

State of the Workforce 2002

LABOR SUPPLY DECLINE IN GREATER NEW HAVEN



PRESENTED BY

THE REGIONAL WORKFORCE DEVELOPMENT BOARD

GREATER NEW HAVEN, CONNECTICUT

State of the Workforce 2002

Labor Supply Decline in Greater New Haven

Prepared by:
Paul E. Harrington
and
Neeta P. Fogg
Center for Labor Market Studies
Northeastern University
Boston Massachusetts

Table of Contents

Introduction.....	1
Labor Force Developments in Connecticut and New Haven.....	2
Gender Differences in Labor Force Growth.....	5
Sources of Labor Force Decline in Connecticut and the New Haven Region.....	7
The Role of Population Growth.....	7
Trends in the Working Age Population	8
Changes in the Labor Force Participation Rate	11
Labor Force Constraints on New Job Creation.....	20
Industry Employment Developments	25
Income and Poverty Developments	29
Trends in the Real Median Household Income	30
Trends in the Real Median Family Income	32
Individual Poverty in the New Haven Region.....	40
Family Poverty in the New Haven Region	44
Summary and Conclusions	51

Introduction

The ability of a regional economy to provide employment growth and economic prosperity is dependent on the availability of economic resources. Indeed, much of state and regional economic development strategy is designed to increase the availability of such resources to create jobs and income. Strategies to provide improved land utilization, enhance capital availability to firms, and infrastructure investment to spur economic growth are all examples of regional and state efforts to develop economic activity. However, physical and financial resources are only part of the economic growth equation. Access to sufficient quantities of high quality labor supply also heavily influences the ability of a regional economy to grow, create jobs, increase incomes, and reduce problems of poverty and income inadequacy.

The decade of the 1990s was characterized by a slowdown in the rate of labor force growth in the nation. In fact, during the 1970s and 1980s the nation's labor markets experienced rapid labor force growth that resulted in substantial problems of excess labor supply. High unemployment rates were viewed as core labor market problems during most the 1970s and much of the 1980s, until the peak of the economic boom that occurred at the end of that decade.¹ However, during the 1990s the slowing of labor force growth, coupled with strong growth in labor demand (following the early 1990s recession), pushed the nation's unemployment rate down to the 4.0 percent level by the end of 2000, the lowest national unemployment rate since the 1960s. In New England the unemployment rate fell to an annual average rate of just 2.8 percent by 2000, reaching a 40 year low. Connecticut's unemployment rate was even lower than that of the New England region as a whole, falling to the extraordinarily low level of just 2.3 percent on average during 2000.

The reduction of unemployment rates to these "over full-employment levels" shifted the core set of labor market issues for workforce boards from a perspective of dealing with high unemployment and labor surplus to responding to problems of labor shortages and skill deficits. Increasing evidence of labor shortages developed throughout

New England during the latter half of the 1990s, especially in Connecticut and Massachusetts—two states characterized by an industry structure weighted toward a more high-end labor demand for college graduates.²

As we will discuss in greater detail below, the tightness that characterized the Connecticut and New England regional labor markets at the end of the 1990s was in large measure attributable to very slow growth in regional labor supply. The employment situation has changed considerably in Connecticut and the region as a whole over the past 22 months, as labor demand has declined with the onset of a national economic recession. Indeed, the number of unemployed workers in Connecticut (and the region as a whole) has increased by about 70 percent since January of 2001. By October of 2002, the state's unemployment rate increased by 1.7 points to 4.2 percent. Despite the rising unemployment rate in the state and the region, there is substantial reason to believe that labor shortages will once again materialize as the economic recovery gets underway, and the nation resumes a strong and consistent path of business expansion. Labor supply issues—both in quantity and quality will loom large in the economic growth debate in Connecticut and the Greater New Haven area in the next decade.

Labor Force Developments in Connecticut and New Haven

Information on trends in labor force growth that can provide detailed insight into a variety of labor supply developments at the state and local level have just been released by the U.S. Bureau of the Census, as part of its 2000 decennial census program. These data differ from that released by the Connecticut Department of Labor's labor market information program in a number of important ways. For our purposes, the census findings provide critical insights into not only trends in the size of state and local labor force, but also information on key labor force characteristics—information that is

¹ Andrew Sum, et al. *Labor Force Growth in New England: Past Current and Future Trends and Their Implications for Workforce Development Policy*, Center for Labor Market Studies, Northeastern University, June 2002.

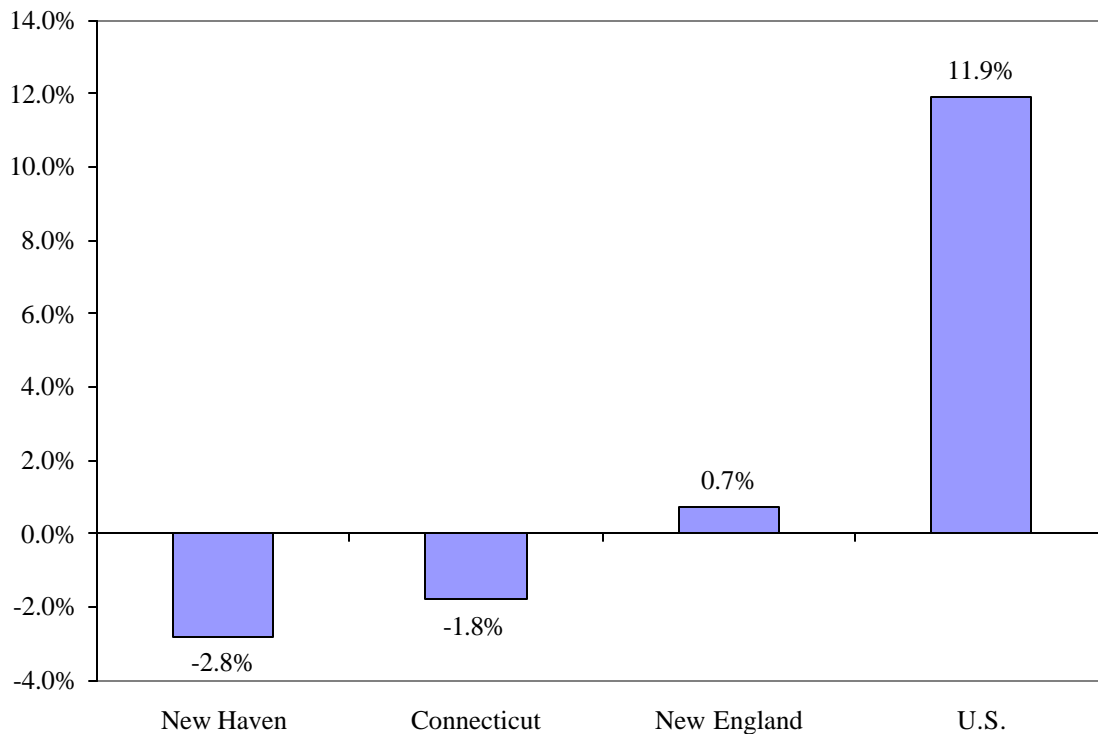
² See: (i) Neeta P. Fogg and Paul E. Harrington, *Threats to Sustained Economic Growth*, The New England Council September, 2000; (ii) Neeta P. Fogg and Paul E. Harrington, *Teacher Labor Market Imbalances in Massachusetts*, The New England Council, August, 2001

essential to properly developing effective human resource program strategies that can effectively respond to labor supply issues.

The labor force is widely used as a proxy for available labor supply to a state or region. An area's labor force is simply made up of all those residents who are in the civilian non-institutional population, and are of working age (16 years or older), and who are active participants in the job market at a point in time. In order to be counted as active labor market participants, working age persons must either be classified as employed or unemployed and actively seeking work.

Between 1990 and 2000 the labor force in the nation was estimated to have increased by a little less than 12 percent, a rate of labor force growth well below the 18 percent rise in the 1980s and the 29 percent increase that occurred in the 1970s. The size of the New England labor force remained virtually unchanged during the 1990s, with a

Chart 1:
Trends in the Size of Resident Civilian Labor Force Growth in the U.S.,
New England, Connecticut and the Greater New Haven region, 1990 to 2000\



rise of just 0.7 percent in ten years. The number of active participants in the Connecticut labor force actually declined during the 1990s, falling by more than 31,000 workers or by 1.8 percent over the decade. In the Greater New Haven area, the size of the labor force declined by nearly 3 percent. The labor force declines that occurred in the state and New Haven region sharply limited the new job creation capacity of both the state and area. Absent gains in the size of the labor force, employers were confronted with both quantitative and qualitative labor supply problems by the end of the decade. Unable to find sufficient labor supply, employers increasingly chose to locate their facilities outside both the region and the state.

The labor force declines that occurred over the decade of the 1990s in the New Haven region were not evenly distributed across the communities located in the area. The data provided in Table 1 examine trends in resident labor force growth in the cities

Table 1:
Trends in the Size of Resident Civilian Labor Force in the
Greater New Haven Service Region, by City and Town, 1990 to 2000

Cities and Towns	1990	2000	Absolute Change	Relative Change
Bethany town	2,712	2,706	-6	-0.2%
Branford town	16,500	16,342	-158	-1.0%
Clinton town	7,399	7,305	-94	-1.3%
East Haven town	14,709	15,080	371	2.5%
Guilford town	11,486	11,881	395	3.4%
Hamden town	29,078	29,938	860	3.0%
Madison town	8,133	9,123	990	12.2%
New Haven city	64,126	57,265	-6,861	-10.7%
North Branford town	7,596	7,615	19	0.3%
North Haven town	12,541	11,941	-600	-4.8%
Orange town	6,861	6,651	-210	-3.1%
Wallingford town	23,097	23,080	-17	-0.1%
West Haven city	30,176	28,235	-1,941	-6.4%
Woodbridge town	4,040	4,554	514	12.7%
 New Haven Region	 238,454	 231,716	 -6,738	 -2.8%
 Connecticut	 1,788,693	 1,757,108	 -31,585	 -1.8%

and towns that compose the region's workforce region. The data reveal that most of the decline in labor force occurred in the central city of New Haven. In 1990, about 64,100 residents of the city of New Haven were active participants in the labor market at the time of the decennial census, but by 2000 the number of workers residing in the city fell by 6,800, to just over 57,200. This decline represented a very large 10.7 percent relative reduction in the size of the labor force of New Haven city over the decade. While the city of New Haven had the largest absolute and relative decline in the size of its resident labor force, other communities in the region also experienced considerable labor force losses. West Haven saw its labor force fall by more than 1,900 over the decade, a loss of 6.4 percent and North Haven saw its labor force decline by more than 600, or nearly 5 percent between 1990 and 2000.

Offsetting some of these losses, was labor force growth in several communities within the service region. Madison increased the number of persons in its resident labor force by nearly 1,000 over the decade, growing by a substantial 12.2 percent. The labor force in Woodbridge increased by 12.7 percent between 1990 and 2000, while Hamden grew more modestly, with its resident labor force increased by 860 persons, an increase of 3 percent.

Gender Differences in Labor Force Growth

The declines in the size of the labor force in both Connecticut and in the New Haven region were exclusively associated with declines in the number of men who were actively participating in the labor market. Statewide, between 1990 and 2000 the number of women in the labor market actually increased slightly, despite the overall losses in labor force that occurred in Connecticut (Table 2). The female labor force stood at just over 838,600 in 2000, after increasing by 6,200 workers or 0.7 percent between 1990 and 2000. During the same time period, the number of men actively participating in the state's labor force fell by more than 37,800 workers or by 4.0 percent. The decline in the size of the male labor force in the state accounted for all of the labor supply losses that occurred in the state during the 1990s.

