable for their growth and worth examining more closely. Sectors that are not competitive locally although that sector is doing well nationally (Yes-No) include Construction, Finance and Insurance, Educational Services and (again) Professional, Scientific and Technical Services. These sectors, although they enjoy growth nationally may need help locally. And finally those sectors which are neither competitive or growing nationally (No-No) include Manufacturing and Retail. While they may provide employment now, their prospects for growth are not favorable from a shift share perspective.

Cluster Analysis

Finally, location quotients that measure local employment concentration relative to the national economy, and differential shifts that measure local competitiveness relative to how that sector is doing nationally, can be combined to provide very rough groupings (clusters) of sectors with regard to their current and future employment potential. Using these measures, the table below groups sectors into Growing Base Industries (high concentration, high competitiveness), Transformative Industries (high concentration, low competitiveness), Emerging Industries (low concentration, high competitiveness), and Declining Industries (low concentration, low competitiveness).

Sector Employment Concentration (2004) and Competitiveness (2000-2006)

	Low Competitiveness (Differential Shift < 1)	High Competitiveness (Differential Shift >1)
	<i>Transforming Industries</i>	<i>Growing Base Industries</i>
High Local Employment Concentration Export Orientation (LQ>1)	Educational Services Manufacturing Construction Retail	Information Arts, Entertainment and Recreation Health Care and Social Services Professional, Scientific and Technical Services
	<i>Declining Industries</i>	<i>Emerging Industries</i>
Low Local Employment Concentration Local Orientation (LQ<1)	Finance, Insurance	Wholesale Transportation Real Estate Accommodations and Food

2.2.5 Summary

The generally strong performance of the County economy, discussed earlier in this chapter, is the result of employment-providing industrial sectors within the County. However, as we have seen in our examination, they differ significantly along a variety of dimensions. This can be seen in the Table below.

Sectoral Rankings by Employment Importance, Employment Growth, Real Annual Wages, Export-Orientation and Competitiveness, Chittenden County, 1990-2005

Description	2005 Employment	90-05 Employ. Growth	2005 Annual Wages*	Employ. Rank	Growth Rank	Wage Rank	Relative Importance (LQ)	Competitiveness (Diff. Shift)
Manufacturing	12,418	-13.5%	\$62.5	4	16	2	2	11
Construction	5,213	18.0%	\$43.1	7	12	7	4	13
Natural Resources & Mining	180	23.2%	\$21.0, \$56.7***	18	11	4, 12***		
Wholesale Trade	3,370	5.54%		9	14		9	6
Retail Trade	12,918	25.7%	\$24.6	2	8	11	6	10
Utilities	248	-36.4%	\$79.6	17	17	1		
Transportation & Warehousing	2,489	30.4%	\$36.1	12	6	10	13	3
Information	2,371	13.4%	\$48.4	13	13	5	3	8
Finance & Insurance	3,567	25.2%	\$59.3	8	9	3	12	12
Real Estate, Rental & Leasing	1,221	23.7%		16	10		9	4
Profes., Scient. & Tech. Services	5,925	51.7%	\$46.5	6	3	6	7	9
Admin., Support & Waste Services	n/a	?		11				
Educational Services	2,194	47.7%	\$38.7**	14	4	9**	1	14
Health Care & Social Assistance	12,762	56.3%	\$38.7**	3	2	9**	5	2
Arts, Entertainment & Recreation	1,595	64.9%	\$17.6	15	1	13	3	7
Accommodations & Food Services	7,056	3.98%		5	15		8	5
Other Services	2,802	27.0%		10	7			
Government Total	14,715	32.1%	\$42.5	1	5	8		

*Nominal annual wages in \$1,000s

**Education and health sector combined

***Separate agriculture and mining annual wages and ranking

This Table ranks sectoral employment in Chittenden County according to five dimensions. First, employment importance as measured by the percent of total jobs provided in 2005 by that sector. Second, employment growth by percentage change between 1990 and 2005. Third, annual wages (in 2005), Fourth, export-orientation as measured by how much more employment (on a percentage basis) is provided by a sector locally than nationally (location quotient). A high location quotient suggests the sector is export-oriented, a low quotient suggests the sector produces mostly for local consumption and also may be a candidate for expansion. And finally, sectoral competitiveness as measured by how much faster the local sector is growing than that same sector nationally (differential shift). Different sectors have different rankings along these five dimensions, and consequently differ in their importance in terms of local and state policy priorities and require different strategies to enhance their performance.

This analysis of the major industrial sectors in Chittenden County suggests a multi-dimensional approach to the retention and development of jobs in different sectors.

Let's begin with the sectors that currently provide the most jobs (government, retail, health care and social services, manufacturing, accommodations and food services, professional, scientific and technical services, and construction). Of these sectors, some provide higher than average wage employment (manufacturing, professional, scientific and technical services, construction, government and health care and social services) and are clear candidates for support. The nature of this support will vary with manufacturing requiring extreme efforts to slow its decline and increase its competitiveness. Health care and social services and professional, scientific and technical services, on the other hand, are growing sectors, with less need for help staying alive and, in the case of health care, more need for improving the quality of the jobs or help moving individuals to higher paying work within this sector. Finally, the retail and accommodations and food services sectors need to improve the quality of the jobs they offer. It is important to pursue such a strategy with these sectors since they both may be luring individuals, and their consuming dollars, into the County from outside as well as providing some low-skill jobs that may be the only employment options available to some residents.

Turning to the growth sectors, we've already discussed health care and social services, professional, scientific and technical services, and government. This leaves arts, entertainment and recreation, educational services, and transportation and warehousing. Arts, entertainment and recreation is currently not a large employer in the County, pays very low average wages, and yet is the fastest growing sector by far (especially within Burlington – see Chapter 3). It is also growing faster than this sector is nationally (meaning it's "competitive"), has a higher percentage of those working in this sector than the percentage employed nationally (i.e. it is probably exporting its sights, sounds and services) and contributes a lot to the cultural and quality of life the County. A strategy to reduce costs and increase incomes in this sector is essential.

Educational services, containing approximately 2,000 employees, still employs a higher percentage of workers than nationally, largely because most places in the nation don't have a University in residence. This higher location quotient indicates that this is an export-industry for the County and valuable for the funds it attracts to the County. It also pays wages near the average levels for the County. Working with the University of Vermont and other educational institutions to improve the quality of staff jobs and increase the opportunities for advancement, would seem like a high return strategy for this sector. Finally transportation and warehousing. Even with modest growth, transportation and warehousing is still growing faster than the national sector suggesting that the County provides some untapped advantages for expansion of this sector (its location in a relatively dense and growing population area of the State with a nearby interstate may be factors). Infrastructure support and help improving the quality of its jobs might be beneficial.

Finally, there are other sectors of relative unimportance in terms of employment levels and growth that might still merit attention because of the higher wages they pay. This is clearly the case for finance and insurance, and for the information sector, both of which pay annual real wages well above the average. These sectors also present other reasons for support. Information provides a higher percentage of local employment than the information sector does nationally, suggesting that the local information sector is exporting some of its services and bringing resources into the County. A cost-cutting strategy, rather than a growth strategy (since already employing above the national average) may be in order. In contrast, finance and insurance employs a much lower percentage of workers locally than the sector does nationally, suggesting there may be opportunities for expansion locally, and efforts to enhance that growth may be helpful.

Several caveats need to be unfurled at this point. First, there are other characteristics of sectors that should be included in a more complete analysis. For example, the regional multiplier effects of expansions of different sectors is of importance in assessing the total direct and indirect impacts on local business output, earnings and employment. Measures of such effects, and their rankings along with the five characteristics in the table above, would enrich the analysis. Such multipliers (RIMS II) are available through the Census Bureau. Second, this analysis of aggregate sectors should be extended to subsectors within each of the most promising sectors. Aggregate sectors are just that; the aggregations of many smaller sectors that are included under the same umbrella but may be quite different. We examine a few subsectors in Chapter 3.

Chapter 3. The Burlington Economy

Burlington is the primary city and growth center of Chittenden County. Its economy is highly inter-connected with the County's economy yet it has its own special employment sectors, unique labor force characteristics, economic dilemmas, and levels of economic well-being. It also has its own tax and revenue base and scope of influence over its economic situation.

This chapter looks first at the population demographics of Burlington residents and how they have changed over time. We then focus on the structure and performance of the Burlington economy and the particular risks and opportunities that the City faces. This includes examining the particular mix of employment sectors and sub-sectors within the City for the risks and opportunities they may hold. Finally, we analyze total employment and job growth, aggregate income, unemployment, and poverty levels.

3.1 Burlington Residents and Workforce

3.1.1 Population Levels, Growth and Birth Rates

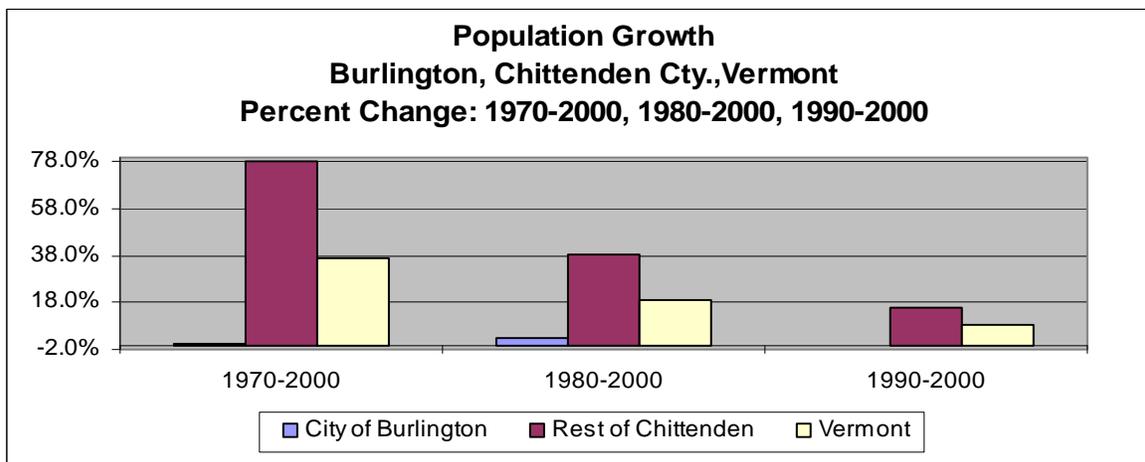
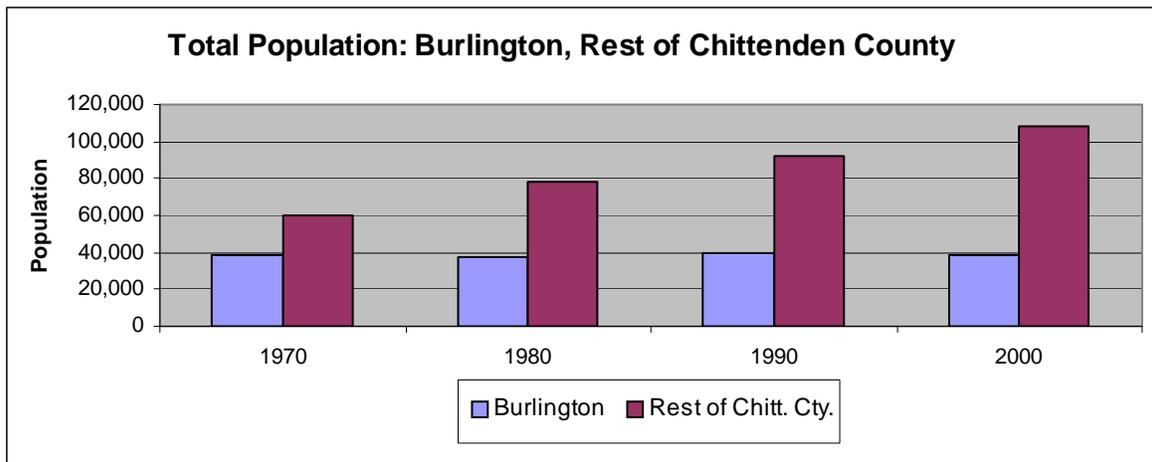
Population levels and changes over the 1970-2000 period are shown in the table below and compared with Chittenden County in the graph that follows. Burlington's population has been amazingly stable over that entire period barely growing from 38,633 in 1970 to 38,889 in 2000 with minor fluctuations in between. At the same time, Chittenden County's population in the area outside of Burlington has grown nearly 78 percent, from 60,498 to 107,682.

Over the 1981-2003 period, birthrates in Burlington were consistently lower than in the rest of Chittenden County, although growth rates have been declining throughout the region. This reflects the larger percentage of families living in Chittenden County outside of Burlington and the national decline in birth rates over this period. These trends can be seen in the table and graphs below, while full birthrate and population data can be found in Chapter 3, Appendices 1 and 2.

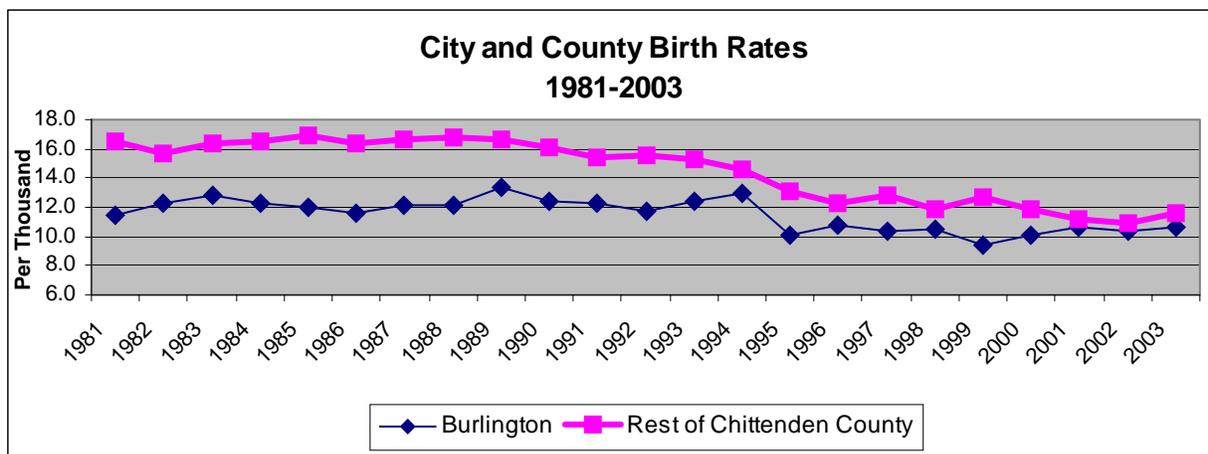
Population Growth for Burlington, Chittenden County, Vermont: 1970-2000

	Population				Percent Change		
	1970	1980	1990	2000	1970-2000	1980-2000	1990-2000
Burlington	38,633	37,712	39,127	38,889	0.663%	3.121%	-0.608%
Rest of Chitt. Cty.	60,498	77,822	92,634	107,682	77.993%	38.370%	16.245%
Vermont	444,732	511,456	562,758	608,827	36.898%	19.038%	8.186%

Source: U.S. Bureau of the Census; **1970:** U.S. Census 1970, (VT/Part 47), Tables 1 (P. 47-7) & 10 (P. 47-15); **1980:** U.S. Census 1980, (VT/Part 47), Table 4 (P. 47-11); **1990:** U.S. Census 1990, (SF3), Table P001; **2000:** U.S. Census 2000, (SF1), Table 5 PHC-3-47



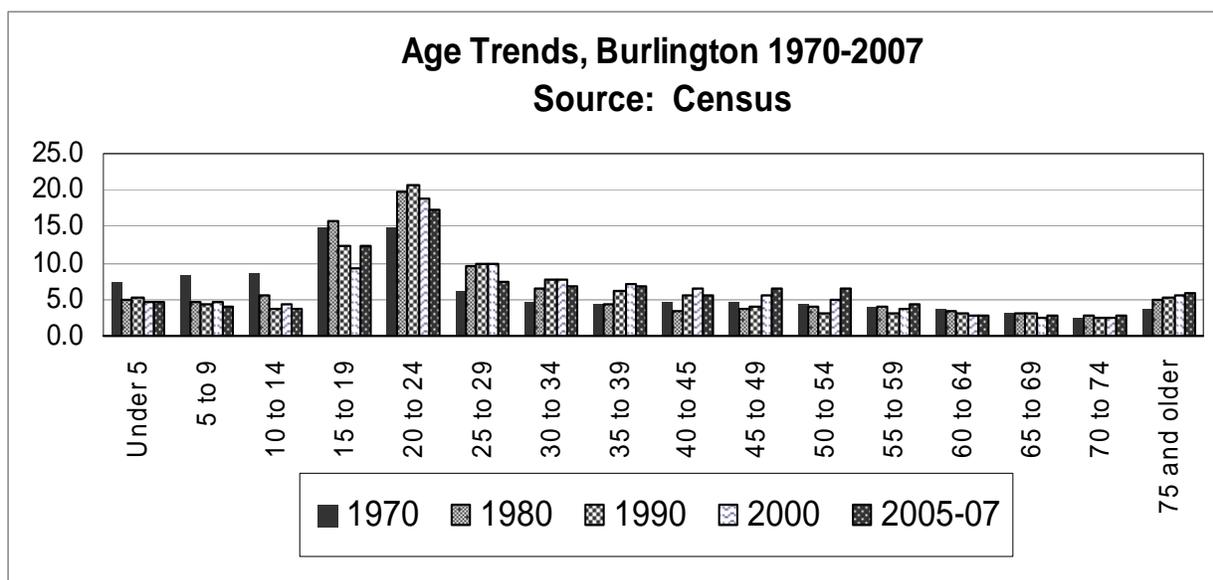
Source: U.S. Bureau of the Census; **1970:** U.S. Census 1970, (VT/Part 47), Tables 1 (P. 47-7) & 10 (P. 47-15); **1980:** U.S. Census 1980, (VT/Part 47), Table 4 (P. 47-11); **1990:** U.S. Census 1990, (SF3), Table P001; **2000:** U.S. Census 2000, (SF1), Table 5 PHC-3-47



Source: Vermont Department of Health; **1981-91:** Vital Statistics, Table 3; **1992-2003:** Table A-3

3.1.2 The Aging Population

Burlington’s population has aged significantly since 1970, as can be seen in the chart and table below. The number of individuals under twenty has decreased by 42 percent since 1970, while the number of residents 20-54 in age grew by 41 percent, and those over 75 by 49 percent. The “peak” age has increased continuously since 1970 from individuals in their late teens and early twenties to individuals in their late twenties and early thirties. This trend appears likely to continue and may accelerate if the city is unable to attract more younger residents and families.



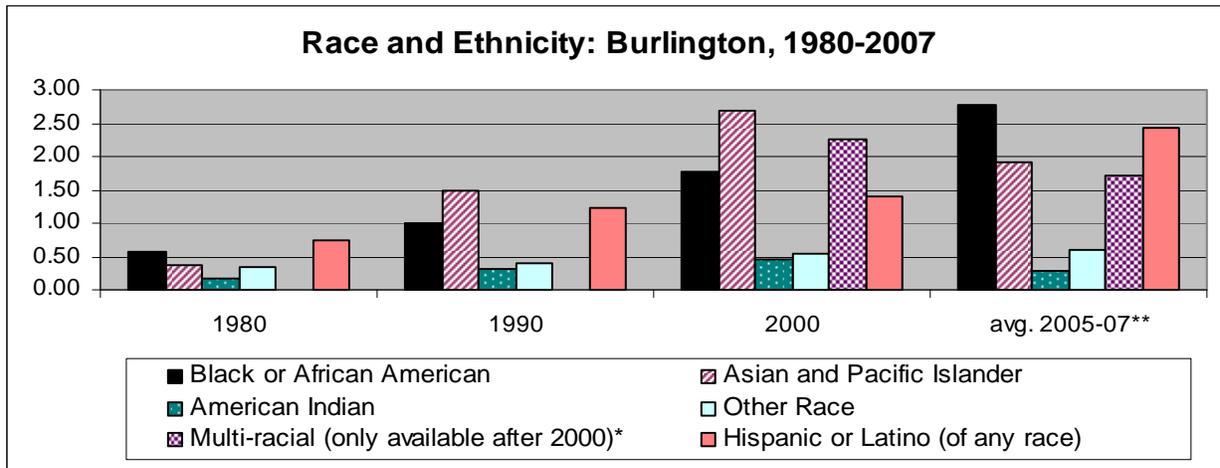
Burlington Age Trends, 1970 to 2007

Age Group	1970	1980	1990	2000	Avg. 2005-07
Under 5	2,872	1,846	2,071	1,788	1,840
5 to 9	3,246	1,762	1,725	1,826	1,554
10 to 14	3,391	2,123	1,496	1,690	1,453
15 to 19	5,692	5,934	4,850	3,566	4,757
20 to 24	5,703	7,469	8,119	7,343	6,682
25 to 29	2,409	3,566	3,892	3,845	2,824
30 to 34	1,734	2,414	3,035	2,977	2,641
35 to 39	1,641	1,575	2,466	2,756	2,614
40 to 44	1,808	1,301	2,168	2,488	2,202
45 to 49	1,839	1,395	1,515	2,179	2,524
50 to 54	1,672	1,472	1,215	1,894	2,499
55 to 59	1,532	1,518	1,236	1,387	1,674
60 to 64	1,451	1,262	1,203	1,058	1,052
65 to 69	1,208	1,152	1,162	962	1,019
70 to 74	987	1,039	931	974	1,025
75 and older	1,448	1,884	2,043	2,156	2,240
Total	38,633	37,712	39,127	38,889	38,600

Source: Census population data

3.1.3 Changing Racial and Ethnic Diversity

Racial and ethnic diversity in Burlington has grown exponentially since 1980, albeit from a small base. Burlington has been a gateway city for generations, and it continues in that role. In 1980, 2.2 percent of residents were Hispanic, Black, Asian, Pacific Islanders, American Indians, and other multi-racial individuals. By 2000, that percentage had more than quadrupled to 9.1 percent. While the white population dropped by almost 1,500 between 1980-2000, the number of Hispanic and American Indian residents nearly doubled, and the African American population tripled. This growth occurred while the Burlington population overall has been stable. The number of residents who categorized themselves as Asian and Pacific Islanders or Other and Multi-Racial increased by over 500%, although some of this may have been affected by the addition of the Multi-Racial category in 2000. This is particularly vivid given that the Burlington population overall has been stable. In 2000, the Census showed that nearly 5% of city residents (1,925 people) had entered the country in the last ten years and 1,345 residents had entered the country in the last five years. Burlington has assisted with resettlement efforts to support Vietnamese, Bosnian, Sudanese, Congolese, Bantu refugees from Somalia and, most recently, Burundians and Iraqis. In 2008, the Vermont Refugee Resettlement Program anticipated the arrival of 457 refugees, with many locating to Burlington.



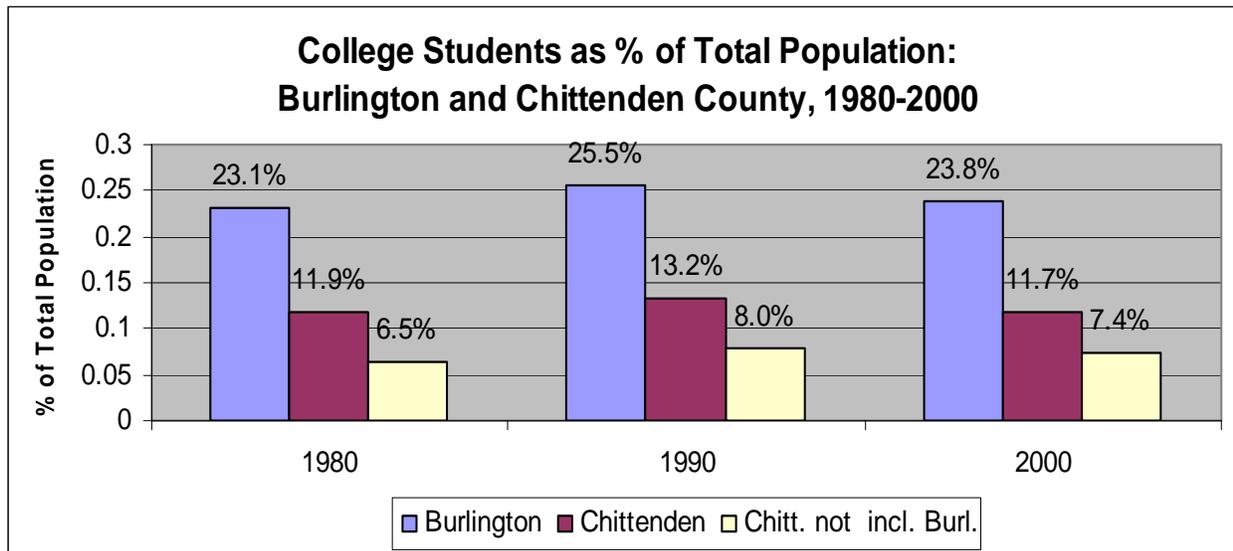
Burlington Racial Trends, 1970 to 2000

	1980	1990	2000	Avg. '05-07
White, Not Hispanic	37,153	37,876	35,883	35,795
Hispanic	285	483	546	934
Black	218	390	693	1,068
Asian and Pacific Islander	143	583	1,039	743
American Indian	67	123	182	106
Other/Multi-racial	131	155	1,092	888

Source: U.S. Decennial Census, 1980, 1990, 2000 Summary File 1; U.S. Census Bureau, American Community Survey 2005-2007, 3-year estimates

3.1.4 College Students

Students as a percent of the population in Burlington, Chittenden County, and the area of Chittenden County outside of Burlington in 1980, 1990 and 2000 is shown in the following graph. The percentage of students residing in Burlington, with the University of Vermont and several colleges located here, has hovered around 24 percent, compared to only around 7.5 percent outside of Burlington. Increases in student enrollments at UVM and Champlain College since 2000 may change Burlington’s total population and percentage of students by the 2010 census.

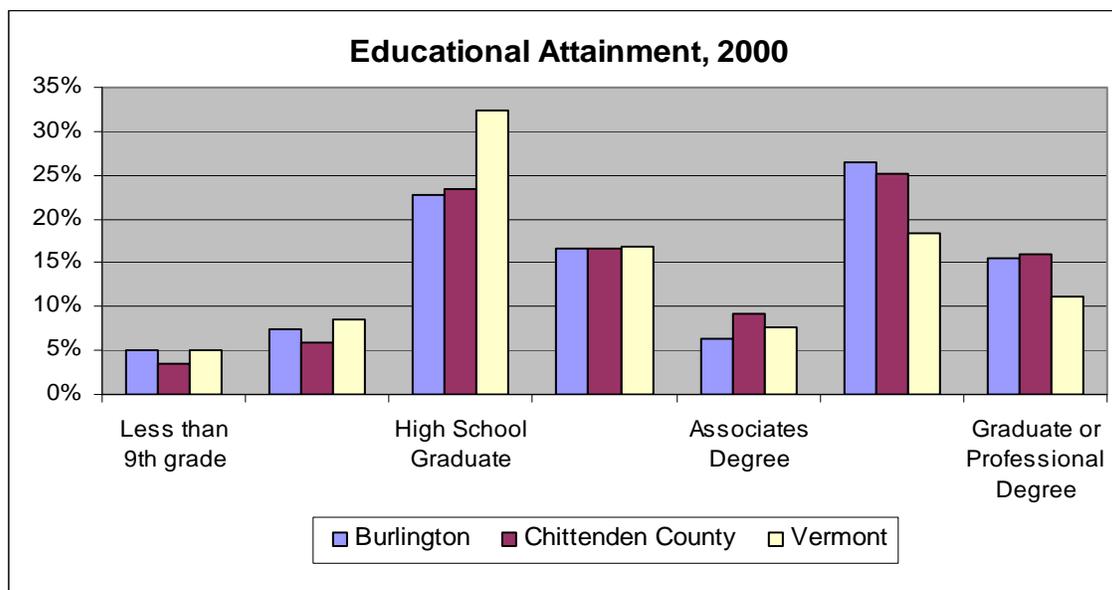


Source: U.S. Census Bureau; 1980: U.S. Census 1980, General Social & Economic Characteristics of Vermont, Table 119 & 175; 1990: U.S. Census 2000 (SF3), Table P054

3.1.5 Education

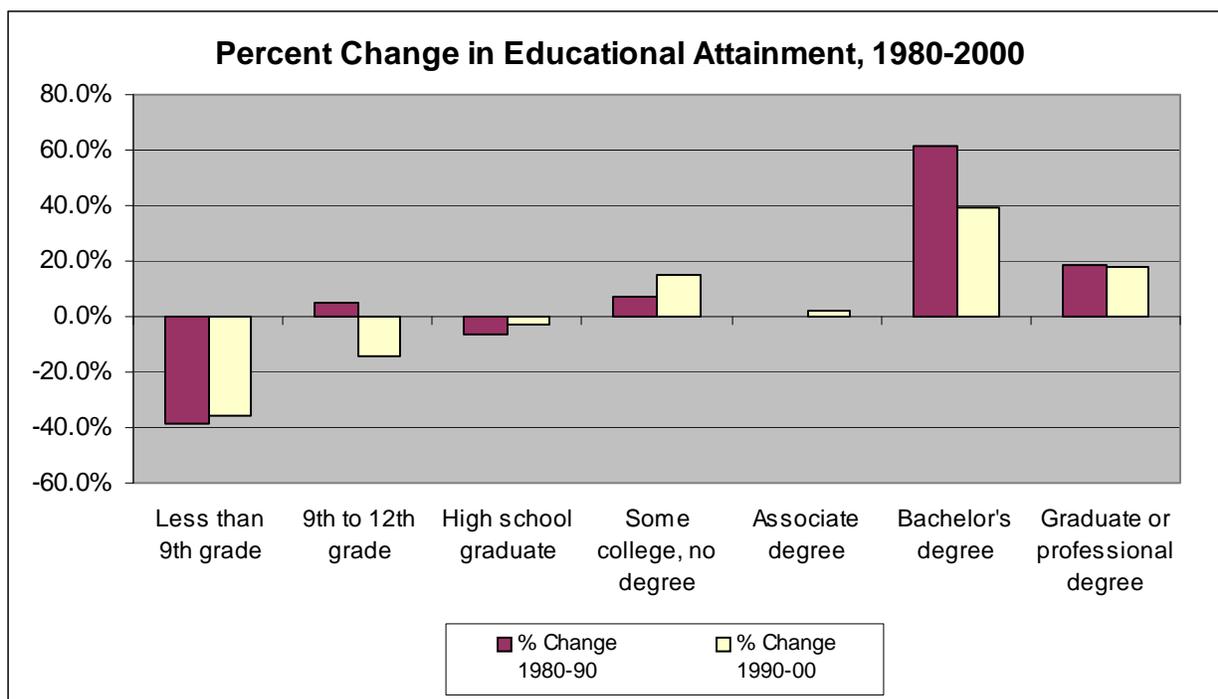
As of 2000, Burlington had a higher percentage of individuals who had completed a bachelor’s, graduate, or professional degree (43%) than Chittenden County (41%) and the rest of Vermont (29%). At the same time, the percentage of Burlington residents with less than a high school diploma (12.5%) was similar to statewide levels (13%). This information can be seen in the table below, with more detailed data in Chapter 3, Appendix 3.

The disparities in educational attainment create pressures for employment opportunities that match the job skills linked to education. While there are enough jobs available for lower skilled residents, they are relatively low paying service, health care and social service sector positions, some of which are located in the suburbs adding transportation and access difficulties. The challenge is to try to upgrade these jobs to increase wages and other benefits and to train individuals for better paying jobs. A related challenge is to reduce the mismatch of job and residence locations, with Burlington offering affordable housing not available outside the city, and the suburbs providing many retail jobs. For those with more skills, who can perform in higher paying jobs, the challenge is to have enough of these better paying jobs for these individuals. This is often an issue for college graduates who can’t find good jobs locally and either leave the area or compete with lower skilled individuals for available low skill employment. The inadequate supply of “good jobs” often means many individuals are taking part-time positions when they are seeking full-time work. Data on educational attainment in Burlington was collected from the 2000 census and compared to the 1980 and 1990 censuses.



Source: U.S. Census Bureau; U.S. Census 1980, General Social & Economic Characteristics of Vermont, Table 119 (P. 47-104); U.S. Census 1990, General Social & Economic Characteristics of Vermont, Table 171 (P. 212); U.S. Census 2000, (SF3), Table P37

During the period from 1980 to 2000, a significant change in the educational attainment of Burlington residents occurred (see table below). Those who had less than a 9th grade education fell by 39.5% between 1980 and 1990, and another 35.9% from 1990 to 2000; concurrently those with a bachelor’s degree rose by 61.1% in the first decade and another 40% in the second. In absolute terms, however, there are still significant numbers of residents in Burlington who only have a high school diploma or less (about 12.5% of residents as shown in the 2000 educational attainment table above). The data this chart is based on can be found in Chapter 3, Appendix 4.



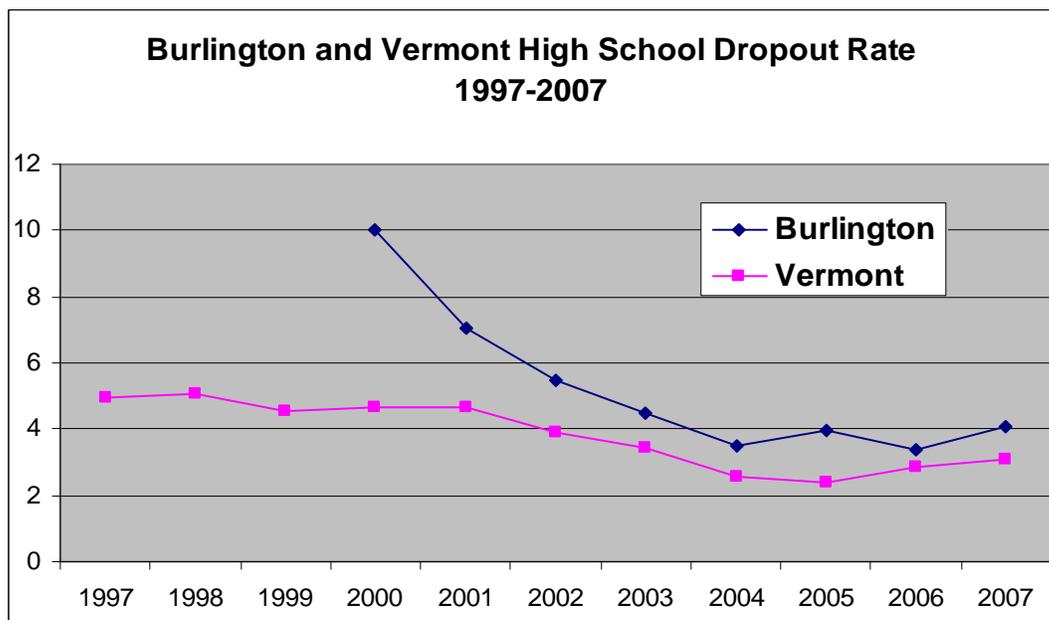
Source: U.S. Census Bureau; U.S. Census 1980, General Social & Economic Characteristics of Vermont, Table 119 (P. 47-104); U.S. Census 1990, General Social & Economic Characteristics of Vermont, Table 171 (P. 212); U.S. Census 2000, (SF3), Table P37

Over the past ten years, drop out rates have fallen significantly in Burlington and Statewide (see table and graph below). From 2000 to 2004, the high school drop out rate in Burlington dropped from 10% to 3.52% and then leveled off. Vermont followed a similar trend, with the rate falling from 4.96% in 1997 to 2.40% in 2005 but returning to 3.08% in 2007.

Burlington and Vermont Grades 9-12 Dropout Rate, 1997-2007

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Burlington				10.00	7.06	5.49	4.46	3.52	3.98	3.36	4.06
Vermont	4.96	5.06	4.52	4.67	4.66	3.9	3.45	2.57	2.4	2.85	3.08

Sources: Vermont Department of Education <<http://education.vermont.gov/new/html/>>



3.2 The Burlington Economy

3.2.1 Employment

3.2.1.1 Employment Levels and Growth by Industry

During the time period between 1980 and 2006, total employment in Burlington grew from 25,966 to 32,377 with the majority of this change taking place between 1980 and 1990.

Burlington's employment growth rate is significantly less than the rates of Vermont, Chittenden County, and the United States; this is largely caused by the City's lack of space, and higher cost, for building compared to the rest of the County and its lower rate of population growth.

The full table of employment statistics for Burlington residents by industry (total and percent of total) can be found in Chapter 3, Appendices 5 and 6.

The following table draws from annual sectoral employment in Burlington, 1990-2006 (Chapter 3, Appendix 5). Several sectors are missing information due to non-availability of data (construction, wholesale trade, administration, support and waste services).

The table below shows a major shift in the structure of Burlington's economy.

Description	1990	1995	2000	2005	90-05	Empl.	Growth
Total Employment	30,801	30,032	31,493	32,498	5.51%	Rank	Rank
Service Providing*	21,030	20,817	21,807	22,120	5.18%		
Manufacturing	2,244	2,079	2,072	1,876	-16.4%	6	10
Construction	807	602	n/a	n/a			
Wholesale Trade	844	n/a	n/a	n/a			
Retail Trade	3,524	3,048	2,995	3,073	-12.8	3	9
Transportation/Warehousing	875	741	708	590	-32.6	11	13
Information	848	949	875	601	-29.1%	10	11
Finance & Insurance	2,348	1,900	1,699	1,531	-34.8%	7	12
Real Estate, Rental & Leasing	416	511	448	415	-.24%	12	7
Profess., Scient. & Tech. Service	1,503	1,819	2,336	2,171	44.4%	5	2
Admin, Support & Waste Service	469	n/a	n/a	n/a			
Educational Services	637	735	790	673	5.65%	9	6
Health Care & Social Assistance	6,177	6,641	6,899	7,658	24.0%	2	3
Arts, Entertainment & Recreation	137	161	233	312	127.7	13	1
Accommodations & Food Services	2,327	2,125	2,205	2,320	-3.01%	4	8
Other Services	924	971	1,031	989	7.03%	8	5
Government Total	6,720	6,533	6,840	7,727	15.0%	1	4

*Note: 2006 Data is an average of quarters 1, 2 and 3 only.