Table 2:
Trends in the Size of the Labor Force in Connecticut and
New Haven, by Gender, 1990 to 2000

	1990	2000	Absolute Change	Relative Change
<u>New Haven Region</u>				
Female	112,913	113,835	922	0.8%
Male	125,541	117,881	-7,660	-6.1%
Total Labor Force	238,454	231,716	-6,738	-2.8%
<u>Connecticut</u>				
Female	832,431	838,665	6,234	0.7%
Male	956,262	918,443	-37,819	-4.0%
Total Labor Force	1,788,693	1,757,108	-31,585	-1.8%

Similar to the trend in the state's labor force, men also accounted for all of the labor force loss that occurred in the New Haven region during the 1990s. The major difference was that in New Haven the rate of decline was considerably higher than that observed for the state as a whole (-6.1 percent for New Haven versus -4.0 percent statewide). The male labor force in Greater New Haven fell from 125,500 workers in 1990 to 117,900 in 2000, a decline of more than 7,600 workers, or over 6 percent.

Unsurprisingly, the local geographic pattern of male labor force losses closely mirrored the overall decline in the size of the New Haven region's labor force. Out of the total loss of 7,600 men in the region's labor force, 5,000 men, or about two thirds of the overall loss, was in the city of New Haven. Thus the number of men who were actively participating in the city's labor market fell by one-sixth in just ten years. It takes little imagination to think through the array of social and economic problems that are associated with such a loss in the number of working men in a single community.

Clearly, the most serious labor force problem in both Connecticut and the New Haven region is associated with the disappearance of a considerable number of men from the labor markets. The labor shortage problems that were experienced in the late 1990s could be characterized as a shortage of men in the labor market. But what happened to these men? Did they simply move out of the state or the region, thus reducing the size of the male labor force, or did they remain in the state or the region, but decide to withdraw

from the labor market? The kinds of strategies that one would adopt to respond to the labor supply shortage differ sharply, depending on the nature of the problem. In order to assess this issue more carefully, the following sections of this report examine developments in the size of the resident working age population in the region and state to assess the impact that population loss may have had on labor supply. We also analyze developments in the labor force participation rate of the working age population to determine the extent to which behavioral changes may have influenced the supply of labor in the region.

Sources of Labor Force Decline in Connecticut and the New Haven Region

The Role of Population Growth

Changes in the size of a state or region's labor force are in part driven by trends in overall population developments. During the decade of the 1990s, the size of Connecticut's population increase was quite modest in relation to the nation as a whole and to most other states in the nation. Between 1990 and 2000, the population in the state of Connecticut increased by over 118,000 persons representing a rise of just 3.6 percent. This slow growth rate resulted in Connecticut being ranked 47th out of 50 states on the basis of population growth over the decade of the 1990s. Connecticut was also the slowest growing of all states in the New England region.

Population increases within the Greater New Haven area were even more modest. The population of the New Haven region increased by just 2.2 percent over the entire 10-year period. Substantial population losses in New Haven city and West Haven largely offset population gains in outlying communities within the region. The population growth that did occur within both the region and the state was entirely the product of new foreign immigrants moving into the state/region during the 1990s. While the state's overall population increased by just over 118,000, the number of foreign-born residents who moved to the state during the 1990s decade was over 144,000 persons.

Table 3:
Trends in the Size of the Total Population in Connecticut
and the Greater New Haven Region, 1990 to 2000

Cities and Towns	1990	2000	Absolute Change	Relative Change
Bethany town	4,608	5,040	432	9.4%
Branford town	27,603	28,683	1,080	3.9%
Clinton town	12,767	13,094	327	2.6%
East Haven city	26,144	28,189	2,045	7.8%
Guilford town	19,848	21,398	1,550	7.8%
Hamden town	52,434	56,913	4,479	8.5%
Madison town	15,485	17,858	2,373	15.3%
New Haven city	130,474	123,626	-6,848	-5.2%
North Branford town	12,996	13,906	910	7.0%
North Haven town	22,247	23,035	788	3.5%
Orange town	12,830	13,233	403	3.1%
Wallingford town	40,822	43,026	2,204	5.4%
West Haven city	54,021	52,360	-1,661	-3.1%
Woodbridge town	7,924	8,983	1,059	13.4%
New Haven region	440,203	449,344	9,141	2.1%
Total Connecticut	3,287,116	3,405,565	118,449	3.6%

New immigrants accounted for 122 percent of the state's total population increase during the 1990s. This means that in the absence of foreign immigration the state's population would have actually declined over the decade. The Greater New Haven region was even more heavily dependent on new immigrants for population growth. New immigrants accounted for 193 percent of the total population increase in the region.

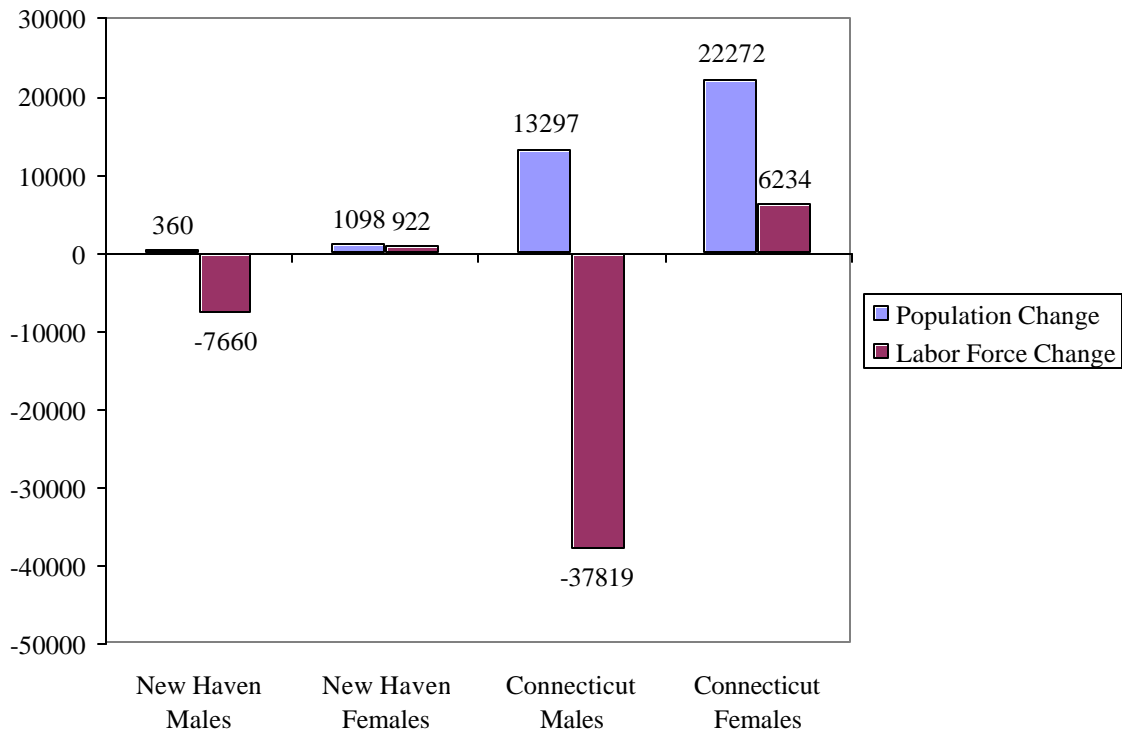
Trends in the Working Age Population

The total number of persons who actively participate in an area's labor force at a point in time is determined by two critical factors: the size of the resident working age population in that area and the labor force participation rate of the working-age population. The decline in the number of men in both the Connecticut and Greater New Haven labor force that occurred during the 1990 could be the result of a decline in the

number of men who reside in the state or region. Alternatively, the decline in the male labor force could be the product of reduced job market attachment of working age men who reside in the state/region. Men may now supply labor at reduced rates compared to 1990, preferring some other type of activity not connected to the world of work. The data provided in Chart 2 examine trends in the size of the male labor force in the state and the Greater New Haven region as a whole between 1990 and 2000.

The chart reveals that the number of men in the working age population in Connecticut actually increased slightly over the decade of the 1990s, even as the number of men in the labor force declined. Between 1990 and 2000 the number of males in the working age population increased by about 13,300, a relative rise of 1.1 percent. Over

Chart 2:
The Change in the Size of the Resident Non Institutional Population in
Connecticut and the Greater New Haven Region, 1990 to 2000.



the same time the number of men who actively participated in the state's labor force fell by nearly 39,000. During the same time period, the number of working age women increased statewide by just over 22,000, while the number of women who were active participants in the Connecticut job market increased by just over 6,200. Thus, even as both the male and female working age population in the state increased between 1990 and 2000, the direction of labor force growth of the two genders was different. As the male working age population increased slightly, the number of men in the labor force fell substantially. The number of working age women increased by 1.6 percent over the decade, resulting in a marginal increase in the number of women in the state's labor force.

In the Greater New Haven area, the number of male working age residents remained virtually unchanged, rising by fewer than 400 persons or just 0.2 percent over the decade. Despite the fact that the working age male population in the region held constant over the decade, the size of the male labor force declined by over 7,600. In contrast, both the female population and labor force increased slightly over the decade in the Greater New Haven region. These findings suggest that in both the state and in Greater New Haven it was not population loss that caused the reduction in the size of the male labor force. Instead, it appears that men reduced their level of attachment to the job market over the decade.

Some variation in the nature of change in the number of men in the working age population did occur across cities and towns within the Greater New Haven region. In most communities the number of resident working age men either remained mostly unchanged or increased modestly. The two major exceptions to this were New Haven and West Haven. The number of working age male residents in New Haven fell by more than 2,500 or 5.5 percent between 1990 and 2000. West Haven saw its 16+ male population decline by nearly 1,000 or about 5 percent over the same time. In both of these communities, reductions in the number of working age men could have contributed to reductions in the size of their respective resident male labor force.

Table 4:
Trends in the Size of the Male Working Age Non Institutional Population in
Connecticut and the Greater New Haven Region, 1990 to 2000

Cities and Towns	1990	2000	Absolute Change	Relative Change
Bethany town	1,772	1,868	96	5.4%
Branford town	10,591	10,869	278	2.6%
Clinton town	4,760	4,872	112	2.4%
East Haven town	10,186	10,641	455	4.5%
Guilford town	7,439	7,900	461	6.2%
Hamden town	19,479	20,717	1,238	6.4%
Madison town	5,858	6,348	490	8.4%
New Haven city	47,281	44,692	-2,589	-5.5%
North Branford town	5,019	5,091	72	1.4%
North Haven town	8,684	8,690	6	0.1%
Orange town	5,030	4,960	-70	-1.4%
Wallingford town	15,490	16,122	632	4.1%
West Haven city	20,543	19,545	-998	-4.9%
Woodbridge town	3,063	3,240	177	5.8%
New Haven region	165,195	165,555	360	0.2%
Connecticut	1,248,972	1,262,269	13,297	1.1%

Changes in the Labor Force Participation Rate

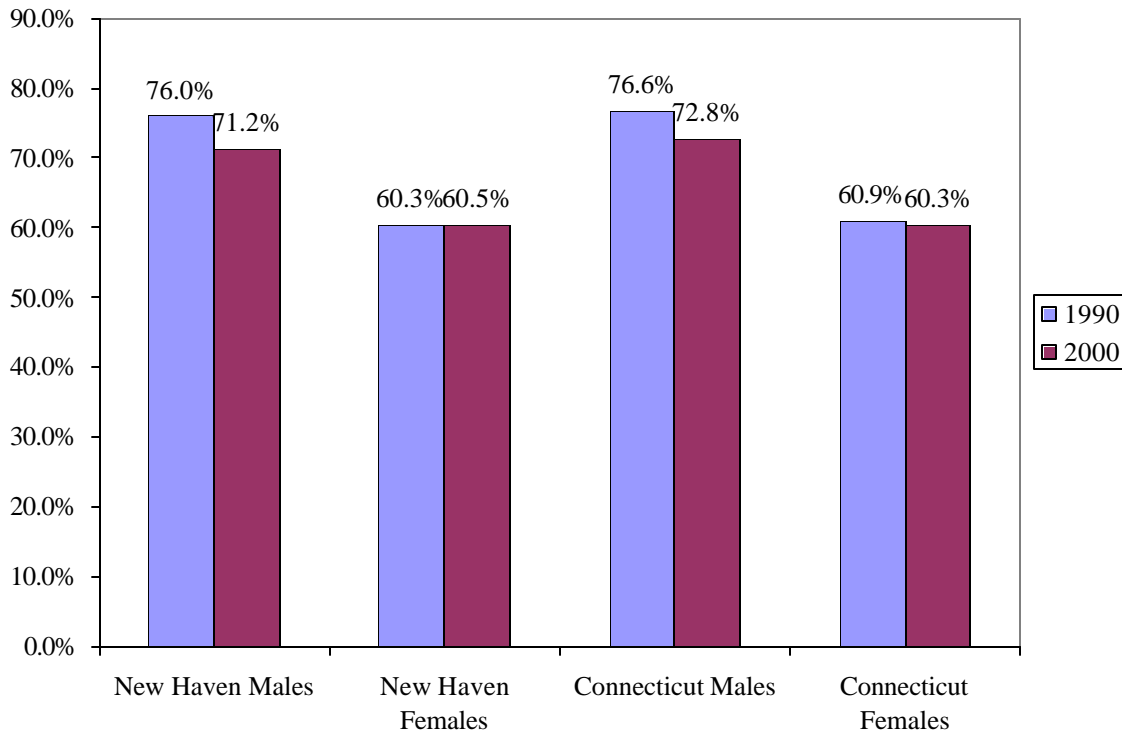
The size of a state or region's labor force is determined not only by the size of its resident working age population, but also by the labor force participation behavior of that population. The labor force participation rate serves as a basic measure of the labor force attachment of an area's working age population. It measures the percent of the resident working age population that was either employed or unemployed at a point in time. Estimates of the labor force participation rates of the working age population by gender for Connecticut and the Greater New Haven service region can be found in Chart 3.

Similar to the differences in the labor force participation trends between men and women in the nation, the pattern of labor force participation between men and women varies somewhat in Connecticut, as well as the New Haven region. Although substantial

gaps exist in labor force participation rates between men and women in Connecticut and the Greater New Haven region, the size of these gaps narrowed somewhat during the 1990s.

At the time of the 1990 decennial census, 60.9 percent of working age women statewide were active participants in the labor market, a level that remained almost unchanged at the time of the 2000 decennial census. Men were considerably more likely to participate in the labor market in 1990, with a participation rate of 76.6 percent. However, the male labor force participation rate declined to 72.8 percent by 2000. The entire reduction in the participation rate gap between men and women is attributable to the decline of 3.8 percentage points in the male labor force participation rate. This sharp reduction in the male labor force participation rate also had a powerful effect on the nature of overall labor force growth in the state. The analysis below provides insight into

Chart 3:
Trends in the Labor Force Participation Rate in the Greater New Haven
Service Region and the State of Connecticut, 1990 to 2000



the overall impact of the male participation rate decline on the overall size of the state's labor force.

Table 5 provides a summary of the population, labor force participation rate, and labor force size developments among men in the state of Connecticut between 1990 and 2000. In order to assess the impact of the reduction in the male labor force participation on the size of the overall labor force in the state, we apply the 1990 male labor force participation rate to the 2000 male working age population to simulate the size of the male labor force if the male labor force participation had remained unchanged. The difference between this simulated figure and the actual size of the 2000 labor force is an estimate of the number of potential workers lost in the state, as men changed their workforce attachment behavior.

Table 5:
Male Working Age Population, Labor Force Participation Rate
and Labor Force Size in Connecticut, 1990 to 2000

	Working Age Population	Labor Force Participation Rate	Labor Force
1990	1,248,972	76.6%	956,262
2000	1,262,269	72.8%	918,443
Total Change	13,297	-3.8%	-37,819

1990 Male Labor force Participation Rate	*	2000 Male Working Age Population	=	Hypothetical 2000 Male Labor Force
---	---	-------------------------------------	---	---------------------------------------

.766	*	1,262,269	=	966,898
------	---	-----------	---	---------

Hypothetical 2000 male labor force	=	966,898
(-) Actual 2000 male labor force	=	918,433

Labor force loss from decline in male labor force participation	=	48,465
--	---	--------

The findings of this analysis reveal that had the labor force participation rate of men in 2000 remained at its 1990 level, the Connecticut labor force would have had an additional 48,400 workers available. These findings imply that for every 1-percentage point decline in the male labor force participation rate, the state lost 12,700 potential

workers. Instead of the actual labor force losses of 31,000 workers experienced over the decade, the state would have had a net increase in labor supply of 17,000, if the male labor force participation rate had remained at the 1990 level. The addition of 48,000 workers to the state's labor supply would have provided the economy with the productive potential to create a considerably larger number of jobs than were actually created, which in turn would have resulted in a higher level of output, sales and income in 2000.

A similar analysis of male labor force participation developments in the Greater New Haven service region is provided below (Table 6). The analysis reveals that had men continued to participate in the labor force in 2000 at the same rate as they did in 1990, the size of the male labor force in 2000 would have been 122,800—a level that is considerably larger than the actual labor force in the region in 2000 (117,881). If the participation rate for men had remained at 76.6 percent, then the labor force in the region would have had more than 7,900 additional workers to supply labor to area firms. Instead of overall net labor force decline of 6,700 workers, the potential labor supply in the region would have actually increased slightly.

Table 6:
Male Working Age Population, Labor Force Participation Rate
and Labor Force Size in the Greater New Haven Region, 1990 to 2000

	Working Age Population	Labor Force Participation Rate	Labor Force
1990	165,195	76.0%	125,541
2000	165,555	71.2%	117,881
Total Change	+360	-4.8%	-7,660

1990 Male Labor force Participation Rate	*	2000 Male Working Age Population	=	Hypothetical 2000 Male Labor Force
.760	*	165,555	=	125,822
Hypothetical 2000 male labor force		=		125,822
(-) Actual 2000 male labor force		=		117,881
Labor force loss from decline in male labor force participation		=		7,941

The findings for both Connecticut and the Greater New Haven region clearly reveal that none of the decline in size of the labor force that has occurred in either the state or the region is associated with declines in the size of the working age population. However, our earlier assessment of population developments makes clear that slow population growth clearly limits the ability of either the state or the region to substantially increase labor supply. Nonetheless, the entire labor force decline that occurred in both the state and region is the result of a behavioral change among male residents. Men simply participated in the labor force at lower rates than they had ten years ago.

The state of Connecticut has long recognized the problem of slow labor force growth, and has tried to implement a set of activities designed to stem the out-migration that has occurred in the population during the 1990s. This strategy is a difficult one to implement, as large cost of living differences have developed between the southern New England region and much of the rest of the nation. State and local workforce officials should begin to develop a set of strategies that can help increase the labor force attachment of men who already reside within the state and region. It would seem that such an effort may be more effective in bolstering state and local labor supply compared to a population strategy that must operate in the face of adverse geographic cost of living differentials.

The overall rate of labor force participation of men is also influenced by the age distribution of men in the population. For instance, holding other factors constant (such as educational attainment, marital status, and the like), we might reasonably expect that a state or region with a disproportionate number of elderly men (65 and over) would have a lower overall rate of labor force participation. Generally, we would expect many older men to withdraw from the labor market as they reach retirement age. Analyzing data on the age composition of the working age male population can help us gain some insight into the overall labor force participation rate in the state, the region and especially in the city of New Haven. Earlier, we found that out of the reduction in the male labor force of 7,600 in the region, over 4,900 or about two thirds was concentrated in the city of New Haven. Our analysis will thus focus more directly on the city in order to understand the impact of age structure on labor force attachment.

Compared to other cities in the Greater New Haven region, and compared to the entire state of Connecticut, the male working age population in the city of New Haven is quite young. The teenage population (16-19) and the young adult population (20-24) together accounted for about 14 percent of the male working age population in Connecticut. In New Haven city, 26 percent of all working age men were between the ages of 16 and 24. The share of 16-24 year old men in the male working age population in the remaining communities in the New Haven region together was one half of the level in New Haven city (13.2 percent). Indeed, in the city of New Haven one-half of all working age men were under the age of 35 at the time of the 2000 census.

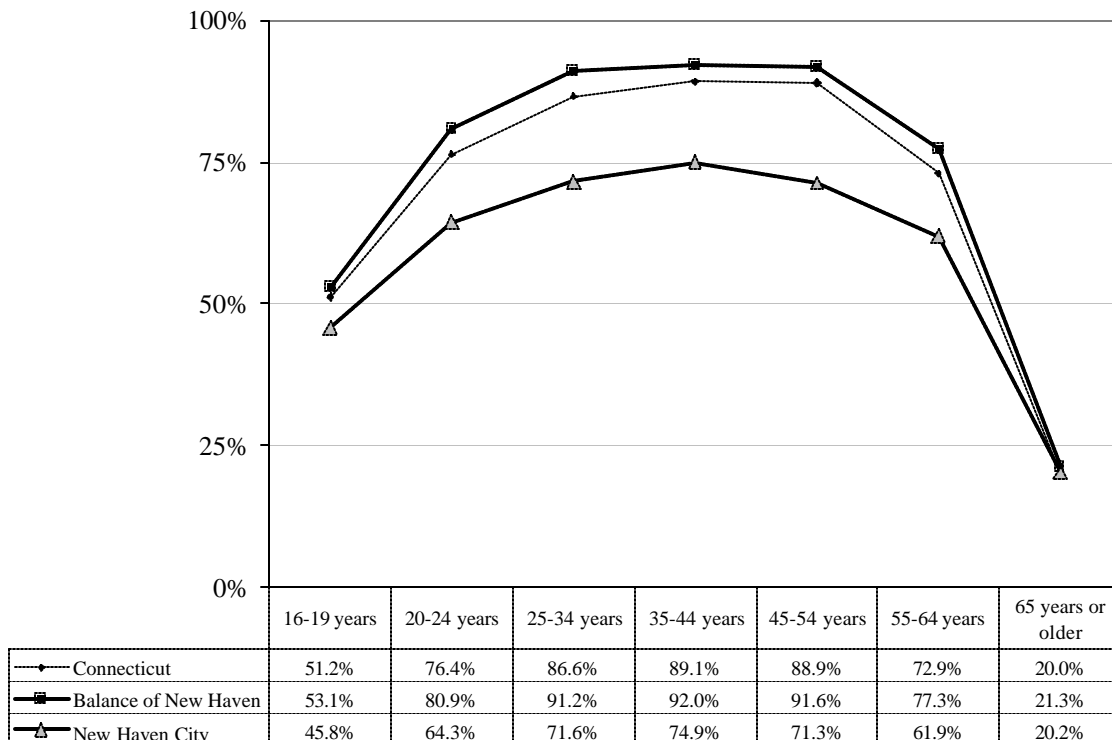
Table 7:
The Age Distribution of the Male Working Age Population in
Connecticut, and the New Haven Region, 2000

	Connecticut	New Haven City	Balance of New Haven Region
16-19	6.9%	10.6%	6.6%
20-24	7.5%	15.4%	6.6%
25-34	17.5%	23.7%	15.7%
35-44	22.8%	18.5%	22.2%
45-54	18.5%	13.3%	19.5%
55-64	11.7%	7.6%	12.3%
65 or older	15.0%	10.8%	17.1%
Total	100.0%	100.0%	100.0%

The rate at which individuals participate in the labor force is closely associated with the age of the individual. The data provided in Chart 4 examine the labor force participation rate of males by age in Connecticut, the city of New Haven and the balance of the New Haven service region. The data reveal an inverted U pattern of participation among men in all three areas. That is, the labor force participation is low among younger males, rises with age, and reaches a maximum after which it declines among older males. For example, in the entire state, about half of 16- to 19-year old males were active participants in the job market at the time of the 2000 census. Following the inverted-U pattern, the labor force participation increased with age. Between the ages of 20 and 24, the labor force participation rate was 76.4 percent after which it peaked at 89.1 percent

for males aged 35 to 44. After this age, participation rates begin to decline, reaching 72.9 percent in the pre-retirement group of men between ages 55 and 64, and falling to just 20 percent among those men aged 65 and over.