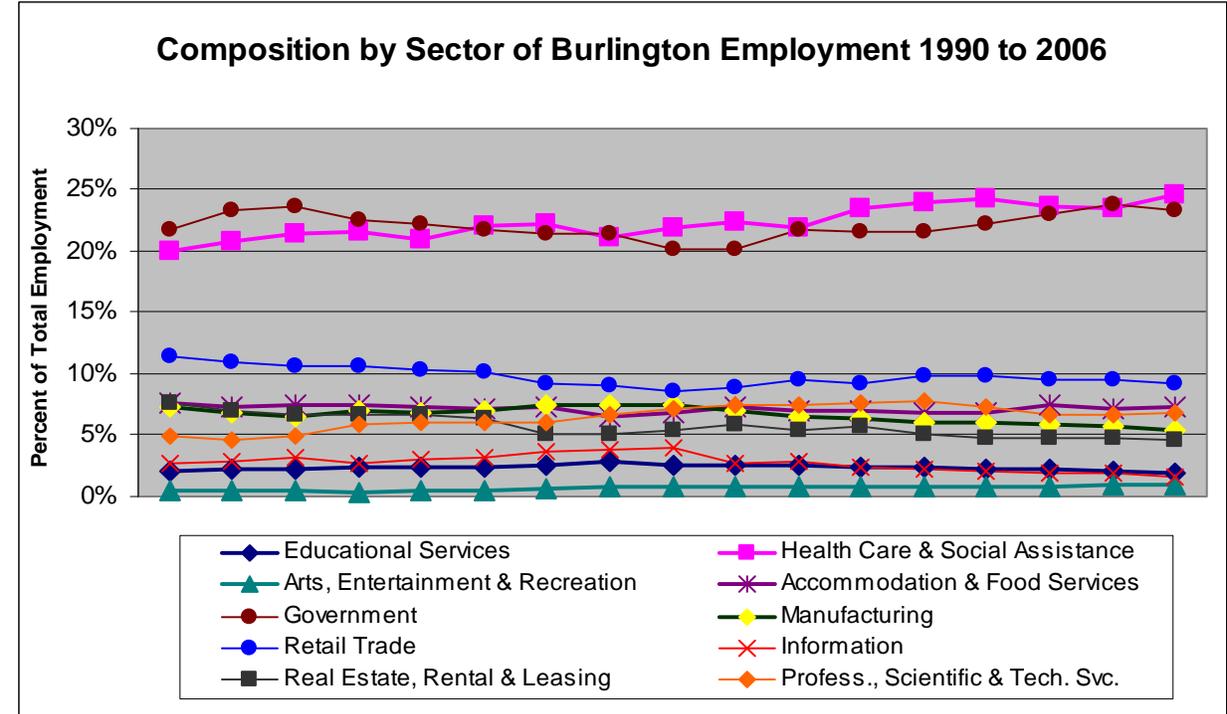
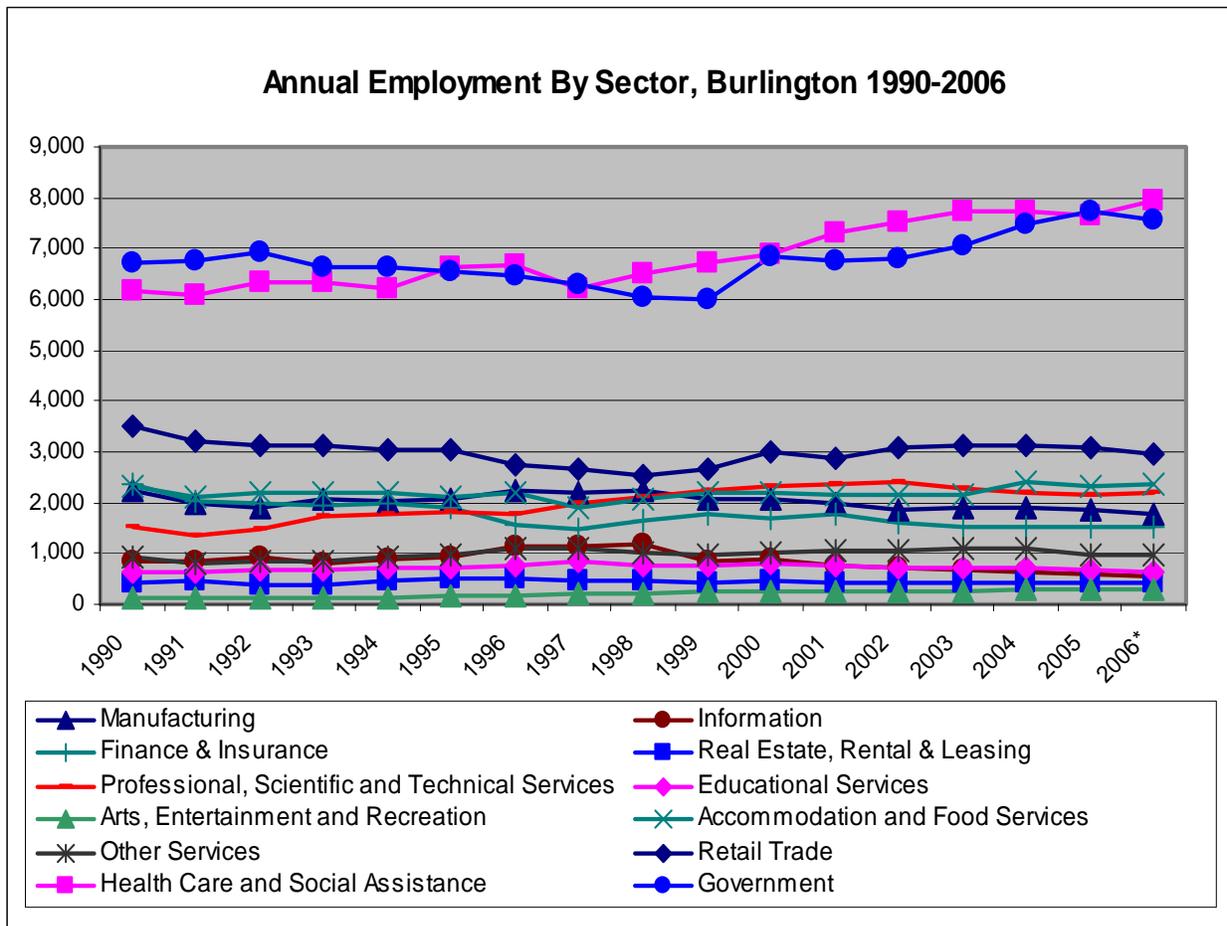
Total employment declined significantly in five sectors (manufacturing, retail trade, transportation and warehousing, information, and finance and insurance), resulting in a loss of 2,168 jobs in these sectors since 1990. At the same time, four other sectors grew significantly (professional, scientific and technical services; health care and social services; arts, entertainment and recreation; and government) creating 3,331 jobs over the same 1990-2005 period.

Of those sectors providing over 1,000 jobs (the top seven sectors ranked by employment), the two top employing sectors, government, health and social services, continue to grow. Retail trade, the third highest employer, shrank somewhat between 1990 and 1999 (see Appendix 5) but rebounded since 2000. The fourth ranked job providing sector, accommodations and food services, has remained stable, while the fifth ranked professional, scientific and technical services sector grew significantly between 1990 and 2000 and has remained relatively stable since then. The remaining sectors providing 1,000 jobs and more, manufacturing and finance and insurance, continue their long term slides.

Of the sectors that have grown more than 15% over this 15 year period, the only one not noted so far is arts, entertainment and recreation, a sector that has grown by almost 128%.

Since Burlington residents often work outside the City (see Employment Location Chart, Chapter 2, page 5), it's important to look at sectoral employment shifts in the County compared to Burlington. With the exception of manufacturing, those sectors declining in Burlington are growing in the County (information, real estate, transportation and warehousing, finance and insurance) so that employment options are not necessarily being reduced overall.

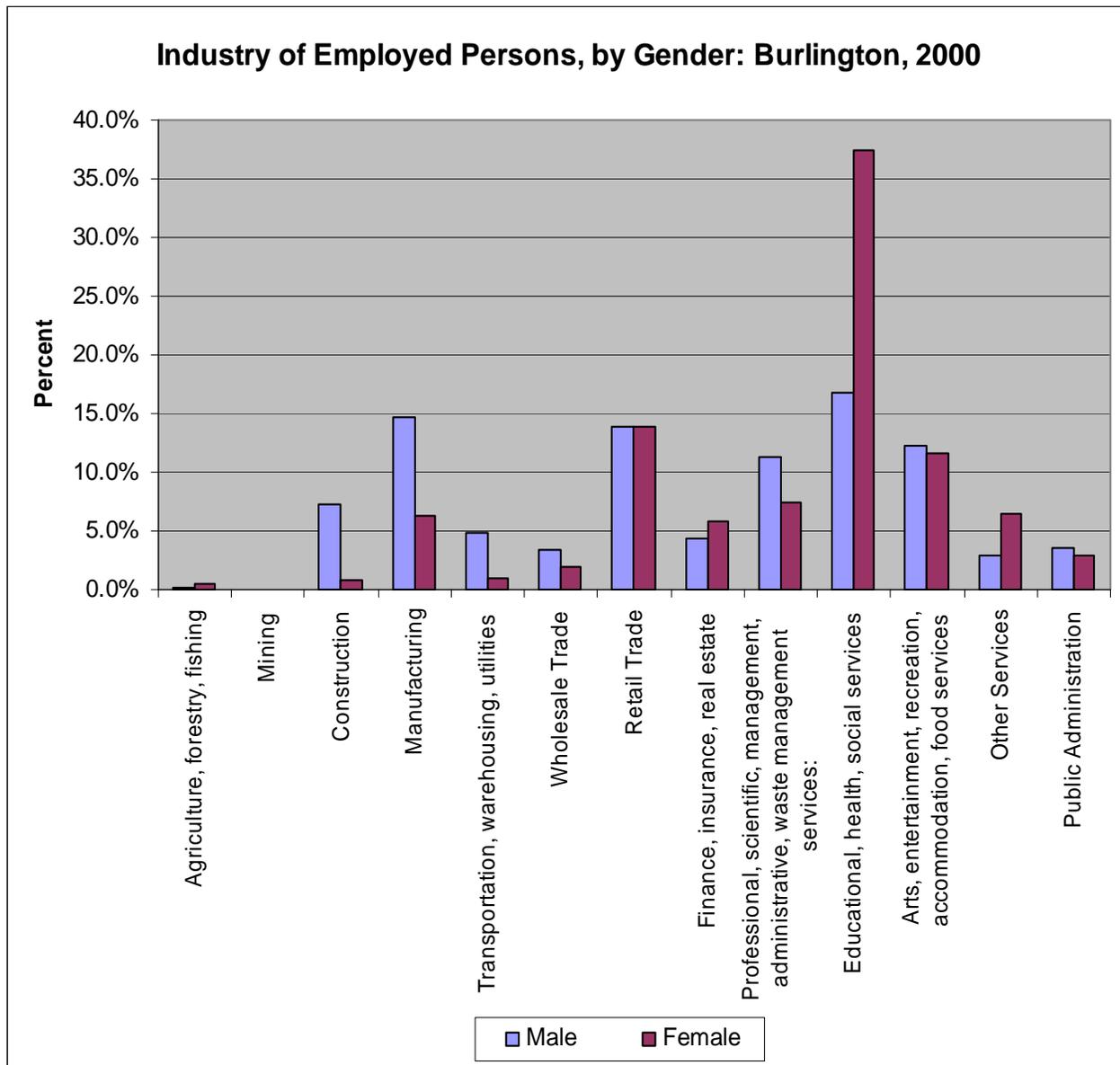
These trends in sectoral employment levels (number and percent of total) and growth rates can be seen in the following graphs. Additional data providing a more specific breakdown of the changes in the numbers of jobs within each industry from 1998 to 2005 can be found in Chapter 3, Appendix 8.



Source: U.S. Census Bureau; U.S. Census 2000 (SF3), Table P49

3.2.1.2 Industry Composition by Gender

The sectors with the greatest gender disparities are construction, manufacturing, transportation, warehousing, and utilities, which employ significantly more men, and the sectors of education, health and social services, which employs significantly more women. Interestingly, the sectors experiencing dynamic growth favor women while those facing a decline employ more men. The data for the chart below can be found in Chapter 3, Appendix 9.



Source: U.S. Census Bureau; U.S. Census 2000 (SF3), Table P49

3.2.2 Location Quotients and Shift-Share Analysis

Location Quotients

A location quotient is a measure of the extent to which an urban area specializes in a particular industry. It is defined as the percentage of total employment in an urban area engaged in a particular industry divided by the corresponding percentage for the nation as a whole. For example, if a municipality has 10% of its total employment in manufacturing while nationally 15% of those employed work in manufacturing, the location quotient would be 2/3 or .67.

Location quotients can be used as rough indicators of whether a particular sector in a locality is exporting or not. The assumption is that a LQ of over 1.0 implies that a locality is producing more of that good or service than it needs locally (based on national average of employment in that sector) so that sector must be exporting the extra production. The tables below show the Burlington location quotients by industry 2004.

As can be seen in the table, the sectors with a location quotient greater than one are Financial Activities, Professional, Scientific, and Technical Services, Trade, Transportation and Utilities, Educational Services, and Health Care and Social Assistance.

Location Quotients: Burlington, 2004

TOTAL EMPLOYMENT BY SECTOR			
DESCRIPTION	BURLINGTON	U.S.	LQ
Total Employment	32,579	108,117,731	N/A
Forestry, fishing, hunting, & agriculture support	N/A	187133	N/A
Mining	N/A	497843	N/A
Construction	N/A	5798261	N/A
Manufacturing	1,915	16945834	0.37503
Trade, Transportation and Utilities	4,195	5884946	2.36564
Information	633	3141957	0.66859
Financial Activities	1,949	5770209	1.12093
Real Estate and Rental and Leasing	409	1812621	0.74882
Professional, Scientific, and Technical Services	2,180	6051636	1.19548
Management of Companies and Enterprises	N/A	2703798	N/A
Admin, Support, Waste Mgt, Remediation Services	N/A	7774610	N/A
Education Services	737	2323744	1.05254
Health Care and Social Assistance	7,716	13757996	1.86121
Arts, Entertainment, and Recreation	276	1583783	0.57833
Accommodation and Food Services	2,413	9466088	0.84595
Other Services (except public admin.)	1,084	5037866	0.71407
Auxiliaries (excluding corporate, subsid. & regional mgt)	N/A	916349	N/A
Unclassified Establishments	N/A	77642	N/A

Source: VT Department of Labor and Market Information; "2004 Covered Employment and Wages;" <<http://www.labor.vermont.gov/VDOLHomePage/tabid/90/Default.aspx>> To enable data reporting while maintaining employer privacy, sectors 42-49 and 22 were aggregated into one category entitled *Trade, Transportation and Utilities*.

Shift Share Analysis

Shift share is a way to compare growth in local industries to national overall and industry specific growth (see discussion in Chapter 2). The rate of growth of a local sector, like educational services, will reflect the growth of the overall national economy, the growth of the educational services sector nationally compared to the growth of the national economy (proportional shift), and the growth of the local educational services sector compared to the growth of that sector nationally (differential shift). In the world of shift share, a locality is more likely to grow if it has jobs in sectors with positive proportional and differential shifts.

The table below shows these different types of “shifts” between 2000 and 2006 for sectors in Burlington based on data found in Chapter 3, Appendices 10 and 11.

Over this time period, Burlington’s overall employment growth (3.3%) was nearly identical to the national rate (3.26%) so this effect can be ignored.

In interpreting these shifts it is important to remember that Burlington’s growth rates of employment in different sectors are limited by its low population growth and constraints on space. Consequently, it is harder for some sectors to expand in Burlington more rapidly than that sector is expanding nationally (positive differential shift); however, small negative differential shifts may still suggest sectors worthy of support. These constraints on Burlington can be seen by comparing the table below to the shift share table for Chittenden County in Chapter 2.

Looking at specific industries (see table below) there are three sectors where the local sector is growing faster than the national sector, and the national sector in turn is growing faster than the overall economy (Y-Y in table). These are arts, entertainment and recreation, government, and real estate with the latter result due solely to the particular years selected. These results for the arts, entertainment and recreation sector are especially encouraging as this sector is growing a full 25% higher in Burlington than nationally, and the national rate is 4% higher than that of the overall economy.

Health care and social services and accommodations and food are very close to the Y-Y condition and should be considered strong candidates for support based on this type of analysis.

While the retail trade sector nationally did not grow as fast as the overall economy, Burlington's retail sector since 2000 grew faster than its sector nationally (N-Y in table). Similarly, while manufacturing was declining nationally, Burlington's manufacturing sector was declining more slowly, perhaps due to continuing local efforts to hold on to manufacturing jobs.

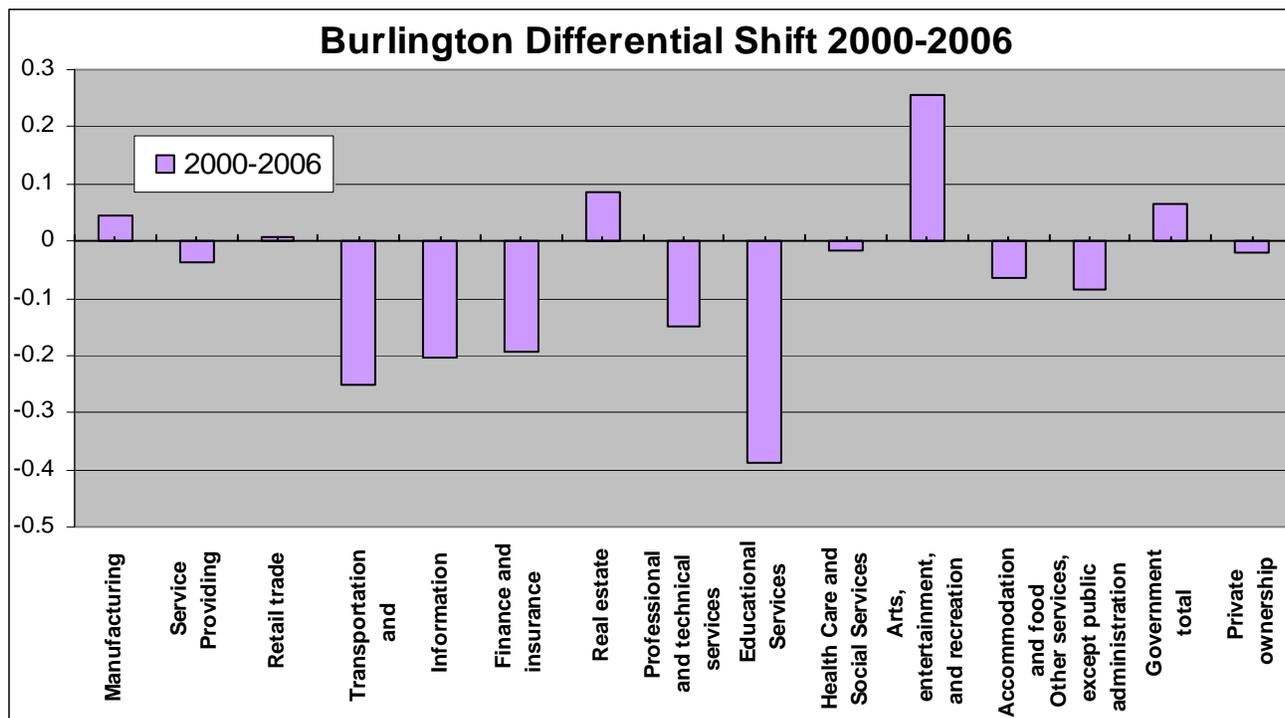
Burlington Employment Sectors	Proportional Shift 2000-2006	National Sector Growing faster than economy?	Differential Shift 2000-2006	Local sector growing faster than national sector?
Construction	0.100609	Y	N/A	
Manufacturing	-0.21267	N	0.044903	Y, Declining slower
Service Providing	0.02883	Y	-0.03592	N
Wholesale trade	-0.01812	N	N/A	
Retail trade	-0.0305	N	0.00554	Y
Transportation and warehousing	-0.02121	N	-0.25012	N
Information	-0.21401	N	-0.20491	N
Finance and insurance	0.051796	Y	-0.19391	N
Real estate	0.106421	Y	0.084769	Y
Professional and technical services	0.0651	Y	-0.14868	N
Educational Services	0.180927	Y	-0.38825	N
Health Care and Social Services	0.140921	Y	-0.01817	N
Arts, entertainment, and recreation	0.046003	Y	0.256124	Y
Accommodation and food services	0.108605	Y	-0.0655	N
Other services, except public administration	0.019327	Y	-0.08494	N
Government total	0.028842	Y	0.064252	Y

Three other sectors not growing faster than their sectors at the national level are professional, scientific and technical services, educational services, finance and insurance. All three sectors nationally, however, are growing faster than the overall economy.

Finally, there are two sectors where Burlington employment is growing much slower than their sectors are nationally—transportation and warehousing, and information—and these sectors are in turn growing more slowly than the overall economy (N-N in table). The information sector is especially discouraging, with employment actually shrinking at the national level over the 2000-2006 period, and Burlington’s information sector shrinking at an even faster rate over the same time period. Fortunately the information sector at the County level is growing faster than nationally, providing potential employment for Burlington residents.

Throughout this discussion it is important to remember that declining or slow growth sectors within Burlington may be expanding more rapidly at the County level, continuing to offer employment opportunities to Burlington residents.

The chart below shows the differential shifts of major industrial sectors in Burlington 2000-2006, highlighting local sectors growing faster or slower than their national counterparts.



3.3 Community Occupational Analysis

3.3.1 Employment by Occupation

Employment in Burlington is weighted towards white collar work and those sectors that support it (office and administrative support, professional occupations, and service occupations). Occupations in Burlington that employ lower percentages than the County or the State include production, transportation, construction and extraction, farming and fishing, and installation, maintenance fields. These occupations serve industries that often require significant space, something in short supply in Burlington proper.

Occupational growth rates from 1990-2000 generally were in line with the percent of employment shown in the table below with a few exceptions. (Professional and related occupations grew by 19.7%, office and administrative by 4%, and management, business, and finance by 1.1% with services (other than protective) declining slightly (-2.7%) and sales more significantly (-15%)). All other occupational sectors declined over this period except transportation and material moving occupations that grew by 45%. Full data is available in Chapter 3, Appendices 12 and 13.

Occupational Breakdown of Residents: Burlington, Chittenden County, Vermont 2000

	Burlington		Chittenden		Vermont	
Employed Persons 16 yrs & over	21,335	100.0%	80,787	100.0%	317,134	100.0%
Management, business, and financial operations occupations:	2,492	11.7%	12,197	15.1%	42,491	13.4%
Professional and related occupations:	5,880	27.6%	23,172	28.7%	72,645	22.9%
Sales and related occupations	2,543	11.9%	8,814	10.9%	32,546	10.3%
Office and administrative support occupations	3,556	16.7%	11,997	14.9%	45,062	14.2%
Service occupations (except Protective)	3,335	15.6%	9,485	11.7%	42,397	13.4%
Protective service occupations:	170	0.8%	962	1.2%	3,987	1.3%
Farming, fishing, and forestry occupations	37	0.2%	260	0.3%	4,160	1.3%
Construction and extraction occupations:	731	3.4%	3,103	3.8%	17,998	5.7%
Installation, maintenance, and repair occupations	378	1.8%	2,339	2.9%	11,564	3.6%
Production occupations	1307	6.1%	5,242	6.5%	28,756	9.1%
Transportation and material moving occupations:	906	4.2%	3,216	4.0%	15,528	4.9%

Source: U.S. Census Bureau, U.S. Census: 2000, (SF 3) Series P50

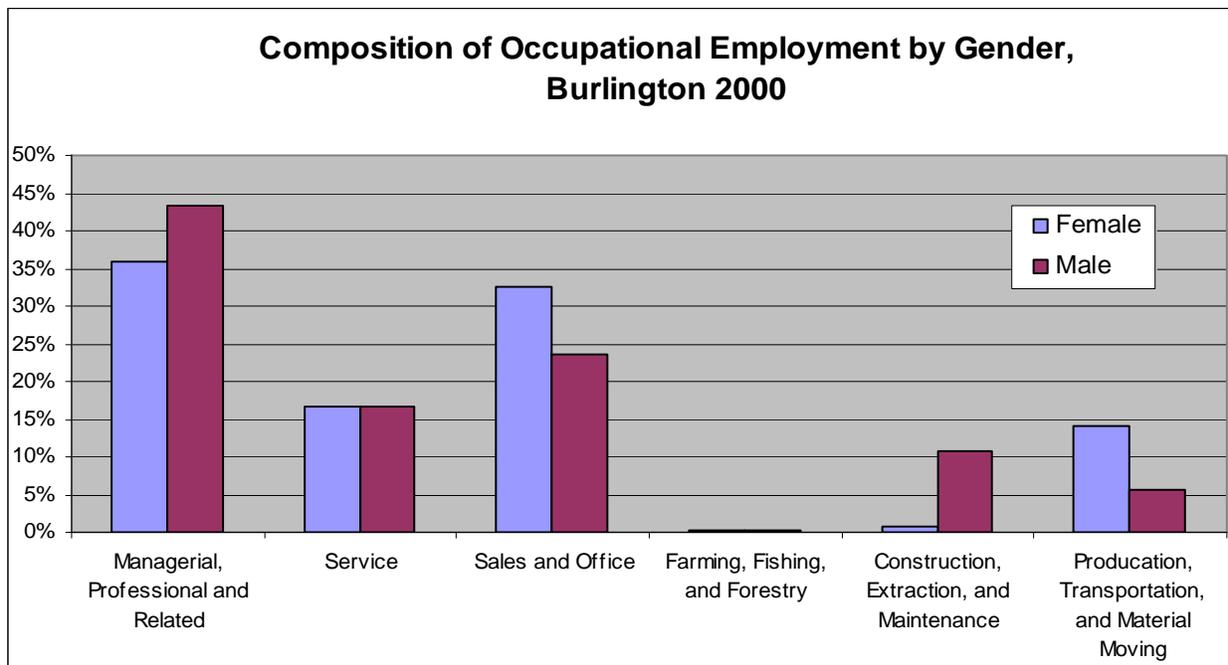
3.3.1.1 Occupations by Gender

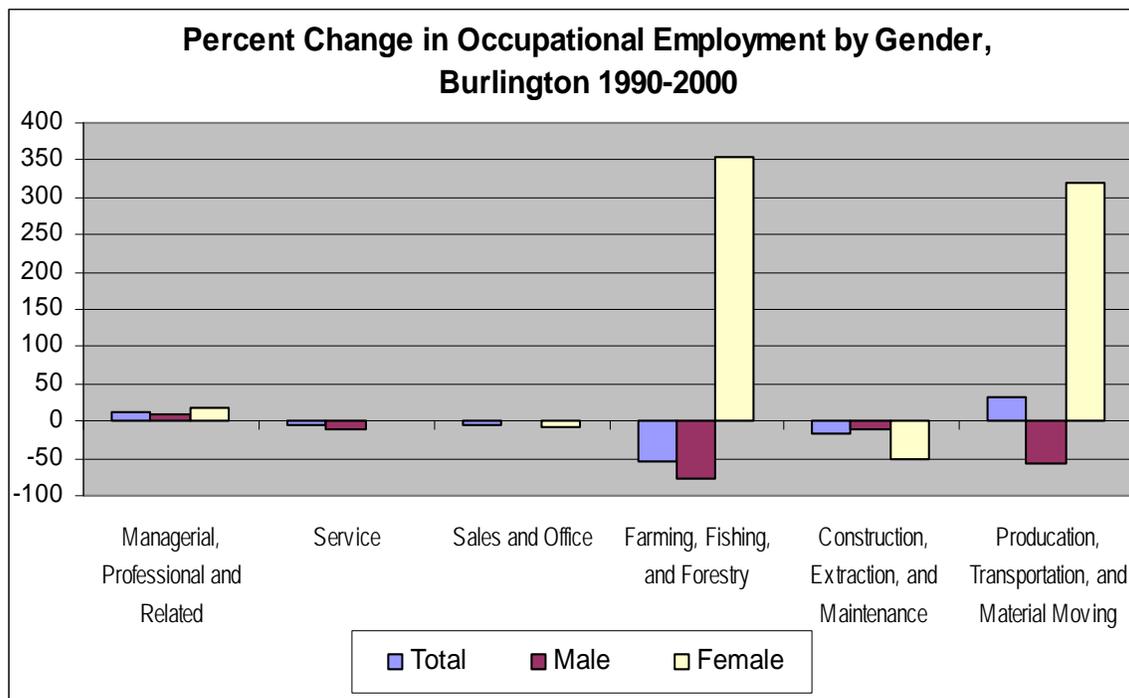
In terms of total employment by occupation and gender, as of 2000 there was a higher percentage of employed men than women in the construction and managerial, professional or related occupational sectors. However, a higher percentage of women were employed in the sales and office, and the production, transportation, and material moving occupations. (See chart below).

The second chart below presents the percentage change from 1990 to 2000 of the percent employed in a particular occupation – thus women in production and transportation rose from 3.9% in 1990 to 15.6% in 2000, a 333% increase (See Appendices 13 and 14 for the data).

Since 1990 the percentage of women employed in several sectors has changed noticeably. Their importance in the management and professional, production and transportation, and in farming, fishing, and forestry occupations grew (although in the latter sector it started from a very small base), and declined in construction. The percentage of men employed in management and professions grew, and declined in all other occupational groups (see chart below).

Further information on the number, percentage, and percent change of women and men in each occupation for 1990 and 2000 is available in Chapter 3, Appendices 14-16.





3.3.2 Residential Employment

3.3.2.1 Residents' Job Locations

As of 2000, slightly more than half of Burlington residents (52.3%) worked within the City limits, with those working outside most likely to be working in South Burlington, Essex, Williston and Colchester respectively (see table below). Between 1990 and 2000, however, those working in the City declined by 6.3% while those working in Williston increased by 73.8% and in Colchester by 50.3%. This large Williston shift may reflect the growing number of low skill jobs opening up there during this period, coupled with more affordable housing and fewer of these types of jobs in Burlington. South Burlington maintained the highest proportion of commuters from Burlington (15.1%), and only 8% leave the County, a percentage which has declined since 1990.

Employment Destinations: Burlington, 2000
Major Employment Destinations of Burlington Residents, 2000

	Total 2000	% of Total	% Change 1990-2000
Employed Burlington Residents	21,335	100.0%	5.1%
Remains in Chittenden	19,608	91.9%	2.7%
Remain in Burlington	11,154	52.3%	-6.3%
<i>Work at home</i>	655	3.1%	2.8%
Colchester town	1,046	4.9%	50.3%
Essex town	1,524	7.1%	21.0%
Shelburne town	419	2.0%	-12.7%
South Burlington city	3,227	15.1%	3.0%
Williston town	1,293	6.1%	73.8%
Winooski city	470	2.2%	-17.0%
Other Counties			
Addison County	131	0.6%	-24.7%
Franklin County	287	1.3%	66.9%
Rutland County	20	0.1%	-81.8%
Washington County	386	1.8%	27.4%
Outside Vermont	220	1.0%	*

*Data not available

Source: U.S. Census Bureau

U.S. Census, 2000 Minor Civil Division/County-to-Minor Civil Division/County Worker Flow Files
<http://www.census.gov/population/www/cen2000/mcdworkerflow.html>

3.4 Local Companies and the Community Economy

3.4.1 Employment by Company Size

The table on the following page ranks the largest employers in the City of Burlington and the surrounding area. This table was not published in the original Jobs and People; instead it was used in the past in the Economic Development Plan for the City of Burlington. This version has been updated to reflect 2006 employment and includes some large employers that have emerged since its last update.

Within Burlington the largest employers are Fletcher Allen, UVM, City government and schools, Westaff (a temp agency), and General Dynamics. Major employers operating in both Burlington and the rest of the County are Vermont state government, the Howard Center for Human Services, and Chittenden Bank. Large employers within Chittenden County, but outside Burlington, include IBM, GE Healthcare, Adecco and Ben and Jerry's. Of all these employers, Fletcher Allen, UVM and IBM are the largest.

Employment by Company Size in 2006

Sources: Vermont Business Magazine -Vermont at a Glance: 2007-2008; Vermont Department of Education, 2006 Teacher/Staff FTE and Salary Report <http://education.vermont.gov/new/html/data/teacher_FTE.html>; Phone Calls to Employers

Company Name	2006 Staff	Company Name	2006 Staff
<u>Within the City:</u>		<u>Within surrounding municipalities:</u>	
Fletcher Allen Hospital	4086	IBM	6000
University of Vermont	3137	IDX	850
Burlington City Schools	774	Adecco	764
City of Burlington	630	Ben & Jerry's	735
Westaff	562	St. Michael's College	472
General Dynamics	500	South Burlington Schools	449
S.D. Ireland	355	Colchester Schools	402
Gardeners Supply	250	VSAC	375
Burlington Free Press	250	Lane Press, Inc.	306
Champlain College	230	Husky Injection Molding Systems	300
Blodgett Oven Co.	220	Adelphia	300
City Market	150	Vermont Teddy Bear	285
Rhino Foods	130	UPS	267
Wyndham Hotel	110	Engeberth Construction	235
		Heritage Automotive	228
<u>Within the City and Surrounding Region:</u>		Essex Junction Schools	226
U.S. Government	2650	S.T. Griswold	215
Chittenden Bank	1202	Twincraft, Inc.	215
Howard Center for Human Services	750	Resolution, Inc.	210
Napoli Group	680	Green Mountain Power	196
Verizon	650	Bio-Tek Instruments	190
T.D. Banknorth Group, Inc.	550	Champlain Cable	130
Visiting Nurse Association	422	Sheraton Hotel	110
Sodexo	350		
Perry Restaurant Group	332		
Reel Hospitality	332		
Merchants Bank	300		
Burton Snowboards	272		
Pizzagalli Construction	250		
Citizens Bank	182		
Key Bank of Vermont	128		

3.4.2 Self-Employment and Working at Home

In Burlington, the number of self-employed residents continues to rise. While overall employment increased by approximately 25% over this time period, the number of self-employed individuals increased by over 75%. Also, while the number of total jobs in Burlington was stable from 1990 to 2000, the number of self-employed workers grew by 18.9%. This trend may indicate an increase in individual business startups and/or an inflow of self-employed individuals into Burlington. In either case the City needs to be able to support this growing number of self-employed. The change in the number of residents who work at home was small but positive during this time period. This is consistent with the growth in self-employment, but may also represent an increase in telecommuting.

Self Employment and Working at Home, Burlington, 2000, 1990, 1980

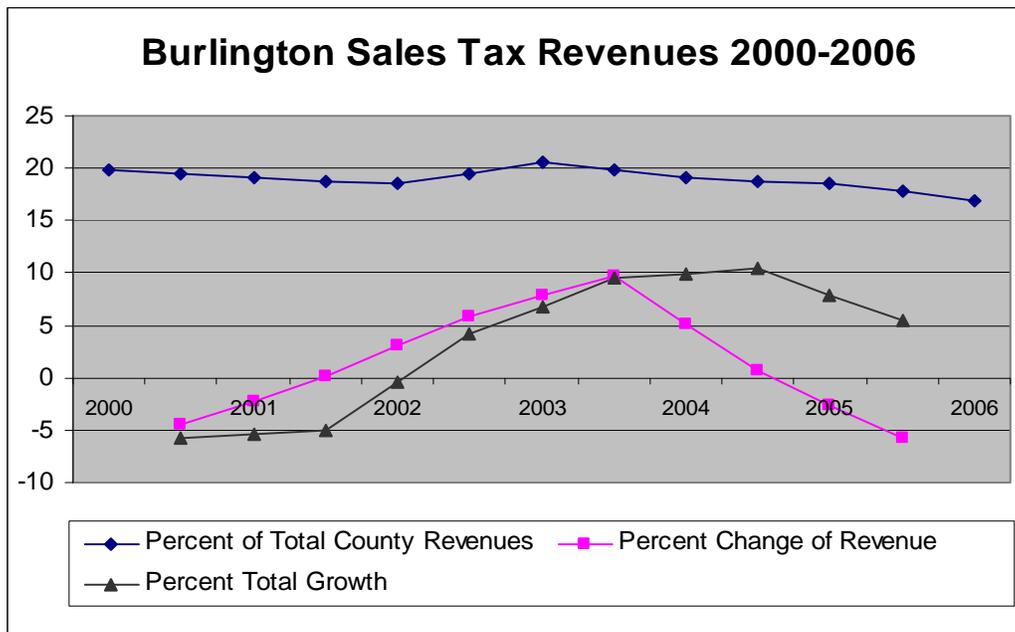
	2000	1990	1980
# of self-employed	1,661	1,396	928
% self-employed	5.3%	4.5%	3.6%
# work at home	655	637	
% work at home	2.08%	2.07%	

Source: Census Data Table P49, 1980, 1990, 2000

3.5 Tax Revenues

3.5.1 Sales Tax Information

Revenues from the sales tax in Burlington increased from \$244.4 million in 2000 to \$257.6 million in 2006 with a high of \$269.82 million in 2005 (see Chapter 3, Appendix 17 for data). After growing at an increasing rate through 2004, sales tax revenue growth slowed and became negative in 2005. This drop may have reflected a State change in what was subject to a sales tax. Throughout this period, Burlington sales tax revenues represented about 20% of total County sales tax revenues declining slightly after 2004. This decline is expected as Chittenden County expands its business activity faster than Burlington. Further information on Burlington sales tax revenues can be found in Chapter 3, Appendix 17 as can the information for other communities in Chittenden County.



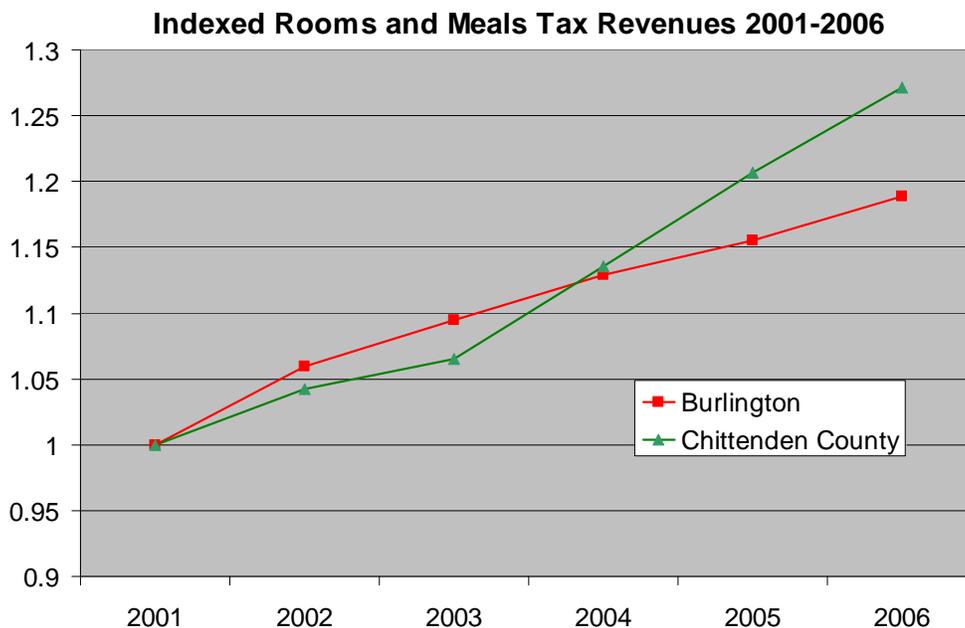
Source: Vermont Department of Taxes; “2000-2006 Sales and Use Tax information;” published 2006, <<http://www.state.vt.us/tax/statisticss&umult.shtml>>

3.5.2 Rooms and Meals Tax Information

Rooms and Meals Tax revenues for Burlington rose from \$7.55 million in 2001 to \$8.97 million in 2006, an increase of 17.6% (see Table below). As with the sales tax, the Burlington rooms and meals tax revenues were a relatively stable percent of the County’s tax revenues from this source until 2003-2004 when this percentage declined. This again may be due to greater County growth than within Burlington, where space limitations are a constraint on some forms of growth.

Rooms and Meals Tax Revenues, FY 2001-2006

Fiscal Year	Burlington	Chittenden County	Burlington as % of County
2001	\$7,549,990	\$23,192,269	32.55%
2002	\$8,001,360	\$24,168,283	33.11%
2003	\$8,263,426	\$24,712,709	33.44%
2004	\$8,526,626	\$26,330,769	32.38%
2005	\$8,724,590	\$27,990,223	31.17%
2006	\$8,972,083	\$29,486,549	30.43%

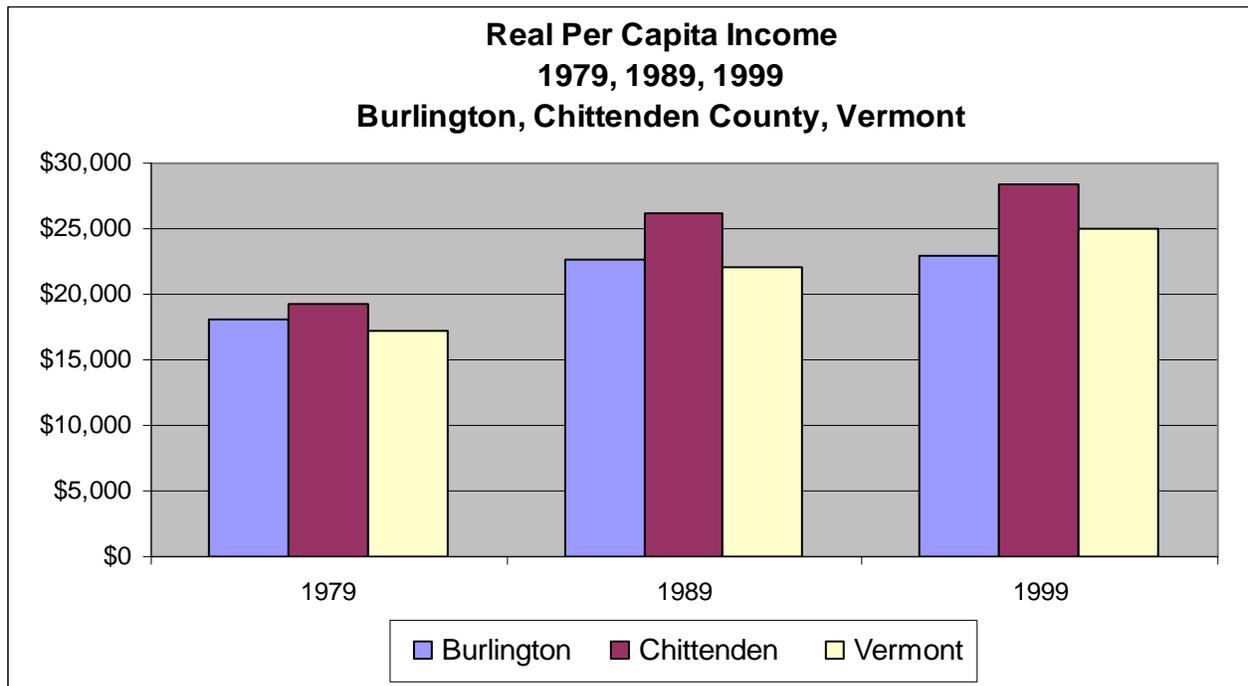


Source: Vermont Department of Taxation, Chittenden County data is from the Department's Biennial Reports

3.6 Income, Wages and Poverty

3.6.1 Per Capita Income

The per capita income figures show real per capita income in 2006 dollars as reported by the U.S. Census. These figures are different from those on the previous pages, which were taken from the Bureau of Economic Analysis National Income (BEA) and Product Accounts tabulations. Although the figures from both sources exhibit similar relative trends (Chittenden County above US average and Vermont below U.S. average) their absolute values are quite different. This discrepancy was due to the different methods in which this data was collected. While the BEA data is derived from macro-level tabulations of the National Income Accounts compiled every quarter, the Census data is reported by individual respondents every decade, and thus may be affected by response and recall bias.



Source: U.S. Census Bureau; US Census, 2000 Minor Civil Division/County-to-Minor Civil Division/County Worker Flow Files <<http://www.census.gov/population/www/cen2000/mcdworkerflow.html>>

**Real Per Capita Income: Burlington, Chittenden County, Vermont, 1979, 1989, 1999
(2006 Dollars)**

	1979	1989	1999
Burlington	\$18,116.23	\$22,627.97	\$23,004.91
Chittenden	\$19,229.75	\$26,168.98	\$28,438.18
Vermont	\$17,155.44	\$21,992.28	\$24,957.98

Source: U.S. Census Bureau; **1989** U.S. Census 1990 (SF3) Series P114A; **1990** U.S. Census 2000 (SF3) Series P82

3.6.2 Average Real and Nominal Wages

In 2006, Burlington nominal and real (corrected for inflation) wages were higher than Chittenden county, the U.S., and especially Vermont (see Table below) and from 1990-2006 its real wages grew 21%, compared to the County (13%), Vermont's (7.2%), and the nation (19.2%) (See graph below). That Burlington wages were below the County wages in 1990 and above them in 2006, reflecting its higher growth rate, speaks well for the City's contribution to the County economy. Nominal and real wages by industry will be discussed further in the next section.

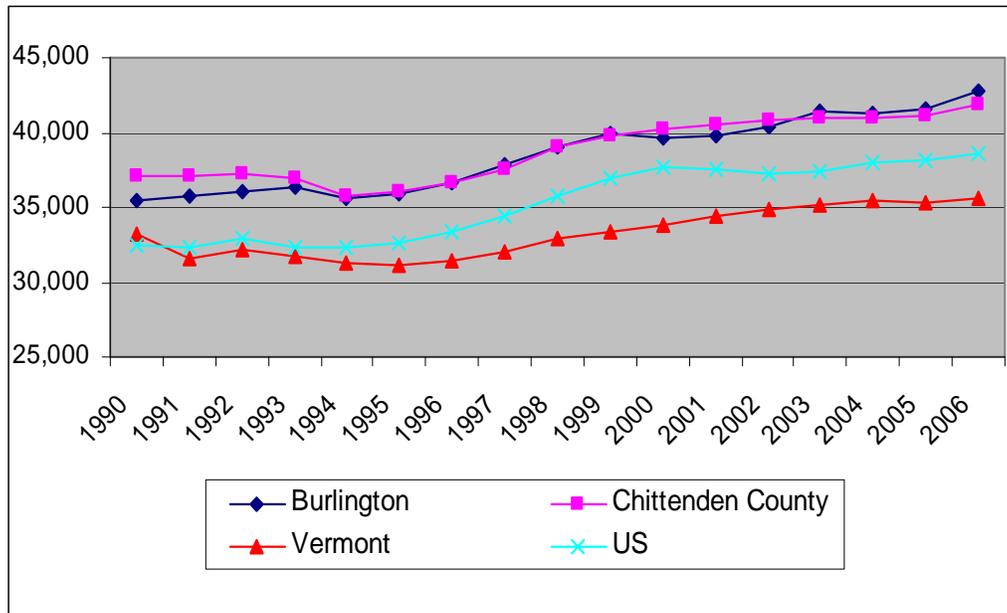
Average Real and Nominal Wages, Burlington, Chittenden County,

	Average Nominal Wages				Average Real Wages			
	Burlington	Chittenden County	Vermont	U.S.	Burlington	Chittenden County	Vermont	U.S.
1990	\$22,948	\$24,044	\$21,531	\$21,028	\$35,396	\$37,087	\$33,211	\$32,435
1995	\$27,170	\$27,245	\$23,573	\$24,706	\$35,941	\$36,041	\$31,183	\$32,682
2000	\$33,835	\$34,327	\$28,925	\$32,155	\$39,612	\$40,188	\$33,863	\$37,645
2006	\$42,831	\$41,903	\$35,585	\$38,651	\$42,831	\$41,903	\$35,585	\$38,651

Vermont, U.S., 1990, 1995, 2000, 2006 (*2006 Dollars)

Sources: Vermont Department of Labor, Economic and Labor Market Information; Employment and Wages Report, Covered Employment & Wages (QCEW), National Average Wage Index <http://www.ssa.gov/OACT/COLA/AWI.html#Series>

Average Real and Nominal Wages, Burlington, Chittenden County, Vermont, U.S., 1990, 1995, 2000, 2006 (*2006 Dollars)



Sources: Vermont Department of Labor, Economic and Labor Market Information Employment and Wages Report, Covered Employment & Wages (QCEW), National Average Wage Index <<http://www.ssa.gov/OACT/COLA/AWI.html#Series>>

3.6.3 Average Wage Growth by Industry

The Table below presents the average real and nominal wages for different industrial sectors for 1990, 2000 and 2006. Since some of the sectors may only include a few establishments in Burlington, the data for those sectors have not been made available for proprietary reasons. The graph that follows shows a wide range in average real wages and in their growth rates since 1990.

The highest paying sectors are finance and insurance, manufacturing, professional, scientific and technical services, government, health care and social services, and information respectively. The lowest, ascending, are accommodations and food, retail, arts, entertainment and recreation, real estate, and transportation. Educational services, not on the table, are most likely somewhere in the middle based on County-wide wage data.

When you compare employment importance and average wages in that sector, many of Burlington’s highest employing sectors (employing more than 1500 in 2005) - government, health care and social services, professional, scientific and technical services, manufacturing, and finance and insurance – are among the higher paying sectors. These sectors, in 2005, provided a total of 20,963 jobs or almost two-thirds of the jobs in Burlington. Granted the 2006 real wages in this group range from \$46,084 (health care, social services) to \$85,101 (finance, insurance), this still speaks well for the number of quality jobs available in Burlington.

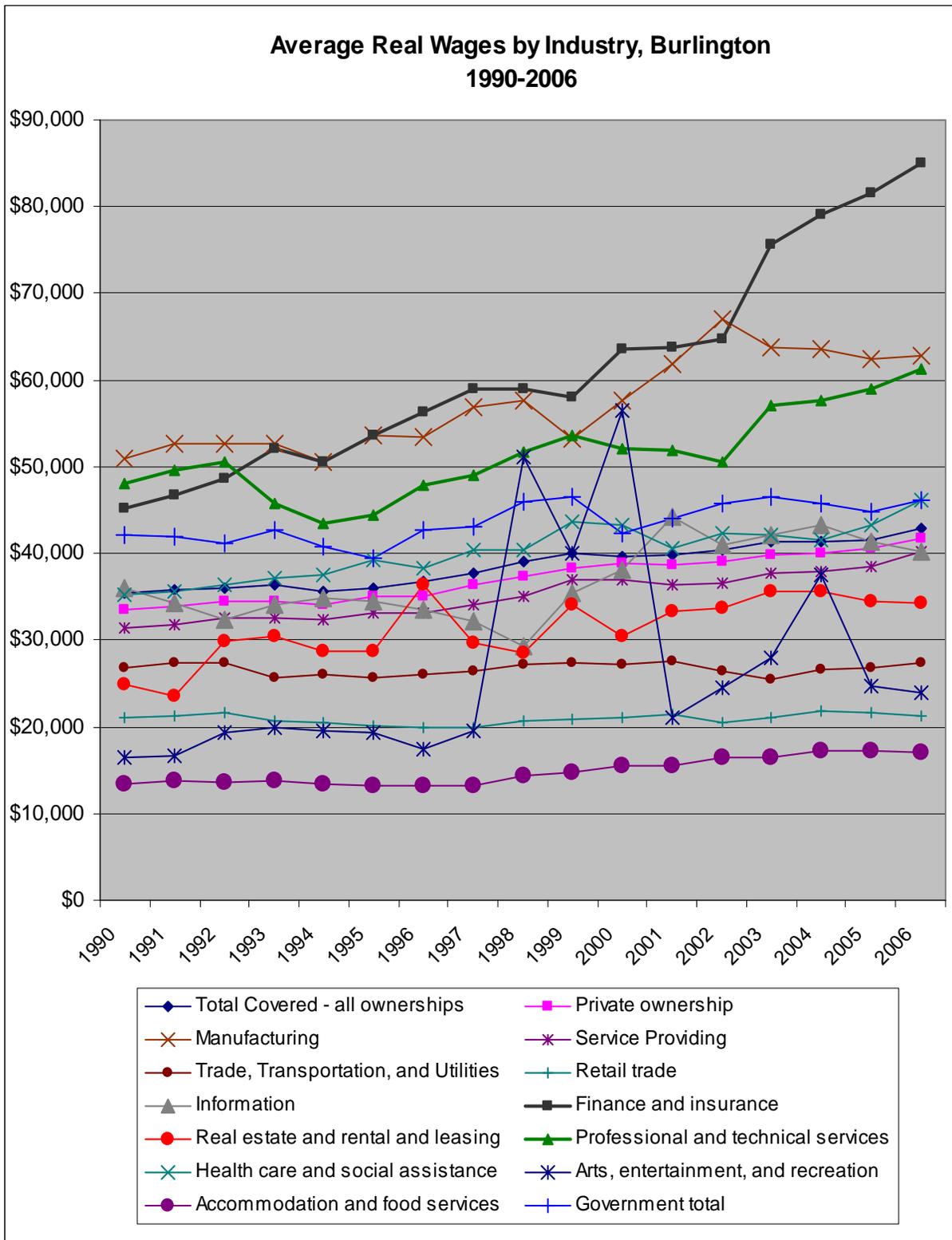
At the same time, retail and accommodations and food, two of the largest sources of employment in Burlington, are the lowest paying sectors based on average real wages. The remaining sectors, all employing less than 1500 – arts, entertainment and recreation, real estate, transportation, information, and educational services – are also among the lowest paying sectors. With the exception of arts, entertainment and recreation, these employers are also among the slower growing sectors in Burlington. This latter sector is growing rapidly and experiencing erratic wage levels (see annual variations over the 1990 and 2006 period in Chapter 3, Appendices 20 and 21) albeit in most years wages are among the lowest paid in Burlington. It is important to remember that the jobs provided by Burlington establishments don't necessarily go to Burlington residents. From the table in Section 3.3.2.1, in 2000 11,154 Burlington residents, out of 21,335 total in labor force, worked in Burlington, while Burlington establishments were providing 31,493 jobs (see Section 3.2.1.1). Almost two-thirds of Burlington jobs go to those living outside the City. It should be noted that many of the jobs in Burlington going to non-Burlington residents are "good jobs." When we compare the number of jobs provided by different Burlington sectors (Section 3.2.1.1) with the sectors in which Burlington residents work wherever the jobs are located geographically (Section 2.2.2), significantly more jobs are provided within Burlington than held by Burlington residents in finance, insurance, and real estate, professional, scientific and technical services, education, health care and social services, and government. These are all relatively higher paying sectors providing many jobs to non-Burlington residents. A challenge for the City is not only to provide quality jobs, but to have as many of those jobs as possible go to Burlington residents.

A full table of average real and nominal wages by industry and year from 1990-2005 is in Chapter 3, Appendices 20 and 21.

Burlington Average Wages by Industry, 1990, 2000, 2006 (*2006 Dollars)

	Average Real Wages			Increase 90-06	Average Nominal Wages		
	1990	2000	2006		1990	2000	2006
Total Covered - all ownerships	\$35,396	\$39,612	\$42,831	21.0%	\$22,948	\$33,835	\$42,831
Private ownership	\$33,527	\$38,864	\$41,820	24.7%	\$21,736	\$33,196	\$41,820
Construction	\$39,459				\$25,582		
Manufacturing	\$50,971	\$57,717	\$62,726	23.1%	\$33,045	\$49,300	\$62,726
Service Providing	\$31,437	\$37,024	\$40,179	27.8%	\$20,381	\$31,625	\$40,179
Trade, Transportation, Utilities	\$26,719	\$27,237	\$27,393	2.5%	\$17,322	\$23,265	\$27,393
Retail trade	\$21,158	\$21,109	\$21,225	0.3%	\$13,717	\$18,031	\$21,225
Transportation, warehousing	\$34,818	\$35,134	\$38,481	10.5%	\$22,573	\$30,010	\$38,481
Information	\$36,015	\$38,084	\$40,257	11.8%	\$23,349	\$32,530	\$40,257
Finance and insurance	\$45,136	\$63,585	\$85,101	88.5%	\$29,262	\$54,312	\$85,101
Real estate, rental and leasing	\$24,837	\$30,396	\$34,301	38.1%	\$16,102	\$25,963	\$34,301
Professional, technical services	\$48,085	\$52,127	\$61,270	27.4%	\$31,174	\$44,525	\$61,270
Health care, social assistance	\$35,267	\$43,290	\$46,086	30.7%	\$22,864	\$36,977	\$46,086
Arts, entertainment, recreation	\$16,386	\$56,532	\$23,877	45.7%	\$10,623	\$48,288	\$23,877
Accommodation, food services	\$13,492	\$15,489	\$17,063	26.5%	\$8,747	\$13,230	\$17,063
Government total	\$42,098	\$42,307	\$46,092	9.5%	\$27,293	\$36,137	\$46,092

Sources: VT Dept. of Labor Quarterly Census of Employment and Wages, Sector coding changed from SIC to NAICS in 1993.



Source: Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages; www.vtlmi.info/indareanaics.cfm

3.6.4 Income Distribution

The table below presents the percentage of households in different income groups for Burlington, Chittenden County and the state of Vermont in 1999. The median household income in Burlington (\$33,070) is lower than both the State (\$40,856) and the County (\$47,673). This reflects the higher levels of poverty in the City and the low incomes of students who are residents of the City. This can also be seen in the fact that 28.3% of Burlington residents earn less than \$20,000 per year compared to 21.3% in the State and 16.6% in the County. At the same time, 6.8% of Burlington residents earn more than \$100,000, compared to 8.7% in the State and 13.1% in the County. On a statewide basis, Burlington is a poorer City and Chittenden a richer County. We look more at poverty statistics below.

Distribution of Household Income: Burlington, Chittenden County, Vermont, 1999

	Burlington		Chittenden County		Vermont	
Households	15,869	100.0%	56,500	100.0%	240,744	100.0%
Less than \$10,000	2,016	12.7%	3,703	6.6%	19,552	8.1%
\$10,000 to \$14,999	1,225	7.7%	2,628	4.7%	15,240	6.3%
\$15,000 to \$19,999	1,248	7.9%	2,978	5.3%	16,581	6.9%
\$20,000 to \$24,999	1,417	8.9%	3,373	6.0%	17,187	7.1%
\$25,000 to \$29,999	1,171	7.4%	3,174	5.6%	16,806	7.0%
\$30,000 to \$34,999	1,218	7.7%	3,708	6.6%	16,616	6.9%
\$35,000 to \$39,999	1,059	6.7%	3,454	6.1%	15,537	6.5%
\$40,000 to \$44,999	869	5.5%	3,365	6.0%	15,024	6.2%
\$45,000 to \$49,999	778	4.9%	3,103	5.5%	14,310	5.9%
\$50,000 to \$59,999	1,151	7.3%	5,472	9.7%	23,794	9.9%
\$60,000 to \$74,999	1,318	8.3%	6,825	12.1%	26,030	10.8%
\$75,000 to \$99,999	1,316	8.3%	7,318	13.0%	23,051	9.6%
\$100,000 to \$124,999	467	2.9%	3,388	6.0%	9,590	4.0%
\$125,000 to \$149,999	226	1.4%	1,514	2.7%	4,185	1.7%
\$150,000 to \$199,999	170	1.1%	1,314	2.3%	3,679	1.5%
\$200,000 or more	220	1.4%	1,183	2.1%	3,562	1.5%
Median Household Income	33,070		47,673		40,856	

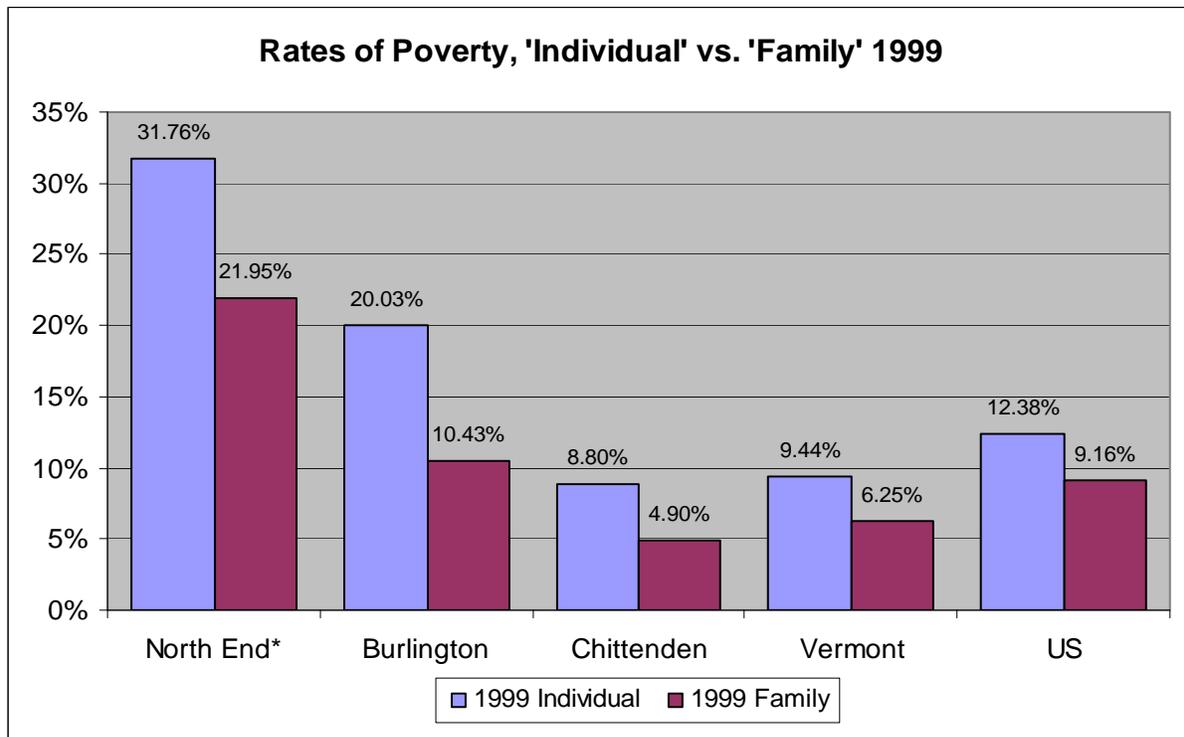
Source: U.S.Census Bureau, U.S. Census 2000 (SF#), series P52,P53

3.6.5 Poverty

3.6.5.1 Poverty Rates for Families and Individuals

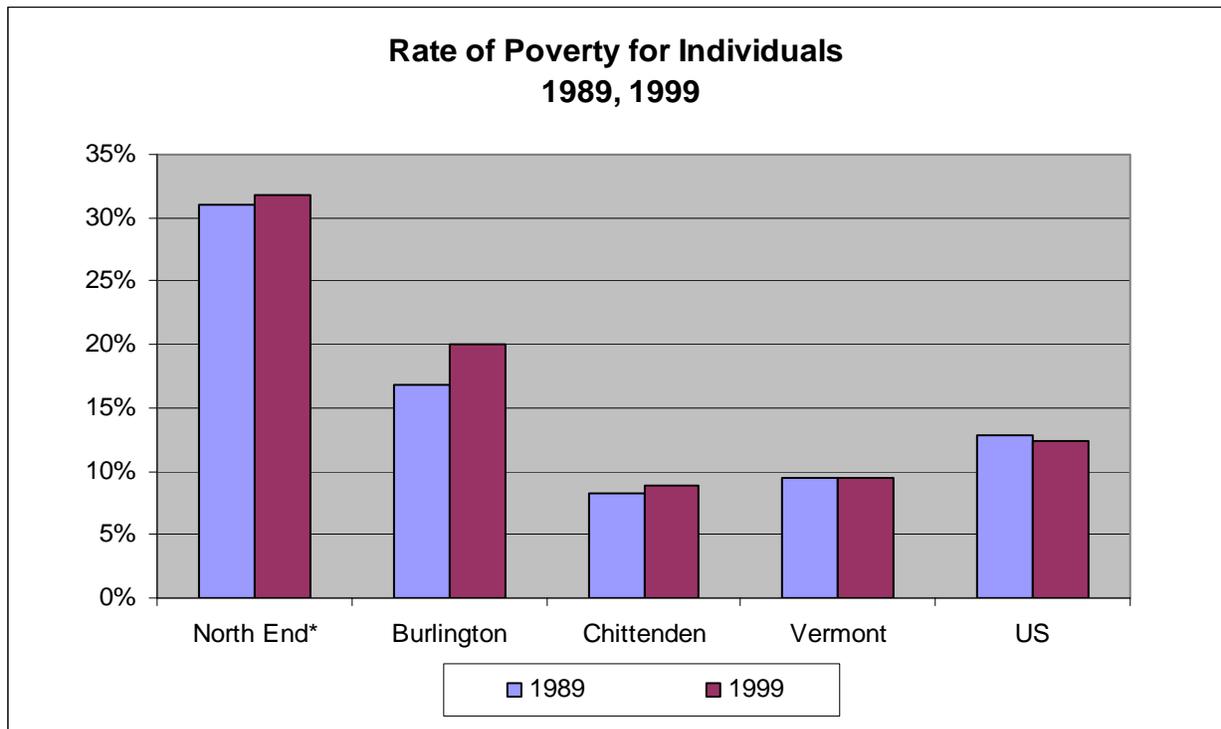
Poverty is a continuing problem for Burlington and especially for parts of the City such as the Old North End (see first chart below). The U.S. Census Bureau’s 2000 data show that the poverty rate for individuals living in Burlington increased from 16.79% in 1989 to 20.03% in 1999. The same time period saw the poverty rate for individuals in Burlington’s North End grow slightly from 31.05% to 31.76%. Vermont’s individual poverty rate during this time decreased slightly from 9.48% to 9.44%, as did the U.S.’s rate, dropping from 12.76% to 12.38%.

For families, the rate of poverty is lower than the individual rate in the North End, Burlington, Chittenden County, Vermont and the U.S. (see second chart below). The North End poverty rate for families is 9.81% which is substantially higher than the family poverty rate in the rest of Burlington, the County, State, and Country.



*Old North End consists of Burlington Census Tracts 3, 4 and 5

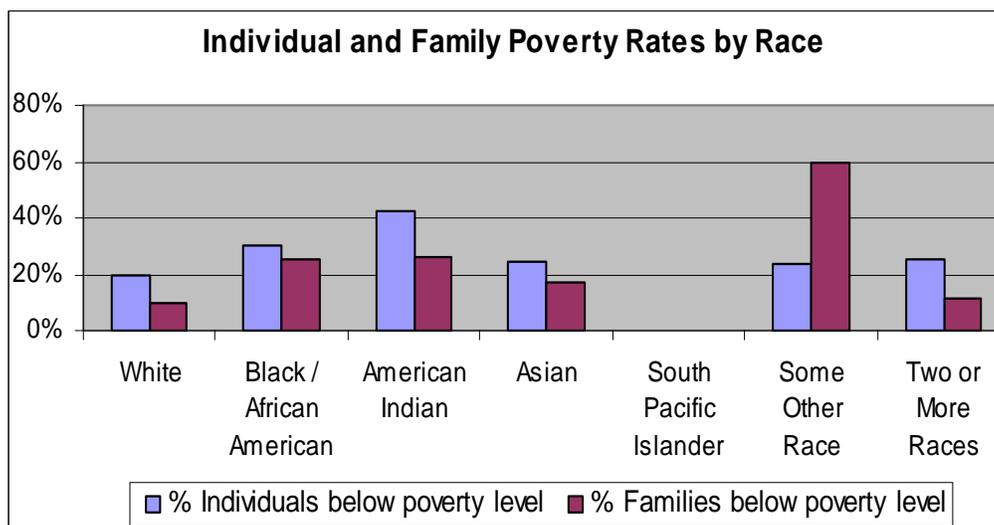
Source: U.S. Census Bureau; U.S. Census 2000 (SF3) Series P87; **1999:** U.S. Census 2000 (SF3) Series P90



Source: U.S. Census Bureau; **1989:** U.S. Census 1990 (SF3) Series P117; **1999:** U.S. Census 2000 (SF3) Series P87, Series P90

3.6.5.2 Poverty Rates by Race

There is a wide disparity in poverty rates by race for Burlington residents. In 2000, 19.4% of white individuals had incomes below the poverty line. This figure, while significant, was 5% lower than the rate for Asian individuals, more than 10% lower than for African Americans and 23% below the rates for American Indians (See chart and table below). A similar pattern exists for families. Fewer than 10% of white Burlington residents live in poverty while 16% of Asian families and over 25% of African American and American Indian families do.



Burlington Poverty Rates by Race, 2000

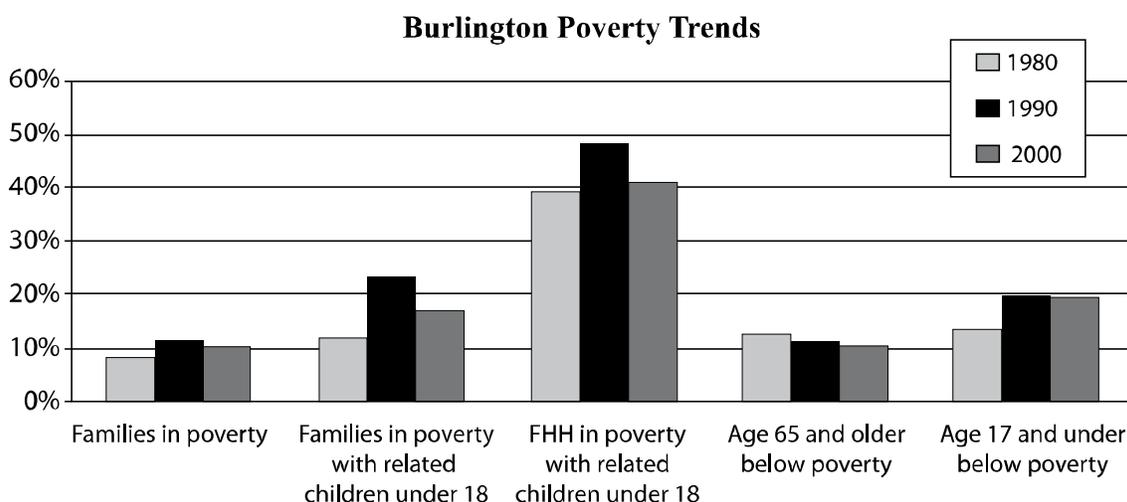
Race	Total Individuals	# Individuals below poverty level	% Individuals below poverty level	Total Families	# Families below poverty level	% Families below poverty level
White	32,412	6,302	19.4%	6,640	646	9.7%
Black / African American	719	219	30.5%	156	40	25.6%
American Indian	163	69	42.3%	19	5	26.3%
Asian	922	223	24.2%	195	33	16.9%
South Pacific Islander	15	0	0%	9	0	0%
Some Other Race	166	39	23.5%	15	9	60.0%
Two or More Races	672	171	25.5%	88	10	11.4%

Source: U.S. Census Bureau; U.S. Census 2000 (SF3)

3.6.5.3 Poverty Trends

In addition to general poverty statistics by family status and race, there are a number of other groups whose economic condition is of special concern (See chart and table below). The percent of female-headed households in poverty remains high at over 40%, a number which has declined since 1990 but which still remains slightly above 1980 levels. This pattern is also seen when the data is isolated to show families and particularly families with related children under 18 living in poverty.

Poverty among those aged 65 and older has gradually decreased; however, as this segment of the population continues to grow, this group will remain a concern. In contrast, the number of children 17 and under living in poverty has increased. Furthermore, their poverty rate remained flat from 1990 to 2000 while other poverty measures have declined, another reason children in poverty need special attention.



Burlington Poverty Trends

Those Living in Poverty:	1980	1990	2000
# families	563	798	743
# families with children under 18	434	689	624
# female-headed households with children under 18	299	504	451
# age 65 and older	515	408	383
# age 17 and under	990	1,208	1,248

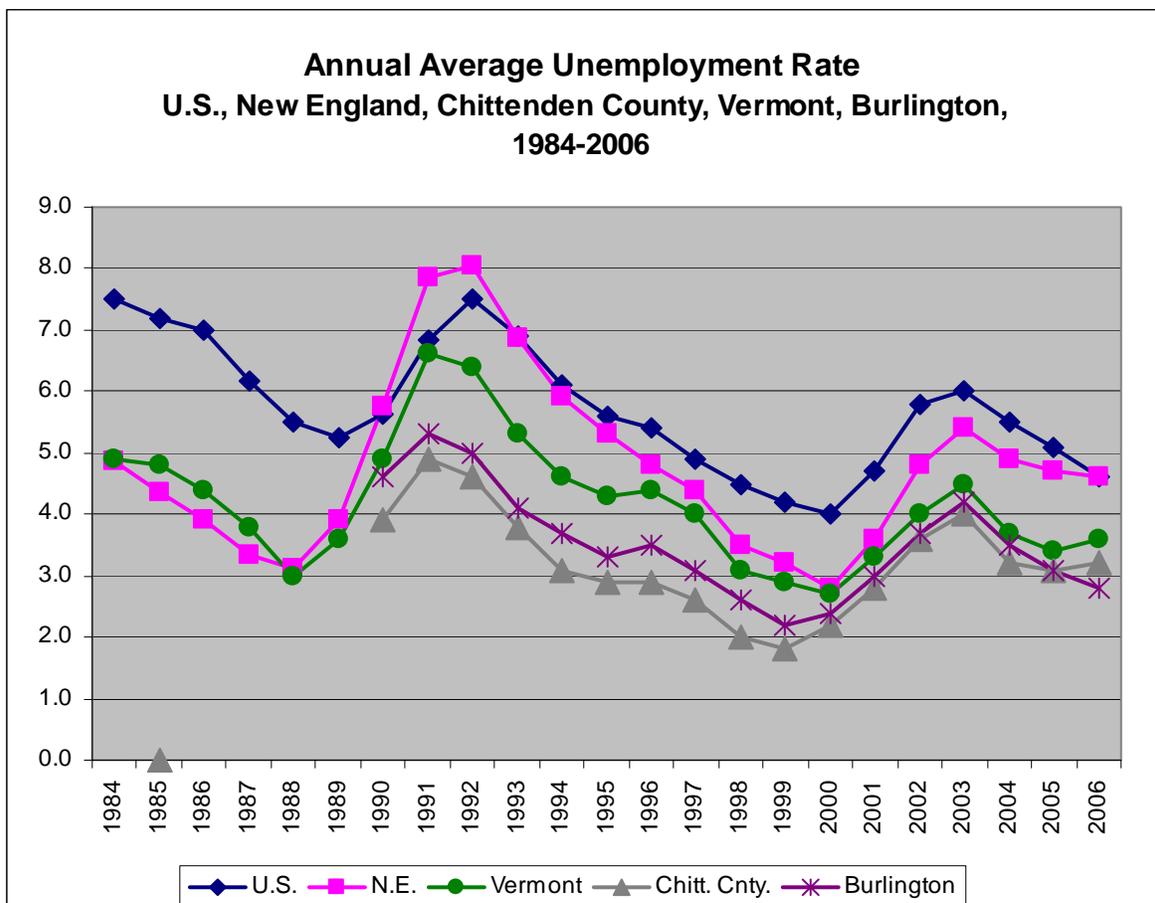
Source: U.S. Census Data 1980, 1990, 2000 (SP3)

3.7 Unemployment

3.7.1 Average Unemployment

The graph below, discussed previously in Section 2.2.2, shows the annual average unemployment rates in Chittenden County, Burlington, Vermont, New England, and the U.S. for 1984-2006 (1990-2006 for Chittenden and Burlington). The data underlying this table can be seen in Chapter 2, Appendix 5.

Unemployment rates for Burlington and Chittenden County over 1990-2006 are consistently lower than those of Vermont, New England and the U.S. While the County rate is lower than Burlington’s for most of this period, the difference begins at only .7 percent in 1990 and narrows in 2005 to the point where the two rates come together. Burlington drops below the County in 2006. From an unemployment perspective, the Burlington economy performs well; as we’ve seen, however, the wages of jobs held by a significant percentage of Burlington residents are not high enough to move them out of poverty.

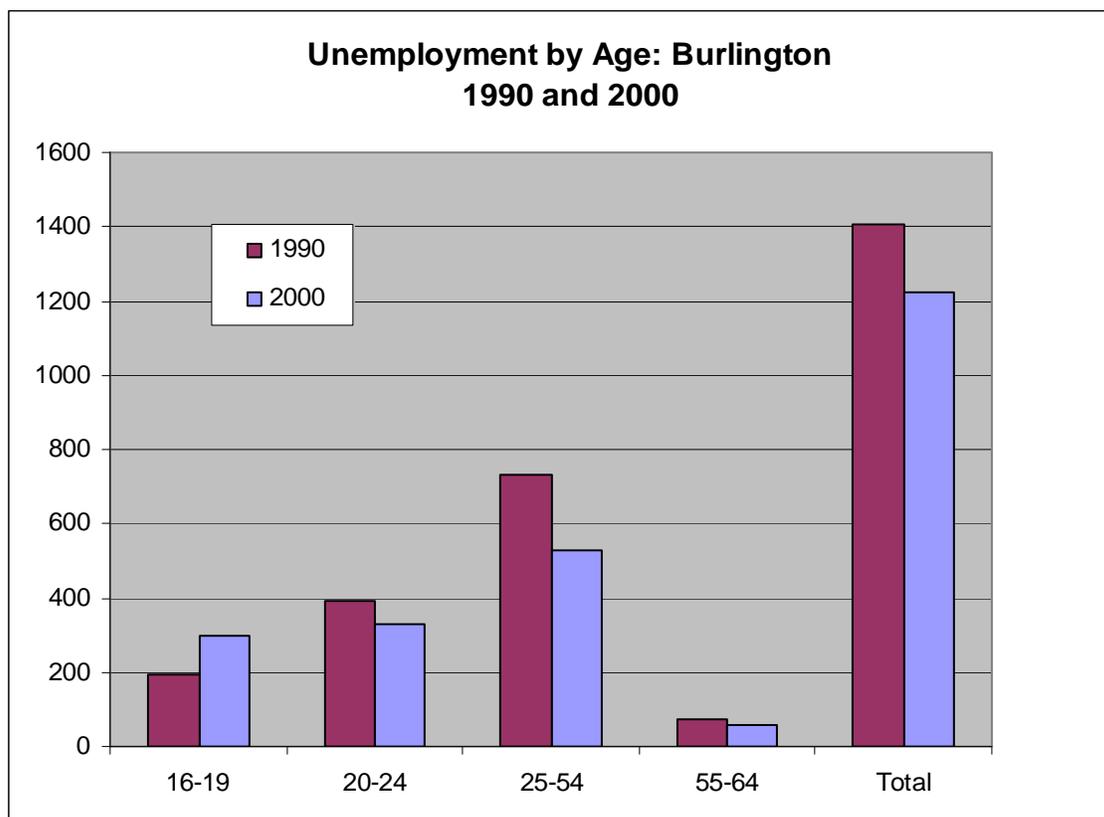


Source: NE & U.S.: BLS, http://www.bls.gov/xg_shells/ro1xg02.htm#rate
U.S.: Series LNU04000000; **N.E.:** Series LAURD81000003; **VT:** LAUST50000003; **Chitt. Cty.:** LAUPA500100003; **Burlington:** LAUCT50005003

3.7.2 Unemployment by Age

Between 1990 and 2000, total unemployment in Burlington dropped from 1,409 to 1,222 (See chart below). This was the result of a decline in unemployment in all age groups except for those between 16 and 19. In 1990, 51.9% of Burlington’s unemployed people were aged 25-54; by 2000, that percentage had dropped to 43%. During that same period, however, the unemployed in the 16-19 age group grew from 13.6% to 24.4%.