Chart 4:
The Labor Force Participation Rate of Working Age
Males in Connecticut and New Haven by Age, 2000



In New Haven city, the lower labor force participation rates of young men, combined with a much younger male population, resulted in a reduction in the overall level of male labor force attachment relative to the state and the balance of region communities. However, the relatively young age structure of the working age population is not the only factor that depresses the size of the male labor force in the city of New Haven. The pattern of labor force participation in both the city of New Haven and its surrounding communities follows the same inverted U pattern observed for the state as a whole. However, large differences exist in the level of labor force attachment across the three areas.

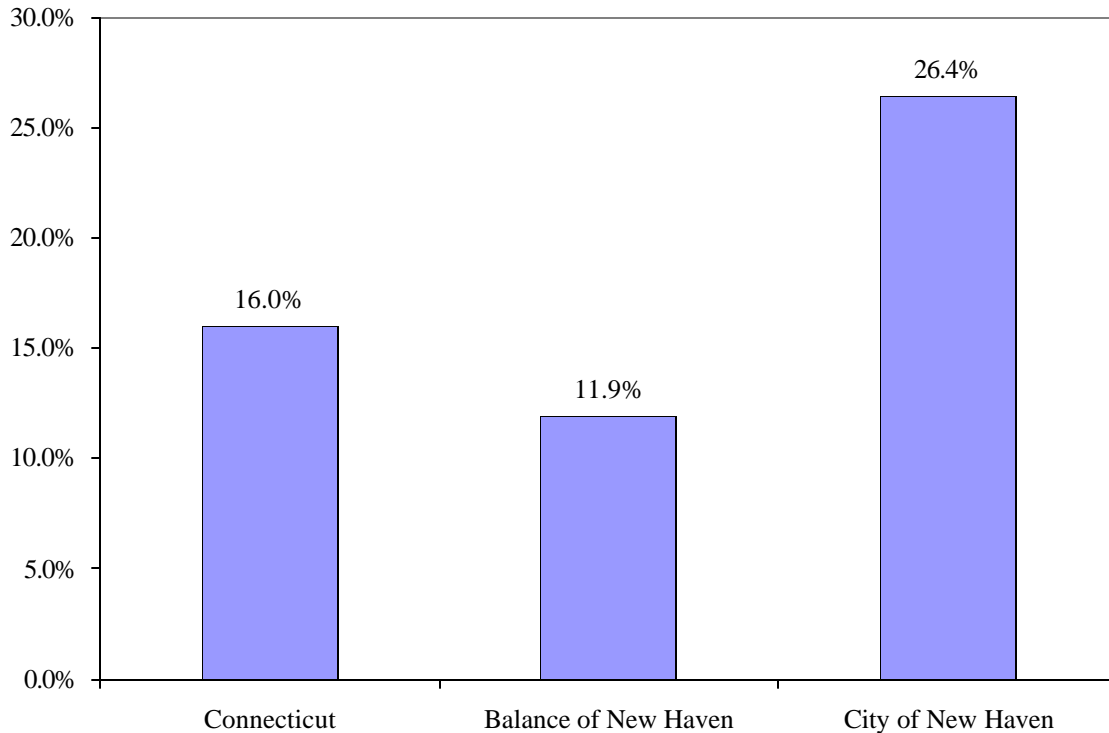
The labor force attachment of men in the balance of New Haven is actually higher than that of the state in every age group as a whole. In contrast, the labor force participation rate of men in the city of New Haven is well below that observed for balance of the region, as well as the state. For example, among young men aged 20 to 24 only 64.3 percent were active participants in the labor force at the time of the census versus a participation rate of 80.9 percent among 20-24 year old men in the surrounding region. Thus a gap of nearly 17 percentage points in the job market attachment exists between the two areas. Among those aged 25 to 34, the size of the participation gap is almost 20 points. When one considers that half of the working age men in New Haven are under the age of 35, it is clear why the overall male labor force participation rate in the city is so low. However, age is not the only factor depressing labor force attachment. In central city New Haven the participation rate of men aged 35 to 44 is 17 points below that of the surrounding communities. Among middle-aged men (45 to 54), the size of the urban-suburban difference is 20 points.

Efforts to increase the size of the male labor force in the New Haven region are best focused on strategies that can improve the job market attachment of men. Frequently, depressed labor force attachment, like that observed among men in central city New Haven, is closely associated with low levels of educational attainment and poor basic skills including reading, writing, spoken English and math skills. Currently, data are not yet available from the 2000 census on the educational characteristics of those in the labor force at the state and local level. However, data are available on the educational attainment of the overall adult population (25 years or older).

The findings provided in Chart 5 reveal that the fraction of adults who failed to earn a high school diploma in the city of New Haven was about double that of the surrounding communities and 1.6 times that of the state. These findings reveal sharply lower overall levels of educational attainment in New Haven city, with dropouts accounting for more than one quarter of the adult population. These findings suggest that the low overall level of educational attainment in the city of New Haven has resulted in lower levels of labor force attachment. Strategies designed to raise basic skills and educational levels of the population—especially among young men can help solve

problems related to both the quantity and quality of labor supply in the city and the region.

Chart 5:
The Educational Attainment of the 25+ Population of Connecticut, the Balance of New Haven Region and the City of New Haven, 2000



In developing strategies to respond to the labor supply problems that exist within the region, special attention needs to be placed on the newly arrived immigrants. Between 1990 and 2000, even as the population of the area increased by about 9,100 persons, the number of new foreign immigrants residing in the region increased by more than 17,600, implying that in the absence of immigration the population of the region would have actually declined over the decade. Statewide, immigration accounted for 122 percent of overall population growth. Analysis of the sources of labor force growth and change in the U.S revealed that foreign immigration accounted for nearly 46 percent of

all labor force growth in the nation.³ In Connecticut, the number of new immigrants who entered the labor market over the decade of the 1990s is estimated to be about 81,000, even as the overall size of the state's workforce declined. Foreign-born workers likely provided a substantial contribution to the labor force in the Greater New Haven region. Given the slow growth in the size of the native born population, it is quite likely that future labor force growth will come from either increasing the labor force attachment of resident males, or from foreign born workers continuing to enter the state at high rates.

Labor Force Constraints on New Job Creation

Connecticut ranked last among the 50 states in the nation in its ability to increase labor supply between 1990 and 2000. Indeed, Connecticut's labor force declined as that of the nation increased by about 12 percent during the past decade. The labor force decline that occurred in Connecticut is a comparatively new phenomenon. During the 1970s, as the baby boom generation came of age, the size of the labor force in the state increased by 20 percent. During the 1980s, the Connecticut labor force expanded by 15 percent. Although Connecticut lagged the nation in labor force growth rates, the state was still able to substantially increase the overall size of its labor force in both decades.

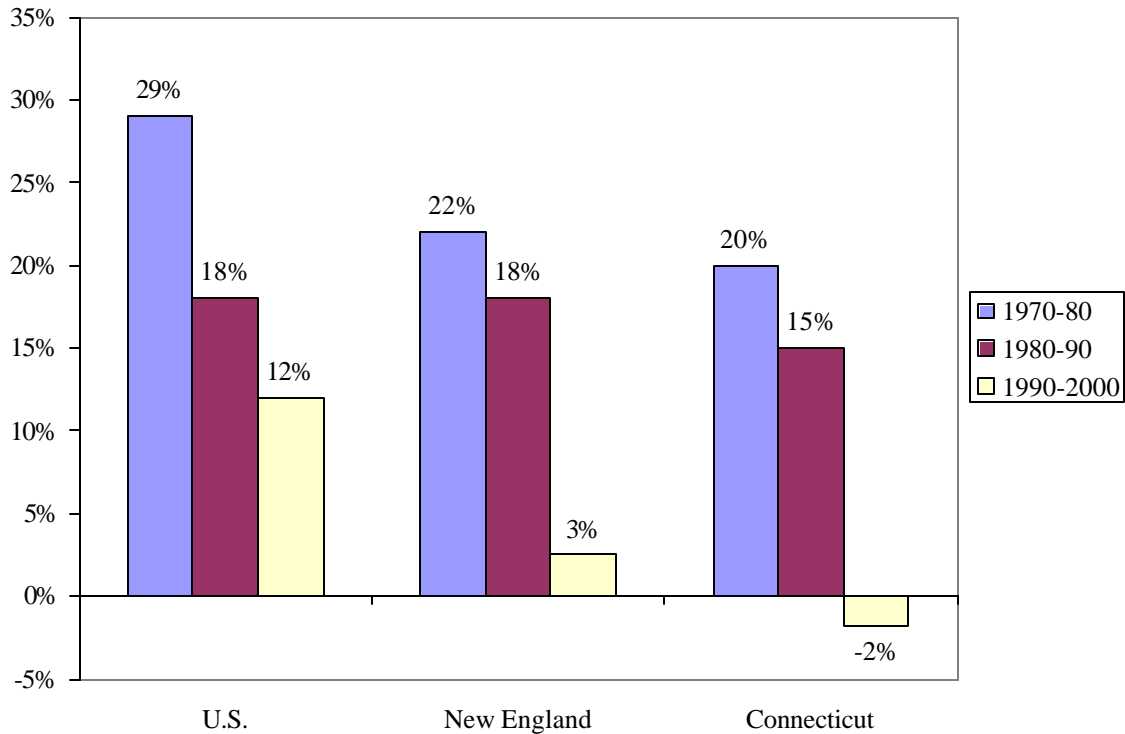
The gains in labor force size that occurred in Connecticut during the 1970s and 1980s provided the state economy with the ability to substantially increase its employment levels. Between 1970 and 1980, Connecticut was able to add 229,000 wage and salary jobs—despite a severe economic recession that occurred in the state and New England region during the 1974-75 time period. Wage and salary employment increased in the state by 19 percent over the ten-year period—as the size of the state's labor force grew by 20 percent over the same period. During the 1980s, the Connecticut labor force grew by 15 percent, accommodating a 14 percent increase in the number of wage and salary jobs in the state.