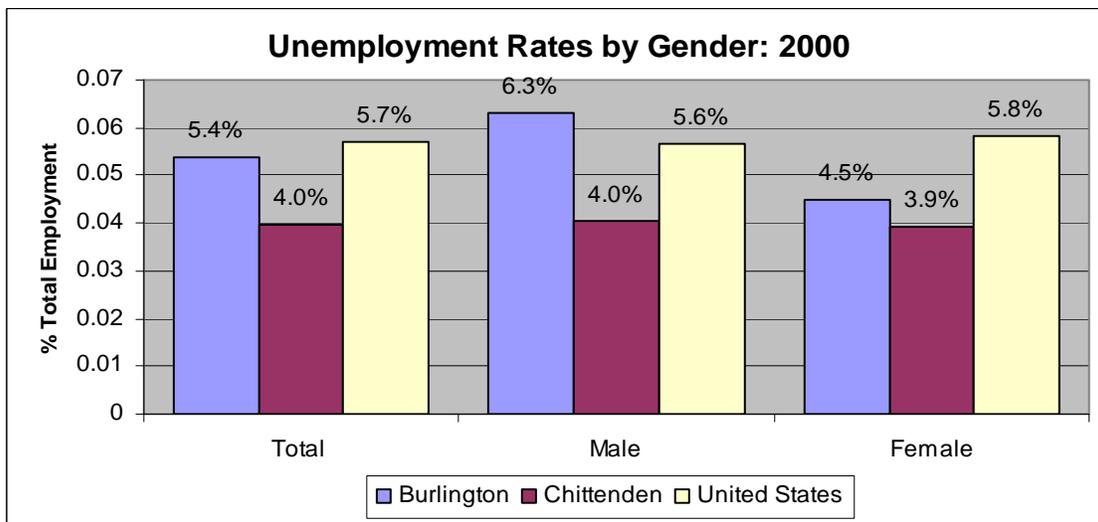
Data for Burlington, Vermont, and Chittenden County is available in Chapter 3, Appendix 22, and further analysis comparing the different locations is in Section 2.1.2.



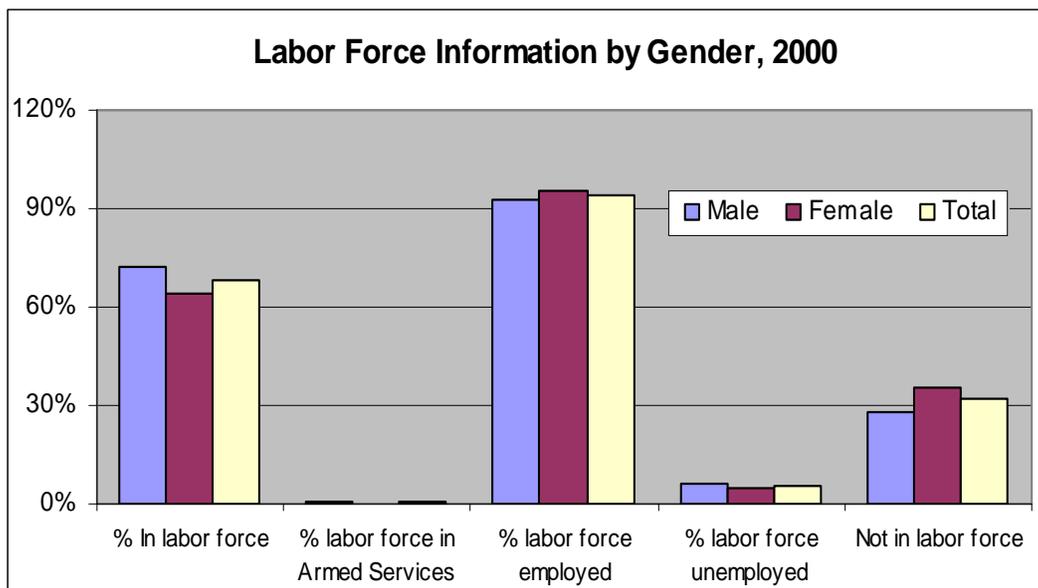
Source: U.S. Census Bureau
 U.S. Census 1990, Labor Force Characteristics, Table 173

3.7.3 Unemployment by Gender

The unemployment rates of men and women in Chittenden County, Burlington and the U.S. are shown in the first chart below for the year 2000 and have been discussed in Section 2.1.2. While the unemployment rates for men and women are close in the County, the gender differences in unemployment rates are greater in Burlington; 6.3% for men, 4.5% for women in 2000. This difference may lie in the lower labor force participation rate of women in Burlington than men (see second chart below) perhaps resulting from some women in two parent households choosing not to work and some women single parents unable to work because of child care requirements. It may also reflect a mix of jobs available typically taken by women rather than men.



Source: U.S. Census Bureau; U.S. Census 2000: Employment Data, Table P43



3.8 Business Survey **(See Supplement A. for the Complete Business Survey)**

The assessment of the performance and structure of the Burlington economy can not proceed without a parallel examination of the regional economy in which it is imbedded. Almost a half of Burlington's labor force works outside of Burlington, mostly within Chittenden County. Two-thirds of jobs in Burlington establishments are held by those who reside outside of Burlington. Industries declining in Burlington are often expanding in the County areas outside of the City providing opportunity for Burlington residents to find work in those sectors. Many living outside Burlington come into the City to shop, have dinner, attend events, and many Burlington residents travel outside the City for similar needs. The two economies are highly interwoven. From Chapter 2 we established that Chittenden County, including Burlington, has a strong record of economic performance over the last few decades (up to 2006 the most recent year covered by much of our data). Compared to the state of Vermont and the U.S., its total employment has grown faster, its average annual wages and its per capita income are higher, and its unemployment and poverty rates are lower. Although it faces job turnover and a growing percentage of those unemployed who are young, its overall economy has performed well and, as of 2006, was strong.

Over the same period, the Burlington portion of the Chittenden County economy did not fare as well. Compared to the County, its total employment growth was slower (not surprising since the City faces space constraints), its unemployment rate was higher, its per capita income lower, and its poverty levels across a wide range of racial, ethnic, family status and gender categories significantly more serious. Burlington also faces a higher and faster growing percentage of young people among the unemployed. While less favorable than the County, Burlington's employment, unemployment, per capita income, and average wages were more favorable than the State and often the Country. Poverty remains a critical weakness of the City's economic performance, and its reduction a continuing high priority for the City.

Economic performance is grounded in the economic structure of the County – the private and public establishments in different industrial sectors that provide employment and income to County and City residents – and to some extent the distribution of these sources of employment between Burlington and the rest of the County.

The County's industrial structure described in Chapter 2 is a mix of industrial sectors differing in the numbers they employ, their average wages, their rates of growth or decline, as well as their growth relative to their sector nationally and that national sector relative to the overall growth of the economy (See Chapter 2, Section 2.2.5 Summary). Consequently the characteristics of different industrial sectors need to be determined and an economic development strategy adapted to these characteristics. Thus a growth strategy may be appropriate for a sector that pays high wages but employs very few, or a training strategy for sectors that employ many but at low paying jobs.

Because Burlington residents are part of the County economy as workers and consumers (and perhaps investors or suppliers), ideally regional economic development policies would be in place that recognize the needs of Burlington as well as the rest of the County. Such policies would be established, perhaps, through the coordinated efforts of local governments within the County, or by a regional planning group. Efforts of this sort, however, are just beginning. In the absence of such a regional policy mechanism, how might Burlington decision-makers strive to improve the economic lives of Burlington residents?

The Burlington economy differs from the overall County economy in ways that allow for some Burlington-based strategies and decisions to help local residents. When you compare employment importance and average wages in the sectors in Burlington, many of the City's highest employing sectors (employing more than 1500 in 2005) - government, health care and social services, professional, scientific and technical services, manufacturing, and finance and insurance – are among the higher paying sectors. These sectors, in 2005, provided a total of 20,963 jobs or almost two-thirds of the jobs in Burlington. Granted the 2006 real wages in this group range from \$46,084 (health care, social services) to \$85,101 (finance, insurance), this still speaks well for the number of quality jobs available in Burlington.

The challenge is to link up more Burlington residents with these higher paying jobs within the City. Right now most of these jobs are held by non-Burlington residents. Increasing Burlington resident employment in these sectors will require a long-term, focused educational effort working with both local residents and key employers.

But the Burlington economy has other sectors that do not pay as well. Retail and accommodations and food, two of the largest sources of employment in Burlington, are the lowest paying sectors based on average real wages. They are also among the slowest growing sectors in the City. The challenge to the City here is more how to help residents advance in these jobs or, better still, move into somewhat higher paying sectors than, for example, policies that support these businesses directly (at least not for their employment benefits). There are other sectoral changes that raise other challenges. If we look at sectoral employment shifts in the County compared to Burlington we see that, with the exception of manufacturing, those sectors declining in Burlington are growing in the County (information, real estate, transportation and warehousing, finance and insurance). Consequently, employment options are not necessarily being reduced overall but are shifting their location. The challenge now becomes helping Burlington residents find good jobs outside of Burlington.

Finally all of these challenges need to encompass the largest need in Burlington, reducing the numbers of residents in poverty. Working directly with those facing economic hardship, or with the organizations that represent their interests, the challenge is to build economic development strategies from the ground up – fully understanding all of the material needs of low income individuals or households and designing strategies that speak more directly to these needs. These may be employment and income based, connecting into the strategies discussed above, or they may be related to costs of living, educational or training limitations, cultural barriers, and borrowing or credit struggles. Whatever those needs, strategy development should begin with their understanding.

Chapter 4. Recommendations

The analysis of Chapters 2 and 3 provides information that can be used, along with other available information, to assess current economic development efforts in Burlington and make recommendations to guide future actions. This Chapter summarizes the results of that analysis, reviews Burlington's current economic development goals and programs, and offers several recommendations for next steps.

4.1 Economic Well-being

Economic development seeks to improve the economic well-being of households, neighborhoods and local and regional communities.

Household economic well-being comes from:

- improved access to more and better jobs, and thus to higher income
- greater freedom from poverty
- increased security in maintaining employment and incomes
- enhanced opportunities to gain other forms of income (rents, interest, etc.)
- lowered costs of living so that incomes go further in providing needed goods and services
- access to capital and ways to invest savings, both at reasonable rates, and
- affordable tax levels and the provision of public services where needed

Community economic well-being (or that of the City, County or more aggregate levels) is achieved when individual households are doing better economically AND there is increased economic security, equity, sustainability and participation in the community economy.

Community well-being requires community-wide measures such as:

- relatively low population turnover – households experiencing higher incomes choose to remain in the community and those experiencing income losses do not have to leave; there's minimal "flight" of capital or labor
- fairness in the overall distribution of income and wealth among households in the community
- maintenance or improvement of the ecology that supports the community and reduced use of non-renewable natural resources in achieving household economic well-being
- high participation rates by households in collective economic decision-making

In this larger context, this study of the performance and structure of the Burlington and regional economy provides a partial but still useful view of the economic well-being of Burlington households and the City overall.

As for the economic well-being of households, the report provides little information on matters such as the cost of living, access to capital and investment, and tax burdens on residents, but it does provide helpful data and analysis on household employment, income, wages, and poverty:

- lower unemployment than the State and country so that availability of work is usually not a critical problem for Burlington households (except for younger workers);
- average real wages received by local residents are on a par with the County and higher than the State and country indicating that the jobs held by residents are, on average, better than elsewhere;
- per capita incomes, however, have not grown as fast as the County or State and, as of the 2000 census, were lower than both, indicating that Burlington residents, on average, receive less income from sources other than wages (e.g. retirement income, rents, profits) than those living outside the City; and most importantly
- individuals and families experience higher rates of poverty than the County, State of Vermont and the country, with children, people of color, and female heads of households those most affected by poverty.

As far as the economic wellbeing of the City overall, this report finds that its income is less evenly distributed than the County and State (as measured by lower median incomes) and that residents experience high turnover of jobs in the County where most work, however, the report does not provide information on matters of population turnover, impacts on the environment and resident participation in economic decision-making.

Accepting that this picture is incomplete, it still suggests that the City should continue to focus a significant portion of its economic development efforts on the struggles of younger workers (facing unemployment) and on those individuals and families in poverty (mainly people of color and single women head of households with children.) This should not replace its diligence in expanding and retaining good jobs; it suggests such efforts be accompanied by a renewed focus to get these jobs to the special groups listed above.

4.2 Burlington's Economic Development Organization and Goals

Burlington's specific economic development planning and implementation efforts are carried out by a small but talented group within the Community and Economic Development Office (CEDO). This group combines (1) economic development planning, (2) economic development organizing and collaboration, and (3) business development, retention and support. Their efforts are complemented by other divisions within CEDO that focus more on physical development, Brownfields/special projects (waterfront, physical infrastructure), transportation, Center for Community and Neighborhoods, and housing (including the Lead abatement program). The Economic Development group works with these other divisions of CEDO to

ensure that all the different elements of the economic well-being of households and the City are addressed. The group also works with a variety of private, public and non-profit organizations outside of CEDO to achieve its economic development goals.

The Economic Development Goals of the City are (from Chapter one):

1. The quality of life in Burlington is enhanced by a strong, diverse and vital downtown
2. Burlington's waterfront is developed as a cultural, recreational, social and economic resource for the entire community
3. Businesses that offer essential goods and services are located within the City, readily available to all residents
4. The startup and expansion of businesses are nurtured, including the support of a readily accessible core of centrally-located business services
5. Burlington's 200+ acre agricultural breadbasket – home to market farming, community supported agriculture, community gardens, farmer training, and composting – thrives
6. Burlington continues to generate a strong, diverse base of locally-owned enterprises
7. Sites with real or perceived contamination issues are redeveloped into productive use
8. Quality employment supports and opportunities are available for those who are traditionally underserved, and workers are earning a living wage
9. Transportation needs are addressed, traffic congestion reduced, access in and around the downtown improved, and greater use of alternative modes of transportation promoted
10. Burlington's competitive advantages are maximized by supporting the development of targeted industries including tourism, telecommunications intensive businesses, the environmental technology industry, financial services, specialty foods, media, printing and publishing, the arts, and sustainable natural resource promotion
11. New cooperative relationships are developed between the City and other communities in the region to strengthen the regional economy for the benefit of all

These goals reflect the strengths of the Economic Development group in business development (goals 3, 4, 5, 6, 7 and 10) and in economic development collaboration outside of CEDO (goals 1, 8 and 11) and within (goals 2 and 9). The overall goals extracted from this list are improving the quality of life of all residents (from goal 1) and enhancing the economic lives of those who are underserved (goal 8). The other goals are instrumental in achieving these.

4.3 Economic Development Methods

To achieve these and similar goals over the last twenty years, CEDO's Economic Development group has used the following methods:

1. Collaboration with other organizations and government agencies as seen in efforts such as the Chittenden County Roundtable (1988), Community Banking Council (1989),
-

- Community Outreach Partnership Center with UVM (1999) and extensive partnering on specific development projects
2. Worked with Lake Champlain Regional Chamber of Commerce to establish the School to Work Initiative (1996). The program is now known as Linking Learning to Life and operates throughout Vermont.
 3. Resource Centers (1989) were originally created in Burlington following layoffs at a local manufacturing plant, as an attempt to coordinate a set of resources that had recently been developed. These centers allowed workers to find new educational and training opportunities in one location. Resource Centers are now located in every state Department of Labor office in the United States.
 4. Development Planning and Data Collection including Business Surveys (1996, 2008), Jobs and People Reports (1984, 1989, 1994, 2008), and the economic development portion of Consolidated Plans (2000, 2008)
 5. Physical Infrastructure Development and Maintenance working with Burlington Telecom's Fiber Optic Network (2003) and a variety of commercial real estate developments, North Street and Church Street Marketplace
 6. Business Networks, organizing including South End Arts and Business Association (1985), Vermont Businesses for Social Responsibility (199), the Micro Business Alliance (2003), the Vermont Software Developers Alliance (2004), and the Old North End Arts and Business Network (2007), and the Vermont BioScience Alliance (2008).
 7. Neighborhood or Community-wide Development Initiatives such as the Local Ownership Program/Fund (1986), Business Incubators (1987), Old North End Enterprise Community (1995), Eco-Industrial Park (1996), UVM/Burlington Community Outreach Partnership Center's Business and Workforce Development Project (1999), and the Renewal Community Designation (2002).
 8. Technical Assistance for Business including business development, planning, financing, and education, publications (e.g. Guide to Doing Business in Burlington), and linking business development to sustainable community development
 9. Sectoral Development through organizing of industry groups (Vermont Software Developers Alliance and Vermont Bioscience Alliance) and ownership types (Local and Cooperative Owned Business development)
-

10. Workforce development, training, including the Step Up for Women (1986): now Vermont Works for Women, the Welfare to Work sector training program (1998) and the Aviation Technology Program (2008)
11. Linking Jobs and People through such means as Alternative Career Forums and the Vermont 3.0 Creative Tech Career Jams (2008)
12. Education about Business and the Economy as illustrated by the Downtown Summit (1986), establishing the Business Community Program (Key Bank, UVM), and recent Local Economy Status meetings (2008)

4.4 Recommendations

The following recommendations draw on the City's economic development goals and activities, the findings of this report on economic performance and structure, and a variety of related economic development concepts and ideas.

4.4.1 Regional Planning and Strategy

One of the City's economic development goals and activities is to develop new cooperative relationships with other communities in the County to strengthen the regional economy for the benefit of all (goal #11). This should be a high priority as the Burlington and Chittenden County economies are highly integrated, and decisions made by separate communities may detract from the long-term strength of the regional economy that serves everyone.

We have seen that many Burlington residents work outside of the City and many from outside commute into Burlington for employment. Some sectors that have been declining within Burlington are growing outside. Lower skill jobs have been growing outside Burlington while lower cost housing opportunities needed by those pursuing such employment are much more prevalent within the City. Similar interconnections are seen on the consumption side. Although Burlington is the commercial center of the County, attracting many outsiders to City merchants, many City residents shop at regional malls in Williston and elsewhere.

In the face of these regional interdependencies, autonomous local community decision-making, and relatively weak regional planning organizations, it is difficult to coordinate the business zoning, support, and location decisions needed to strengthen and rationalize the regional economy. The City has made strides to support regional economic decision making – for example, the Chittenden County Roundtable (1988) – but needs to expand significantly these efforts for regional economic development planning. Cooperation in the development of future Jobs and People Reports would be a useful component of such cooperation.

4.4.2 Infrastructure Development

Economic development planning needs to focus on creating the conditions that attract and retain businesses and entrepreneurs, and this involves both physical and social infrastructure. Some of this infrastructure is needed by all or most businesses; other infrastructure is designed to support and promote certain industrial sectors or type of businesses.

Physical infrastructure includes a wide range of public services such as roads, sewers, and water, as well as developments like Burlington Telecom's Fiber Optic Network (2003) and a wide variety of commercial real estate improvements such as North Street and the Church Street Marketplace.

This report suggests that a focus on transportation infrastructure, or at least on the use of that infrastructure, can play an important economic development role in Burlington. Two findings in particular are relevant here. First, that many sectors providing good jobs are declining in Burlington while growing in Chittenden County but outside of Burlington, and second, that the growth of lower skill jobs is occurring outside of Burlington while the concentration of individuals who most need those jobs is in Burlington. This suggests a renewed and expanded effort of providing public transportation between Burlington and where these jobs are located may have significant returns for local residents with lower work skills and/or other barriers to employment.

Social infrastructure is less apparent but equally important. This includes the development of business networks and alliances such as the South End Arts and Business Association (1985), the Micro Business Alliance (2003), the Vermont Software Developers Alliance (2004), the Old North End Arts and Business Network (2007), and the Vermont BioScience Alliance (2008).

The creation of the Software Developers Alliance is a model approach that should be used to strategically and selectively assist in the strengthening of specific subsectors that potentially offer quality jobs that fit the needs of Burlington's labor force. The current use of this approach in the Life Sciences likely meets these criteria along with the creation of a statewide technology association, the Vermont BioScience Alliance.

The City's goal of providing a readily accessible core of centrally-located business services to nurture the start-up and expansion of businesses (goal #4) represents another important form of social infrastructure.

4.4.3. Local First Chittenden County

Burlington's economic development goals of continuing to generate a strong, diverse base of locally-owned enterprises (goal #7) and a thriving local farming sector (goal #5) build on a

strategy of support for locally-owned and cooperative enterprises that goes back to 1986. This support for individual businesses or farms in this category is important but it needs to be part of a larger strategy to promote resident, non-profit and business purchasing from local sources. For example, City Market agreed to carry a minimum of 1,000 local products. Six years later, the Market carries over 1,700 local products.

This strategy involves several elements.

First, the development of an association of community-based non-profits and locally-owned, independent businesses that has the goal of promoting local purchasing that strengthens both individual enterprises and the entire local economy. A model for such an association is Local First Vermont; perhaps a Local First Chittenden County network would achieve these goals on a regional basis and reinforce efforts to plan regional economic development in a more cooperative fashion.

Second, creating and supporting organization-based efforts that increase local purchasing by major local non-profits like UVM, Fletcher Allen, and the Burlington School system. The Burlington-UVM Community Outreach Partnership Center (1999-2003) included a major effort to increase local buying by UVM. The Burlington Food Council and various Farm-to-School efforts have increased purchasing of produce locally by the Burlington Schools. Follow up efforts in these areas along with a targeted initiative to engage Fletcher Allen in local buying would be a next step.

Finally, continuing the strong local ownership and cooperative business support program in CEDO that is currently in place.

4.4.4. Sectoral Development

Burlington has pursued sectoral development largely through its organizing and collaborative work (Vermont Software Alliance). In stating its Goal #10 – *Burlington’s competitive advantages are maximized by supporting the development of targeted industries including tourism, telecommunications intensive businesses, the environmental technology industry, financial services, specialty foods, media, printing and publishing, the arts, and sustainable natural resource promotion* – it’s moving more directly into identifying specific sectors and setting priorities for its business development and support activities.

This report should inform this strategy.

First, the report provides several measures of sectoral characteristics and performance that might be used in identifying sectors to be the focus of development efforts. These measures or criteria should be used in conjunction with the common sense and wisdom of those directly

involved in or with these sectors. These are:

- ◇ Numbers they employ
- ◇ Average wages—a proxy for the quality of employment
- ◇ Rates of growth or decline—future employment prospects
- ◇ Location quotients—a proxy for their export effects (bringing funds into the local economy) or their import substitution potential (expanding to provide locally what is currently bought from the outside)
- ◇ Growth relative to their sector nationally and that national sector relative to the overall growth of the economy—sectoral competitiveness

To this list we could add the importance of the sector to the overall economy, both in terms of their multiplier effects (based on their employment levels and their use of other local inputs) and their more direct effects (like drawing others to the City).

Second, the report provides specific information about some of the sectors currently identified.

- Tourism includes the accommodations and food service sector. This sector is a major source of local employment albeit at fairly low wages. As of 2006 this sector was growing nationally faster than the economy, with the local sector growing faster than the sector is nationally. In shift-share terms this is taken as an indication that there are conditions locally that provide it with a competitive edge. This sector is also an “export” sector highlighting its ability to draw people from outside the City, bringing funds into the local economy. Support for businesses in this sector should include ways to improve the wages paid for these jobs and/or ways that those employed can move up to better jobs.
 - Financial services locally demonstrated moderate employment and growth through 2006, with higher wages. Data on this sector, however, suggests it has no particular competitive advantage locally and considering the changes in credit markets since 2006, probably is not likely to demonstrate much if any growth for some time. Probably not a high priority sector for support at this time.
 - Media, printing and publishing are part of the information sector, a sector that generally offers reasonable wages and, according to findings in this report, is export oriented and competitive (as of 2006). This sector has a record of relatively low employment levels and growth, and this growth has been more in the County outside of Burlington. Support for businesses in this sector should emphasize growth and retention, although the actual location may not be in Burlington itself. This raises the interesting question of whether Burlington’s limited resources for development should be used for businesses outside of the City.
 - Arts, along with entertainment and recreation, have been fast growing, and are estimated to be an “export” sector that has a strong competitive edge locally. They also contribute
-

a lot to the quality of life in Burlington and thus may attract individuals to the City who might play an entrepreneurial role. Low wages in this sector suggest that efforts at support should attempt to lower non-labor costs to these businesses while working to increase demand.

- Environmental technology, specialty foods, and sustainable natural resources promotion included in goal #10 require subsector analysis for better determination of their current competitiveness locally. Such an analysis would also be useful for the other sectors discussed above.
- Telecommunication intensive industries are obviously excellent candidates given Burlington's new fiber optic system. Many if not most industrial sectors rely heavily on the internet so that the availability of higher speed data transmission is a critically important form of local infrastructure and a valuable instrument for local development.
- There are a variety of other sectors that are well represented in Burlington and worthy of attention but not included in goal #10. Some of these other sectors, and examples of types of economic development supports needed, are (see Chapter 3):
 - ◇ Health care and social services (training for entry level positions and/or advancement; linking jobs and local residents)
 - ◇ Professional, scientific and technical services (business development/support, linking jobs and local residents)
 - ◇ Retail, along with food and accommodations (business development/support, training for advancement; transportation to out of City jobs)
 - ◇ Manufacturing (business retention/support)
 - ◇ Information, transportation and warehousing, real estate (business development/support; transportation to out of City jobs)

Finally, as suggested above, different sectors may require different forms of support. To the extent that the support needed is encompassed within business enterprise development methods, CEDO is well equipped to provide that assistance. However, where workforce development methods are required, CEDO works with partner organizations with the resources and skills to provide that form of help and to ensure that Burlington's needs are being met. Workforce development is discussed again below.

4.4.5 Business Development/Support Methods and Priorities

CEDO has itself, or has access to, a depth and breadth of business development and support activities – it can provide business planning, financing, location, legal and other related forms of technical assistance either directly or by referring businesses to other sources of support (see their Guide to Doing Business in Burlington).

This business development/support capacity can play a critical role in its efforts to achieve a variety of its goals listed earlier. These include ensuring that City residents can secure essential goods and services close by (3), enjoy the agricultural outputs from a thriving Intervale (5), be served by a strong, diverse base of locally-owned enterprises (6), and find satisfying employment (8 and 10). This capacity can also come into play in efforts to make the City more sustainable – Sustainable Burlington – as described in the City’s Legacy Project (<http://burlingtonlegacyproject.org>).

CEDO conducts broad outreach along with targeted outreach, such as door knocking and phone calling, to check on how businesses are doing. Through these outreach methods, over 300 companies per year are contacted. CEDO also works with community partners, such as Burlington Telecom, Burlington Electric Department, and Greater Burlington Industrial Corporation, to cast a wider net and increase the amount of resources available to local businesses. CEDO has also worked with organizations that provide direct business support such as the Women’s Small Business Program, South End Arts and Business Association, MicroBusiness Development Program, and the Small Business Development Center.

While a reactive decision system of this sort may seem more random than strategic, in fact many requests for assistance emerge from other CEDO activities that are strategic such as which industrial sectors they help organize (see 4.4.2 above), which sectors they want to target (see 4.4.4 above), which groups they work with that have similar goals (e.g. Church Street Marketplace, Legacy Project), and which kinds of funding and other support CEDO can offer (e.g. business loans giving local ownership priority). CEDO’s goal is to match resources to a business’s need through the use of the web, through direct referrals, through printed materials such as the Doing Business Guide and Resource Guide, and by organizing events and workshops.

4.4.6 Workforce Training, Development and Support

That poverty in Burlington is an important and continuing problem is a clear finding of this report and is well understood by many in City government and the focus of many programs and activities carried out over the years. Burlington highlights this concern in its economic development Goal #8: *Quality employment supports and opportunities are available for those who are traditionally underserved, and workers are earning a living wage.*

CEDO has played a key role in planning and implementing initiatives like the Old North End Enterprise Community that focus on the City’s lowest income neighborhoods. On a continuing basis, there’s no question that its economic development planning, data collection, business development assistance, business networks, sectoral organizing, and related activities are contributing to a vital Burlington economy. To the extent that this vitality trickles down to lower income households and neighborhoods, these activities help to reduce poverty and inequities as well. However, if CEDO wants to reduce poverty more directly, and on a continuing basis rather than through periodic programs, it needs to play a bigger role in workforce development and support.

Business support contributes to job creation and the demand for workers. However, what those facing barriers to employment and in need of employment at living wages most often require is help getting into the labor market and becoming prepared to apply, be hired and work effectively at those jobs. If the labor markets are going to work for these individuals, economic development efforts must operate at both the labor demand and labor supply sides, providing both business and workforce development assistance and support. A conclusion of CEDO's most recent business survey was the need to "support technical education and training efforts to provide workers with well-paying jobs and businesses with quality employees."

CEDO has experience in workforce development – Step-Up for Women (1986, now Vermont Works for Women), Alternative Career Forums (1990), and Welfare-to-Work sector training program (1998) – and frequently collaborates with the State's Department of Labor, and a variety of non-profit training programs such as Recycle North.

What CEDO's Economic Development Division does not currently have is someone in-house whose primary job is to focus on workforce development, especially for the most marginalized groups in the local economy. Someone in this position would have to pay close attention to the actual conditions faced by such workers, the constraints faced in even getting into the labor market (housing, transportation, social services), the challenges to entering that market (language skills, application process, interviewing, work discipline), the skills needed for the actual job (job training), and the support essential to securing, retaining and succeeding in that employment.

CEDO already has the capacity to go a long way towards helping someone with a variety of barriers to employment secure a living wage job. Its business development group works with potential employers and helps create and retain jobs, its in-house Center for Community and Neighborhoods has connections to, and understanding of, those most in need of employment, and it has good relations with a variety of relevant workforce-related organizations to help individuals get the skills and knowledge needed for those jobs. What CEDO doesn't have is an individual who works with all of these individuals and organizations to provide the training and support needed to connect "*Jobs and People*."

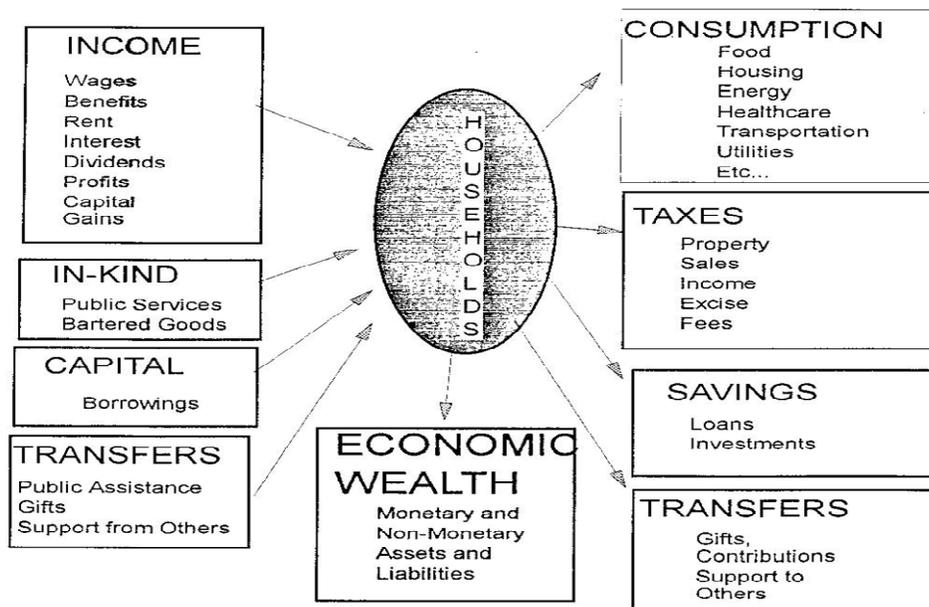
4.4.7 Going Beyond Employment and Income

A final long-term recommendation for CEDO is to go beyond employment and income strategies to a more comprehensive approach and set of strategies to improve the economic well-being of local households, especially those most challenged economically. This approach is based on a more comprehensive view of what households face in trying to improve their material status, and a deeper understanding of the specific challenges faced by different groups of people and/or different neighborhoods.

This approach examines all sources of material support and all uses of resources in the household, looking at, on the one hand, income of all sorts, availability of credit, public services and transfers, and, on the other hand, consumption expenditures, taxes, investments, savings and transfers to others. It also includes current stocks of assets and liabilities, the household “balance sheet” (See figure below).

In this context, economic development strategies can operate on any resource flow or stock. They might aim to increase other income flows (rents, dividends, profits), availability of credit, or share of public services or transfers; or decrease the costs of living (healthcare, food, energy, etc.), taxes or the costs of borrowing (or increase return from savings); or increase assets or decrease liabilities through these and other strategies.

FIGURE 1
SOURCES, USES AND LEVELS OF
HOUSEHOLD ECONOMIC RESOURCES



Some strategies come to mind, beyond the employment and wage income ones discussed above, that fit within this framework, such as micro-lending, alternative credit unions, bartering, worker cooperatives, individual development accounts, food and energy cooperatives, organizing to reduce costs of living or taxes, or to gain access to more public services. The particular strategies used depend, of course, on the particular struggles faced by households in a particular neighborhood.

CEDO is well situated to play the role of coordinator and supporter of a multi-factor, multi-strategy approach to enhancing household economic well-being. It already plays a role in areas such as micro-lending, micro-business, and cooperatives; it is very connected to local nonprofits and other organizations that focus on one or more of these strategies; its Center for Community and Neighborhoods is connected to the populations who would benefit from these strategies; and it already has some experience in linking a variety of strategies in its Enterprise Community program. Most of these different strategies operate in isolation of others; CEDO is in the best position to connect and coordinate these efforts to better serve economically disadvantaged communities.

From “How Burlington Became an Award Winning City: An Historical Summary of Burlington’s Economic Development Efforts with a Vision for the Future 1983-2008,” CEDO, Burlington, Vermont (2008)

APPENDIX 1**Total Employment Trends, 1980-2006**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000's)	growth rate
1980	249,700	1.00	53,849	1.00	25,966	1.00	90,528	1.00
1981	257,300	1.03	56,603	1.05	27,050	1.04	91,289	1.01
1982	263,000	1.05	57,378	1.07	27,248	1.05	89,677	0.99
1983	265,400	1.06	58,805	1.09	27,665	1.07	90,280	1.00
1984	271,600	1.09	61,460	1.14	28,332	1.09	94,530	1.04
1985	280,200	1.12	64,946	1.21	29,324	1.13	97,511	1.08
1986	288,400	1.15	67,378	1.25	30,116	1.16	99,474	1.10
1987	294,400	1.18	70,752	1.31	31,695	1.22	102,088	1.13
1988	297,900	1.19	74,895	1.39	32,073	1.24	105,345	1.16
1989	304,500	1.22	78,119	1.45	31,597	1.22	108,014	1.19
1990	309,300	1.24	77,548	1.44	30,801	1.19	109,487	1.21
1991	308,600	1.24	75,533	1.40	29,110	1.12	108,374	1.20
1992	312,400	1.25	76,188	1.41	29,437	1.13	108,726	1.20
1993	314,900	1.26	77,873	1.45	29,430	1.13	110,844	1.22
1994	316,200	1.27	79,960	1.48	29,750	1.15	114,291	1.26
1995	319,000	1.28	82,617	1.53	30,032	1.16	117,298	1.30
1996	323,900	1.30	85,224	1.58	30,045	1.16	119,708	1.32
1997	328,800	1.32	86,363	1.60	29,402	1.13	122,776	1.36
1998	331,900	1.33	88,145	1.64	29,809	1.15	125,930	1.39
1999	335,400	1.34	91,165	1.69	29,924	1.15	128,993	1.42
2000	335,800	1.34	95,354	1.77	31,493	1.21	131,785	1.46
2001	341,200	1.37	96,179	1.79	31,208	1.20	131,826	1.46
2002	345,600	1.38	94,083	1.75	31,424	1.21	130,341	1.44
2003	349,400	1.40	93,533	1.74	31,823	1.23	129,999	1.44
2004	350,700	1.40	94,881	1.76	32,579	1.25	131,435	1.45
2005	353,600	1.42	94,799	1.76	32,498	1.25	133,703	1.48
2006*	361,000	1.45	94,208	1.75	32,377	1.25	136,174	1.50

Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages
 United States: Bureau of Labor Statistics Data, Total Non-farm Employment- Not Seasonally Adjusted
 *NOTE: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.