Wage and salary employment levels increased at fairly strong rates during the 1970s and 1980s, because the state was able to supply the workforce needed to

³ Andrew Sum and Paul Harrington, *Immigrant Workers and the Great American Job*

accommodate this level of expansion. The level of labor force increase that occurs in a state over time serves as a fundamental constraint on the ability of the state to increase

Chart 6:
Trends in Labor Force Growth Rates in the U.S.,
New England and Connecticut, 1970 to 2000



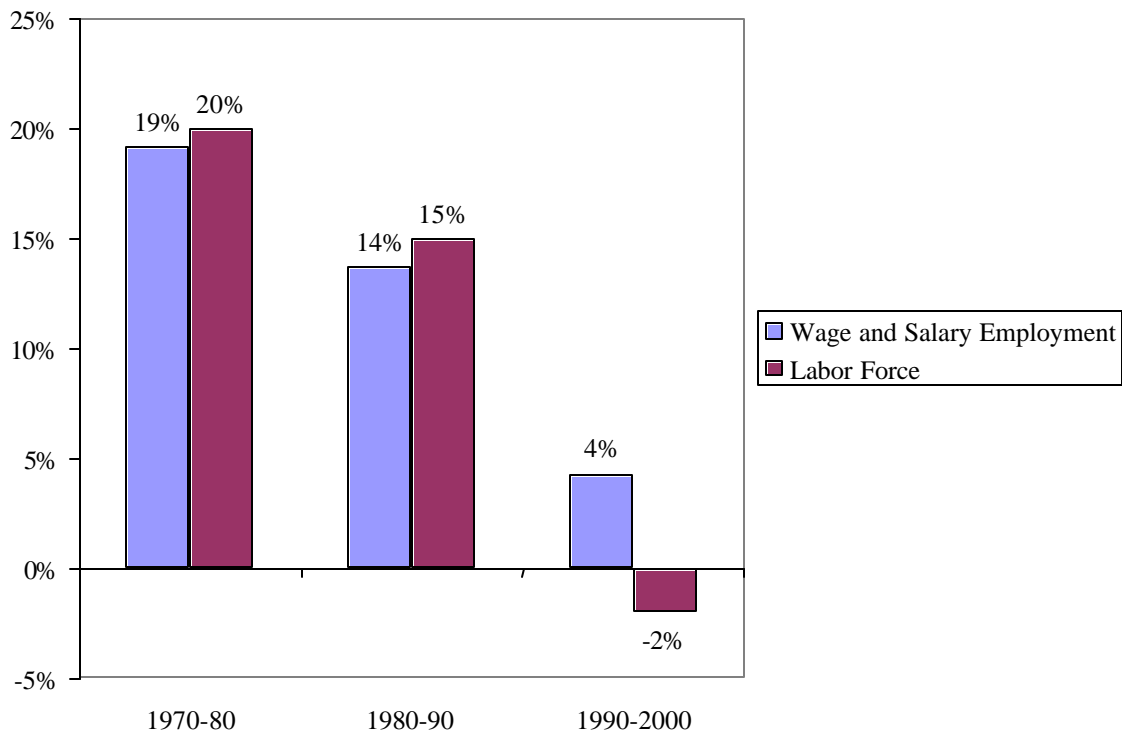
employment, output, sales and income.

Between the recession year of 1990 and the peak employment year of 2000, Connecticut saw its labor force fall for the first time since records on labor force have been kept at the state level. The reduction in the size of the state’s labor force meant that Connecticut was quite limited in its ability to add wage and salary jobs over time. New job creation during the 1990s was quite modest by historical standards. Total wage and salary employment increased by just 4 percent over the entire decade of the 1990s. This growth rate was equal to only one fifth that achieved in the state during the 1970s, and just over one quarter of the growth rate achieved during the 1980s.

Machine: The Contributions of New Foreign Immigration to National and Regional Labor Force Growth in the 1990s, The Business Roundtable, Washington DC, November, 2002

Despite the decline in the size of the labor force that occurred during the 1990s, the state was able to achieve positive, albeit very slow, job growth during the 1990s. Excess unemployment conditions existed in the state during 1990, as the recession of 1989 to 1992 was in full swing. The comparatively high unemployment that prevailed at that time provided additional available labor supply through the first half of the 1990s, as the state began the slow process of recovery from jobs lost during the decline. Indeed, between 1989 and 1990 Connecticut saw its payrolls fall by 50,000 jobs.

Chart 7:
Trends in Labor Force and Wage and Salary Employment
Growth Rates in Connecticut, 1970 to 2000



The connection between labor force growth and new job creation is further illustrated in Table 8. This table compares the rate of labor force growth with the rate of net new job creation for the top five labor force growth states and the bottom five labor force growth states during the 1990s. The data reveal that the rate of labor force growth among the five most rapidly growing states in the nation during the 1990s was indeed high. Nevada led the nation, expanding its resident labor force by 54 percent over the

decade followed by labor force growth rates ranging from 33 percent in Colorado up to 41 percent in Utah. The five states that led the nation in labor force growth also were the

Table 8:
The Top Five and Bottom Five States in Rate of Labor Force Growth
and Net New Job Creation Rank and Rate of New Job Creation, 1990 to 2000

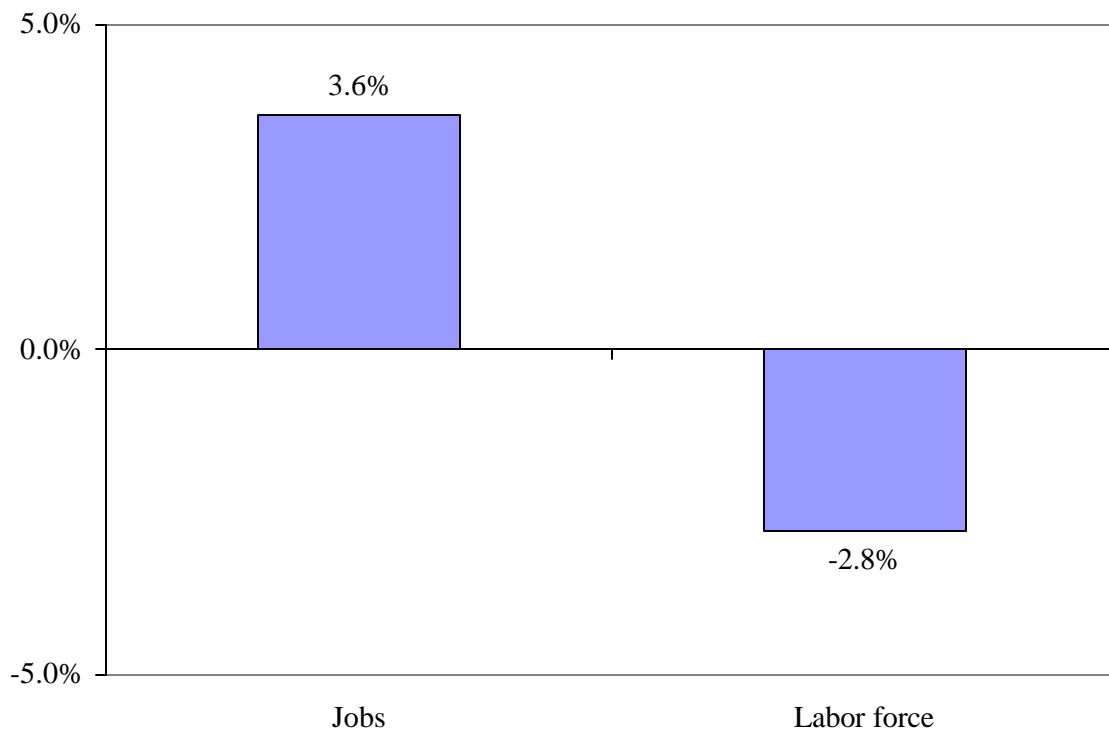
State	Rank in Labor force Growth	Percent Change in Civilian Labor Force	Rank in Job Creation (Percent Change)	Net Job Creation (Percent Change)
<u>Top five</u>				
Nevada	1	54%	1	65%
Utah	2	41%	3	49%
Arizona	3	37%	2	49%
Idaho	4	35%	5	45%
Colorado	5	33%	4	46%
<u>Bottom Five</u>				
New Jersey	46	2%	46	10%
Massachusetts	47	2%	44	11%
Rhode Island	48	2%	47	6%
New York	49	0%	48	5%
Connecticut	50	-2%	50	4%

five states that led the nation in new job creation. Nevada expanded payroll employment levels by an incredible 65 percent in just ten years, fueled by rapid population and labor force growth. The remaining four states in the top five ranking also posted extraordinarily rapid rates of new job creation over the decade—made possible only through an expansion in the size of each state’s labor force to accommodate the new jobs created.

The slowest growing states in the nation are all concentrated in the Northeast region of the nation. Connecticut ranked 50th out of all states on the measure of labor force growth, and was the only state in the nation to post a decline in the size of its labor force over decade of the 1990s. The data reveal that those states with very slow labor force growth all had rates of new job creation that were well below the national average. These states were able to achieve net job creation rates that were somewhat higher than their rate of new labor force growth, because a recession gripped the Northeast during 1990. This recession sharply increased the number of unemployed workers who were

later re-employed, as the economy began to recover. Despite the decline in its labor force, Connecticut was able to generate some employment over the decade. However, the size of this employment expansion was constrained by the lack of labor force growth. Thus, by 2000, Connecticut was ranked 50th out of 50 states in its ability to generate new employment opportunities. The connection between labor force growth and new job creation is quite strong. The correlation coefficient between labor force growth rates and new job creation rates is 0.97, indicating a very strong positive relationship between labor force growth and employment expansion.

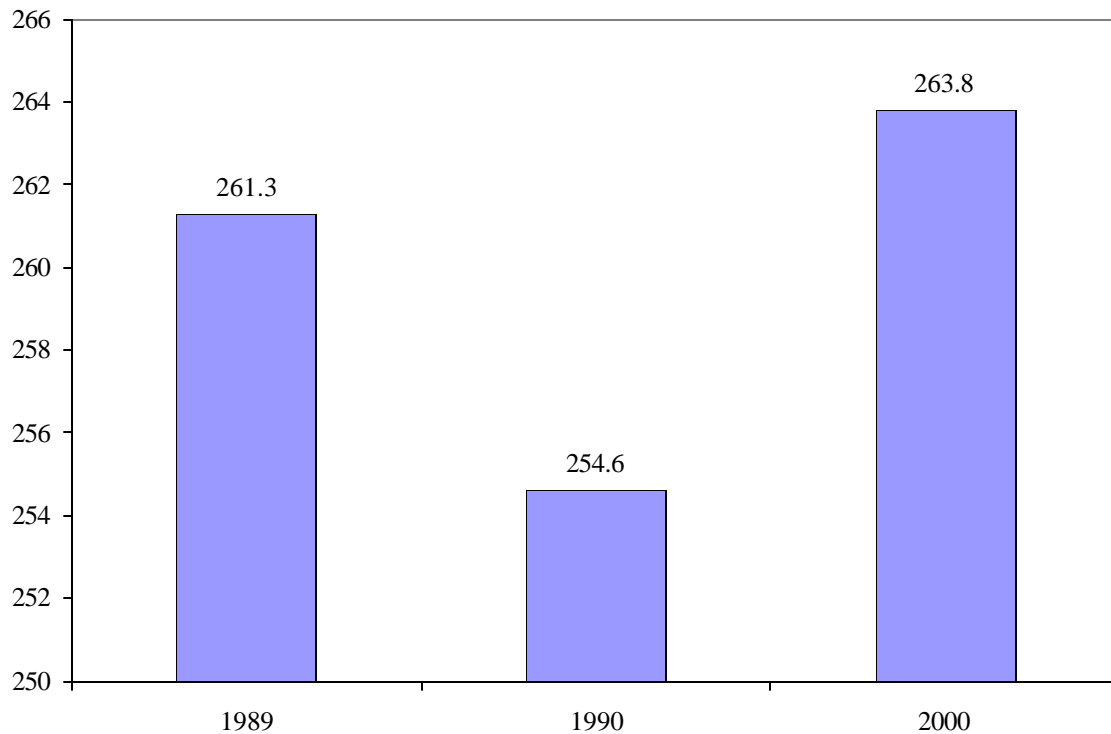
Chart 8:
Growth Rates in the Size of the Labor Force and Wage and Salary Employment
Levels in the Greater New Haven Region, 1990 to 2000



The slow labor force growth that characterized the Greater New Haven region also acted as a brake on the ability of the region to generate new employment opportunities. Between 1990 and 2000, wage and salary employment in the region

increased from 254,600 to 263,800, representing a rise of 9,200 jobs and a relative increase of just 3.6 percent. During the same time period, the region's labor force declined by 2.8 percent. Once again, it is important to note that the region was experiencing a severe economic recession in 1990 that created excess labor supply. Between 1989 and 1990 wage and salary employment within the Greater New Haven region fell by 6,700. A comparison of the peak employment years of 1989 and 2000 reveal that payroll jobs increased by just 2,500 jobs in ten years (Chart 9).

Chart 9:
Wage and Salary Employment in the Greater New Haven
Labor Market Area, 1989, 1990 and 2000 (Thousands)



Industry Employment Developments

The job growth that occurred across industries in the Greater New Haven region during the 1990s closely mirrored developments in the statewide structure of employment. The region's manufacturing sector continued its long-term trend of job loss

during good economic times as well as bad. The decade of the 1980s saw Connecticut loose about one-sixth of its manufacturing employment, with communities like New Haven particularly hard hit by these job losses. Manufacturing employment continued to decline in both the state and in the New Haven labor market area. Statewide manufacturing payroll employment levels fell by an additional 25 percent during the 1990s. In New Haven, manufacturing employment levels declined from 45,000 in 1990 to 38,300 in 2000, a loss of about 15 percent. Most of these declines in the region's manufacturing employment base were concentrated among durable goods producers, especially in fabricated metal shops and transportation equipment producers. Manufacturing job losses tend to be concentrated in high wage blue collar occupations characterized by workers with relatively low levels of educational attainment, who have developed a considerable set of productive skills through on the job learning. Moreover, foreign immigrants are heavily over represented in blue-collar occupations within the manufacturing sector.⁴ Thus worker dislocation that occurs in manufacturing has tended to have the greatest impact on blue-collar workers, with relatively low levels of educational attainment, who are substantially more likely to be foreign born.

Table 9:
Trends in Wage and Salary Employment Levels in the
Greater New Haven Region, 1990 to 2000

	1990 (1000s)	2000 (1000s)	Absolute Change	Relative Change
Total Non Farm	254.6	263.8	9.2	3.6%
Total Private	222.4	228.4	6	2.7%
Construction and Mining	10.4	10.7	0.3	2.9%
Manufacturing	45.0	38.3	-6.7	-14.9%
Durable Goods	29.6	24.4	-5.2	-17.6%
Non Durable Goods	15.4	13.9	-1.5	-9.7%
Transportation and Utilities	16.9	16.2	-0.7	-4.1%
Wholesale Trade	13.1	13.5	0.4	3.1%
Retail Trade	42.5	40.7	-1.8	-4.2%
Finance Ins Real Estate	16.9	12.5	-4.4	-26.0%
Services	77.7	96.6	18.9	24.3%
Total Government	32.2	35.4	3.2	9.9%

⁴ Op.Cit Sum and Harrington, Business Roundtable

The losses in manufacturing that occurred in the Greater New Haven region have been more than offset by increases in employment within the service industry. Service employment rose by nearly 19,000 jobs in the region between 1990 and 2000, growing at a robust 24 percent pace. The health industry is the largest single component of the service sector in the region, followed by the business service industry and the educational service industry. Together these three industries accounted for just over two-thirds of all service sector jobs, and about one-fourth of all wage and salary jobs in the region during 2000.

Service sector staffing patterns differ markedly from those found in manufacturing. A very large share of all service sector employment is concentrated in professional, technical, managerial and high-level sales jobs. These jobs generally require some type of post secondary schooling for job access, and demand stronger basic skills from workers. On-the-job training plays a less important role in skills acquisition. Instead formal instruction in specific occupational skills, usually through post secondary degree or certificate programs, is the norm.

The business service industry expanded employment levels quite rapidly during the 1990s in the Greater New Haven area, adding 5,400 jobs, representing an increase of almost 53 percent. The business service sector is composed of a highly diverse set of firms ranging from janitorial service providers to computer software development and support firms. Personnel services, including temporary help agencies, are also found in the business service industry. Health services including hospitals, nursing homes, and physicians' offices added 4,300 jobs, expanding employment levels by about 19 percent over the decade. Educational services, including higher education and private elementary and secondary education, expanded employment levels by 4,300 jobs, or about 27 percent during the 1990s. These three industries together accounted for 14,200 new jobs in the region. This increase represents 154 percent of all the job creation that occurred in the Greater New Haven region over the 1990 to 2000 period.

The strong growth posted by these three service industries strongly suggest that the structure of labor demand has shifted toward workers with higher levels of educational attainment, stronger basic skills, and a set of occupational proficiencies that

are in demand. Continued job losses in manufacturing means dislocation among blue-collar workers, who generally possess relatively few years of schooling and occupational skills that are quite specific to manufacturing employment. The rapid increase in service sector employment means that employers will increasingly demand workers with stronger basic skills and relevant occupational skills, most often developed at the post secondary level.

Workforce development strategies clearly need to focus on the growing sectors of the regional economy, recognizing the nature of the skill deficits of those workers they seek to serve. Education and training strategies that emphasize basic skills, occupational proficiency and effective job development and placement through close links to the employer community are essential in providing upward mobility to those left behind in the “New Economy” of Connecticut. These strategies will also serve to raise the job market attachment of those not currently participating in the labor market—especially men. Such strategies are critical if the region is to meet labor supply needs of employers, who are quite likely to be confronted with labor shortages as the Connecticut economy begins the process of recovery from the current recession.

Income and Poverty Developments

The economic well being of the population of an area is closely associated with the strength of local labor markets. A strong labor market provides plenty of opportunities for employment to the residents, while a weak labor market leaves residents with a shortage of employment opportunities. A strong labor market also has a positive influence on the level of earnings, resulting in higher incomes and lower levels of economic hardship and poverty. Although the overall income of a person is derived from earned as well as non-earned sources, the largest single source of income for most individuals consists of earnings from the labor market. Therefore, the economic well being of most persons is strongly associated with their earnings from the labor market.

As noted in the previous section, the New Haven Workforce Investment Area was plagued by a slow growth in the population, employment, and wages, and a decline in the labor force. These trends are indicative of a weak labor market in the region. Moreover, the region saw a large influx of foreign-born persons, coupled with a likely outflow of some native-born residents. Foreign-born individuals frequently have low levels of educational attainment and literacy proficiencies and poor English language skills, which reduce their likelihood of success in the labor market. Given the close association between the strength of the labor market and the economic well being of the population, it is not surprising to find that the economic well being of the residents of this region deteriorated during the decade of the 1990s.

The two most widely used measures of the economic well being of the population are income and poverty rates. Income is a measure of the standard of living of the population, and the poverty rate is a measure of the degree of economic hardship of the population. The following section of this paper contains an analysis of the income and poverty developments in the communities located within the New Haven Workforce Investment Area, with some comparisons with trends in Connecticut, the New England region, and the nation.

Trends in the Real Median Household Income

One of the most widely cited measures of the economic well being of households and families is their median income. The median income represents the income of the family or household at the center of the distribution of the family or household income. Findings from our analysis of trends in the real median household income in each of the New England states and the nation are presented in Table 10. Between 1989 and 1999, the real (inflation-adjusted) median income of the nation's households increased by a modest amount, \$1,600 or 4 percent—a slow rate of growth by historical standards. Households in the New England states performed even more poorly than their national counterparts. The median income of households in three New England states declined, while the remaining three states saw their real median household income increase by less than 2 percent over the past decade. Households in Connecticut lost ground with a median income loss of nearly 4 percent, whereas households in Massachusetts saw their median incomes increase by only 1.7 percent between 1989 and 1999.

Table 10:
Trends in the Real Median Household Income in Each New
England State and the U.S., 1989-1999

State	1989	1999	Absolute Change	Relative Change
Connecticut	56,073	53,935	-2,138	-3.8%
• New Haven County	51,688	48,834	-2,854	-5.5%
Maine	37,436	37,240	-196	-0.5%
Massachusetts	49,663	50,502	839	1.7%
New Hampshire	48,826	49,467	641	1.3%
Rhode Island	43,251	42,090	-1,161	-2.7%
Vermont	40,040	40,856	816	2.0%
U.S.	40,395	41,994	1,599	4.0%

The recession of the early-1990s hit the New England region particularly hard. The region lost 639,000 jobs or nearly 10 percent of its employment base. In contrast, the nation lost less than 2 percent of its employment base during the recession of the early-1990s. Moreover, the economic recovery from this recession in the New England region

was slow. It took the New England region 5 years before it recovered all the jobs that it lost during the recession. A reversal of the job and income losses from the recession did not start until the mid-to late-1997, when employment and incomes in the region began to grow more rapidly. In 1999, the median household income in three states in the New England region, including Connecticut, had not yet returned to pre-recession levels.

Although data on the median household income are unavailable for the New Haven region as a whole, findings from our analysis of New Haven county reveal that the real median household income in the county declined by \$2,900 or 5.5 percent between 1989 and 1999. This may not be a very accurate assessment of the trends in the real median household income in the New Haven region, since only 53 percent of all households in New Haven county are located within the New Haven Workforce Investment Area. Median household income data are available for each individual town within the New Haven region. These data reveal that the real median household income declined in 11 out of 14 towns. Nearly 90 percent of all households in the region are located in these 11 communities, where the median household income declined. Therefore, it would be fair to conclude that real median income of households in the New Haven region declined over the decade of the 1990s.

A ranking of the communities in the region by relative change in their real median household income is presented in Table 11. Households in just three towns out of 14 in the region saw an increase in their median income between 1989 and 1999. The relative increase in the household income ranged from 7.5 percent in Woodbridge to 1.9 percent in Guilford. The total number of households in these three towns account for only 10 percent of all households in the New Haven region. The three towns with the largest decline in median household income (New Haven City, West Haven, and Hamden) were home to 52 percent of households in the entire region. The total number of households residing in communities with falling incomes accounted for 90 percent of all households in the New Haven region. Declines in the median household income ranged from 0.3 percent in Wallingford to nearly 15 percent in New Haven City.

Table 11:
Communities in the New Haven Region Ranked by Relative
Change in Real Median Household Income Between 1989 and 1999

City or Town	1989	1999	Absolute Change	Relative Change
Woodbridge town	94,980	102,121	7,141	7.5%
Madison town	83,155	87,497	4,342	5.2%
Guilford town	75,419	76,843	1,424	1.9%
Wallingford town	57,500	57,308	-192	-0.3%
North Haven town	66,055	65,703	-352	-0.5%
Branford town	58,569	58,009	-560	-1.0%
Clinton town	61,668	60,471	-1,197	-1.9%
Bethany town	77,033	74,898	-2,135	-2.8%
East Haven town	50,024	47,930	-2,094	-4.2%
Orange town	83,356	79,365	-3,991	-4.8%
North Branford town	68,273	64,438	-3,835	-5.6%
Hamden town	56,198	52,351	-3,847	-6.8%
West Haven city	48,012	42,393	-5,619	-11.7%
New Haven city	34,690	29,604	-5,086	-14.7%
Percent of households in towns with an increase in household income				10.2%
Percent of households in towns with a decrease in household income				89.8%

The findings above clearly indicate that the New Haven region fared poorly on the measure of household income. Although there were some small communities where the median household income increased, most communities saw a decline in the real median household income during the 1990s. The largest declines occurred in the most populous communities in the region. On the measure of household income, the national economic expansion of the 1990s largely bypassed the New Haven region.