APPENDIX 2**Total Private Employment Trends, 1980-2006**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages
United States: Bureau of Labor Statistics Data, Total Non-farm Employment- Not Seasonally Adjusted

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000s)	growth rate
1980	159,571	1.00	44,879	1.00	20,208	1.00	74154	1.00
1981	164,378	1.03	47,499	1.06	21,185	1.05	75109	1.01
1982	163,540	1.02	48,434	1.08	21,485	1.06	73695	0.99
1983	166,832	1.05	49,773	1.11	21,868	1.08	74269	1.00
1984	174,768	1.10	52,128	1.16	22,366	1.11	78371	1.06
1985	184,406	1.16	55,584	1.24	23,435	1.16	80978	1.09
1986	192,538	1.21	57,741	1.29	24,121	1.19	82636	1.11
1987	203,233	1.27	60,913	1.36	25,503	1.26	84932	1.15
1988	211,830	1.33	64,464	1.44	25,545	1.26	87806	1.18
1989	216,096	1.35	67,086	1.49	24,836	1.23	90087	1.21
1990	213,950	1.34	66,401	1.48	24,082	1.19	91072	1.23
1991	205,050	1.29	64,140	1.43	22,335	1.11	89829	1.21
1992	207,250	1.30	64,561	1.44	22,491	1.11	89940	1.21
1993	213,250	1.34	66,519	1.48	22,814	1.13	91855	1.24
1994	219,050	1.37	68,569	1.53	23,122	1.14	95016	1.28
1995	224,900	1.41	70,934	1.58	23,499	1.16	97866	1.32
1996	229,500	1.44	73,461	1.64	23,601	1.17	100169	1.35
1997	233,450	1.46	74,492	1.66	23,100	1.14	103113	1.39
1998	238,650	1.50	76,490	1.70	23,779	1.18	106021	1.43
1999	243,750	1.53	79,065	1.76	23,909	1.18	108686	1.47
2000	249,100	1.56	82,107	1.83	24,653	1.22	110996	1.50
2001	251,900	1.58	82,814	1.85	24,462	1.21	110707	1.49
2002	248,550	1.56	80,452	1.79	24,621	1.22	108828	1.47
2003	247,200	1.55	79,446	1.77	24,767	1.23	108416	1.46
2004	250,650	1.57	80,362	1.79	25,107	1.24	109814	1.48
2005	252,550	1.58	80,084	1.78	24,771	1.23	111899	1.51
2006*	253,950	1.59	79,757	1.78	24,771	1.23	114184	1.54

APPENDIX 3

Workforce Demographics-Location

Source: US Census, 2000 Minor Civil Division/County-to-Minor Civil Division/County Worker Flow Files

	Total Resident Workforce	Total Employed in Chittenden County	% of Resident Workforce Who Work in Chittenden County	% of Resident Workforce Who Work in Their Place of Residence
Bolton	195	180	0.92	0.24
Burlington	30,463	25,762	0.85	0.39
Charlotte	717	585	0.82	0.49
Colchester	5,407	4,453	0.82	0.32
Essex	14,276	11,442	0.80	0.28
Hinesburg	1,035	812	0.78	0.45
Huntington	190	179	0.94	0.84
Jericho	796	681	0.86	0.48
Milton	1,674	1,236	0.74	0.53
Richmond	808	737	0.91	0.52
St. George	NA	NA		
Shelburne	2,668	2,211	0.83	0.25
South Burlington	14,294	11,541	0.81	0.16
Underhill	521	386	0.74	0.42
Westford	212	186	0.88	0.53
Williston	4,577	3,630	0.79	0.14
Winooski	7,859	7,251	0.92	0.09

APPENDIX 4

Where Residents of Chittenden County Work

Source: US Census, 2000 Minor Civil Division/County-to-Minor Civil Division/County Worker Flow Files

	Bolton	Burlington	Charlotte	Colchester	Essex (town)	Hinesburg	Huntington	Jericho	Milton	Richmond	St. George	Shelburne	South Burlington	Underhill	Westford	Williston	Winooski
Bolton	47	34	0	6	18	0	2	0	4	47	0	8	14	0	0	0	0
Burlington	108	11899	590	2419	1826	443	228	445	1026	474	104	1014	2515	338	237	727	1269
Charlotte	2	80	349	15	22	19	15	0	0	13	2	35	14	0	6	6	7
Colchester	15	696	28	1742	488	72	48	114	369	70	15	111	187	63	43	144	248
Essex	76	1260	61	1265	3955	212	105	609	731	366	71	280	832	447	269	500	403
Hinesburg	2	35	10	10	52	461	37	18	2	27	22	24	43	28	3	31	7
Huntington	0	0	0	0	8	0	159	0	0	0	0	0	10	0	2	0	0
Jericho	7	49	6	42	73	7	6	380	6	20	0	0	17	46	16	6	0
Milton	7	57	0	68	75	16	2	894	0	0	0	0	60	0	32	7	18
Richmond	45	44	0	35	22	9	45	27	2	417	5	12	6	24	8	31	5
St. George	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0
Shelburne	4	480	190	107	65	115	19	49	48	35	23	677	236	21	12	41	89
South Burlington	74	3133	275	1207	1152	319	115	285	536	296	79	523	2241	149	104	456	597
Underhill	7	0	0	37	21	0	0	57	8	13	0	0	14	219	3	7	0
Westford	2	7	0	11	47	0	0	0	2	0	0	0	0	5	112	0	0
Williston	35	744	41	378	541	49	56	138	175	121	48	150	297	114	35	631	77
Winooski	17	566	40	390	328	62	8	81	148	66	17	63	190	7	16	58	617

APPENDIX 5**Average Annual Unemployment Rate: U.S., New England, Chittenden County, Vermont, Burlington, 1984-2006**

Source: NE & U.S.: BLS, http://www.bls.gov/xg_shells/ro1xg02.htm#rate, U.S.: Series LNU04000000, N.E.: Series LAURD81000003, VT: LAUST50000003, Chitt Cty: LAU-PA50010003, Burlington: LAUCT50005003

	U.S.	New England	Vermont	Chittenden County	Burlington
1984	7.5	4.9	4.9		
1985	7.2	4.4	4.8	****NOTE*****	
1986	7.0	3.9	4.4		
1987	6.2	3.3	3.8		
1988	5.5	3.1	3.0		
1989	5.3	3.9	3.6		
1990	5.6	5.8	4.9	3.9	4.6
1991	6.9	7.8	6.6	4.9	5.3
1992	7.5	8.1	6.4	4.6	5
1993	6.9	6.9	5.3	3.8	4.1
1994	6.1	5.9	4.6	3.1	3.7
1995	5.6	5.3	4.3	2.9	3.3
1996	5.4	4.8	4.4	2.9	3.5
1997	4.9	4.4	4.0	2.6	3.1
1998	4.5	3.5	3.1	2.0	2.6
1999	4.2	3.2	2.9	1.8	2.2
2000	4	2.8	2.7	2.2	2.4
2001	4.7	3.6	3.3	2.8	3
2002	5.8	4.8	4.0	3.6	3.7
2003	6	5.4	4.5	4.0	4.2
2004	5.5	4.9	3.7	3.2	3.5
2005	5.1	4.7	3.4	3.1	3.1
2006	4.6	4.6	3.6	3.2	2.8

****NOTE***** This information could not be found

APPENDIX 6**Per Capita Personal Income 1990 to 2005**

Source: Regional Economic Information System Bureau of Economic Analysis

US Department of Commerce Bureau of Economic Analysis Personal Income Summary Data

Table CA04

	CPI	Chittenden County			Vermont			U.S.		
		Nominal	Real*	growth rate	Nominal	Real*	growth rate	Nominal	Real*	growth rate
1990	130.7	\$20,710	\$31,945	1.00	\$17,876	\$27,574	1.00	\$19,477	\$30,043	1.00
1991	136.2	\$20,960	\$31,024	.97	\$17,985	\$26,621	.97	\$19,892	\$29,443	.98
1992	140.3	\$21,953	\$31,546	.99	\$19,065	\$27,396	.99	\$20,854	\$29,967	1.00
1993	144.5	\$22,477	\$31,357	.98	\$19,485	\$27,183	.99	\$21,346	\$29,780	.99
1994	148.2	\$22,873	\$31,115	.97	\$20,226	\$27,515	1.00	\$22,172	\$30,162	1.00
1995	152.4	\$24,091	\$31,866	1.00	\$21,002	\$27,780	1.01	\$23,076	\$30,524	1.02
1996	156.9	\$25,492	\$32,758	1.03	\$21,964	\$28,224	1.02	\$24,175	\$31,065	1.03
1997	160.5	\$26,502	\$33,290	1.04	\$23,002	\$28,893	1.05	\$25,334	\$31,823	1.06
1998	163	\$28,573	\$35,341	1.11	\$24,629	\$30,463	1.10	\$26,883	\$33,250	1.11
1999	166.6	\$30,139	\$36,470	1.14	\$25,881	\$31,318	1.14	\$27,939	\$33,808	1.13
2000	172.2	\$32,237	\$37,739	1.18	\$27,678	\$32,402	1.18	\$29,843	\$34,937	1.16
2001	177.1	\$33,588	\$38,233	1.20	\$28,948	\$32,952	1.20	\$30,562	\$34,789	1.16
2002	179.7	\$34,147	\$38,264	1.20	\$29,292	\$32,824	1.19	\$30,795	\$34,508	1.15
2003	184	\$35,236	\$38,606	1.21	\$30,247	\$33,140	1.20	\$31,466	\$34,476	1.15
2004	188.9	\$36,299	\$38,740	1.21	\$31,442	\$33,556	1.22	\$33,090	\$35,315	1.18
2005	195.3	\$37,501	\$38,709	1.21	\$32,717	\$33,771	1.22	\$34,471	\$35,581	1.18
2006	201.6									

*NOTE: Income listed as real 2006 dollars

APPENDIX 7**Real Wages and Income for Chittenden County from 1990 to 2005**

Sources: Regional Economic Information System Bureau of Economic Analysis
US Department of Commerce Bureau of Economic Analysis Personal Income Summary Data
Table CA04

Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT
Department of Labor, Economic & Labor Market Information Office, Covered Employment
and Wages

Chittenden County		
	Wages	Income
1990	\$31,945	37,087
1991	\$31,024	37,072
1992	\$31,546	37,241
1993	\$31,357	36,995
1994	\$31,115	35,753
1995	\$31,866	36,041
1996	\$32,758	36,709
1997	\$33,290	37,481
1998	\$35,341	38,981
1999	\$36,470	39,807
2000	\$37,739	40,188
2001	\$38,233	40,545
2002	\$38,264	40,802
2003	\$38,606	41,012
2004	\$38,740	41,017
2005	\$38,709	41,049

*NOTE: Income listed as real 2006 dollars

APPENDIX 8**Per Capita Income: 1982-2004****Real Per Capita Personal Income: Chittenden County, Vermont, U.S., 1982-2004
(2006 Dollars)**

Source: Bureau of Economic Analysis, U.S. Department of Commerce Regional Economic Information System

PER CAPITA PERSONAL INCOME (2006 Dollars): Chittenden, Vermont, U.S., 1982-2004			
	Chittenden Cnty.	VT	US
1982	\$23,705.24	\$21,568.07	\$24,933.64
1983	\$24,532.05	\$22,182.07	\$25,540.05
1984	\$25,823.82	\$23,361.54	\$26,953.09
1985	\$27,039.88	\$24,296.92	\$27,650.68
1986	\$28,262.63	\$25,446.48	\$28,404.26
1987	\$29,428.99	\$26,397.89	\$28,820.28
1988	\$30,768.28	\$27,252.64	\$29,534.49
1989	\$32,223.48	\$28,232.13	\$30,109.94
1990	\$31,944.42	\$27,573.08	\$30,042.56
1991	\$31,024.49	\$26,620.97	\$29,443.67
1992	\$31,543.29	\$27,394.90	\$29,965.55
1993	\$31,358.91	\$27,184.61	\$29,780.99
1994	\$31,114.69	\$27,513.91	\$30,161.10
1995	\$31,868.41	\$27,782.17	\$30,525.73
1996	\$32,754.54	\$28,221.43	\$31,062.33
1997	\$33,288.49	\$28,892.23	\$31,821.40
1998	\$35,339.37	\$30,461.39	\$33,249.16
1999	\$36,470.72	\$31,318.18	\$33,808.54
2000	\$37,745.56	\$32,405.85	\$34,940.49
2001	\$38,247.08	\$32,956.08	\$34,803.60
2002	\$38,277.11	\$32,824.16	\$34,526.38
2003	\$38,766.37	\$33,029.53	\$34,495.51
2004	\$39,705.27	\$33,916.61	\$35,272.00

APPENDIX 9**Composition of Earnings (Total Private Wages) by Sector, Dollar Amount, Chittenden County 1990-2005**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages www.vtlmi.info/indareanaics.cfm

NOTE: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

*Data is in 1000s of nominal dollars

Total Private Earnings* by Sector, Chittenden County 1990 to 2005										
	Con- struction	Informa- tion	Financial Activi- ties	Manu- facturing	Retail	Prof. & Tech. Svc.	Arts, Entmnt & Rec.	Services	Whole- sale	Total Private Income
1990	\$109,626	\$55,672	\$110,577	\$541,405	\$149,069	\$126,362	\$9,352	\$923,742	\$89,420	\$1,577,930
1991	\$94,072	\$58,937	\$113,176	\$541,850	\$144,949	\$126,265	\$10,354	\$951,333	\$91,594	\$1,590,251
1992	\$91,304	\$62,328	\$120,215	\$550,324	\$154,083	\$134,147	\$10,537	\$1,014,400	\$91,809	\$1,659,322
1993	\$98,423	\$66,568	\$131,224	\$563,692	\$163,474	\$136,564	\$11,750	\$1,075,422	\$94,385	\$1,740,809
1994	\$110,660	\$66,781	\$134,021	\$541,590	\$173,377	\$137,007	\$13,346	\$1,120,050	\$97,862	\$1,775,524
1995	\$122,561	\$71,551	\$143,353	\$580,158	\$181,744	\$150,765	\$15,545	\$1,206,943	\$104,923	\$1,913,075
1996	\$128,867	\$80,625	\$154,618	\$643,107	\$184,253	\$175,387	\$16,209	\$1,297,627	\$114,709	\$2,073,104
1997	\$139,984	\$85,988	\$166,192	\$672,257	\$200,998	\$189,407	\$18,370	\$1,380,131	\$117,709	\$2,196,296
1998	\$156,160	\$99,896	\$155,190	\$719,910	\$216,719	\$217,865	\$21,098	\$1,502,735	\$121,446	\$2,383,025
1999	\$178,845	\$94,585	\$196,260	\$758,415	\$233,091	\$249,720	\$20,706	\$1,634,495	\$121,829	\$2,576,042
2000	\$196,894	\$106,294	\$177,071	\$843,688	\$251,236	\$284,467	\$26,441	\$1,775,667	\$127,922	\$2,820,694
2001	\$200,901	\$110,772	\$189,595	\$900,227	\$265,354	\$293,176	\$21,003	\$1,837,066	\$142,529	\$2,943,110
2002	\$181,618	\$109,730	\$201,421	\$824,069	\$279,376	\$292,022	\$23,063	\$1,900,282	\$145,677	\$2,910,910
2003	\$189,855	\$110,425	\$219,707	\$758,409	\$286,507	\$308,499	\$23,195	\$1,995,519	\$160,854	\$2,948,565
2004	\$212,799	\$113,586	\$223,894	\$747,525	\$300,703	\$326,745	\$27,341	\$2,098,126	\$167,695	\$3,063,257
2005	\$217,775	\$112,351	\$236,181	\$751,832	\$307,922	\$349,126	\$27,193	\$2,188,742	\$175,223	\$3,163,371

APPENDIX 10**Wage Growth in Chittenden County, by Town: 1990, 2000, 2005.**

Source: Vermont Department of Labor, Economic and Labor Market Information Employment and Wages Report.

Note: Data in this table is in nominal dollars. The average annual percentage change in the CPI can be compared to the average annual change in wages to determine if nominal wages increases have kept up with inflation.

Average Annual Wages**, 1990, 2000, 2005					
				Avg. Annual Growth	
	1990	2000	2005	1990-2000	2000-2005
<i>CPI*</i>	130.7	172.2	195.3	3.2%	2.7%
Bolton	\$13,679	\$16,604	\$26,864	2.1%	12.4%
Burlington	\$22,948	\$33,835	\$40,240	4.7%	3.8%
Charlotte	\$19,927	\$29,477	\$37,433	4.8%	5.4%
Colchester	\$22,080	\$31,395	\$39,282	4.2%	5.0%
Essex	\$35,351	\$46,147	\$53,191	3.1%	3.1%
Hinesburg	\$21,107	\$24,356	\$32,868	1.5%	7.0%
Huntington	\$19,378	\$27,351	\$34,712	4.1%	5.4%
Jericho	\$17,908	\$26,052	\$30,407	4.5%	3.3%
Milton	\$18,964	\$30,324	\$35,737	6.0%	3.6%
Richmond	\$15,318	\$23,371	\$31,754	5.3%	7.2%
St. George	\$15,170	\$18,959	\$22,678	2.5%	3.9%
Shelburne	\$19,433	\$25,234	\$30,287	3.0%	4.0%
S. Burlington	\$20,248	\$32,184	\$36,560	5.9%	2.7%
Underhill	\$19,648	\$26,589	\$46,656	3.5%	15.1%
Westford	\$17,789	\$21,085	\$25,378	1.9%	4.1%
Williston	\$23,571	\$33,255	\$36,274	4.1%	1.8%
Winooski	\$19,110	\$27,496	\$34,389	4.4%	5.0%
Chittenden Co.	\$24,044	\$34,327	\$39,766	4.3%	3.2%

APPENDIX 11**Self Employment Income for Chittenden County, 1990-2005**

Source: US Department of Commerce, Bureau of Economic Analysis, Regional Economic Profiles, Table CA30

*Earnings are in nominal 1000s of dollars.

Self-Employment Income*, Chittenden County 1990 to 2005			
	Total Earnings	Farm Self Em- ploy	Non- farm Self Employ
1990	\$2,578,546	\$3,699	\$200,783
1991	\$2,621,662	\$3,203	\$205,237
1992	\$2,764,948	\$8,728	\$222,405
1993	\$2,898,681	\$5,450	\$233,972
1994	\$2,953,309	\$5,609	\$240,137
1995	\$3,112,669	\$3,947	\$224,890
1996	\$3,333,999	\$6,123	\$242,869
1997	\$3,490,222	\$2,578	\$240,871
1998	\$3,785,166	\$3,492	\$291,215
1999	\$4,103,237	\$4,504	\$338,869
2000	\$4,472,181	\$5,706	\$371,513
2001	\$4,696,280	\$3,310	\$376,827
2002	\$4,768,999	\$652	\$369,420
2003	\$4,913,680	\$2,784	\$362,491
2004	\$5,191,473	\$5,592	\$403,818
2005	\$5,398,103	\$7,814	\$432,658

Total Self-Employment Income as % of Total Earnings, Chittenden County 1990 to 2005			
	Farm	Non-farm	Total Self- Employ
1990	0.14%	7.79%	7.93%
1991	0.12%	7.83%	7.95%
1992	0.32%	8.04%	8.36%
1993	0.19%	8.07%	8.26%
1994	0.19%	8.13%	8.32%
1995	0.13%	7.22%	7.35%
1996	0.18%	7.28%	7.47%
1997	0.07%	6.90%	6.98%
1998	0.09%	7.69%	7.79%
1999	0.11%	8.26%	8.37%
2000	0.13%	8.31%	8.43%
2001	0.07%	8.02%	8.09%
2002	0.01%	7.75%	7.76%
2003	0.06%	7.38%	7.43%
2004	0.11%	7.78%	7.89%
2005	0.14%	8.02%	8.16%

APPENDIX 12**Self Employment Income for Vermont, 1990-2005**

Source: US Department of Commerce, Bureau of Economic Analysis, Regional Economic Profiles, Table CA30 *Earnings are in nominal 1000s of dollars.

	Self Employment Income			Self-Employment Income as % of Total Earnings		
	Total	Nonfarm	Farm	Total	Nonfarm	Farm
1990	\$930,424	\$860,864	\$69,560	0.1393	0.1289	0.0104
1991	\$882,685	\$823,123	\$59,562	0.1321	0.1231	0.0089
1992	\$1,033,168	\$897,361	\$135,807	0.1434	0.1246	0.0189
1993	\$1,016,744	\$934,151	\$82,593	0.1356	0.1246	0.0110
1994	\$1,043,819	\$959,815	\$84,004	0.1342	0.1234	0.0108
1995	\$968,381	\$918,511	\$49,870	0.1207	0.1145	0.0062
1996	\$1,072,723	\$978,590	\$94,133	0.1268	0.1157	0.0111
1997	\$1,090,326	\$1,034,267	\$56,059	0.1232	0.1168	0.0063
1998	\$1,226,321	\$1,145,119	\$81,202	0.1288	0.1203	0.0085
1999	\$1,359,189	\$1,257,682	\$101,507	0.1332	0.1232	0.0099
2000	\$1,477,615	\$1,373,361	\$104,254	0.1336	0.1242	0.0094
2001	\$1,504,025	\$1,421,744	\$82,281	0.1299	0.1228	0.0071
2002	\$1,390,847	\$1,371,200	\$19,647	0.1171	0.1155	0.0017
2003	\$1,436,104	\$1,386,355	\$49,749	0.1158	0.1118	0.0040
2004	\$1,664,429	\$1,565,800	\$98,629	0.1258	0.1183	0.0075
2005	\$1,788,706	\$1,668,769	\$119,937	0.1294	0.1207	0.0087

APPENDIX 13**Self Employment Income for the U.S., 1990-2005**

Source: US Department of Commerce, Bureau of Economic Analysis, Table 1.12. National Income by Type of Income *Earnings are in nominal billions of dollars.

	Self Employment Income			Self-Employment Income as % of Total Earnings		
	Total	Nonfarm	Farm	Total	Nonfarm	Farm
1990	380.6	348.7	31.9	0.0748	0.0685	0.0063
1991	377.1	350.4	26.7	0.0721	0.0670	0.0051
1992	427.6	393	34.5	0.0776	0.0713	0.0063
1993	453.8	422.6	31.2	0.0786	0.0732	0.0054
1994	473.3	439.4	33.9	0.0773	0.0718	0.0055
1995	492.1	469.5	22.7	0.0762	0.0727	0.0035
1996	543.2	505.9	37.3	0.0794	0.0740	0.0055
1997	576	541.8	34.2	0.0790	0.0743	0.0047
1998	627.8	598.4	29.4	0.0810	0.0772	0.0038
1999	678.3	649.7	28.6	0.0824	0.0789	0.0035
2000	728.4	705.7	22.7	0.0828	0.0802	0.0026
2001	771.9	752.2	19.7	0.0860	0.0838	0.0022
2002	768.4	757.8	10.6	0.0833	0.0821	0.0011
2003	811.3	782.1	29.2	0.0842	0.0812	0.0030
2004	911.6	874.3	37.3	0.0884	0.0848	0.0036
2005	969.9	939.1	30.8	0.0891	0.0863	0.0028

APPENDIX 14**Trends in Total Private Employment**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages
<http://data.bls.gov/cgi-bin/surveymost?ce>

United States: Bureau of Labor Statistics Data, Total Private Employment

Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000s)	growth rate
1980	159,571	1.00	44,879	1.00	20,208	1.00	74,154	1.00
1981	164,378	1.03	47,499	1.06	21,185	1.05	75,109	1.01
1982	163,540	1.02	48,434	1.08	21,485	1.06	73,695	0.99
1983	166,832	1.05	49,773	1.11	21,868	1.08	74,269	1.00
1984	174,768	1.10	52,128	1.16	22,366	1.11	78,371	1.06
1985	184,406	1.16	55,584	1.24	23,435	1.16	80,978	1.09
1986	192,538	1.21	57,741	1.29	24,121	1.19	82,636	1.11
1987	203,233	1.27	60,913	1.36	25,503	1.26	84,932	1.15
1988	211,830	1.33	64,464	1.44	25,545	1.26	87,806	1.18
1989	216,096	1.35	67,086	1.49	24,836	1.23	90,087	1.21
1990	213,950	1.34	66,401	1.48	24,082	1.19	91,072	1.23
1991	205,050	1.29	64,140	1.43	22,335	1.11	89,829	1.21
1992	207,250	1.30	64,561	1.44	22,491	1.11	89,940	1.21
1993	213,250	1.34	66,519	1.48	22,814	1.13	91,855	1.24
1994	219,050	1.37	68,569	1.53	23,122	1.14	95,016	1.28
1995	224,900	1.41	70,934	1.58	23,499	1.16	97,866	1.32
1996	229,500	1.44	73,461	1.64	23,601	1.17	100,169	1.35
1997	233,450	1.46	74,492	1.66	23,100	1.14	103,113	1.39
1998	238,650	1.50	76,490	1.70	23,779	1.18	106,021	1.43
1999	243,750	1.53	79,065	1.76	23,909	1.18	108,686	1.47
2000	249,100	1.56	82,107	1.83	24,653	1.22	110,996	1.50
2001	251,900	1.58	82,814	1.85	24,462	1.21	110,707	1.49
2002	248,550	1.56	80,452	1.79	24,621	1.22	108,828	1.47
2003	247,200	1.55	79,446	1.77	24,767	1.23	108,416	1.46
2004	250,650	1.57	80,362	1.79	25,107	1.24	109,814	1.48
2005	252,550	1.58	80,084	1.78	24,771	1.23	111,899	1.51
2006*	253,950	1.59	79,757	1.78	24,771	1.23	114,184	1.54
*NOTE: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.								

APPENDIX 15**Annual Employment by Sector (% of Total): Chittenden County 1990-2006**

Source: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages

Note: The service providing sector is a combination of other major NAICS sectors. The highlighted rows do not contribute to total employment. They should be considered supplemental information for the enhancement of these tables only.

Percent of Total Employment, Chittenden County 1990 to 2006*									
Description	1990	1991	1992	1993	1994	1995	1996	1997	1998
SERVICE PROVIDING	61.24%	61.81%	62.13%	63.24%	63.67%	63.45%	63.24%	63.48%	63.77%
Manufacturing	18.52%	18.03%	17.77%	17.11%	16.81%	16.93%	17.53%	17.22%	17.27%
Construction	5.70%	4.88%	4.65%	4.88%	5.04%	5.20%	5.18%	5.31%	5.48%
Natural Resources & Mining	0.19%	0.20%	0.19%	0.19%	0.24%	0.28%	0.25%	0.25%	0.25%
Wholesale Trade	4.12%	4.22%	3.99%	4.03%	3.93%	3.91%	3.91%	3.84%	3.67%
Retail Trade	13.25%	12.73%	12.74%	13.02%	13.03%	12.83%	12.54%	12.93%	12.92%
Utilities	0.50%	0.51%	0.51%	0.51%	0.49%	0.45%	0.42%	0.43%	0.43%
Transportation & Warehousing	2.46%	2.24%	2.34%	2.32%	2.43%	2.57%	2.78%	2.78%	2.81%
Information	2.70%	2.82%	2.86%	2.94%	2.80%	2.84%	3.04%	3.06%	3.26%
Finance & Insurance	4.49%	4.41%	4.37%	4.34%	4.31%	4.20%	3.99%	4.00%	4.02%
Real Estate, Rental/Leasing	1.27%	1.34%	1.22%	1.24%	1.37%	1.42%	1.45%	1.47%	1.43%
Professional, Scientific & Technical	5.04%	5.02%	4.98%	4.91%	5.14%	5.16%	5.10%	5.36%	5.69%
Administrative, Support & Waste	n/a	n/a	n/a	3.24%	3.61%	3.24%	3.60%	n/a	n/a
Educational Services	1.91%	2.01%	2.04%	2.10%	2.21%	2.21%	2.28%	2.42%	2.45%
Health Care & Social Asst.	10.53%	11.14%	11.40%	11.67%	11.59%	11.90%	11.57%	11.25%	11.50%
Arts, Entertainment & Rec.	1.25%	1.30%	1.27%	1.34%	1.30%	1.39%	1.34%	1.38%	1.42%
Accommodation & Food Svcs	8.75%	8.37%	8.54%	8.49%	8.27%	8.16%	7.96%	7.65%	7.31%
Other Services	2.84%	3.10%	3.05%	3.07%	3.16%	3.14%	3.22%	3.24%	3.28%
Government	14.36%	15.08%	15.26%	14.57%	14.25%	14.14%	13.80%	13.74%	13.22%

Description	1999	2000	2001	2002	2003	2004	2005	2006*
SERVICE PROVIDING	63.44%	62.75%	62.93%	64.69%	65.50%	65.55%	65.69%	66.10%
Manufacturing	17.35%	17.58%	17.56%	15.58%	14.04%	13.38%	13.10%	12.88%
Construction	5.70%	5.56%	5.38%	5.01%	5.21%	5.58%	5.50%	5.48%
Natural Resources & Mining	0.23%	0.22%	0.23%	0.23%	0.20%	0.19%	0.19%	0.20%
Wholesale Trade	3.42%	3.20%	3.30%	3.38%	3.64%	3.61%	3.55%	3.59%
Retail Trade	12.86%	12.73%	12.81%	13.47%	13.44%	13.42%	13.63%	13.31%
Utilities	0.37%	0.31%	0.24%	0.27%	0.28%	0.27%	0.26%	0.27%
Transportation & Warehousing	2.75%	2.61%	2.58%	2.61%	2.67%	2.64%	2.63%	2.48%
Information	2.76%	2.78%	2.69%	2.69%	2.64%	2.56%	2.50%	2.46%
Finance & Insurance	4.12%	3.72%	3.80%	3.98%	3.99%	3.87%	3.76%	3.71%
Real Estate, Rental/Leasing	1.33%	1.27%	1.21%	1.21%	1.24%	1.27%	1.29%	1.31%
Professional, Scientific & Technical	6.16%	6.31%	6.30%	6.36%	6.26%	6.23%	6.25%	6.46%
Administrative, Support & Waste	n/a	n/a						
Educational Services	2.46%	2.41%	2.39%	2.40%	2.35%	2.32%	2.31%	2.21%
Health Care & Social Asst.	11.60%	11.57%	12.12%	12.79%	13.18%	13.23%	13.46%	13.88%
Arts, Entertainment & Rec.	1.44%	1.56%	1.61%	1.72%	1.68%	1.64%	1.68%	1.78%
Accommodation & Food Svcs	7.27%	7.18%	7.09%	7.37%	7.32%	7.62%	7.44%	7.82%
Other Services	3.20%	3.30%	3.28%	3.21%	3.26%	3.08%	2.96%	2.92%
Government	13.27%	13.89%	13.90%	14.49%	15.06%	15.30%	15.52%	15.34%

APPENDIX 16**Recent Employment Trends: Burlington Labor Market Area, 2005-2006**

Source: Quarterly Census of Employment and Wages (QCEW) program, Vermont Department of Labor, Economic & Labor Market Information Office

DESCRIPTION	1st Quarter 2005	1st Quarter 2006	Change	% Change
Total Employment	109,047	109,232	185	0.17%
Construction	4,617	4,632	16	0.34%
Manufacturing	12,410	12,041	-369	-2.98%
Trade, Transportation, & Utilities	18,780	18,481	-299	-1.59%
Financial Activities	4,720	4,710	-10	-0.21%
Professional & Business Services	9,611	9,731	120	1.25%
Education & Health Services	14,875	15,175	300	2.02%
Arts, Leisure and Hospitality	8,079	8,377	298	3.68%
Other Services	2,763	2,665	-98	-3.53%
Government	14,838	14,965	127	0.86%

Burlington Labor Market Area is described as the Burlington-South Burlington, VT Metropolitan (in New England, the city- and town-based areas, or NECTA). The following towns are included in the Burlington LMA: Bolton town, Buels gore, Burlington city, Cambridge town, Charlotte town, Colchester town, Duxbury town, Essex town, Fairfax town, Ferrisburg town, Fletcher town, Georgia town, Grand Isle town, Hinesburg town, Huntington town, Isle La Motte town, Jericho town, Milton town, Monkton town, North Hero town, Richmond town, Shelburne town, South Burlington city, South Hero town, St. Albans city, St. Albans town, St. George town, Starksboro town, Underhill town, Vergennes city, Westford town, Williston town, and Winooski city.

APPENDIX 17**Composition of Resident Employment by Sector: 1990**

Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, Summary Tape File 3 (Sample Data) Matrices P49, P61, P70, P73, P74, P77, P78, P79.

	Vermont		Chittenden County		Burlington	
	Workers/ Sector	% of Total Employed	Workers/ Sector	% of Total Employed	Workers/ Sector	% of Total Employed
Total Employed	283,146		72,417		20,862	
Agriculture, forestry, and fisheries	12,023	0.042462	1,332	0.018393	234	0.011217
Mining	790	0.00279	31	0.000428	16	0.000767
Construction	21,952	0.077529	4,193	0.057901	914	0.043812
Manufacturing	44,018	0.15546	9,354	0.129169	2,177	0.104352
Transportation	9,131	0.032248	2,250	0.03107	483	0.023152
Communications and public utilities	5,637	0.019908	1,534	0.021183	351	0.016825
Wholesale trade	14,071	0.049695	6,571	0.090738	1,025	0.049132
Retail trade	48,114	0.169926	12,528	0.172998	4,654	0.223085
Finance, insurance, and real estate	15,971	0.056406	4,634	0.06399	1,316	0.063081
Business and repair ser- vices	10,569	0.037327	2,802	0.038693	990	0.047455
Personal services	11,326	0.040001	2,430	0.033556	845	0.040504
Entertainment services	3,561	0.012577	944	0.013036	355	0.017017
Health services	22,670	0.080065	5,807	0.080188	1,654	0.079283
Educational services	33,024	0.116632	9,776	0.134996	3,265	0.156505
Professional and related services	18,102	0.063932	5,326	0.073546	1,941	0.09304
Public administration	12,187	0.043041	2,905	0.040115	642	0.030774

APPENDIX 18**Composition of Earnings (Total Private Wages) by Sector, Dollar Amount, Chittenden County 1990, 1995, 2000, and 2005**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages www.vtلمي.info/indareanaics.cfm

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

*Data is in 1000s of nominal dollars

**Services includes a number of subsectors from the other sectors such as retail, as well as other areas including health and education services.

Total Private Earnings* by Sector, Chittenden County 1990 to 2005										
	Con- struction	Informa- tion	Financial Activi- ties	Manu- facturing	Retail	Prof. & Tech. Svc.	Arts, Entmnt & Rec.	Services	Whole- sale	Total Private Income
1990	\$109,626	\$55,672	\$110,577	\$541,405	\$149,069	\$126,362	\$9,352	\$923,742	\$89,420	\$1,577,930
1991	\$94,072	\$58,937	\$113,176	\$541,850	\$144,949	\$126,265	\$10,354	\$951,333	\$91,594	\$1,590,251
1992	\$91,304	\$62,328	\$120,215	\$550,324	\$154,083	\$134,147	\$10,537	\$1,014,400	\$91,809	\$1,659,322
1993	\$98,423	\$66,568	\$131,224	\$563,692	\$163,474	\$136,564	\$11,750	\$1,075,422	\$94,385	\$1,740,809
1994	\$110,660	\$66,781	\$134,021	\$541,590	\$173,377	\$137,007	\$13,346	\$1,120,050	\$97,862	\$1,775,524
1995	\$122,561	\$71,551	\$143,353	\$580,158	\$181,744	\$150,765	\$15,545	\$1,206,943	\$104,923	\$1,913,075
1996	\$128,867	\$80,625	\$154,618	\$643,107	\$184,253	\$175,387	\$16,209	\$1,297,627	\$114,709	\$2,073,104
1997	\$139,984	\$85,988	\$166,192	\$672,257	\$200,998	\$189,407	\$18,370	\$1,380,131	\$117,709	\$2,196,296
1998	\$156,160	\$99,896	\$155,190	\$719,910	\$216,719	\$217,865	\$21,098	\$1,502,735	\$121,446	\$2,383,025
1999	\$178,845	\$94,585	\$196,260	\$758,415	\$233,091	\$249,720	\$20,706	\$1,634,495	\$121,829	\$2,576,042
2000	\$196,894	\$106,294	\$177,071	\$843,688	\$251,236	\$284,467	\$26,441	\$1,775,667	\$127,922	\$2,820,694
2001	\$200,901	\$110,772	\$189,595	\$900,227	\$265,354	\$293,176	\$21,003	\$1,837,066	\$142,529	\$2,943,110
2002	\$181,618	\$109,730	\$201,421	\$824,069	\$279,376	\$292,022	\$23,063	\$1,900,282	\$145,677	\$2,910,910
2003	\$189,855	\$110,425	\$219,707	\$758,409	\$286,507	\$308,499	\$23,195	\$1,995,519	\$160,854	\$2,948,565
2004	\$212,799	\$113,586	\$223,894	\$747,525	\$300,703	\$326,745	\$27,341	\$2,098,126	\$167,695	\$3,063,257
2005	\$217,775	\$112,351	\$236,181	\$751,832	\$307,922	\$349,126	\$27,193	\$2,188,742	\$175,223	\$3,163,371

APPENDIX 19**Composition of Earnings (Total Private Wages) by Sector, Percent of Total, Chittenden County 1990, 1995, 2000, and 2005**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages www.vtlmi.info/indareanaics.cfm

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

*Data is in 1000s of nominal dollars

**Services includes a number of subsectors from the other sectors such as retail, as well as other areas including health and education services.

Private Earnings by Sector as % of Total Private Earnings, Chittenden County 1990 to 2005									
	Con- struction	Infor- mation	Financial Activities	Manufac- turing	Retail	Prof & Tech Svc	Arts, Entmnt. & Rec.	Service	Whole- sale
1990	6.95%	3.53%	7.01%	34.31%	9.45%	8.01%	.59%	58.54%	5.67%
1991	5.92%	3.71%	7.12%	34.07%	9.11%	7.94%	.65%	59.82%	5.76%
1992	5.50%	3.76%	7.24%	33.17%	9.29%	8.08%	.64%	61.13%	5.53%
1993	5.65%	3.82%	7.54%	32.38%	9.39%	7.84%	.67%	61.78%	5.42%
1994	6.23%	3.76%	7.55%	30.50%	9.76%	7.72%	.75%	63.08%	5.51%
1995	6.41%	3.74%	7.49%	30.33%	9.50%	7.88%	.81%	63.09%	5.48%
1996	6.22%	3.89%	7.46%	31.02%	8.89%	8.46%	.78%	62.59%	5.53%
1997	6.37%	3.92%	7.57%	30.61%	9.15%	8.62%	.84%	62.84%	5.36%
1998	6.55%	4.19%	6.51%	30.21%	9.09%	9.14%	.89%	63.06%	5.10%
1999	6.94%	3.67%	7.62%	29.44%	9.05%	9.69%	.80%	63.45%	4.73%
2000	6.98%	3.77%	6.28%	29.91%	8.91%	10.09%	.94%	62.95%	4.54%
2001	6.83%	3.76%	6.44%	30.59%	9.02%	9.96%	.71%	62.42%	4.84%
2002	6.24%	3.77%	6.92%	28.31%	9.60%	10.03%	.79%	65.28%	5.00%
2003	6.44%	3.75%	7.45%	25.72%	9.72%	10.46%	.79%	67.68%	5.46%
2004	6.95%	3.71%	7.31%	24.40%	9.82%	10.67%	.89%	68.49%	5.47%
2005	6.88%	3.55%	7.47%	23.77%	9.73%	11.04%	.86%	69.19%	5.54%
% change 1990-05	-9.1%	.66%	6.54%	-30.73%	3.04%	37.82%	45.04%	18.19%	-2.26%

APPENDIX 20**Nominal Average Annual Wage by Industry, Chittenden County, 1990-2005**

Source: Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages. www.vtlmi.info/indareanaics.cfm

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS.