Trends in the Real Median Family Income

The economic well being of a community is also frequently measured by the income of family households. Family households are a subset of all households. Depending upon the number of persons and relationships of the persons residing in a household, a household can be classified as either a family household or a non-family household. Family households are defined as households that contain two or more persons who are related to each other by blood, marriage, or adoption. Non-family

households consist of one person, or two or more unrelated persons, living in a household.

Analyzing trends in the income of households as well as of family households provides a more complete picture of the economic well being of the community. In some cases, non-family households consist of students or other young persons residing together or by themselves, and their lower levels of income do not represent true economic hardship, since it is mostly a temporary condition until they graduate from school and secure full-time jobs. However, the economic hardship faced by non-family households consisting of an elderly person residing alone is a cause for concern, and should be representative of the true economic well-being of a community. The economic hardship faced by family households also is cause for concern to policymakers, since in most cases it is likely to be rooted in the educational and labor market traits of the family householder and tends to be a longer-term problem. Moreover, economic hardship among families with children also represents the hardship suffered by children in these families—another serious cause for concern.

The median income of non-family households (and therefore of all households) is lower than the median income of family households. This is true primarily because of the different characteristics of these two types of households. Family households are on average larger in size than non-family households and contain more potential adult earners. A majority of non-family households consist of single person households, and many contain an elderly person living alone. In March of 2000, over 80 percent of all non-family households in the U.S. were single-person households and over three out of ten single person households were headed by a householder who was 65 years or older. In contrast, family households are larger in size since, by definition these households contain two or more persons who are related to each other by blood, marriage, or adoption. In addition, many married couple families have two full-time breadwinners resulting in higher earnings and income.

The median real income of the nation's families increased from \$47,300 in 1989 to \$50,000, representing an increase of \$2,700 or 5.7 percent. With the exception of Connecticut, the real median income of families in all New England states increased,

albeit at a slower rate than that of families in the nation. The real median income of Connecticut's families declined by \$600, or about 1 percent, between 1989 and 1999. Although nationwide the median income of families increased at a slow pace, the income of family households in each state in the New England region fared better than the income of all households, indicating that family households performed better than non-family households during the 1990s.

Table 12:
Trends in the Real Median Family Income in Each New
England State and the U.S., 1989-1999

State	1989	1999	Absolute Change	Relative Change
Connecticut	66,123	65,521	-602	-0.9%
• New Haven County	61,881	60,549	-1,332	-2.2%
Maine	43,575	45,179	1,604	3.7%
Massachusetts	59,629	61,664	2,035	3.4%
New Hampshire	55,948	57,575	1,627	2.9%
Rhode Island	52,647	52,781	134	0.3%
Vermont	46,744	48,625	1,881	4.0%
U.S.	47,342	50,046	2,704	5.7%

The median family income data for the entire New Haven region are not available. However, analysis of trends in the median income of families in New Haven County, where all but one town in the Greater New Haven region are located, indicate poor income performance of resident families. The real median income of families in New Haven County declined between 1989 and 1999 by \$1,300 or 2.2 percent, a decline that was greater than the statewide decline in median family income of 0.9 percent.

Data on the trend in the real median family income in individual towns within the New Haven region are presented in Table 13. Out of a total of 14 towns in the region, the real median income of families increased in 7 towns. The highest income increase occurred in Madison, where the real median family income increased by \$7,300 or 7.7 percent between 1989 and 1999. North Branford had the smallest increase in median family income (\$345 or 0.3 percent). Although half the towns in the region saw an increase in median family income, these towns were small in size. Families residing in

these towns represent only 35 percent of all families residing in the entire New Haven region.

Table 13:
Communities in the New Haven Region Ranked by Relative
Change in Real Median Family Income Between 1989 and 1999

City or Town	1989	1999	Absolute Change	Relative Change
Madison town	94,028	101,297	7,269	7.7%
Guilford town	82,534	87,045	4,511	5.5%
Woodbridge town	107,449	111,729	4,280	4.0%
Clinton town	69,262	71,403	2,141	3.1%
Wallingford town	66,498	68,327	1,829	2.7%
North Haven town	71,823	73,041	1,218	1.7%
North Branford town	71,572	71,813	241	0.3%
Branford town	69,498	69,510	12	0.0%
Orange town	89,395	88,583	-812	-0.9%
East Haven town	57,519	56,803	-716	-1.2%
Hamden town	67,506	65,301	-2,205	-3.3%
Bethany town	82,242	79,493	-2,749	-3.3%
West Haven city	56,323	51,631	-4,692	-8.3%
New Haven city	41,883	35,950	-5,933	-14.2%
Percent of families in towns with an increase in family income				34.8%
Percent of families in towns with a decrease in family income				58.4%
Percent of families in towns with no change in family income				6.8%

Out of the remaining 7 towns, the real median family income remained unchanged in Branford, which housed about 7 percent of the families in the entire New Haven region. Families in the remaining 6 towns of the New Haven region saw a deterioration of their standard of living, as measured by real median family income. The decline in the real median income of families in these towns ranged from 1 percent decline in Orange, to over 14 percent decline among resident families of New Haven City. The most populous towns in the region were among the list of towns with a decline in the median family income. In fact, in 2000, nearly 6 out of 10 families in the New Haven region were residents of the six towns that experienced a decline in the median family income over the 1990s.

The median family income declined in the most populous towns in the Greater New Haven region, indicating that the median income of families in the entire region also likely declined between 1989 and 1999. However, the trend in the median income of families was less unfavorable than the trend in the median income of households in the region. As a result between 1989 and 1999, the gap between the median household income and the median family income grew in most communities in the New Haven region.

An increase in the share of non-family households underlies most of the widening of the gap between the income of family households and the income all households. Between 1990 and 2000, the share of non-family households in the New Haven region increased from 32 percent to 35 percent, an increase of 3-percentage points (Table 14). Almost all (98.8 percent) of the increase in households in the region is attributable to an increase in non-family households. While family households increased by 97 or 0.1 percent, the number of non-family households in the region increased by 7,700 or 14 percent. An increase in the share of non-family households that frequently have lower income levels exerts a downward pressure on the median household income independently of any change in the real incomes of individual households.

Table 14:
Trends in Household Composition in the
New Haven Region, 1990-2000

Household Type	1990	2000	Absolute Change	Relative Change
Total households	166,396	174,177	7,781	4.7%
Family households	112,672	112,769	97	0.1%
Non-family households	53,724	61,408	7,684	14.3%
Percent non-family households	32.3%	35.3%	3.0%	9.3%

At the same time as the composition of all households was changing in favor of non-family households, there also were sizable changes in the composition of family households in the New Haven region. Based upon the presence of a spouse in the

household, families can be classified into married couple families (both spouses present) and single householder (no spouse present) families. Single householder families are further classified into two types, based on the gender of the householder—male-headed families and female-headed families. Male-headed families consist of families that are headed by a male householder, with no wife present in the household. Female-headed families are families headed by a female householder, with no husband present in the household.

The composition of families in the New Haven region changed in favor of single householder families. Between 1990 and 2000, the total number of families in the New Haven service region increased by just 97, while the number of married couple families declined by 3,400, representing a relative decline of 4 percent (Table 15). The number of male-headed families increased by 1,200 or 22 percent, and the number of female-headed families increased by nearly 2,400 or 11 percent. Since married couple families have a higher income level than single householder families, this change in family composition likely exerted a downward pressure on the median family income of the region.

Table 15:
Change in the Number of Families and Mean Family Income in the New Haven Region
by Type of Family, 1990-2000 (Income in inflation-adjusted 1999 dollars)

	1990	2000	Absolute Change	Relative Change
<u>Number of families</u>				
All families	112,672	112,769	97	0.1%
Married couple	85,945	82,527	-3,418	-4.0%
Male headed, no spouse present	5,220	6,384	1,164	22.3%
Female headed, no spouse present	21,507	23,858	2,351	10.9%
	1989 (1999\$)	1999	Absolute Change	Relative Change
<u>Mean Family Income</u>				
All families	\$74,670	\$76,539	\$1,868	2.5%
Married couple	84,172	88,023	3,851	4.6%
Male headed, no spouse present	57,461	57,043	-418	-0.7%
Female headed, no spouse present	38,822	38,364	-458	-1.2%

Unfortunately data for the median income for all families in the New Haven Workforce Investment Area are not available. However, data on the mean income of families are available for the region. Findings presented in the bottom half of Table 15 reveal that the real mean income of all families in the region increased by only \$1,900, or 2.5 percent, over the 10-year time period between 1989 and 1999. However, all of the increase in the mean family income was concentrated among married couple families. In fact, the mean income of male headed families and female headed families each declined by over \$400, yielding a relative decline of 0.7 percent and 1.2 percent, respectively.

The level of, and the trend in, the mean family income can frequently be different from that of the median family income. The mean income is simply an arithmetic average, and is sensitive to extreme values in the distribution. The median income, on the other hand, represents the income of the family or household at the center of the distribution. The median income measure is not sensitive to extreme values in the distribution. If the distribution of income is concentrated at the higher end, the mean income will be higher than the median. If the distribution of income is concentrated at the lower end, the mean income will be smaller than the median. Together, the mean and median income levels can be used to assess the distribution of income.

Because data on the median family income for the entire New Haven region are not available, we cannot make the mean-median income comparisons to determine the degree of income inequality in the entire region. However, data are available to make a comparison of the mean and median income of families in each town within the region. Table 16 presents a comparison of the 1999 mean and median family income in each community in the New Haven region. In every town located in Greater New Haven, the median family income was lower than the mean family income indicating that family incomes in these communities were concentrated (albeit at different degrees) at the higher end of the distribution.

The widest discrepancy between the median and mean family income existed in cities of New Haven and Woodbridge, where the median family income was only three-quarters as high as the mean family income. These two communities also represent the lowest and highest income communities in the New Haven region. The smallest

difference between the mean and median family income was in Clinton, where the median family income was 93 percent of the mean family income.

Table 16:
Mean and Median Family Income in Each
Town Located in the New Haven Region, 1999

<u>Town</u>	<u>Median</u>	<u>Mean</u>	<u>Median/Mean</u>
New Haven city	35,950	48,942	73%
Woodbridge town	111,729	151,308	74%
Branford town	69,510	86,536	80%
Guilford town	87,045	109,211	80%
Madison town	101,297	126,630	80%
Orange town	88,583	109,316	81%
Hamden town	65,301	79,433	82%
North Haven town	73,041	88,319	83%
North Branford town	71,813	85,673	84%
Bethany town	79,493	93,286	85%
West Haven city	51,631	59,865	86%
East Haven town	56,803	63,836	89%
Wallingford town	68,327	76,927	89%
Clinton town	71,403	76,757	93%

Labor market and demographic developments in the New Haven region during the 1990s may have increased the income inequality in the region. A decline in the employment in the manufacturing sector, coupled with an increase in service sector employment in the New Haven region, likely reduced the earnings and income of less educated workers while increasing the earnings of the highly educated and well-to-do workers. Moreover, the influx of immigrants in the region likely led to an increase in the labor supply at the lower end of the labor market, further suppressing wages at the lower end, as well as creating a larger group of low-wage workers. These developments point to a worsening of the income distribution in Greater New Haven. The release of additional data from the 2000 decennial census by the Census Bureau will enable us to test this assertion.