Nominal Average Annual Wage, Chittenden County 1990 to 2005								
	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture/Forestry	\$14,855	\$13,595	\$14,867	\$14,785	\$12,435	\$10,755	\$12,663	\$14,392
Mining	\$40,744	\$38,349	\$48,763	\$46,544	\$34,775	\$38,925	\$34,809	\$39,426
Construction	\$24,819	\$25,507	\$25,767	\$25,892	\$27,462	\$28,526	\$29,187	\$30,548
Manufacturing	\$37,704	\$39,793	\$40,649	\$42,312	\$40,296	\$41,486	\$43,052	\$45,200
Retail Trade	\$14,509	\$15,072	\$15,869	\$16,119	\$16,643	\$17,141	\$17,240	\$18,003
Transport./Warehousing	\$21,643	\$22,690	\$23,209	\$23,412	\$23,913	\$24,384	\$26,347	\$27,891
Utilities	\$36,329	\$37,980	\$40,880	\$42,066	\$43,573	\$45,367	\$48,263	\$49,348
Information	\$26,636	\$27,631	\$28,568	\$29,045	\$29,865	\$30,520	\$31,066	\$32,496
Financial Activities	\$24,761	\$26,066	\$28,222	\$30,162	\$29,474	\$30,878	\$33,358	\$35,135
Professional/Business Svcs	\$26,879	\$26,723	\$28,006	\$27,710	\$25,888	\$27,824	\$30,203	\$31,436
Education/Health Services	\$21,380	\$22,530	\$23,815	\$24,311	\$24,741	\$26,229	\$26,524	\$27,806
Art, Entertainment & Rec	\$9,668	\$10,557	\$10,991	\$11,233	\$12,804	\$13,482	\$14,179	\$15,388
PRIVATE EMPLOYMENT	\$23,761	\$24,793	\$25,702	\$26,170	\$25,894	\$26,970	\$28,221	\$29,484
Government	\$25,731	\$26,466	\$27,112	\$28,547	\$28,628	\$28,914	\$30,752	\$32,076
TOTAL EMPLOYMENT	\$24,044	\$25,046	\$25,917	\$26,517	\$26,283	\$27,245	\$28,570	\$29,840

	1998	1999	2000	2001	2002	2003	2004	2005
Agriculture/Forestry	\$15,270	\$16,088	\$16,421	\$17,127	\$18,178	\$20,064	\$20,933	\$20,421
Mining	\$40,870	\$42,038	\$43,642	\$43,236	\$43,809	\$47,576	\$47,180	\$54,916
Construction	\$32,304	\$34,391	\$37,118	\$38,828	\$38,497	\$38,994	\$40,164	\$41,774
Manufacturing	\$47,277	\$47,946	\$50,344	\$53,295	\$56,222	\$57,754	\$58,888	\$60,544
Retail Trade	\$19,024	\$19,889	\$20,696	\$21,529	\$22,045	\$22,790	\$23,620	\$23,836
Transport./Warehousing	\$28,658	\$31,005	\$35,621	\$33,649	\$32,609	\$33,204	\$33,879	\$34,935
Utilities	\$52,882	\$58,816	\$64,941	\$60,779	\$60,181	\$65,582	\$71,642	\$77,067
Information	\$34,769	\$37,534	\$40,102	\$42,831	\$43,343	\$44,666	\$46,763	\$47,376
Financial Activities	\$38,273	\$39,549	\$43,461	\$45,799	\$47,770	\$51,908	\$53,519	\$57,478
Profess./Business Services	\$33,887	\$35,387	\$37,303	\$38,984	\$40,032	\$41,886	\$43,345	\$45,005
Art, Entertainment & Rec.	\$16,850	\$15,784	\$17,749	\$13,554	\$14,253	\$14,792	\$17,541	\$17,053
Education/Health Services	\$28,456	\$31,141	\$31,624	\$31,499	\$33,377	\$34,226	\$35,282	\$37,455
PRIVATE EMPLOYMENT	\$31,155	\$32,581	\$34,354	\$35,539	\$36,182	\$37,114	\$38,118	\$39,501
Government	\$33,893	\$34,952	\$34,163	\$36,109	\$37,477	\$39,225	\$40,174	\$41,208
TOTAL EMPLOYMENT	\$31,517	\$32,896	\$34,327	\$35,618	\$36,370	\$37,432	\$38,433	\$39,766

APPENDIX 21**Average Annual Real Wages by Industry, Chittenden County, 1990-2005.**

Source: Chittenden County: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages. vtlmi.info/indareanaics

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

Real Average Annual Wage, Chittenden County 1990 to 2005								
	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture/Forestry	\$22,913	\$20,123	\$21,363	\$20,627	\$16,916	\$14,227	\$16,271	\$18,077
Mining	\$62,846	\$56,763	\$70,069	\$64,936	\$47,305	\$51,491	\$44,726	\$49,522
Construction	\$38,282	\$37,755	\$37,025	\$36,123	\$37,357	\$37,735	\$37,502	\$38,371
Manufacturing	\$58,157	\$58,901	\$58,409	\$59,032	\$54,816	\$54,879	\$55,317	\$56,775
Retail Trade	\$22,380	\$22,309	\$22,802	\$22,489	\$22,640	\$22,675	\$22,152	\$22,613
Transport./Warehousing	\$33,384	\$33,585	\$33,349	\$32,663	\$32,529	\$32,256	\$33,853	\$35,033
Utilities	\$56,036	\$56,217	\$58,741	\$58,689	\$59,273	\$60,013	\$62,013	\$61,985
Information	\$41,085	\$40,899	\$41,050	\$40,522	\$40,626	\$40,373	\$39,917	\$40,817
Financial Activities	\$38,193	\$38,582	\$40,553	\$42,081	\$40,094	\$40,846	\$42,862	\$44,132
Profess/Business Services	\$41,460	\$39,555	\$40,242	\$38,660	\$35,216	\$36,807	\$38,808	\$39,486
Education/Health Services	\$32,978	\$33,348	\$34,220	\$33,918	\$33,656	\$34,697	\$34,081	\$34,926
Arts, Entertainment & Rec.	\$14,913	\$15,626	\$15,793	\$15,672	\$17,418	\$17,834	\$18,219	\$19,328
PRIVATE EMPLOYMENT	\$36,650	\$36,698	\$36,932	\$36,511	\$35,224	\$35,677	\$36,261	\$37,034
Government	\$36,689	\$39,174	\$38,958	\$39,828	\$38,943	\$38,248	\$39,513	\$40,290
TOTAL EMPLOYMENT	\$37,087	\$37,072	\$37,241	\$36,995	\$35,753	\$36,041	\$36,709	\$37,481
CPI	130.7	136.2	140.3	144.5	148.2	152.4	156.9	160.5

	1998	1999	2000	2001	2002	2003	2004	2005
Agriculture/Forestry	\$18,886	\$19,468	\$19,225	\$19,496	\$20,393	\$21,983	\$22,340	\$21,080
Mining	\$50,548	\$50,870	\$51,093	\$49,217	\$49,148	\$52,127	\$50,352	\$56,687
Construction	\$39,954	\$41,616	\$43,455	\$44,199	\$43,189	\$42,724	\$42,864	\$43,122
Manufacturing	\$58,473	\$58,019	\$58,939	\$60,668	\$63,074	\$63,278	\$62,847	\$62,497
Retail Trade	\$23,529	\$24,067	\$24,229	\$24,507	\$24,732	\$24,970	\$25,208	\$24,605
Transport./Warehousing	\$35,444	\$37,519	\$41,703	\$38,304	\$36,583	\$36,380	\$36,157	\$36,062
Utilities	\$65,405	\$71,172	\$76,028	\$69,187	\$67,515	\$71,855	\$76,459	\$79,553
Information	\$43,003	\$45,419	\$46,949	\$48,756	\$48,625	\$48,938	\$49,907	48,404
Financial Activities	\$47,336	\$47,858	\$50,881	\$52,135	\$53,592	\$56,873	\$57,117	\$59,332
Profess/Business Services	\$41,912	\$42,821	\$43,672	\$44,377	\$44,911	\$45,892	\$46,259	\$46,457
Education/Health Services	\$35,195	\$37,683	\$37,023	\$35,857	\$37,445	\$37,500	\$37,654	\$38,663
Arts, Entertainment & Rec.	\$20,840	\$19,100	\$20,779	\$15,429	\$15,990	\$16,207	\$18,720	\$17,603
PRIVATE EMPLOYMENT	\$38,533	\$39,426	\$40,029	\$40,455	\$40,591	\$40,664	\$40,681	\$40,775
Government	\$41,919	\$42,295	\$39,996	\$41,104	\$42,044	\$42,977	\$42,875	\$42,537
TOTAL EMPLOYMENT	\$38,981	\$39,807	\$40,188	\$40,545	\$40,802	\$41,012	\$41,017	\$41,049
CPI	163	166.6	172.2	177.1	179.7	184	188.9	195.3

APPENDIX 22**Total Manufacturing Employment (NAICS codes 31-33)**

Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics. Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current, US <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000s)	growth rate
1990	42,800	1.00	14,359	1.00	2,244	1.00	17,695	1.00
1991	40,150	0.94	13,617	0.95	1,984	0.88	17,068	0.96
1992	39,750	0.93	13,538	0.94	1,909	0.85	16,799	0.95
1993	39,950	0.93	13,322	0.93	2,053	0.91	16,774	0.95
1994	40,450	0.95	13,440	0.94	2,046	0.91	17,021	0.96
1995	41,300	0.96	13,985	0.97	2,079	0.93	17,241	0.97
1996	42,650	1.00	14,938	1.04	2,242	1.00	17,237	0.97
1997	43,800	1.02	14,873	1.04	2,194	0.98	17,419	0.98
1998	44,650	1.04	15,227	1.06	2,229	0.99	17,560	0.99
1999	45,400	1.06	15,818	1.10	2,078	0.93	17,322	0.98
2000	46,400	1.08	16,759	1.17	2,072	0.92	17,263	0.98
2001	45,550	1.06	16,891	1.18	1,969	0.88	16,441	0.93
2002	40,550	0.95	14,658	1.02	1,871	0.83	15,259	0.86
2003	37,500	0.88	13,132	0.91	1,898	0.85	14,510	0.82
2004	36,950	0.86	12,694	0.88	1,915	0.85	14,315	0.81
2005	36,800	0.86	12,418	0.86	1,876	0.84	14,226	0.80
2006*	36,150	0.84	12,132	0.84	1,769	0.79	14,197	0.80

***NOTE: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.**

APPENDIX 23**Total Service Sector Employment (NAICS codes 22, 42-81)**

Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics. Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current, US <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000s)	growth rate
1990	199,150	1.00	47,487	1.00	21,030	1.00	38069	1.00
1991	195,800	0.98	46,685	0.98	19,717	0.94	38402	1.01
1992	199,050	1.00	47,337	1.00	19,981	0.95	39179	1.03
1993	204,550	1.03	49,248	1.04	20,125	0.96	40548	1.07
1994	210,350	1.06	50,911	1.07	20,432	0.97	42247	1.11
1995	214,850	1.08	52,421	1.10	20,817	0.99	44049	1.16
1996	218,550	1.10	53,892	1.13	20,753	0.99	45552	1.20
1997	221,550	1.11	54,825	1.15	20,257	0.96	47349	1.24
1998	225,650	1.13	56,212	1.18	20,843	0.99	49019	1.29
1999	230,550	1.16	57,839	1.22	21,079	1.00	50804	1.33
2000	236,150	1.19	59,832	1.26	21,807	1.04	52436	1.38
2001	240,250	1.21	60,522	1.27	21,880	1.04	53044	1.39
2002	243,000	1.22	60,865	1.28	22,126	1.05	52928	1.39
2003	245,400	1.23	61,260	1.29	22,145	1.05	53337	1.40
2004	248,450	1.25	62,192	1.31	22,340	1.06	54368	1.43
2005	251,100	1.26	62,273	1.31	22,120	1.05	55598	1.46
2006*	253,150	1.27	62,276	1.31	22,200	1.06	57020	1.50
*NOTE: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.								

APPENDIX 24**Total Retail Employment (NAICS codes 44-45)**

Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics. Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current, US <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000s)	growth rate
<i>1990</i>	34,050	1.00	10,274	1.00	3,524	1.00	13,182	1.00
<i>1991</i>	32,350	0.95	9,617	0.94	3,194	0.91	12,896	0.98
<i>1992</i>	32,250	0.95	9,709	0.95	3,127	0.89	12,828	0.97
<i>1993</i>	33,400	0.98	10,142	0.99	3,139	0.89	13,021	0.99
<i>1994</i>	34,500	1.01	10,418	1.01	3,051	0.87	13,491	1.02
<i>1995</i>	35,400	1.04	10,603	1.03	3,048	0.86	13,897	1.05
<i>1996</i>	36,150	1.06	10,688	1.04	2,760	0.78	14,143	1.07
<i>1997</i>	37,200	1.09	11,165	1.09	2,674	0.76	14,389	1.09
<i>1998</i>	37,650	1.11	11,392	1.11	2,537	0.72	14,609	1.11
<i>1999</i>	38,600	1.13	11,720	1.14	2,656	0.75	14,970	1.14
<i>2000</i>	39,650	1.16	12,139	1.18	2,995	0.85	15,280	1.16
<i>2001</i>	39,900	1.17	12,325	1.20	2,877	0.82	15,239	1.16
<i>2002</i>	40,000	1.17	12,673	1.23	3,104	0.88	15,025	1.14
<i>2003</i>	39,500	1.16	12,571	1.22	3,111	0.88	14,917	1.13
<i>2004</i>	40,100	1.18	12,731	1.24	3,109	0.88	15,058	1.14
<i>2005</i>	40,450	1.19	12,918	1.26	3,073	0.87	15,280	1.16
2006*	40,400	1.19	12,535	1.22	2,963	0.84	15,319	1.16
	*NOTE: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.							

APPENDIX 25**Total Wholesale Employment (NAICS codes 44-45)**

Source: Burlington, Chittenden County: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics. Vermont: cesvtnsa.xls Mar 6 07 Vermont, 1990-current, US <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Vermont	growth rate	Chittenden County	growth rate	Burlington	U.S. (in 1000s)	growth rate
1990	9,400	1.00	3,193	1.00	844	5268.4	1.00
1991	9,200	0.98	3,186	1.00	833	5185.3	0.98
1992	9,300	0.99	3,043	0.95	N/A	5109.7	0.97
1993	9,750	1.04	3,138	0.98	N/A	5093.2	0.97
1994	9,750	1.04	3,144	0.98	766	5247.3	1.00
1995	9,950	1.06	3,227	1.01	N/A	5433.1	1.03
1996	9,750	1.04	3,335	1.04	N/A	5522	1.05
1997	9,650	1.03	3,319	1.04	N/A	5663.9	1.08
1998	9,500	1.01	3,237	1.01	N/A	5795.2	1.10
1999	9,450	1.01	3,122	0.98	N/A	5892.5	1.12
2000	9,800	1.04	3,048	0.95	N/A	5933.2	1.13
2001	10,050	1.07	3,170	0.99	N/A	5772.7	1.10
2002	10,150	1.08	3,176	0.99	N/A	5652.3	1.07
2003	10,250	1.09	3,408	1.07	N/A	5607.5	1.06
2004	10,150	1.08	3,426	1.07	N/A	5662.9	1.07
2005	10,100	1.07	3,370	1.06	N/A	5764.4	1.09
2006*	10,300	1.10	3,379	1.06	453	5897.6	1.12

***NOTE:** 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.

APPENDIX 26**Total Information Sector Employment (NAICS code 51)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	848	1.00	2,090	1.00	5,450	1.00	2,688,083	1.00
1991	854	1.01	2,133	1.02	5,550	1.02	2,677,583	1.00
1992	937	1.10	2,182	1.04	5,600	1.03	2,641,250	0.98
1993	791	0.93	2,292	1.10	5,700	1.05	2,667,583	0.99
1994	884	1.04	2,236	1.07	5,900	1.08	2,738,500	1.02
1995	949	1.12	2,344	1.12	6,050	1.11	2,843,417	1.06
1996	1,120	1.32	2,595	1.24	6,300	1.16	2,940,167	1.09
1997	1,137	1.34	2,646	1.27	6,250	1.15	3,083,750	1.15
1998	1,189	1.40	2,873	1.37	6,550	1.20	3,218,583	1.20
1999	826	0.97	2,520	1.21	6,750	1.24	3,418,000	1.27
2000	875	1.03	2,651	1.27	6,800	1.25	3,629,500	1.35
2001	752	0.89	2,586	1.24	6,800	1.25	3,628,833	1.35
2002	698	0.82	2,532	1.21	6,650	1.22	3,394,250	1.26
2003	667	0.79	2,472	1.18	6,500	1.19	3,188,833	1.19
2004	633	0.75	2,429	1.16	6,350	1.17	3,117,000	1.16
2005	601	0.71	2,371	1.13	6,250	1.15	3,061,000	1.14
2006	537	0.63	2,316	1.11	6,050	1.11	3,037,167	1.13

APPENDIX 27**Total Finance and Insurance Sector Employment (NAICS code 52)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	2,348	1	3,479	1	10,200	1	4,976,400	1
1991	2,025	0.86	3,331	0.96	9,750	0.96	4,935,100	0.99
1992	1,982	0.84	3,326	0.96	9,650	0.95	4,912,400	0.99
1993	1,960	0.83	3,382	0.97	9,450	0.931	5,033,000	1.01
1994	1,977	0.84	3,450	0.99	9,500	0.93	5,132,500	1.03
1995	1,900	0.81	3,466	1.00	9,450	0.93	5,069,000	1.02
1996	1,543	0.66	3,402	0.98	9,300	0.92	5,151,400	1.04
1997	1,500	0.64	3,457	0.99	9,450	0.93	5,302,100	1.07
1998	1,631	0.69	3,546	1.02	9,450	0.93	5,528,600	1.11
1999	1,769	0.75	3,753	1.08	9,650	0.95	5,664,900	1.14
2000	1,699	0.72	3,546	1.02	9,300	0.92	5,676,700	1.14
2001	1,761	0.75	3,656	1.05	10,100	0.99	5,769,200	1.16
2002	1,600	0.68	3,748	1.08	10,150	1.00	5,813,600	1.17
2003	1,533	0.65	3,728	1.07	10,150	1.00	5,919,100	1.19
2004	1,541	0.66	3,673	1.06	9,850	0.97	5,945,300	1.19
2005	1,531	0.65	3,567	1.03	9,850	0.97	6,018,900	1.21
2006	1,513	0.64	3,475	1.00	9,750	0.96	6,156,000	1.24

APPENDIX 28**Total Professional and Technical Services Employment (NAICS code 54)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	1,503	1.00	3,905	1.00	8,800	1.00	4,538,200	1.00
1991	1,349	0.90	3,790	0.97	8,550	0.97	4,509,200	0.99
1992	1,466	0.98	3,797	0.97	8,600	0.98	4,575,600	1.01
1993	1,721	1.15	3,820	0.98	8,850	1.01	4,689,100	1.03
1994	1,792	1.19	4,108	1.05	9,300	1.06	4,823,300	1.06
1995	1,819	1.21	4,264	1.09	9,650	1.10	5,078,400	1.12
1996	1,795	1.19	4,350	1.11	9,950	1.13	5,312,700	1.17
1997	1,970	1.31	4,625	1.18	10,150	1.15	5,628,800	1.24
1998	2,116	1.41	5,015	1.28	10,700	1.22	5,992,300	1.32
1999	2,241	1.49	5,612	1.44	11,750	1.34	6,345,400	1.40
2000	2,336	1.55	6,014	1.54	12,300	1.40	6,701,700	1.48
2001	2,353	1.57	6,055	1.55	12,400	1.41	6,871,100	1.51
2002	2,420	1.61	5,980	1.53	12,250	1.39	6,648,800	1.47
2003	2,302	1.53	5,852	1.50	12,200	1.39	6,602,700	1.45
2004	2,180	1.45	5,911	1.51	13,200	1.50	6,747,100	1.49
2005	2,171	1.44	5,925	1.52	13,350	1.52	7,024,600	1.55
2006	2,217	1.48	6,103	1.56	13,250	1.51	7,356,700	1.62

APPENDIX 29**Total Education Employment (NAICS code 51)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	637	1.00	1,485	1.00	9,750	1.00	1,688,000	1.00
1991	641	1.01	1,517	1.02	9,650	0.99	1,736,600	1.03
1992	677	1.06	1,557	1.05	10,400	1.07	1,713,100	1.01
1993	688	1.08	1,634	1.10	10,200	1.05	1,755,400	1.04
1994	717	1.13	1,765	1.19	10,500	1.08	1,894,900	1.12
1995	735	1.15	1,825	1.23	10,700	1.10	2,010,200	1.19
1996	775	1.22	1,946	1.31	10,950	1.12	2,077,600	1.23
1997	841	1.32	2,091	1.41	11,050	1.13	2,155,000	1.28
1998	796	1.25	2,162	1.46	11,350	1.16	2,232,900	1.32
1999	773	1.21	2,242	1.51	11,500	1.18	2,320,400	1.37
2000	790	1.24	2,296	1.55	11,950	1.23	2,390,400	1.42
2001	751	1.18	2,301	1.55	12,050	1.24	2,510,600	1.49
2002	739	1.16	2,260	1.52	12,200	1.25	2,642,800	1.57
2003	713	1.12	2,200	1.48	12,450	1.28	2,695,100	1.60
2004	737	1.16	2,199	1.48	12,700	1.30	2,762,500	1.64
2005	673	1.06	2,194	1.48	13,050	1.34	2,835,800	1.68
2006	652	1.02	2,151	1.45	12,750	1.31	2,900,900	1.72

APPENDIX 30**Total Health Services and Social Assistance Employment (NAICS code 62)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	6,177	1.00	8,167	1.00	25,150	1.00	9,295,800	1.00
1991	6,074	0.98	8,412	1.03	25,950	1.03	9,769,800	1.05
1992	6,328	1.02	8,682	1.06	26,850	1.07	10,178,000	1.09
1993	6,357	1.03	9,086	1.11	28,400	1.13	10,548,100	1.13
1994	6,223	1.01	9,265	1.13	29,500	1.17	10,911,700	1.17
1995	6,641	1.08	9,832	1.20	30,750	1.22	11,278,400	1.21
1996	6,686	1.08	9,860	1.21	31,250	1.24	11,604,900	1.25
1997	6,229	1.01	9,720	1.19	31,450	1.25	11,932,200	1.28
1998	6,511	1.05	10,137	1.24	32,050	1.27	12,213,500	1.31
1999	6,707	1.09	10,579	1.30	32,900	1.31	12,477,100	1.34
2000	6,899	1.12	11,031	1.35	34,100	1.36	12,718,000	1.37
2001	7,323	1.19	11,661	1.43	35,850	1.43	13,134,000	1.41
2002	7,536	1.22	12,035	1.47	37,950	1.51	13,555,700	1.46
2003	7,716	1.25	12,325	1.51	39,700	1.58	13,892,600	1.49
2004	7,716	1.25	12,553	1.54	43,800	1.74	14,190,200	1.53
2005	7,658	1.24	12,762	1.56	44,800	1.78	14,536,300	1.56
2006	7,971	1.29	13,092	1.60	45,000	1.79	14,925,300	1.61

APPENDIX 31**Total Arts, Entertainment, and Recreation Employment (NAICS code 71)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	137	1.00	967	1.00	2,850	1.00	1,132,000	1.00
1991	128	0.93	981	1.01	2,950	1.04	1,177,000	1.04
1992	118	0.86	966	1.00	2,700	0.95	1,236,300	1.09
1993	115	0.84	1,046	1.08	2,600	0.91	1,301,900	1.15
1994	142	1.04	1,042	1.08	2,600	0.91	1,375,600	1.22
1995	161	1.18	1,146	1.19	2,550	0.89	1,459,400	1.29
1996	183	1.34	1,143	1.18	2,650	0.93	1,522,100	1.34
1997	216	1.58	1,194	1.23	2,700	0.95	1,599,900	1.41
1998	230	1.68	1,252	1.29	2,800	0.98	1,645,200	1.45
1999	242	1.77	1,312	1.36	2,950	1.04	1,709,100	1.51
2000	233	1.70	1,490	1.54	3,300	1.16	1,787,900	1.58
2001	239	1.74	1,550	1.60	3,450	1.21	1,824,400	1.61
2002	250	1.82	1,618	1.67	3,650	1.28	1,782,600	1.57
2003	272	1.99	1,568	1.62	3,750	1.32	1,812,900	1.60
2004	276	2.01	1,559	1.61	4,050	1.42	1,849,600	1.63
2005	312	2.28	1,595	1.65	3,350	1.18	1,892,300	1.67
2006	311	2.27	1,621	1.68	4,050	1.42	1,928,500	1.70

APPENDIX 32**Total Accommodations and Food Service Employment (NAICS code 72)**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	2,327	1.00	6,786	1.00	26,100	1.00	8,155,600	1.00
1991	2,122	0.91	6,324	0.93	24,700	0.95	8,078,900	0.99
1992	2,184	0.94	6,506	0.96	25,650	0.98	8,200,500	1.01
1993	2,191	0.94	6,610	0.97	26,600	1.02	8,430,400	1.03
1994	2,184	0.94	6,611	0.97	27,300	1.05	8,724,100	1.07
1995	2,125	0.91	6,739	0.99	28,300	1.08	9,041,600	1.11
1996	2,213	0.95	6,784	1.00	28,750	1.10	9,254,300	1.13
1997	1,921	0.83	6,609	0.97	29,150	1.12	9,417,900	1.15
1998	2,053	0.88	6,445	0.95	29,350	1.12	9,586,200	1.18
1999	2,186	0.94	6,626	0.98	29,550	1.13	9,833,700	1.21
2000	2,205	0.95	6,851	1.01	29,650	1.14	10,073,500	1.24
2001	2,167	0.93	6,817	1.00	29,500	1.13	10,211,300	1.25
2002	2,154	0.93	6,933	1.02	29,350	1.12	10,203,200	1.25
2003	2,165	0.93	6,851	1.01	29,050	1.11	10,359,800	1.27
2004	2,413	1.04	7,234	1.07	25,750	0.99	10,643,200	1.31
2005	2,320	1.00	7,056	1.04	26,600	1.02	10,923,000	1.34
2006	2,372	1.02	7,368	1.09	25,900	0.99	11,181,100	1.37

APPENDIX 33**Total Government Employment**

Sources: Burlington and Chittenden County: VT Dept of Labor Economic & Labor Market Information Covered Employment & Wages, <http://vtlmi.labor.state.vt.us/indareanaics.cfm>; VT Nonfarm Payroll Employment, not seasonally adjusted, <http://www.vtlmi.info/industry.cfm>; US: BLS, Employment, Hours, and Earnings from the Current Employment Statistics survey (National), <http://data.bls.gov/cgi-bin/surveymost?ce>

Note: Sector coding was changed in 1993 from SIC to NAICS codes. All data from the Vermont Department of Labor website prior to 1993 has been converted to NAICS. Real wages are in 2006 dollars.

	Burlington	growth rate	Chittenden County	growth rate	Vermont	growth rate	US	growth rate
1990	6,720	1.00	11,138	1.00	43,500	1.00	18,415,000	1.00
1991	6,776	1.01	11,393	1.02	43,850	1.01	18,545,000	1.01
1992	6,946	1.03	11,627	1.04	43,800	1.01	18,787,000	1.02
1993	6,616	0.98	11,354	1.02	43,950	1.01	18,989,000	1.03
1994	6,628	0.99	11,391	1.02	44,750	1.03	19,275,000	1.05
1995	6,533	0.97	11,683	1.05	45,050	1.04	19,432,000	1.06
1996	6,445	0.96	11,763	1.06	45,450	1.04	19,539,000	1.06
1997	6,302	0.94	11,870	1.07	45,750	1.05	19,664,000	1.07
1998	6,031	0.90	11,656	1.05	46,200	1.06	19,909,000	1.08
1999	6,015	0.90	12,100	1.09	47,650	1.10	20,307,000	1.10
2000	6,840	1.02	13,247	1.19	49,450	1.14	20,790,000	1.13
2001	6,746	1.00	13,365	1.20	50,150	1.15	21,118,000	1.15
2002	6,803	1.01	13,632	1.22	50,850	1.17	21,513,000	1.17
2003	7,056	1.05	14,087	1.26	52,000	1.20	21,583,000	1.17
2004	7,473	1.11	14,518	1.30	57,000	1.31	21,621,000	1.17
2005	7,727	1.15	14,715	1.32	56,500	1.30	21,804,000	1.18
2006	7,700	1.15	14,841	1.33	57,100	1.31	21,974,000	1.19

APPENDIX 34**Location Quotients: Chittenden County, 1998**

Source: U.S. Census Bureau; "1998 County Business Patterns, Chittenden County Vermont;"

<<http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>>

DESCRIPTION	TOTAL EMPLOYMENT 1998		LOCATION QUOTIENTS 1998		
	Chittenden County	U.S.	LQ	LQ (min)	LQ (max)
Total Employment	76,889	108,117,731			
Forestry, fishing, hunting, & agriculture support	20-99	187,133		0.150	0.744
Mining	56	497,843	0.158		
Utilities	250-499	682,217		0.515	1.029
Construction	4,999	5,798,261	1.212		
Manufacturing	15,441	16,945,834	1.281		
Wholesale Trade	3,787	5,884,946	0.905		
Retail Trade	11,240	14,240,726	1.110		
Transportation and Warehousing	1,656	3,462,472	0.673		
Information	2,348	3,141,957	1.051		
Finance and Insurance	3,318	5,770,209	0.809		
Real Estate and Rental and Leasing	900	1,812,621	0.698		
Professional, Scientific, & Technical Services	4,577	6,051,636	1.064		
Management of Companies and Enterprises	982	2,703,798	0.511		
Admin, Support, Waste Mgt, Remediation Srv	3,416	7,774,610	0.618		
Education Services	3,600	2,323,744	2.178		
Health Care and Social Assistance	9,667	13,757,996	0.988		
Arts, Entertainment, and Recreation	1,388	1,583,783	1.232		
Accommodation and Food Services	6,250	9,466,088	0.928		
Other Services (except public admin.)	2,759	5,037,866	0.770		
Auxiliaries (excluding corporate, subsidiary & regional mgt)	83	916,349	0.127		
Unclassified Establishments	54	77,642	0.978		

Note: The highlighted sectors refers to those sectors in Chittenden County that likely export production. Where data is given in a range, for confidentiality reasons we have chosen to use the bounds of the range to calculate minimum and maximum values for the location quotient. 1998 is used in this table because it is the first year where NAICS reporting was fully implemented into the County Business Patterns Data that we used to calculate the location quotients.

APPENDIX 35**Location Quotients: Chittenden County, 2004**

Source: U.S. Census Bureau; "2004 County Business Patterns, Chittenden County Vermont;" <<http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>>

Note: For some of the sectors there is a min (LQ) and a max (LQ). The reason for this is because the numbers from the census bureau did not give exact employment figures for some sub-sectors for privacy reasons. Therefore, instead of averaging the numbers the low and high numbers were both used to give a minimum and maximum possible Location Quotient.

DESCRIPTION	2004 TOTAL EMPLOYMENT		2004 LOCATION QUOTIENTS		
	Chittenden County	U.S.	LQ	LQ (min)	LQ (max)
Total Employment	83,685	115,074,924			
Construction	5,376	6,647,641	1.112		
Water and Sewer Line and Related Structures Construction	500-999	192,087		3.579	7.152
Utility System Construction	500-999	451,512		1.523	3.042
New Multifamily Housing Construction (except Operative Builders)	20-99	47,285		0.582	2.879
Commercial and Institutional Building Construction	500-999	632,860		1.086	2.171
Structural Steel and Precast Concrete Contractors	20-99	64,307		0.428	2.117
Residential Remodelers	343	223,535	2.110		
Site Preparation Contractors	344	269,444	1.756		
Other Heavy and Civil Engineering Construction	20-99	79,751		0.345	1.707
Flooring Contractors	20-99	82,060		0.335	1.659
Building Equipment Contractors	1,768	1,784,676	1.362		
Manufacturing	14,488	13,821,976	1.441		
Doll and Stuffed Toy Manufacturing	500-999	2,386		288.159	575.74
Semiconductor and Related Device Manufacturing	5,000-9,999	141,157		48.708	97.41
Doll, Toy, and Game Manufacturing	500-999	18,851		36.473	72.87
Electronic Capacitor Manufacturing	100-249	8,965		15.338	38.19
Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial	500-999	39,313		17.489	34.94
Semiconductor and Other Electronic Component Manufacturing	5,000-9,999	373,729		18.397	36.79
Communication/Energy Wire & Cable Manufact.	250-499	37,446		9.181	183.57
Frozen Cakes, Pies, & Other Pastries Manufact.	100-249	20,730		6.633	613.52
Electronic Connector Manufacturing	100-249	22,185		6.198	15.434
Wholesale Trade	3,760	5,907,051	0.875		
Professional and Commercial Equipment	292	32,948	12.187		
Sporting & Recreational Goods	300	51,596	7.995		
Men's and Boys' Clothing and Furnishings	100-250	56,909		2.416	6.041
beer and ale	100-250	104,208		1.320	3.299
Plumbing & Heating Equipment Supplies	137	68,890	2.735		
beer, wine and distilled alcoholic beverage	306	170,456	2.469		

DESCRIPTION	2004 TOTAL EMPLOYMENT		2004 LOCATION QUOTIENTS		
	Chittenden County	U.S.	LQ	LQ (min)	LQ (max)
Retail Trade	12,221	15,351,431	1.095		
other direct selling establishments	60	636	128.645		
other healthy and personal care	197	107,690	2.515		
all other health and personal care	100	56,460	2.436		
nursery, garden center and farm supply stores	273	149,610	2.509		
lawn and garden equip & supplies	304	176,035	2.375		
all other specialty foods	60	36,181	2.261		
other home furnishing stores	369	202,218	2.509		
children's clothing	142	73,991	2.639		
food (health) supplements	97	51,230	2.604		
window treatment stores	60	9,249	8.846		
Transportation & warehousing	1,691	3,581,013	0.649		
Coastal & Great Lakes passenger trans	20-99	1,600		17.189	85.084
Taxi service	100-249	29,114		4.723	11.761
Interurban & rural bus transportation	20-99	20,705		1.328	6.575
Nonscheduled chartered passenger air trans	20-99	22,736		1.210	5.988
Taxi & limousine service	100-249	65,575		2.097	5.221
Charter bus industry	20-99	32,162		0.855	4.233
Nonscheduled air transportation	20-99	34,643		0.794	3.930
Special needs transportation	20-99	34,990		0.786	3.891
Local messengers & local delivery	112	55,892	2.756		
Other transit & ground passenger transportation	20-99	51,090		0.538	2.665
Information	3,129	3,472,427	1.239		
Paging	78	11,453	9.365		
Data Processing, Hosting, and Related Services	731	365,919	2.747		
Finance and Insurance	4,005	6,481,304	0.850		
All Other Insurance Related Activities	20-99	22,435		1.226	6.068
Sales Financing	250-499	128,340		2.679	5.347
Miscellaneous Intermediation	20-99	34,464		0.798	3.950
Claims Adjusting	20-99	39,094		0.703	3.482
Credit Unions	250-499	229,213		1.500	2.994
Real Estate and Rental and Leasing	1,339	2,086,085	0.883		
Video Tape and disc rental	157	154,405	1.398		
Automotive Equipment Rental and Leasing	172	172,435	1.372		
Consumer Goods Rental	225	263,973	1.172		
Passenger Car Rental	100-249	110,912		1.240	3.087
Nonresidential Property Managers	99	132,102	1.031		
Professional, Scientific, Technical Services	5,399	7,569,981	0.981		
Marketing Research and Public Opinion Polling	250-499	118,533		2.900	5.789
Environmental Consulting Services	142	60,029	3.253		
Graphic Design Services	136	60,172	3.108		
Custom Computer Programming Services	694	434,637	2.196		
Testing Laboratories	147	93,485	2.162		
Photography Studios, Portrait	20-99	65,262		0.421	2.086
Management of Companies and Enterprises	1,794	2,824,787	0.873		
Administrative and Support & Waste Management and Remediation Services	2,758	8,708,052	0.436		
Repossession Services	20-99	6,568		4.187	20.727
Hazardous Waste Treatment and Disposal	20-99	23,043		1.194	5.908
Armored Car Services	20-99	28,446		0.967	4.786
Carpet and Upholstery Cleaning Services	20-99	47,344		0.581	2.875
Remediation Services	20-99	63,263		0.435	2.152

DESCRIPTION	2004 TOTAL EMPLOYMENT		2004 LOCATION QUOTIENTS		
	Chittenden County	U.S.	LQ	LQ (min)	LQ (max)
Educational Services	3,174	2,893,346	1.508		
Junior Colleges	500-999	96,090		7.155	14.296
Computer Training	20-99	25,119		1.095	5.420
Professional and Management Development Training	20-99	32,043		0.858	4.248
All Other Miscellaneous Schools and Instruction	20-99	29,627		0.928	4.595
Other Technical and Trade Schools	111	64,037	2.384		
Educational Support Services	20-99	58,587		0.469	2.324
Exam Preparation and Tutoring	20-99	66,616		0.413	2.044
Business Schools, Computer, & Mgt. Training	98	67,400	1.999		
Arts, Entertainment, and Recreation	1,707	1,889,044	1.243		
Promoters of Performing Arts, Sports, and Similar Events without Facilities	101	24,125	5.757		
Promoters of Performing Arts, Sports, and Similar Events	244	98,692	3.400		
Fitness and Recreational Sports Centers	1,005	479,202	2.884		
Promoters of Performing Arts, Sports, and Similar Events with Facilities	143	74,567	2.637		
All Other Amusement and Recreation Industries	64	84,801	1.038		
Accommodation and Food Services	7,146	10,749,811	0.914		
Bed-and-Breakfast Inns	50	18,354	3.746		
Other Traveler Accommodation	50	22,477	3.059		
Food Service Contractors	429	380,530	1.550		
Drinking Places (Alcoholic Beverages)	372	361,043	1.417		
Other Services (except Public Administration)	2,885	5,416,193	0.732		
One-Hour Photofinishing	20-99	9,199		2.990	14.799
Communication Equipment Repair and Maintenance	20-99	16,732		1.644	8.136
Diet and Weight Reducing Centers	20-99	28,852		0.953	4.718
Environment, Conservation and Wildlife Orgs	159	46,388	4.713		
Pet Care (except Veterinary) Services	20-99	40,089		0.686	3.396
Photofinishing	20-99	37,971		0.724	3.585
Appliance Repair and Maintenance	20-99	37,561		0.732	3.624
Home & Garden Equip. and Appliance Repair/Maint.	20-99	45,020		0.611	3.024
Voluntary Health Organizations	20-99	48,527		0.567	2.805

Job Creation and Destruction, Chittenden County, 2002-2006

Chittenden County, first quarter 2005- first quarter 2006

	New Business		Business Closings		Establishments with Employment Gain		Establishments with Employment Loss	
	Establishmt.	Employmt.	Establishmt.	Employmt	Establishmt	Employmt	Establishmt	Employmt
Total	431	1,684	325	1,096	1,588	5,779	1,615	6,296
Private Ownership	428	1,629	321	1,096	1,520	5,247	1,531	5,836
Goods Producing	64	113	48	104	261	879	255	1,244
Service Providing	364	1,516	273	991	1,259	4,368	1,276	4,592
Govt. Ownership	3	55	4	0	68	532	84	460

Chittenden County, first quarter 2005- first quarter 2006

	Gross Job Creation		Gross Job Loss		Net Job Effect	
	Number	Percent	Number	Percent	Number	Percent
Total	7,463	8.00%	7,392	7.90%	71	0.10%
Private Ownership	6,876	8.80%	6,932	8.90%	-56	-0.10%
Goods Producing	992	5.90%	1,348	8.00%	-356	-2.10%
Service Providing	5,884	9.60%	5,583	9.10%	301	0.50%
Govt. Ownership	587	3.90%	460	3.10%	127	0.80%

Chittenden County, first quarter 2004- first quarter 2005

	New Business		Business Closings		Establishments with Employment Gain		Establishments with Employment Loss	
	Establishmt.	Employmt.	Establishmt.	Employmt	Establishmt	Employmt	Establishmt	Employmt
Total	379	1,747	349	1,347	1,871	5,884	1,801	5,578
Private Ownership	377	1,723	348	1,346	1,772	5,370	1,721	5,168
Goods Producing	50	154	37	118	291	884	282	1,137
Service Providing	327	1,569	311	1,228	1,481	4486	1,439	4,030
Govt. Ownership	2	24	1	1	99	514	80	411

Chittenden County, first quarter 2004- first quarter 2005

	Gross Job Creation		Gross Job Loss		Net Job Effect	
	Number	Percent	Number	Percent	Number	Percent
Total	7,631	8.20%	6,925	7.50%	706	0.80%
Private Ownership	7,093	9.10%	6,514	8.40%	579	0.70%
Goods Producing	1,038	5.90%	1,255	7.20%	-217	-1.20%
Service Providing	6,055	10.00%	5,258	8.70%	797	1.30%
Govt. Ownership	538	3.70%	412	2.80%	126	0.90%

Source: Vermont Department of Labor, Job Destruction and Creation Annual Statewide and County Reports, www.vtلمي.info/lmipub.htm#9

Note: The goods producing sectors consist of private jobs in NAICS sectors 11,21,23,31-33. The service providing sectors consist of private jobs in NAICS sectors 22,42,44-45,48-49,51-56,61-62,71-72,81. This data is useful for demonstrating the significant amount of business and job churn that occurs in a dynamic economy. For most years, the gross job creation and job loss may approach 10%, while the net job change may be close to quite small.

Job Creation and Destruction, Chittenden County, 2002-2006

Chittenden County, first quarter 2003- first quarter 2004

	New Business		Business Closings		Establishments with Employment Gain		Establishments with Employment Loss	
	Establishmt.	Employmt.	Establishmt.	Employmt	Establishmt	Employmt	Establishmt	Employmt
Total	479	2,555	347	1,346	1,772	5,733	1,903	6,263
Private Ownership	462	1,876	339	1,088	1,710	5,220	1,832	5,546
Goods Producing	73	188	51	139	299	1,146	319	1,543
Service Providing	389	1,688	288	949	1,411	4,074	1,511	4,003
Govt. Ownership	17	679	8	258	62	513	72	717

Chittenden County, first quarter 2003- first quarter 2004

	Gross Job Creation		Gross Job Loss		Net Job Effect	
	Number	Percent	Number	Percent	Number	Percent
Total	8,288	9.00%	7,609	8.20%	679	0.70%
Private Ownership	7,096	9.10%	6,634	8.50%	462	0.60%
Goods Producing	1,334	7.60%	1,682	9.60%	-348	-2.00%
Service Providing	5,762	9.50%	4,952	8.20%	810	1.40%
Govt. Ownership	1,192	8.10%	975	6.60%	217	1.50%

Chittenden County, first quarter 2002- first quarter 2003

	New Business		Business Closings		Establishments with Employment Gain		Establishments with Employment Loss	
	Establishmt.	Employmt.	Establishmt.	Employmt	Establishmt	Employmt	Establishmt	Employmt
Total	419	1,766	324	1,595	1,764	6,019	1,852	7,025
Private Ownership	407	1,627	323	1,595	1,689	5,235	1,784	6,866
Goods Producing	64	120	43	94	241	729	325	2,274
Service Providing	343	1,507	280	1,501	1,448	4,506	1,459	4,592
Govt. Ownership	12	138	1	0	75	784	68	159

Chittenden County, first quarter 2002- first quarter 2003

	Gross Job Creation		Gross Job Loss		Net Job Effect	
	Number	Percent	Number	Percent	Number	Percent
Total	7,785	8.40%	8,620	9.40%	-835	-0.90%
Private Ownership	6,862	8.80%	8,461	10.90%	-1,599	-2.10%
Goods Producing	849	4.70%	2,368	13.10%	-1,519	-8.40%
Service Providing	6,013	10.10%	6,093	10.20%	-80	-0.10%
Govt. Ownership	922	6.40%	159	1.10%	763	5.30%

APPENDIX 1**Birth Rates: Burlington and Chittenden County, 1981-2003**

Source: Vermont Department of Health **1981-91:** Vital Statistics, Table 3 **1992-2003:** Vital Statistics, Table A-3

BIRTHRATE (per 1000 people)			
	Burlington	Chittenden County	Rest of Chitt. County
1981	11.5	14.8	16.5
1982	12.3	14.6	15.7
1983	12.8	15.3	16.4
1984	12.3	15.2	16.5
1985	12.0	15.4	16.9
1986	11.6	14.9	16.3
1987	12.2	15.3	16.7
1988	12.2	15.4	16.8
1989	13.4	15.7	16.7
1990	12.4	15.0	16.1
1991	12.2	14.5	15.4
1992	11.7	14.4	15.5
1993	12.4	14.4	15.2
1994	12.9	14.1	14.6
1995	10.1	12.3	13.1
1996	10.7	11.9	12.3
1997	10.4	12.1	12.8
1998	10.5	11.5	11.9
1999	9.4	11.7	12.6
2000	10.1	11.4	11.9
2001	10.6	11.0	11.2
2002	10.3	10.8	11.0
2003	10.6	11.3	11.6

APPENDIX 2**Population Burlington and Chittenden County, 1981-2003**

Source: Vermont Department of Health **1981-91:** Vital Statistics, Table 3 **1992-2003:** Vital Statistics, Table A-3

POPULATION			
	Burlington	Chittenden County	Rest of Chitt. County
1981	37712	115534	77822
1982	37838	117248	79410
1983	37894	119646	81752
1984	37817	121676	83859
1985	38275	123087	84812
1986	37867	124835	86968
1987	37661	126723	89062
1988	37725	129063	91338
1989	38296	132478	94182
1990	39127	131761	92634
1991	38869	133394	94525
1992	38518	133422	94904
1993	39295	136773	97478
1994	39435	138770	99335
1995	40259	141179	100920
1996	39391	141798	102407
1997	39690	141975	102285
1998	40727	143491	102764
1999	39982	144001	104019
2000	39815	146571	106756
2001	38991	147691	108700
2002	38885	148273	109388
2003	39148	148990	109842

APPENDIX 3**Educational Attainment: Burlington, Chittenden County, Vermont, U.S., 2000**

Source: U.S. Census Bureau
U.S. Census 2000 (SF3), Table QT-P20

	Burlington		Chittenden County		Vermont		U.S.	
Persons 25 yrs and over	22,629	100%	92,651	100%	404,223	100%	182,211,639	100%
Less than 9th grade	1,119	5%	3,234	3%	20,769	5%	13,755,477	8%
9th to 12th grade	1,664	7%	5,459	6%	34,127	8%	21,960,148	12%
High School Graduate	5,152	23%	21,784	24%	130,804	32%	52,168,981	29%
Some College, no degree	3,738	17%	15,481	17%	68,440	17%	38,351,595	21%
Associates Degree	1,443	6%	8,555	9%	31,058	8%	11,512,833	6%
Bachelor's Degree	5,977	26%	23,391	25%	74,124	18%	28,317,792	16%
Grad. or Professional Degree	3,536	16%	14,747	16%	44,901	11%	16,144,813	9%

APPENDIX 4**Educational Attainment: Burlington, 1980-2000**

Source: U.S. Census Bureau; 1980: U.S. Census 1980, General Social & Economic Characteristics of Vermont, Table 119 (P. 47-104); 1990: U.S. Census 1990, General Social & Economic Characteristics of Vermont, Table 119 (P. 47-104); 2000: U.S. Census 2000, (SF3), Table P37

	1980		1990		2000		% Change 1980-90	% Change 1990-00
Persons 25 yrs & over	18,578	100.0%	20,932	100.0%	22,629	100.0%	12.7%	8.1%
Less than 9th grade	2,856	15.4%	1,746	8.3%	1,119	4.9%	-38.9%	-35.9%
9th to 12th grade	1,855	10.0%	1,947	9.3%	1,664	7.4%	5.0%	-14.5%
High school graduate	5,659	30.5%	5,288	25.3%	5,152	22.8%	-6.6%	-2.6%
Some college, no degree	3,026	16.3%	3,249	15.5%	3,738	16.5%	7.4%	15.1%
Associate degree		0.0%	1,417	6.8%	1,443	6.4%		1.8%
Bachelor's degree	2,660	14.3%	4,286	20.5%	5,977	26.4%	61.1%	39.5%
Grad. or professional degree	2,522	13.6%	2,999	14.3%	3,536	15.6%	18.9%	17.9%

APPENDIX 5**Total Employment Trends, 1980-2006**

Source: Vermont, Chittenden County, Burlington: Quarterly Census of Employment and Wages (QCEW) program, VT Department of Labor, Economic & Labor Market Information Office, Covered Employment and Wages United States: Bureau of Labor Statistics Data, Total Non-farm Employment- Not Seasonally Adjusted *NOTE: 2006 Data for Vermont, Chittenden County and Burlington is an average of quarters 1, 2 and 3 only.

	Vermont	growth rate	Chittenden County	growth rate	Burlington	growth rate	U.S. (in 1000s)	growth rate
1980	249,700	1.00	53,849	1.00	25,966	1.00	90,528	1.00
1981	257,300	1.03	56,603	1.05	27,050	1.04	91,289	1.01
1982	263,000	1.05	57,378	1.07	27,248	1.05	89,677	0.99
1983	265,400	1.06	58,805	1.09	27,665	1.07	90,280	1.00
1984	271,600	1.09	61,460	1.14	28,332	1.09	94,530	1.04
1985	280,200	1.12	64,946	1.21	29,324	1.13	97,511	1.08
1986	288,400	1.15	67,378	1.25	30,116	1.16	99,474	1.10
1987	294,400	1.18	70,752	1.31	31,695	1.22	102,088	1.13
1988	297,900	1.19	74,895	1.39	32,073	1.24	105,345	1.16
1989	304,500	1.22	78,119	1.45	31,597	1.22	108,014	1.19
1990	309,300	1.24	77,548	1.44	30,801	1.19	109,487	1.21
1991	308,600	1.24	75,533	1.40	29,110	1.12	108,374	1.20
1992	312,400	1.25	76,188	1.41	29,437	1.13	108,726	1.20
1993	314,900	1.26	77,873	1.45	29,430	1.13	110,844	1.22
1994	316,200	1.27	79,960	1.48	29,750	1.15	114,291	1.26
1995	319,000	1.28	82,617	1.53	30,032	1.16	117,298	1.30
1996	323,900	1.30	85,224	1.58	30,045	1.16	119,708	1.32
1997	328,800	1.32	86,363	1.60	29,402	1.13	122,776	1.36
1998	331,900	1.33	88,145	1.64	29,809	1.15	125,930	1.39
1999	335,400	1.34	91,165	1.69	29,924	1.15	128,993	1.42
2000	335,800	1.34	95,354	1.77	31,493	1.21	131,785	1.46
2001	341,200	1.37	96,179	1.79	31,208	1.20	131,826	1.46
2002	345,600	1.38	94,083	1.75	31,424	1.21	130,341	1.44
2003	349,400	1.40	93,533	1.74	31,823	1.23	129,999	1.44
2004	350,700	1.40	94,881	1.76	32,579	1.25	131,435	1.45
2005	353,600	1.42	94,799	1.76	32,498	1.25	133,703	1.48
2006*	361,000	1.45	94,208	1.75	32,377	1.25	136,174	1.50

APPENDIX 6**Annual Employment by Sector: Burlington 1990-2006**

Source: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics.

Note: Sector coding was changed in the 1990s from SIC to NAICS codes. The Vermont Department of Labor website has converted the earlier data to NAICS. So, all data in this report is comparable but not comparable with the data in Jobs and People 3. Data for sectors with a small number of employers/employees may not be available to protect privacy-those sectors are designated n/a. The service providing sector is a combination of service jobs in other NAICS sectors. Specifically, the service providing sector consists of private sector jobs in NAICS sectors 22 and 42-81.

Burlington 1990 to 2006*									
Description	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Employment	30,801	29,110	29,437	29,430	29,750	30,032	30,045	29,402	29,809
SERVICE PROVIDING	21,030	19,717	19,981	20,125	20,432	20,817	20,753	20,257	20,843
Manufacturing	2,244	1,984	1,909	2,053	2,046	2,079	2,242	2,194	2,229
Construction	807	634	n/a	n/a	644	602	606	n/a	706
Wholesale Trade	844	833	n/a	n/a	766	n/a	n/a	n/a	n/a
Retail Trade	3,524	3,194	3,127	3,139	3,051	3,048	2,760	2,674	2,537
Transportation & Warehousing	875	n/a	751	747		741	772	739	724
Information	848	854	937	791	884	949	1,120	1,137	1,189
Finance & Insurance	2,348	2,025	1,982	1,960	1,977	1,900	1,543	1,500	1,631
Real Estate, Rental & Leasing	416	449	365	395	485	511	507	483	473
Professional, Scientific & Tech Svcs	1,503	1,349	1,466	1,721	1,792	1,819	1,795	1,970	2,116
Admin, Support & Waste Svcs	469	n/a	n/a						
Educational Services	637	641	677	688	717	735	775	841	769
Health Care and Social Assistance	6,177	6,074	6,328	6,357	6,223	6,641	6,686	6,229	6,511
Arts, Entertainment & Recreation	137	128	118	115	142	161	183	216	230
Accommodation & Food Services	2,327	2,122	2,184	2,191	2,184	2,125	2,213	1,921	2,053
Other Services	924	806	846	844	942	971	1,087	1,100	1,022
Government Total	6,720	6,776	6,946	6,616	6,628	6,533	6,445	6,302	6,031
Description	1999	2000	2001	2002	2003	2004	2005	2006*	
Total Employment	29,924	31,493	31,208	31,424	31,823	32,579	32,498	32,377	
SERVICE PROVIDING	21,079	21,807	21,880	22,126	22,145	22,340	22,120	22,200	
Manufacturing	2,078	2,072	1,969	1,871	1,898	1,915	1,876	1,769	
Construction	752	n/a							
Wholesale Trade	n/a	453							
Retail Trade	2,656	2,995	2,877	3,104	3,111	3,109	3,073	2,963	
Transportation & Warehousing	743	708	693	683	674	649	590	546	
Information	826	875	752	698	667	633	601	537	
Finance & Insurance	1,769	1,699	1,761	1,600	1,533	1,541	1,531	1,515	
Real Estate, Rental & Leasing	432	448	412	434	428	409	415	433	
Professional, Scientific & Tech Svcs	2,241	2,336	2,353	2,420	2,302	2,180	2,171	2,203	
Admin, Support & Waste Svcs	n/a								
Educational Services	773	790	751	739	713	737	673	618	
Health Care and Social Assistance	6,707	6,899	7,323	7,536	7,716	7,716	7,658	7,943	
Arts, Entertainment & Recreation	242	233	239	250	272	276	312	310	
Accommodation & Food Services	2,186	2,205	2,167	2,154	2,165	2,413	2,320	2,386	
Other Services	986	1,031	1,044	1,073	1,115	1,084	989	985	
Government Total	6,015	6,840	6,746	6,803	7,056	7,473	7,727	7,549	

APPENDIX 7**Annual Employment by Sector, Percent of Total Employment: Burlington 1990-2006**

Source: Current Employment Statistics (CES) program produced by the Vermont Department of Labor, Labor Market Information in cooperation with the U.S. Bureau of Labor Statistics.

Percent of Total Employment, Burlington 1990 to 2006*									
Description	1990	1991	1992	1993	1994	1995	1996	1997	1998
SERVICE PROVIDING	68.28%	67.73%	67.88%	68.38%	68.68%	69.32%	69.07%	68.90%	69.92%
Manufacturing	7.29%	6.82%	6.49%	6.98%	6.88%	6.92%	7.46%	7.46%	7.48%
Construction	2.62%	2.18%	n/a	n/a	2.16%	2.00%	2.02%	n/a	2.37%
Wholesale Trade	2.74%	2.86%	n/a	n/a	2.57%	n/a	n/a	n/a	n/a
Retail Trade	11.44%	10.97%	10.62%	10.67%	10.26%	10.15%	9.19%	9.09%	8.51%
Transportation & Warehousing	2.84%	n/a	2.55%	2.54%	0.00%	2.47%	2.57%	2.51%	2.43%
Information	2.75%	2.93%	3.18%	2.69%	2.97%	3.16%	3.73%	3.87%	3.99%
Finance & Insurance	7.62%	6.96%	6.73%	6.66%	6.65%	6.33%	5.14%	5.10%	5.47%
Real Estate, Rental & Leasing	1.35%	1.54%	1.24%	1.34%	1.63%	1.70%	1.69%	1.64%	1.59%
Professional, Scientific & Tech.	4.88%	4.63%	4.98%	5.85%	6.02%	6.06%	5.97%	6.70%	7.10%
Admin, Support & Waste Svcs	1.52%	n/a							
Educational Services	2.07%	2.20%	2.30%	2.34%	2.41%	2.45%	2.58%	2.86%	2.58%
Health Care & Social Assistance	20.05%	20.87%	21.50%	21.60%	20.92%	22.11%	22.25%	21.19%	21.84%
Arts, Entertainment & Rec.	0.44%	0.44%	0.40%	0.39%	0.48%	0.54%	0.61%	0.73%	0.77%
Accommodation & Food Svcs	7.55%	7.29%	7.42%	7.44%	7.34%	7.08%	7.37%	6.53%	6.89%
Other Services	3.00%	2.77%	2.87%	2.87%	3.17%	3.23%	3.62%	3.74%	3.43%
Government	21.82%	23.28%	23.60%	22.48%	22.28%	21.75%	21.45%	21.43%	20.23%

Description	1999	2000	2001	2002	2003	2004	2005	2006*
SERVICE PROVIDING	70.44%	69.24%	70.11%	70.41%	69.59%	68.57%	68.07%	68.57%
Manufacturing	6.94%	6.58%	6.31%	5.95%	5.96%	5.88%	5.77%	5.46%
Construction	2.51%	n/a						
Wholesale Trade	n/a	1.40%						
Retail Trade	8.88%	9.51%	9.22%	9.88%	9.78%	9.54%	9.46%	9.15%
Transportation & Warehousing	2.48%	2.25%	2.22%	2.17%	2.12%	1.99%	1.82%	1.69%
Information	2.76%	2.78%	2.41%	2.22%	2.10%	1.94%	1.85%	1.66%
Finance & Insurance	5.91%	5.39%	5.64%	5.09%	4.82%	4.73%	4.71%	4.68%
Real Estate, Rental & Leasing	1.44%	1.42%	1.32%	1.38%	1.34%	1.26%	1.28%	1.34%
Professional, Scientific & Tech Svcs	7.49%	7.42%	7.54%	7.70%	7.23%	6.69%	6.68%	6.81%
Admin, Support & Waste Svcs	n/a							
Educational Services	2.58%	2.51%	2.41%	2.35%	2.24%	2.26%	2.07%	1.91%
Health Care and Social Assistance	22.41%	21.91%	23.47%	23.98%	24.25%	23.68%	23.56%	24.53%
Arts, Entertainment and Recreation	0.81%	0.74%	0.77%	0.80%	0.85%	0.85%	0.96%	0.96%
Accommodation and Food Services	7.31%	7.00%	6.94%	6.85%	6.80%	7.41%	7.14%	7.37%
Other Services	3.30%	3.27%	3.35%	3.41%	3.50%	3.33%	3.04%	3.04%
Government	20.10%	21.72%	21.62%	21.65%	22.17%	22.94%	23.78%	23.32%

APPENDIX 8**Change in the Number of Jobs in Burlington 1998-2005**

Source: VT Department of Labor and Market Information; "2004 Covered Employment and Wages;" <<http://www.labor.vermont.gov/VDOLHomePage/tabid/90/Default.aspx>> (c)Data is confidential. (s)Data is suppressed to protect confidential information

NAICS Industry	Total Employment		Change 1998 to 2005	
	1998	2005	# of Jobs	% Change
Manufacturing	2,229	1,876	-353	-15.84%
Durable Goods			N/A	N/A
wood product manufacturing	©	©	N/A	N/A
Nonmetallic mineral product manufacturing	©	©	N/A	N/A
Fabricated metal product manufacturing	876	735	-141	-16.10%
Machinery manufacturing	©	©	N/A	N/A
Computer and Electronic product manufacturing	17	©	N/A	N/A
Miscellaneous manufacturing	©	©	N/A	N/A
Non-Durable Goods			N/A	N/A
Food manufacturing	293	323	30	10.24%
Beverage and tobacco product manufacturing	©	©	N/A	N/A
Apparel Manufacturing	©	©	N/A	N/A
Printing and related support activities	154	146	-8	-5.19%
Chemical manufacturing	©	©	N/A	N/A
Trade, Transportation and Utilities	3,915	4,102	187	4.78%
Wholesale trade	(s)	(s)	N/A	N/A
Merchant wholesalers, durable goods	362	280	-82	-22.65%
Merchant wholesalers, Non-durable goods	288	127	-161	-55.90%
Electronic Markets and agents and brokers	©	©	N/A	N/A
Retail trade	2,537	3,073	536	21.13%
Motor vehicle and parts dealers	161	146	-15	-9.32%
Furniture and home furnishing stores	110	188	78	70.91%
Electronics and appliance stores	29	(s)	N/A	N/A
Building Material and garden supply stores	80	113	33	41.25%
Food and beverage stores	587	771	184	31.35%
Health and Personal care stores	148	119	-29	-19.59%
Gasoline stations	160	158	-2	-1.25%
Clothing and clothing accessories stores	453	792	339	74.83%
Sporting goods, hobby, book and music stores	22	285	263	1195.45%
General merchandise stores	143	©	N/A	N/A
Miscellaneous store retailers	279	238	-41	-14.70%
Non-store retailers	159	223	64	40.25%
Transportation and Warehousing	724	590	-134	-18.51%
Air-transportation	85	©	N/A	N/A
Water transportation	©	©	N/A	N/A
Truck transportation	29	76	47	162.07%
Transit and ground passenger transportation	170	153	-17	-10.00%
Scenic and Sight-seeing transportation	©	©	N/A	N/A
Support activities for transportation	47	©	N/A	N/A
Couriers and messengers	©	©	N/A	N/A

	Total Employment		Change 1998 to 2005	
	1998	2005	# of Jobs	% Change
Utilities	©	©	N/A	N/A
Financial Activities	2,104	1,946	-158	-7.51%
Finance and insurance	1,631	1,531	-100	-6.13%
Credit intermediation and related activities	929	805	-124	-13.35%
Securities, commodity contract, investments	(s)	(s)	N/A	N/A
Insurance carriers and related activities	343	440	97	28.28%
Funds, Trusts and other financial activities	©	©	N/A	N/A
Real estate and rental leasing	473	415	-58	-12.26%
Real estate	289	320	31	10.73%
Rental and leasing services	(s)	(s)	N/A	N/A
Lessors of non financial intangible assets	©	©	N/A	N/A
Professional and business services	3,023	3,519	496	16.41%
Professional and technical services	2,116	2,171	55	2.60%
Management of companies and enterprises	©	©	N/A	N/A
Administrative and waste services	(s)	(s)	N/A	N/A
Administrative and support services	732	1,141	409	55.87%
Waste management and remediation services	(s)	(s)	N/A	N/A
Education and Health Services	7,307	8,331	1,024	14.01%
Educational services	796	673	-123	-15.45%
Elementary and secondary schools	118	160	42	35.59%
Junior colleges	©	©	N/A	N/A
Colleges and universities	©	©	N/A	N/A
Business computer and management training	©	19	N/A	N/A
Technical and trade schools	©	©	N/A	N/A
Other schools and instruction	27	30	3	11.11%
Educational support services	©	20	N/A	N/A
Health care and social assistance	6,511	7,658	1,147	17.62%
Ambulatory health care service	2,445	3,189	744	30.43%
Hospitals	©	©	N/A	N/A
Nursing and residential care facilities	(s)	(s)	N/A	N/A
Social Assistance	570	803	233	40.88%

This table illustrates the change in number of jobs and percent change in number of jobs in Burlington Town from 1998-2005 for several key 2-digit NAICS sectors and their primary sub-sectors.

APPENDIX 9**Industry by Gender: Burlington, 2000**

Source: U.S. Census Bureau

U.S. Census 2000 (SF3), Table P49

INDUSTRY	MALE		FEMALE		TOTAL	
Agriculture, forestry, fishing	17	0.2%	51	0.5%	68	0.3%
Mining	0	0.0%	0	0.0%	0	0.0%
Construction	767	7.2%	83	0.8%	850	4.0%
Manufacturing	1,561	14.7%	681	6.3%	2,242	10.5%
Transportation, warehousing, utilities	506	4.8%	108	1.0%	614	2.9%
Wholesale Trade	367	3.5%	201	1.9%	568	2.7%
Retail Trade	1,463	13.8%	1,486	13.8%	2,949	13.8%
Finance, insurance, real estate	465	4.4%	621	5.8%	1,086	5.1%
Professional, scientific, management, administrative, waste management services	1,199	11.3%	791	7.4%	1,990	9.3%
Educational, health, social services	1,777	16.8%	4,021	37.5%	5,798	27.2%
Arts, entertainment, recreation, accommodation, food services	1,298	12.2%	1,253	11.7%	2,551	12.0%
Other Services	313	3.0%	684	6.4%	997	4.7%
Public Administration	372	3.5%	305	2.8%	677	3.2%
Total Employed	10,599	100%	10,736	100%	21,335	100%

APPENDIX 10**Burlington and National Change in Employment by Industry, 2000, 2006**

Source: Census of Quarterly Earnings and Wages and the U.S. Bureau of Labor Statistics

Industry	Burlington			US		
	2000	2006	2000-2006	2000	2006	2000-2006
Construction	(s)	(s)		6,792	7,697	0.133245
Manufacturing	2,072	1,792	-0.13514	17,263	14,155	-0.18004
Service Providing	21,807	22,364	0.025542	107,913	114,546	0.061466
Wholesale trade	(s)	454	N/A	5883.8	5969.2	0.014514
Retail trade	2,995	3,018	0.007679	15379.9	15412.8	0.002139
Transportation and warehousing	708	539	-0.2387	4473.9	4525	0.011422
Information	875	537	-0.38629	3,705	3,033	-0.18138
Finance and insurance	1,699	1,513	-0.10948	5676.7	6,156	0.084433
Real estate	277	339	0.223827	1,316	1,499	0.139058
Professional and technical services	2,336	2,217	-0.05094	6701.7	7356.7	0.097736
Health Care and Social Assistance	6899	7971	0.155385	12,718	14925.3	0.173557
Educational Services	790	652	-0.17468	2390.4	2900.9	0.213563
Arts, entertainment, and recreation	233	311	0.334764	1787.9	1928.5	0.07864
Accommodation and food services	2,205	2,372	0.075737	10073.5	11496.3	0.141242
Other services, except public administration	1,031	997	-0.03298	5,196	5,466	0.051963
Government total	6,840	7,700	0.125731	20,804	22,083	0.061479
Private ownership	24,653	24,832	0.007261	111,681	114,899	0.028814
Total Covered	31,493	32,533	0.033023	131,785	136,086	0.032636

APPENDIX 11**Shift Share Table, 2000, 2006**

Source: Census of Quarterly Earnings and Wages and the U.S. Bureau of Labor Statistics

2000-2006	Proportional Shift	Differential Shift
Construction	0.100609	N/A
Manufacturing	-0.21267	0.044903
Service Providing	0.02883	-0.03592
Wholesale trade	-0.01812	N/A
Retail trade	-0.0305	0.00554
Transportation and warehousing	-0.02121	-0.25012
Information	-0.21401	-0.20491
Finance and insurance	0.051796	-0.19391
Real estate	0.106421	0.084769
Professional and technical services	0.0651	-0.14868
Educational services	0.180927	-0.38825
Health care and social services	0.140921	-0.01817
Arts, entertainment, and recreation	0.046003	0.256124
Accommodation and food services	0.108605	-0.0655
Other services, except public administration	0.019327	-0.08494
Government total	0.028842	0.064252
Private ownership	-0.00382	-0.02155

Note: Proportional Shift represents the rate of growth of each industry nationally compared to the overall growth of the national economy. Differential shift represents the rate of growth in an industry locally compared to the industry's national growth rate. See Appendix 7 for the underlying employment data.

APPENDIX 12**Occupational Breakdown of Residents: Burlington, 1980-1990**

Source: U.S. Census Bureau

1980 US Census Table 121 p.47-108; 1990 US Census (SF3) Series PO78, Table 174 p. 215

1980 SOC	1980	1990	% Change 1980-90
Employed pers. 16 yrs & over	17,456	20,862	19.5%
Executive, administrative, and managerial occupations	1,921	2,610	35.9%
Professional specialty occupations	3,008	3,921	30.4%
Technicians and related support occupations	838	1,022	22.0%
Sales	1,747	2,927	67.5%
Administrative support including clerical	3,163	3,337	5.5%
Private household	104	100	-3.8%
Protective service	315	279	-11.4%
Service except household or protective	2,646	3,187	20.4%
Farming, forestry, & fishing	205	211	2.9%
Precision production, craft & repair	1,503	1,630	8.4%
Machine operators, assembler & inspectors	1,064	834	-21.6%
Transportation & material moving	454	316	-30.4%
Handlers, equipment cleaners, helpers, & laborers	488	488	0.0%

APPENDIX 13**Occupational Breakdown of Residents: Burlington, 1990-2000**

Source: U.S. Census Bureau

1990 US Census (SF3) Series PO78, Table 174 p. 215; 2000: U.S. Census (SF3) Series PO50

Note: 1990 Data is not directly comparable to 2000 due to the 1998 revision of the Standard Occupational Classification (SOC), maintained by the BLS. We utilized the 'US Census Bureau Occupation Crosswalk Template,' an excel spreadsheet that automates the process of reclassification. It is available at: http://www.census.gov/hhes/www/ioindex/occcross_menu.html

SF-3 / Demographic Profile Category (1998 SOC)	1990	2000	% Change 1990-2000
Total	20,862	21,335	2.3%
Management, business, and financial operations occupations:	2,466	2,492	1.1%
Professional and related occupations:	4,912	5,880	19.7%
Sales and related occupations	2,995	2,543	-15.1%
Office and administrative support occupations	3,421	3,556	4.0%
Service occupations except Protective	3,428	3,335	-2.7%
Protective service occupations:	291	170	-41.5%
Farming, fishing, and forestry occupa- tions	80	37	-53.6%
Construction and extraction occupa- tions:	796	731	-8.2%
Installation, maintenance, and repair occupations	528	378	-28.4%
Production occupations	1,321	1,307	-1.1%
Transportation and material moving occupations:	625	906	45.0%

APPENDIX 14**Occupation of Employed Persons by Gender: Burlington 1990**

Source: U.S. Census Bureau; 1990: US Census 1990 (SF3) Series PO78, Table 174 p. 215;
2000: U.S. Census (SF3) Series PO50

Note: 1990 Data is not directly comparable to 2000 due to the 1998 revision of the Standard Occupational Classification (SOC), maintained by the BLS. We utilized the 'US Census Bureau Occupation Crosswalk Template,' an excel spreadsheet that automates the process of reclassification. It is available at: http://www.census.gov/hhes/www/ioindex/occcross_menu.html

EMPLOYMENT BY GENDER, BURLINGTON 1990						
OCCUPATION	TOTAL		MALE		FEMALE	
Management, professional, & related occupations	7,378	35.8%	3,795	37.0%	3,583	34.7%
Service occupations	3,719	18.1%	1,758	17.1%	1,960	19.0%
Sales & office	6,415	31.2%	2,202	21.5%	4,213	40.8%
Farming, fishing, & forestry	80	0.4%	76	0.7%	4	0.0%
Construction, extraction, & maintenance	1,324	6.4%	1,160	11.3%	163	1.6%
Production, transportation, & material moving	1,674	8.1%	1,274	12.4%	400	3.9%
TOTAL	20,589	100.0%	10,266	100.0%	10,323	100.0%

APPENDIX 15**Occupations by Gender: Burlington 2000**

Source: U.S. Census Bureau

1990: US Census 1990 (SF3) Series PO78, Table 174 p. 215

2000: U.S. Census (SF3) Series PO50

EMPLOYMENT BY GENDER, BURLINGTON 2000						
OCCUPATION	TOTAL		MALE		FEMALE	
Managerial, Professional and Related Occupations	8,372	39.2%	4,103	38.7%	4,269	39.8%
Service Occupations:	3,541	16.6%	1,573	14.8%	1,968	18.3%
Sales and Office	6,099	28.6%	2,235	21.1%	3,864	36.0%
Farming, fishing, & forestry	37	0.2%	18	0.2%	19	0.2%
Construction, extraction, and maintenance	1,109	5.2%	1,031	9.7%	78	0.7%
Production, transportation, and material moving	2,213	10.4%	538	5.1%	1,675	15.6%
TOTAL	21,335	100.0%	10,599	100.0%	10,736	100.0%

APPENDIX 16**Percent Change in Occupations by Gender: Burlington 1990-2000****Source:** U.S. Census Bureau

1990: US Census 1990 (SF3) Series PO78, Table 174 p. 215

2000: U.S. Census (SF3) Series PO50

EMPLOYMENT BY GENDER, BURLINGTON % Change 1990-2000			
OCCUPATION	TOTAL	MALE	FEMALE
Managerial, Professional and Related Occupations	13.5%	8.1%	19.2%
Service Occupations:	-4.8%	-10.5%	0.4%
Sales and Office Occupations	-4.9%	1.5%	-8.3%
Farming, Fishing, and Forestry Occupations	-53.6%	-76.2%	354.7%
Construction, extraction, and maintenance	-16.2%	-11.2%	-52.2%
Production, Transportation, and material moving occs.	32.2%	-57.8%	318.8%

APPENDIX 17**Sale Tax Revenues by Chittenden County Municipality, FY 2000-2006**

Source: Vermont Department on Taxes; "2000-2006 Sales and Use tax information;" published 2006,
<<http://www.state.vt.us/tax/statisticss&umult.shtml>>

Sales Tax Revenue for Chittenden County and Surrounding Areas			
	Burlington	Williston	South Burlington
FY 2006			
Total sale tax revenues	\$257,626,996	\$428,421,664	\$330,936,861
% of county total	16.96%	28.21%	21.79%
FY 2005			
Total sale tax revenues	\$269,816,852	\$410,052,729	\$297,507,587
% of county total	18.50%	27.70%	22.50%
FY 2004			
Total sale tax revenues	\$269,599,258	\$366,729,543	\$289,610,459
% of county total	19.10%	25.00%	24.20%
FY 2003			
Total sale tax revenues	\$254,536,076	\$322,740,123	\$274,195,232
% of county total	20.59%	26.11%	22.18%
FY 2002			
Total sale tax revenues	\$231,921,751	\$347,881,621	\$283,116,389
% of county total	18.50%	27.70%	22.50%
FY 2001			
Total sale tax revenues	\$230,500,046	\$300,990,950	\$291,485,122
% of county total	19.10%	25.00%	24.20%
FY 2000			
Total sale tax revenues	\$244,418,160	\$301,657,066	\$278,253,370
% of county total	19.90%	24.60%	12.80%
% Growth			
% Growth 00-01	-5.69%	-0.22%	4.76%
% Growth 01-02	0.60%	15.60%	-2.90%
% Growth 02-03	9.75%	-7.23%	-3.15%
% Growth 03-04	5.92%	13.63%	5.62%
% Growth 04-05	0.08%	11.81%	2.73%
% Growth 05-06	-4.52%	4.48%	11.24%
% Growth 00-06	5.40%	42.02%	18.93%

Sales Tax Revenue for Chittenden County and Surrounding Areas				
	Colchester	Essex	Winooski	Chittenden County
FY 2006				
Total sale tax revenues	\$234,081,538	\$96,358,085	\$17,207,373	\$1,518,601,525
% of county total	15.41%	6.35%	1.13%	
FY 2005				
Total sale tax revenues	\$223,760,349	\$94,154,445	\$16,723,676	\$1,458,189,303
% of county total	12.70%	6.90%	1.60%	
FY 2004				
Total sale tax revenues	\$204,756,810	\$85,708,475	\$16,165,033	\$1,369,817,829
% of county total	13.10%	6.90%	1.90%	
FY 2003				
Total sale tax revenues	\$157,579,995	\$84,862,253	\$15,385,101	\$1,235,970,609
% of county total	12.75%	6.87%	1.24%	
FY 2002				
Total sale tax revenues	\$159,506,378	\$86,110,857	\$20,337,018	\$1,256,219,267
% of county total	12.70%	6.90%	1.60%	
FY 2001				
Total sale tax revenues	\$157,236,875	\$83,137,622	\$22,925,368	\$1,204,312,998
% of county total	13.10%	6.90%	1.90%	
FY 2000				
Total sale tax revenues	\$156,801,224	\$96,561,528	\$27,240,407	\$1,226,693,341
% of county total	22.70%	7.90%	2.20%	
% Growth 00-01				
	0.28%	-13.90%	-15.84%	-1.82%
% Growth 01-02				
	1.40%	3.60%	-11.30%	4.30%
% Growth 02-03				
	-1.21%	-1.45%	-24.35%	-1.61%
% Growth 03-04				
	29.94%	1.00%	5.07%	10.83%
% Growth 04-05				
	9.28%	9.85%	3.46%	6.45%
% Growth 05-06				
	4.61%	2.34%	2.89%	4.14%
% Growth 00-06				
	49.29%	-0.21%	-36.83%	23.80%

This data depicts the differences in sales tax revenue accrued by town in Chittenden County from 2000-2006.

APPENDIX 18**Average Nominal Wage, Burlington, Chittenden County, Vermont, U.S., 1990-2006**

Source: VT Dept. of Labor Quarterly Census of Employment and Wages, Sector coding changed from SIC to NAICS in 1993., SS Average National Wage Index, <<http://www.ssa.gov/OACT/COLA/AWI.html#Serie>>

	Burlington	Chittenden County	Vermont	US
1990	22,948	24,044	21,531	21,028
1991	24,144	25,046	21,346	21,812
1992	25,073	25,917	22,364	22,935
1993	26,092	26,517	22,702	23,133
1994	26,138	26,283	22,963	23,754
1995	27,170	27,245	23,573	24,706
1996	28,542	28,570	24,479	25,914
1997	30,097	29,840	25,506	27,426
1998	31,589	31,517	26,624	28,861
1999	33,039	32,896	27,589	30,470
2000	33,835	34,327	28,925	32,155
2001	34,925	35,618	30,239	32,922
2002	36,089	36,370	31,041	33,252
2003	37,740	37,432	32,090	34,065
2004	38,699	38,433	33,276	35,649
2005	40,240	39,766	34,199	36,953
2006	42,831	41,903	35,585	38,651

APPENDIX 19**Average Real Wage, Burlington, Chittenden County, Vermont, U.S., 1990-2006**

Source: VT Dept. of Labor Quarterly Census of Employment and Wages, Sector coding changed from SIC to NAICS in 1993., SS Average National Wage Index, <<http://www.ssa.gov/OACT/COLA/AWI.html#Serie>> Valued in 2006 dollars.

	Burlington	Chittenden County	Vermont	US
1990	35,396	37,087	33,211	32,435
1991	35,737	37,072	31,596	32,285
1992	36,028	37,241	32,135	32,956
1993	36,402	36,995	31,673	32,274
1994	35,556	35,753	31,237	32,312
1995	35,941	36,041	31,183	32,682
1996	36,673	36,709	31,453	33,297
1997	37,804	37,481	32,037	34,449
1998	39,070	38,981	32,929	35,696
1999	39,980	39,807	33,385	36,871
2000	39,612	40,188	33,863	37,645
2001	39,757	40,545	34,422	37,476
2002	40,442	40,757	34,785	37,263
2003	41,350	41,012	35,159	37,323
2004	41,301	413,481	35,513	38,045
2005	41,538	41,049	35,302	38,145
2006	42,831	41,903	35,585	38,651

APPENDIX 20**Average Nominal Wage by Industry, Burlington 1990-2006**

Source: VT Dept. of Labor Quarterly Census of Employment and Wages, Sector coding changed from SIC to NAICS in 1993.

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Covered - all ownerships	22,948	24,144	25,073	26,092	26,138	27,170	28,542	30,097	31,589
Private ownership	21,736	22,885	23,978	24,773	25,036	26,428	27,275	28,932	30,173
Construction	25,582	26,496			27,725	26,593	25,503		32,135
Manufacturing	33,045	35,608	36,657	37,726	37,191	40,571	41,550	45,279	46,644
Service Providing	20,381	21,488	22,681	23,398	23,734	25,011	25,785	27,203	28,345
Trade, Transportation, Utilities	17,322	18,445	19,111	18,400	19,127	19,332	20,337	20,996	21,987
Retail trade	13,717	14,326	14,997	14,771	15,122	15,232	15,426	15,920	16,760
Transportation, warehousing	22,573		24,522	23,713		24,536	25,478	26,644	27,373
Information	23,349	23,162	22,490	24,430	25,635	26,018	26,140	25,671	23,715
Finance and insurance	29,262	31,505	33,902	37,285	37,230	40,470	43,758	46,966	47,684
Real estate, rental and leasing	16,102	15,850	20,803	21,843	21,160	21,667	28,337	23,592	23,142
Professional, technical services	31,174	33,491	35,225	32,784	31,967	33,554	37,233	39,062	41,787
Health care, social assistance	22,864	24,111	25,380	26,695	27,590	29,642	29,799	32,200	32,648
Arts, entertainment, recreation	10,623	11,253	13,393	14,322	14,353	14,571	13,583	15,620	41,388
Accommodation, food services	8,747	9,262	9,528	9,849	9,805	9,999	10,322	10,446	11,686
Government total	27,293	28,294	28,617	30,640	29,980	29,840	33,179	34,369	37,171

	1999	2000	2001	2002	2003	2004	2005	2006
Total Covered - all ownerships	33,039	33,835	34,925	36,089	37,740	38,699	40,240	42,831
Private ownership	31,671	33,196	33,906	34,812	36,376	37,473	39,249	41,820
Construction	30,918							
Manufacturing	44,015	49,300	54,327	59,736	58,193	59,639	60,487	62,726
Service Providing	30,481	31,625	31,995	32,652	34,454	35,473	37,340	40,179
Trade, Transportation, Utilities	22,671	23,265	24,271	23,537	23,283	24,986	26,046	27,393
Retail trade	17,313	18,031	18,829	18,288	19,216	20,441	20,934	21,225
Transportation, warehousing	29,734	30,010	30,446	31,150	30,602	32,882	35,218	38,481
Information	29,280	32,530	38,814	36,500	38,411	40,542	40,002	40,257
Finance and insurance	47,964	54,312	55,986	57,774	68,986	74,065	79,005	85,101
Real estate, rental and leasing	28,104	25,963	29,345	30,119	32,488	33,301	33,317	34,301
Professional, technical services	44,345	44,525	45,610	45,032	52,065	54,022	57,189	61,270
Health care, social assistance	36,023	36,977	35,739	37,807	38,377	38,989	41,979	46,086
Arts, entertainment, recreation	33,095	48,288	18,460	21,904	25,595	35,138	23,838	23,877
Accommodation, food services	12,160	13,230	13,685	14,601	15,052	16,153	16,670	17,063
Government total	38,476	36,137	38,618	40,712	42,528	42,821	43,416	46,092

APPENDIX 21**Average Real Wage by Industry, Burlington 1990-2006**

Source: VT Dept. of Labor Quarterly Census of Employment and Wages, Sector coding changed from SIC to NAICS in 1993.

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Covered - all ownerships	\$35,396	\$35,737	\$36,028	\$36,402	\$35,556	\$35,941	\$36,673	\$37,804	\$39,070
Private ownership	\$33,527	\$33,874	\$34,454	\$34,562	\$34,057	\$34,960	\$35,046	\$36,341	\$37,318
Construction	\$39,459	\$39,219	\$0	\$0	\$37,715	\$35,178	\$32,769	\$0	\$39,745
Manufacturing	\$50,971	\$52,706	\$52,673	\$52,634	\$50,592	\$53,669	\$53,387	\$56,874	\$57,690
Service Providing	\$31,437	\$31,806	\$32,591	\$32,644	\$32,286	\$33,085	\$33,131	\$34,169	\$35,057
Trade, Transportation, Utilities	\$26,719	\$27,302	\$27,461	\$25,671	\$26,019	\$25,573	\$26,131	\$26,373	\$27,194
Retail trade	\$21,158	\$21,205	\$21,550	\$20,608	\$20,571	\$20,149	\$19,821	\$19,997	\$20,729
Transportation, warehousing	\$34,818	\$0	\$35,236	\$33,083	\$0	\$32,457	\$32,737	\$33,467	\$33,855
Information	\$36,015	\$34,284	\$32,316	\$34,084	\$34,872	\$34,418	\$33,587	\$32,245	\$29,331
Finance and insurance	\$45,136	\$46,633	\$48,714	\$52,018	\$50,645	\$53,535	\$56,224	\$58,993	\$58,976
Real estate, rental and leasing	\$24,837	\$23,461	\$29,892	\$30,474	\$28,784	\$28,662	\$36,410	\$29,633	\$28,622
Professional, technical services	\$48,085	\$49,573	\$50,616	\$45,739	\$43,485	\$44,386	\$47,840	\$49,065	\$51,683
Health care, social assistance	\$35,267	\$35,689	\$36,469	\$37,244	\$37,531	\$39,211	\$38,289	\$40,446	\$40,379
Arts, entertainment, recreation	\$16,386	\$16,656	\$19,245	\$19,981	\$19,525	\$19,275	\$17,453	\$19,620	\$51,189
Accommodation, food services	\$13,492	\$13,709	\$13,691	\$13,741	\$13,338	\$13,227	\$13,263	\$13,121	\$14,453
Government total	\$42,098	\$41,880	\$41,120	\$42,748	\$40,783	\$39,473	\$42,632	\$43,170	\$45,973
CPI	130.7	136.2	140.3	144.5	148.2	152.4	156.9	160.5	163

	1999	2000	2001	2002	2003	2004	2005	2006
Total Covered - all ownerships	\$39,980	\$39,612	\$39,757	\$40,487	\$41,350	\$41,301	\$41,538	\$42,831
Private ownership	\$38,325	\$38,864	\$38,597	\$39,055	\$39,855	\$39,992	\$40,515	\$41,820
Construction	\$37,413	\$0	\$0	\$0	\$0	\$0	\$0	
Manufacturing	\$53,262	\$57,717	\$61,843	\$67,016	\$63,759	\$63,649	\$62,438	\$62,726
Service Providing	\$36,885	\$37,024	\$36,421	\$36,631	\$37,750	\$37,858	\$38,545	\$40,179
Trade, Transportation, Utilities	\$27,434	\$27,237	\$27,629	\$26,405	\$25,510	\$26,666	\$26,886	\$27,393
Retail trade	\$20,950	\$21,109	\$21,434	\$20,517	\$21,054	\$21,815	\$21,609	\$21,225
Transportation and warehousing	\$35,981	\$35,134	\$34,658	\$34,946	\$33,529	\$35,093	\$36,354	\$38,481
Information	\$35,431	\$38,084	\$44,184	\$40,948	\$42,085	\$43,268	\$41,292	\$40,257
Finance and insurance	\$58,040	\$63,585	\$63,731	\$64,815	\$75,585	\$79,044	\$81,554	\$85,101
Real estate and rental and leasing	\$34,008	\$30,396	\$33,405	\$33,790	\$35,596	\$35,540	\$34,392	\$34,301
Professional, technical services	\$53,661	\$52,127	\$51,920	\$50,520	\$57,045	\$57,654	\$59,034	\$61,270
Health care and social assistance	\$43,591	\$43,290	\$40,683	\$42,415	\$42,048	\$41,610	\$43,333	\$46,086
Arts, entertainment, and recreation	\$40,048	\$56,532	\$21,014	\$24,573	\$28,043	\$37,500	\$24,607	\$23,877
Accommodation and food services	\$14,715	\$15,489	\$15,578	\$16,380	\$16,492	\$17,239	\$17,208	\$17,063
Government total	\$46,559	\$42,307	\$43,960	\$45,674	\$46,596	\$45,700	\$44,817	\$46,092
CPI	166.6	172.2	177.1	179.7	184	188.9	195.3	

APPENDIX 22**Average Annual Unemployment Rate: U.S., Vermont, New England, Chittenden County, Burlington, 1984-2006**Source: NE & U.S.: BLS, http://www.bls.gov/xg_shells/ro1xg02.htm#rate

U.S.: Series LNU04000000; N.E.: Series LAURD81000003; VT: LAUST50000003

Chitt Cty: LAUPA50010003; Burlington: LAUCT50005003

	U.S.	N.E.	VT	Chitt. Cty.	Burlington
1984	7.5	4.9	4.9	****NOTE****	
1985	7.2	4.4	4.8		
1986	7.0	3.9	4.4		
1987	6.2	3.3	3.8		
1988	5.5	3.1	3.0		
1989	5.3	3.9	3.6		
1990	5.6	5.8	4.9	3.9	4.6
1991	6.9	7.8	6.6	4.9	5.3
1992	7.5	8.1	6.4	4.6	5.0
1993	6.9	6.9	5.3	3.8	4.1
1994	6.1	5.9	4.6	3.1	3.7
1995	5.6	5.3	4.3	2.9	3.3
1996	5.4	4.8	4.4	2.9	3.5
1997	4.9	4.4	4.0	2.6	3.1
1998	4.5	3.5	3.1	2.0	2.6
1999	4.2	3.2	2.9	1.8	2.2
2000	4.0	2.8	2.7	2.2	2.4
2001	4.7	3.6	3.3	2.8	3.0
2002	5.8	4.8	4.0	3.6	3.7
2003	6.0	5.4	4.5	4.0	4.2
2004	5.5	4.9	3.7	3.2	3.5
2005	5.1	4.7	3.4	3.1	3.1
2006	4.6	4.6	3.6	3.2	2.8

****NOTE**** Data not available

APPENDIX 23**Unemployment by Age, Burlington, Chittenden County, US: 2000**

Source: U.S. Census Bureau, U.S. Census 2000: (SF3), Table QT-P24

	16-19 yrs.	20-24 yrs.	25-54 yrs.	55-64 yrs.	Total
Burlington	298	332	526	59	1,222
Chitt. County	760	741	1,278	196	3,367
U.S.	1,474,882	1,466,888	4,251,038	484,631	7,947,286
	16-19 yrs.	20-24 yrs.	25-54 yrs.	55-64 yrs.	
Burlington	24.4%	27.2%	43.0%	4.8%	
Chittenden County	22.6%	27.9%	38.0%	5.8%	
U.S.	18.6%	18.5%	53.5%	6.1%	

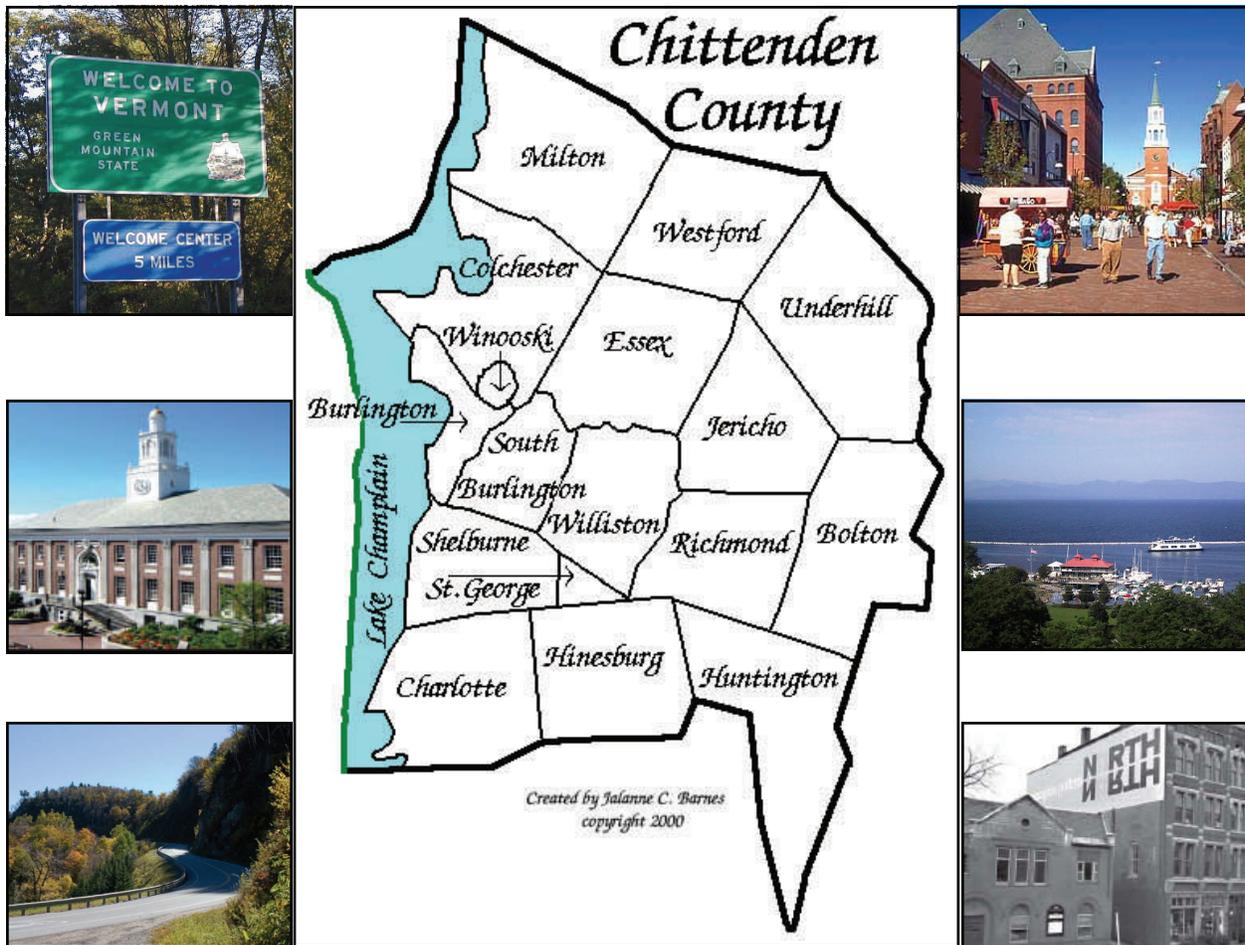
Unemployment by Age for Burlington, Chittenden County, US: 1990

Source: U.S. Census Bureau, U.S. Census 1990: Labor Force Characteristics, Table 173

	16-19 yrs.	20-24 yrs.	25-54 yrs.	55-64 yrs.	Total
Burlington	192	394	731	74	1,409
Chitt. County	589	634	1,912	172	3,350
U.S.	1,211,850	1,374,257	4,530,663	494,297	7,792,248

	16-19 yrs.	20-24 yrs.	25-54 yrs.	55-64 yrs.
Burlington	13.6%	28.0%	51.9%	5.3%
Chitt. County	17.6%	18.9%	57.1%	5.1%
U.S.	15.6%	17.6%	58.1%	6.3%

2008 Chittenden County Business Survey Results



Created by Jalande C. Barnes
copyright 2000



2008 Chittenden County Business Survey Results

Table of Contents

Executive Summary	3
Introduction and Methods	4
General Demographics	4
Expansion Plans	6
Business Assistance Organizations	7
Recruitment	9
Training Needs	10
Energy Use and Conservation	11
Best Factors of Operating in the Region	12
Most Challenging Factors of Operating in the Region	14
Conclusions	15
Recommendations	15

Executive Summary

The Chittenden County Business Survey is completed periodically by Burlington's Community and Economic Development Office. The survey was last taken in 1994, and results from this 2008 update were compared to past findings. Surveys were distributed to 84 of the largest employers in the county and ultimately completed by 25% of these organizations. Questions included demographic information, such as company size, employees, and expected growth, as well as organizational needs, covering assistance, recruitment, and training, energy conservation, and advantages and disadvantages of operating in the area.

While companies are cautious about the national economic climate, particularly energy costs, most appear stable and continue to plan moderate growth. No organization surveyed plans to relocate outside of Vermont, although more are planning to expand outside Chittenden County. Businesses also rate quality of life as the best factor of operating in the region, a strong indicator in Burlington's ability to retain and attract new companies to the area.

There do exist some opportunities to improve conditions. Most businesses have few difficulties recruiting workers and appreciate the quality of schools and the labor force; however, there remains a challenge in finding sufficient workers with technical, engineering, or scientific skills. By further improving training programs, the regions can enable more residents to find these well-paying jobs. While many companies are worried about energy costs, over 80% are also already working to conserve energy and 70% are interested in learning about new opportunities. The region's strong network of local energy and environmental agencies will also be an asset to this process.

Introduction and Methods:

Surveys of a number of the largest employers of Chittenden County have been completed periodically by the Burlington Community and Economic Development Office. Since the last survey in 1994, however, there have been significant changes within Burlington and the region. This 2008 update is valuable both in its comparative value to the 1994 survey and on its own, as the City of Burlington works to determine how it can best support and sustain a healthy regional business climate.

The 84 businesses which employed the greatest number of people in Chittenden County were mailed a pre-notification of the 2008 survey, which followed in the mail. Companies could either return the paper copy of this survey or complete an identical survey on-line. Organizations that failed to return the survey were given follow-up phone calls, which ultimately obtained a 25% response rate. The businesses that responded include a mix of the areas many different industries, including production, manufacturing, scientific/technical, social services, temporary agencies, and retail establishments.

General Demographics:

While the average company in 2008 is somewhat larger than in 1994 and the survey size somewhat smaller, most responses to the survey did not deviate significantly from past views. More companies own space than lease, to be expected with larger companies. Similarly with finance, these companies either can obtain or don't need most types of available capital.

A few exceptions to this general trend were found in the need for financing. Given the companies surveyed are generally larger than those surveyed in 1994, that fewer companies need financing could either result from their size or from efforts to improve capital availability. A greater percentage of the 2008 businesses also own their own locations and plan to increase their employees by a greater amount, both of which are also likely caused by their greater size. General business demographics and financing information can be found on the following page.

Business Demographics					
	2008 Respondents			1994 Respondents	
	Total	Average	Median	Total	Average
Respondents	21			76	
Independently Owned (n=20)	80%			92.1%	
2008 Full Time Employment (n=20)	4137	197	157	3227	47
Growth in Full Time Employment 2004-2007/1991-1994 (n=19)	643	34	10	265	4
Expected Growth in Full Time Employment 2007-2010/1994-1997 (n=18)	572	32	10	539	9
Size (sq. ft.) (n=18)	933,006	51,834	42,500	947,691	13,348
Own*	74 %			44 %	
Lease*	58 %			58 %	
Percent of Available Space Utilized (n=18)	96 %			92 %	
* Does not add to 100% because some respondents both own and lease.					

Financing								
	Able to obtain		Tried but turned down		Haven't tried but need		Don't need	
	2008	1994	2008	1994	2008	1994	2008	1994
Working Capital	68%	59%	0%	15%	5%	5%	26%	20%
Equipment Loan	61%	53%	0%	8%	0%	3%	39%	36%
Commercial/Industrial Mortgage	63%	40%	0%	1%	0%	7%	37%	51%
Venture Capital	6%	18%	0%	12%	0%	6%	94%	64%

Expansion Plans:

A key factor in retaining businesses in Burlington and Chittenden County is understanding where local companies choose to expand, as well as their reasons for doing so. Since 1994, there are several trends worth exploring when observing business expansion plans. A significant number of companies are no longer planning to expand at their current site, and the number which plan to expand at a new site in Burlington remains small. There is some positive news in that fewer companies plan to relocate outside of Vermont, but more plan to relocate out of Chittenden County. The size difference in companies surveyed may partially explain this trend; given that large regional employers may plan to expand statewide while remaining in Vermont, but nonetheless, the trend is positive.

Expansion Plans (n=18)			
	2008 Total	2008 %	1994 %
Planning to expand	13	72.22%	78.70%
At current site	5	27.78%	52.50%
At a new site in Burlington	1	5.56%	8.50%
At a new site outside of Burlington but within Chittenden County	3	16.67%	27.10%
At a new site outside of Chittenden County but in Vermont	5	27.78%	10.20%
Relocate outside of Vermont	0	0.00%	25.40%

The chart on the following page catalogues the given reasons for companies expansion predictions (for those planning to expand outside of Chittenden County). The top three reasons given in both years are Closer Proximity to Markets, Land/Building Availability, and Taxes. While taxes moved from first to third from 1994 to 2008, (a positive sign as it is more challenging for government policy to affect the other two expansion factors), that taxes continue to remain a disadvantage for businesses is a challenge which more can still be done to address.

Reasons for Expanding Outside of Chittenden County (n=9)			
	Total	2008 Rank	1994 Rank
Closer Proximity of Markets	6	1	2
Land/Building Availability and Cost	4	2	3
Taxes	2	3	1
Transportation Consideration	2	4	4
Labor Availability	2	5	6
Labor Costs	1	6	5
Other: Program Convenience	1	7	
Closer Proximity of Suppliers	0	8	7
Access to Financing	0	9	8

Business Assistance Organizations:

To measure firms' perceptions of local business assistance organizations, the survey asked whether businesses had used any of a number of local business assistance organizations, and if so, what was their opinion of the services they had received. There were relatively few differences between 1994 and 2008. More than three-quarters of businesses were familiar with the Chamber of Commerce, UVM, and the Vermont Economic Development Authority (VEDA). More than 25% of businesses had used these three companies, Greater Burlington Industrial Corporation (GBIC), and the Vermont Economic Development Department (VEDD).

Of these most-used companies, all except UVM received at least a 66% favorable response rating. The highest favorable rating was received by GBIC, and the Chamber of Commerce has the highest increase in favorable ratings, moving from 53% in 1994 to 74% in 2008. The sample sizes of businesses who had used each organization were too small to adequately determine whether opinions had changed significantly, but overall, both familiarity and opinion appeared to match up relatively evenly.

Firms' Opinions of Business Assistance Organizations				% Favorable Response	
	Favorable	Neutral	Unfavorable	2008	1994
Chamber of Commerce (n=15)	11	4	0	73.33%	52.9%
Greater Burlington Industrial Corporation (n=8)	7	0	1	87.5%	91.7%
University of Vermont (n=13)	8	4	1	61.54%	60%
Small Business Administrative Loans (n=4)	2	2	0	50%	92.3%
Vermont Economic Development Authority (n=8)	6	1	1	75%	90.9%
Small Business Development Center (n=1)	0	1	0	0%	28.6%
Vermont Economic Development Department (n=6)	4	1	1	66.67%	60%
Small Business Innovation Research (n=0)	0	0	0	N/A	50%
Burlington Economic Development Office (n=5)	3	2	0	60%	80%
US Department of Commerce (n=3)	3	0	0	100%	60%
Federal/State Export Program (n=1)	0	1	0	0%	66.7%
Vermont Job Start (n=1)	0	0	1	0%	66.7%
Burlington Revolving Loan Program (n=0)	0	0	0	0%	0%
Firms' Familiarity with Business Assistance Organizations					
	Used	Familiar	Not Familiar	% not familiar	
				2008	1994
Chamber of Commerce (n=20)	15	5	0	0.00%	8.60%
Greater Burlington Industrial Corporation (n=19)	8	6	5	26.32%	11.40%
University of Vermont (n=20)	13	5	2	10.00%	16.90%
Small Business Administrative Loans (n=19)	4	9	6	31.58%	4.20%
Vermont Economic Development Authority (n=19)	8	8	3	15.79%	19.70%
Small Business Development Center (n=19)	1	10	8	42.11%	41.40%
Vermont Economic Development Department (n=19)	6	8	5	26.32%	31.90%
Small Business Innovation Research (n=19)	0	8	11	57.89%	49.30%
Burlington Economic Development Office (n=19)	5	7	7	36.84%	21.10%
US Department of Commerce (n=19)	3	11	5	26.32%	35.30%
Federal/State Export Program (n=19)	1	8	10	52.63%	30.00%
Vermont Job Start (n=19)	1	12	6	31.58%	47.10%
Burlington Revolving Loan Program (n=19)	0	6	13	68.42%	58.00%

Recruitment:

While unemployment has remained relatively low in the past decade, one of the main challenges in supporting businesses and workers remains understanding the characteristics of occupations in high demand. This understanding, particularly of any major shifts over time, can enable new training programs and other efforts to assist the business and labor markets.

The results from this survey question show a general trend where employers have the most difficulty finding qualified workers with technical, engineering, and scientific skills. This field has greatly increased since 1994, when there was only moderate demand for these workers. There also remains relatively strong demand for skilled and semi-skilled production workers, although this has declined since the last survey, likely caused by the continued decline in manufacturing.

Unskilled, clerical, and administrative/managerial employees have remained relatively easy for businesses to find; however, sales and marketing employees have become significantly easier to find since 1994. Likely causes of these effects include the increased general education levels of Burlington and Chittenden County residents and the student population, which supports a large supply of unskilled, clerical, and sales workers.

This clear disparity between technical and professional/pre-professional work suggests that continued training programs for technical fields may yield significant results, as there remains a high demand for these workers.

Companies with Recruiting Challenges by Employee Type		
	2008 (n=17)	1994
Technical	9	7
Engineering and Scientific	9	4
Skilled Production	7	14
Semi-skilled Production	4	6
Sales and Marketing	4	16
Unskilled	4	3
Clerical	3	4
Administrative/ Managerial	3	3
Other: Clinical	1	
Other: Human Service Professionals	1	

Training Needs:

Responses to whether specialized employee training would be helpful led to less clear results than the previous question on recruitment. Each company had a different protocol; a significant number of organizations responded that they completed all employee training internally or had no interest in training assistance. Businesses that did respond had an even balance between the same need for managerial and production employee training. For management, companies were primarily interested in general Management Training and Problem Analysis Techniques. Production employee training focused on technical skills such as CNC Operation, Blueprint Reading, and Computer Aided Drawing or Manufacturing.

Specialized Training Needs (n=12)	
	Total:
Management:	
Management Training	5
Problem Analysis Techniques	4
Waste Disposal and Recycling	3
Strategic Planning	2
Creating Flexible Work Teams	2
Transportation	1
Production:	
CNC Operation	4
Blueprint Reading	4
Computer Aided Drawing or Manufacturing	3
Basic Math	2
Programming	2
Other: Health Information	1
Other: Tolerance	1

Energy Use and Conservation:

A new section on the 2008 business survey asked about energy use and conservation, expanding on two questions originally in the demographics section of the 1994 survey. Given the recent increase in energy prices, and as Burlington updates its Climate Action Plan, understanding local companies' views on energy use can provide a baseline for future efforts to help businesses cut costs and reduce their greenhouse gas emissions.

The responses to this survey question were largely positive. 84% of companies agree or strongly agree that energy is a major cost for their organization, twice as many as in 1994, and nearly 75% of companies agree or strongly agree that they would be interested in learning more about energy conservation programs, up from 47% in 1994. Again, over 80% and 90% of companies surveyed respectively agree or strongly agree that their organization is already working to reduce their energy use and that energy reduction programs would benefit their company.

Energy Use and Conservation						% Agree	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	2008	1994
Energy is a major cost for our organization (n=19)	10	6	2	1	0	84.2%	38.7%
Energy reduction programs would benefit our organization. (n=17)	7	9	1	0	0	94.1%	
Our organization is interested in learning more about energy conservation programs. (n=15)	4	7	4	0	0	73.3%	47.1%
Our organization is already working to reduce our energy use. (n=19)	10	6	3	0	0	84.2%	

Best Factors of Operating in the Region:

Both the structural and perceived benefits and challenges of operating in the region are important in attracting and retaining businesses. What companies view as the best features of the region include some that have been promoted along with others that may have been overlooked. By examining these views, Burlington has the opportunity to possibly brand or further advertise certain opportunities while publicly addressing or solving the difficulties that have been raised.

Quality of life is by far the greatest advantage seen by companies to operate in the area, with 72% of respondents referring to it as an advantage and none as a disadvantage. This response moved from being ranked 5th in 1994 to first in 2008, where it received more than twice as many votes as any other category. This is an area where the region can continue to use this reputation to attract more companies that appreciate this value (and who will in turn support efforts to retain and improve this feature). Burlington also has the opportunity to modify its definition of what quality of life includes, whether this is environmental sustainability or livable wages. Additional positives to this include that the rank of companies referring to this as an asset of operating in the area increased from 5th place in 1994 to 1st in 2008.

While availability of labor and quality of schools are seen as positive by a number of companies, others are still having significant difficulty recruiting qualified applicants (as seen in the list of the most challenging operating factors). This disparity may indicate a gap either in the types of employees the companies recruit or that more needs to be done outside of traditional educational methods in providing needed skills and matching jobs and qualified employees.

Telecommunications has also declined slightly as an asset, as has utilities capacity. These factors remain a net positive for operating in the region; however, a likely cause of this decline is that infrastructure development in the region overall has simply not kept pace with other locations across the country, or that a basic level is simply taken for granted. Telecommunication needs have also changed over time, as companies have become more dependent on specialized technology needs such as website development which the city is less able to support or influence.

Best Operating Factors (n=18)			
	Total	2008 Rank	1994 Rank
Quality of life	13	1	5
Highway access	7	2	
Availability of labor	7	2	
Quality of schools	6	4	
Telecommunications	4	5	1
Quality of local economic development sources	3	6	9
Labor force skills	3	6	
Air transportation	3	6	10
Access to suppliers	3	6	2
Utilities Capacity	2	10	3
Other:	2	10	
Availability of bank loans	2	10	4
Company History	2	10	
Zoning	1		8
Road quality	1		
Energy costs	1		7
Availability of land, buildings	1		
Rail service	0		
Property taxes	0		6

Most Challenging Factors of Operating in the Region:

As of 2008, property taxes are now viewed as the single most difficult factor of operating in the region. This indicates a significant challenge for Burlington and the surrounding community, as local governments must balance efforts to maintain services while retaining businesses and homeowners struggling with high property taxes. Zoning also remains a challenge, but the land and buildings are more available than they were in 1994, hopefully maintaining a balance that allows for sustainable development.

Energy costs will continue to be an important factor in local businesses, particularly in the realm of transportation. That energy costs are now high on this list is consistent with the previous question regarding energy use and conservation and indicates that efforts to help companies reduce their energy bills may be more successful than past

Most Challenging Operating Factors (n=18)			
	Total	2008 Rank	1994 Rank
Property taxes	13	1	
Labor force skills	10	2	10
Availability of labor	7	3	1
Energy costs	5	4	
Highway access	5	5	6
Zoning	5	5	
Access to suppliers	4	7	
Road quality	4	7	7
Air transportation	3	9	8
Availability of land, buildings	2	10	3
Quality of local economic development sources	2	10	
Telecommunications	2	10	
Utilities Capacity	1		
Other: Using out-of-state Contractors for in-state work	1		
Availability of bank loans	0		
Rail service	0		5
Quality of life	0		
Quality of schools	0		4

Conclusions:

In today's economy, Chittenden County businesses appear hesitant, as the slowing national economy and rising costs are leading to more cautious growth. While in 1994 projected 3-year growth was nearly double growth from the past 3-year period, in 2008 companies are projecting slower growth than took place from 2004-2007. However, this data projecting the number of new hires is likely somewhat skewed by the current perception of a national recession and its potential impacts. The years from 1994-1997 also involved the national economy's recovery from the prior recession, explaining the period's high employment growth rate.

Property taxes and energy costs are leading concerns for businesses, and some employers still find it difficult to recruit employees, particularly in technical fields. However, most feel the labor market is relatively strong and appreciate Burlington's quality of life. Many companies have also already started or are open to support in reducing their energy costs.

The large companies surveyed have few financing problems and most plan to expand, but not in Burlington. As Chittenden County has become more developed, more of these companies are expanding to outside the region, although remaining in state.

Most companies are either aware of or have used a number of the local business assistance organizations. Fewer than 10% had an unfavorable experience, and approximately two-thirds had a favorable experience with a given organization.

Recommendations:

- Support technical education and training efforts to provide workers with well-paying jobs and businesses with quality employees.
 - Continue to work with area businesses to reduce energy use and collaborate with organizations already working toward this goal such as BED, Efficiency Vermont, Vermont Gas, and the 10 Percent Challenge.
 - Continue efforts to take advantage of Burlington's quality of life and other assets to retain and recruit companies, using the existing network of business assistance organizations to address financial and technical challenges where possible.
 - Given the high level of concern about the property tax efforts should be made, if possible, to correct any misconceptions about the relative area tax rate and to find other revenue sources which may serve as effective substitutes.
-

Supplement B



CEDO - Burlington Economic Summit February 13, 2009 Contois Auditorium, City Hall

With the theme of “Building a Vision for Our Community’s Economic Future,” the Burlington Economic Summit took place on February 13, 2009 at City Hall. In response to the economic crisis of 2008/2009, the City’s Community & Economic Development Office (CEDO) capped off a series of meetings held over the winter by inviting members of the business community, along with City residents, to collaborate on developing ideas for strengthening the community and building sustainable economic growth. The purpose of the Summit was to have attendees expand upon eleven goals that were previously established by CEDO, incorporated into the City’s 1995, 2000, and 2003 Consolidated Plans, and approved by the City Council. Participants offered specific ideas regarding how best to achieve each goal over the next five years.

The Summit was co-sponsored by CEDO and the Micro-Business Alliance, a group of local business technical service providers, government agencies, commercial lenders, and academics. Turnout for the Summit was impressive, demonstrating the incredible dedication, engagement, and interest of the Burlington community in generating new ideas for economic development and civic improvement. The Summit can be viewed not only as a response to the economic crisis, but also as a continuation of CEDO’s efforts over its twenty-five year history.

CEDO feels strongly that small businesses are an integral part of the community and it is critical to provide support to these entrepreneurs so that they may help our community to overcome the current economic recession. It is important to be proactive and provide businesses with the core resources that they need to thrive and be successful. The

Economic Summit provided direction and ideas which will contribute further to the programs and services available for small business owners.

Organizations represented at the Summit included:

Lisman, Webster & Leckerling
Burlington Planning & Zoning Office
Big Heavy World
Green River Pictures
Hands On Productions
Small Business Development Center (SBA)
City Market
Greater Burlington Industrial Corporation
Burlington College
Recycle North
Planning Commissioners Journal
Long Meadow Financial Services
Northfield Savings Bank
Champlain Housing Trust
Redstone Commercial Management
Burlington Children's Space
Financial Scribes
The Bobbin
Community College of Vermont
Opportunities Credit Union
VT Department of Labor
Vermont Works For Women
Service Core of Retired Executives (SCORE)
University of Vermont
Divergence Design
Key Bank
Town of Colchester
Champlain Valley Office of Economic Opportunity (CVOEO)
Vermont Employee Ownership Center
Small Business Administration (SBA)
Vermont Sustainable Exchange
Front Porch Forum
Girlington Garage
Umpteen Productions
U.S. Department of Agriculture – Rural Development
Burlington Free Press
South End Arts and Business Association (SEABA)
Mercy Connections
Vermont Adult Learning
Ben & Jerry's

Hundreds of recommendations were offered during the Summit. The new ideas that received the highest number of votes from those attending were:

1. Create a public market and business incubator at the Armory building at 131 Main Street
2. Year-round farmers market
3. Re-naturalize the shoreline on the northern waterfront
4. Offer affordable incubator space in underutilized buildings
5. Commuter trains – rails are in place
6. Offer affordable legal and consulting support for local businesses
7. Expand the idea of “downtown” business area (geographically)
8. Harness steam from McNeil Plant to heat greenhouses
9. More frequent roundtables to connect people to jobs and to consider students as part of the labor force
10. Bluff area – from Burlington College to Lakeview Terrace, should have walking paths allowing access from the Old North End to the Waterfront
11. Pine Street area – Expand arts/culture district
12. Distribute accurate information about City departments, programs, events, and contact information (posted centrally, possibly in flow-chart form and accessible via the web)
13. Use education facilities more effectively – when not in use by the institution, use the space for workshops, trainings, etc.

14. Promote green building as an industry cluster
15. Create branding, software, packaging, and a distribution network to market VT products.

Economic Development Goals

The eleven previously established Economic Development Goals served as the basis for the Summit and the foundation upon which to build new ideas. These goals focus on several interrelated issues, including small businesses, the waterfront, environmental resources, and community life.

1. The quality of life in Burlington is enhanced by a strong, diverse, and vital downtown
2. Burlington's waterfront is developed as a cultural, recreational, social and economic resource for the entire community through the implementation of the Urban Renewal Plan for the Waterfront Revitalization District
3. Businesses that offer essential goods and services are located within the City, readily available to all residents
4. The startup and expansion of businesses is nurtured, including the support of a readily accessible core of centrally located business services
5. Burlington's 200+ acre agricultural breadbasket – home to market farming, community-supported agriculture, community gardens, farmer training, and composting – thrives
6. Burlington continues to generate a strong, diverse base of locally-owned enterprises

7. Sites with real or perceived contamination issues are developed into productive use
8. Quality employment supports and opportunities are available for those who are traditionally underserved, and workers are earning a livable wage
9. Transportation needs are addressed, traffic congestion reduced, access in and around downtown improved and greater use of alternate modes of transportation promoted
10. Burlington's competitive advantages are maximized by supporting the development of targeted industries, including tourism, telecommunications-intensive businesses and the environmental technology industry, financial services, specialty foods, media, printing and publishing, the arts, and sustainable natural resource promotion
11. New cooperative relationships are developed between the City and other communities in the region to strengthen the regional economy for the benefit of all

Prior to the Economic Summit, three meetings were convened by CEDO, at City Hall, to address specific components of the economic crisis. The first meeting was held to discuss the state of commercial lending in the region and the problem of a worsening environment for small businesses to borrow money. 40 people attended the meeting including commercial lenders, alternative lenders, the State Treasurer and a representative from Senator Bernie Sander's office. Outcomes of the meeting included:

- A statement from the SBA that 50% of calls to their hotline consisted of people interested in starting a business, demonstrating a clear need to create funding for small start-ups.
- Community Capital reported that there was a 150% increase in the amount of people who were interested in starting a new business.
- The Champlain Valley Office of Economic Opportunity (CVOEO) stated that they have many customers who would like to get funding for start-up businesses, but there is simply no place to send them
- With a diminishing job market for recent college graduates, St. Michael's College stated that they believe many students will be looking into starting their own businesses due to lack of other options.

Focused on economic development, the second meeting was convened on December 15, 2008. News from the first meeting on the state of commercial lending was shared with the group, which included staff members of ReCycle North, CVOEO, SCORE, the Small Business Administration (SBA), St. Michael's College, and Vermont Venture Network. With rumors swirling about local layoffs, the group also focused on how economic development professionals and technical service providers can best manage this aspect of the economic decline. According to Bruce Seifer, Assistant Director for Economic Development for Burlington's Community & Economic Development Office, "We need to encourage and provide a system of support for entrepreneurship." Dan Rosenfeld, from the Vermont Center for Emerging Technologies (VCET), spoke about their training program for entrepreneurs and traditional incubator services for businesses.

These programs and services offer some options to people who have been laid off and are thinking about starting a new business. Another discussion topic centered on the cycle of job creation and elimination, also known as “job churn.” As establishments start up and shut down, or expand or contract, jobs are continually created and eliminated. This cycle can be dramatic, with jobs created and destroyed in any one year sometimes reaching 10% or more of average total employment. Net gains and losses in jobs in government and goods-producing sectors can be particularly dramatic relative to the more modest net changes in service-providing establishments. Job churn is an economic development issue that needs to be more thoroughly understood in our local context. Also covered was the fact that many college students seem to be concerned about what they will do upon graduating as well as the lack of funds available for start-up businesses in the community.

A third meeting was held on January 7, 2009. The focus was “Workforce Re-training in an Era of Layoffs.” Attended primarily by workforce training and business technical assistance providers, there was a strong emphasis on working together as a group. The format of the meeting was a round-table discussion based on three questions that were asked of local business owners;

1. What re-training programs does your organization offer, that are available to displaced workers who receive a stipend from their employer?
2. What can we, as service providers, do to coordinate our services and programs to make them easier to access?
3. Can we develop new programs or find new ways to collaborate in order to proactively respond to any further layoffs?

With everyone at the table answering these questions, attendees gained knowledge of the tremendous programming innovations happening at organizations such as Vermont Adult Learning, ReCycle North, and Vermont Works for Women. A discussion of the many opportunities for collaboration and client sharing followed. Bruce Seifer brought up the fact that many people are training for jobs that are not in demand, while other fields that are in need of workers cannot find enough people who are adequately trained. For example, the software development, aviation, and biosciences industries have a shortage of workers, but there are not enough people with sufficient training in these fields. The discussion again centered on the rumors of pending layoffs and what could be done to steer displaced workers into these programs, and in the process fill some of the excess demand in specific sectors of the economy.

Conclusions

The Burlington Economic Summit along with the three meetings leading up to it, served as a forum where members of the Burlington community could come together and work collaboratively to create a collective vision for the future. The Summit also provided an opportunity for members of the Congressional delegations' staff to offer updated information regarding the Federal Stimulus Package and how it would affect Vermont and Burlington. During the Summit, attendees were encouraged to expand on the City's eleven existing economic development goals, creating a prioritized list of specific ideas to consider for future action. Creating an opportunity for business owners and residents to share their ideas and concerns about our local economy is another example of CEDO's efforts over the years to engage the public in visioning and shaping

the community's future. However, much work still needs to be done to transform these ideas into actual projects. Community members must ask themselves, "What can we do together to achieve these goals over the next five years?" "What can we afford and what are we willing to pay for?" In an effort to initiate the next step in this process and spur action, CEDO has made this report available via its website. This report will also be included in CEDO's strategic 25-year economic plan and as an appendix in our recently completed economic report, *Jobs & People IV*. Whether the ideas generated during the Summit are put into place or not will depend largely on the involvement and commitment of the entire community. Government agencies, City residents, for-profit businesses, and non-profit organizations must all take the next steps together if we hope to make this vision a reality.