Individual Poverty in the New Haven Region

The analysis of income trends in the Greater New Haven region point to a worsening of the standard of living of households and families in the region. In addition, these data indicate a wide discrepancy in the distribution of family income in the region. A decline in income, accompanied with a worsening of the distribution of income, is frequently associated with an increase in poverty and economic hardship. The poverty rate is used to gauge the degree of economic hardship among residents of a community. This section contains findings from an examination of trends in the poverty rate between 1990 and 2000 in the Greater New Haven region, including all towns within the region as well as the state of Connecticut. All poverty rates presented in this report are based on the official federal poverty thresholds for families of different sizes. In 1999, a family of four with an annual income below \$17,029 was classified as being poor.

Poverty problems have been found to be cyclically sensitive, rising during periods of economic recession and slow job growth, such as the early 1990s, and declining during periods of strong job and real income growth. Rising real family incomes and declining aggregate unemployment rates have typically led to a reduction in the incidence of poverty problems, as more members of lower income groups become employed, work more hours during the year, and earn higher real hourly wages.

Between 1989 and 1999, the incidence of poverty in the population of the New Haven region increased from 8.7 percent to 10.1 percent, representing an increase of 1.4-percentage point, a one-sixth relative rise in poverty (Table 17). While the total population of the New Haven region grew by slightly more than 2 percent during the 1990s, the poverty population grew by nearly 18 percent. The economic recovery in the New Haven region was anemic at best. With employment growth of only 7 percent since 1993, and a reduction in the labor force and the labor force attachment of the working-age population between 1990 and 2000, Greater New Haven clearly did not fully participate in the economic recovery that occurred in the nation and the New England region between 1991 and 2000. Poor job creation, and poor wage growth has resulted in an absence of income growth and increased poverty in the service region. Demographic

changes including the growth of single householder families also contributed to these increases.

Analysis of poverty across the 14 communities that compose the New Haven region reveals that only 3 communities saw a decline in the incidence of individual poverty (Table 17). These three towns were home to only 8 percent of the total population in the region. Moreover, only 1 out of 100 poor persons in the entire New Haven region lived in these three towns. In 1999, the combined poverty rate of these 3 towns was just 1.6 percent. The remaining 11 towns in the Greater New Haven

Table 17:
Trends in the Individual Poverty Rates in
Towns within the Greater New Haven Region, 1989-1999

City or Town	1989	1999	Absolute Change
Bethany town	3.1%	2.6%	-0.5%
North Branford town	2.0%	1.6%	-0.4%
Madison town	1.5%	1.3%	-0.2%
Combined poverty rate in 1999		1.6%	
Percent of total population in 2000		8.2%	
Percent of poor population in 2000		1.3%	
Guilford town	3.0%	3.1%	0.1%
Orange town	2.3%	2.5%	0.2%
Woodbridge town	2.1%	2.3%	0.3%
East Haven town	4.9%	5.2%	0.3%
Wallingford town	3.1%	3.6%	0.5%
Branford town	3.5%	4.1%	0.6%
Clinton town	3.3%	4.2%	0.9%
North Haven town	2.5%	3.5%	1.0%
West Haven city	6.1%	8.8%	2.7%
New Haven city	21.3%	24.4%	3.1%
Hamden town	4.4%	7.8%	3.5%
Combined poverty rate in 1999		10.9%	
Percent of total population in 2000		91.8%	
Percent of poor population in 2000		98.7%	
New Haven region	8.7%	10.1%	1.4%
Connecticut	6.8%	7.9%	1.0%

region saw an increase in the individual poverty rate ranging from 0.1-percentage point in Guilford to 3.5-percentage points in Hamden. Towns with rising poverty rates were home to 92 percent of the region's population, and nearly 99 percent of its poor population. In 1999, the combined poverty rate in these 11 towns was 10.1 percent.

The analysis above clearly indicates that the economic hardship borne by residents of Greater New Haven increased during the decade of the 1990s. In addition to the anemic job and population growth and the decline in the labor force, as

Table 18:
Newly Arrived Immigrants (Entered the U.S. in the 1990s) as a Percent of the Total
Population Growth in Towns within the New Haven Region, 2000

	(A)	(B)	(C)	(D)	(E)
	Population	Foreign-		Foreign-Born	
	Change,	Born		+Puerto	
	1990-00	Entered	(B)/(A)	Rican/US	
		in 1990s		Islands-Born	(D)/(A)
				entered in	
				1990s ⁵	
New Haven city	-6,848	8362	NA	11,307	NA
West Haven city	-1,661	2759	NA	3,084	NA
Clinton town	327	627	192%	658	201%
Bethany town	432	326	75%	357	83%
North Haven town	788	593	75%	613	78%
Orange town	403	236	59%	241	60%
Wallingford town	2,204	1028	47%	1,158	53%
Hamden town	4,479	2124	47%	2,276	51%
East Haven town	2,045	608	30%	693	34%
Woodbridge town	1,059	318	30%	320	30%
Guilford town	1,550	294	19%	324	21%
Madison town	2,373	260	11%	276	12%
North Branford town	910	55	6%	74	8%
Branford town	1,080	70	6%	72	7%
New Haven area	9,141	17,660	193%	21,452	235%

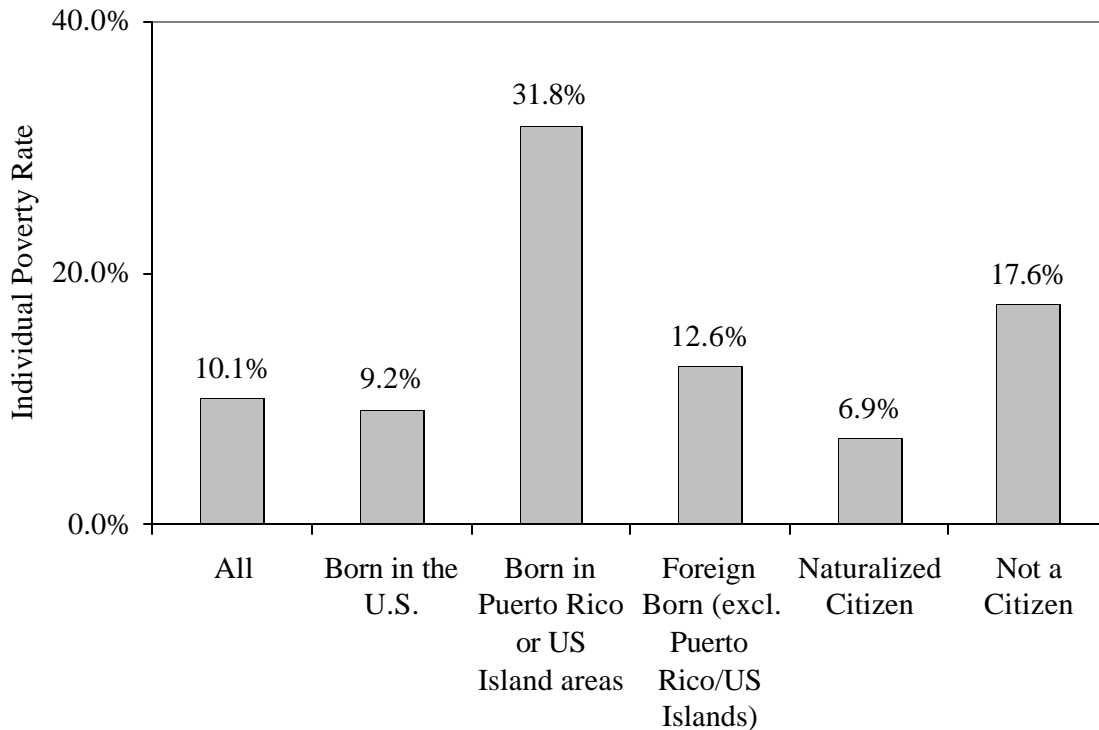
⁵ According to calculations by the authors from the Current Population Surveys for 2000-2001, 31.9% of all New England residents who were born in Puerto Rico or the U.S. Islands entered the U.S. in the 1990s. We applied this ratio to the total Puerto-Rican/U.S. Islands-born population in each town in the region to estimate the number of these individuals who were recent arrivals. The U.S. Census Bureau excludes the population of Puerto Rico when it reports the U.S. population. Migration of the population from Puerto Rico to the U.S. results in an increase in the nation's population. We have therefore included individuals born in Puerto Rico as part of the immigrant population. Moreover, although Puerto Ricans are U.S. citizens, their income and poverty characteristics are very different from those of U.S. born individuals.

well as the labor force participation rate in the region, the Greater New Haven region was also characterized by a sharp increase in the immigrant population. During the 1990s the number of newly arrived foreign-born individuals was 1.93 times the increase in the population of the region between 1990 and 2000. Including newly arrived Puerto Ricans in the recent immigrant population raises this multiple from 1.93 to 2.35 (Table 18, columns C and E). In 2000, 9 percent of the population of the New Haven area consisted of foreign-born individuals. If Puerto Ricans are included, the immigrant population accounted for 12 percent of the total population of the region.

Data in Table 18 also present the contribution of recently arrived immigrants to the population growth in each town within the region. The proportion of population growth attributable to newly arrived immigrants (including Puerto Ricans) ranged from a high of 201 percent in the town of Clinton to a low of 7 percent in Branford (Table 18, column E). The total population of the cities of New Haven and West Haven declined by 6,900 and 1,700, respectively, despite the large number of newly arrived immigrants who chose to live in these towns (11,300 in New Haven City and 3,100 in West Haven City). In 2000, nearly one-fifth (19%) of the population of New Haven City and 13 percent of the population of West Haven City consisted of immigrants (including Puerto Ricans).

Newly arrived immigrants tend to be young, poorly educated, and have limited English language proficiencies. Each one of these factors limit their success in the labor market, resulting in lower level of earnings and incomes and a higher incidence of poverty among this group. A part of the increased poverty problem in the New Haven Workforce Investment Area is attributable to the huge influx of immigrants in the region during the 1990s. According to data presented in Chart 10, the poverty rate among foreign-born individuals was 3-percentage points higher than among native-born individuals. In the foreign-born population, those who were not U.S. citizens (most likely recent arrivals) were more than twice as poor as those who were naturalized citizens of the United States. The highest poverty rate in the Greater New Haven area was among individuals born in Puerto Rico. Nearly one third of these individuals were poor in 1999.

Chart 10:
Individual Poverty Rate of the Population in the New Haven Region, by
Place of Birth and U.S. Citizenship Status, 1999



Family Poverty in the New Haven Region

Similar to the analysis of household and family incomes, the economic hardship in a community cannot be fully assessed through analysis of individual poverty rates. Individual poverty rates in many cases may include temporary poverty problems among younger persons and students, who may not warrant as much attention as the problem of poverty and economic hardship in a family. The poverty problem of the family is more permanent in nature, and is more often rooted in structural factors that will not disappear in time. Also problematic are poverty problems that persist even as the economy recovers from a recession. Persons who remain poor in a strong labor market are most likely detached from the labor market, or do not work as intensively in a full-time year-round job. Previous research by the authors has found that poverty is almost non-existent

among persons who are employed in full-time year-round jobs. If poverty persists despite employment in a full-time and year-round job, the problem is clearly one of low wages.

The family poverty rate in the New Haven region increased from 6.4 percent in 1989 to 7.3 percent in 1999. Over the same 10-year time period, the family poverty rate in Connecticut increased from 5 percent to 5.6 percent. Although the poverty rate is sensitive to the business cycle and falls during an economic expansion, this did not occur in the Greater New Haven area or statewide. One of the likely underlying causes of the inability of the region and the state to lower the family poverty rate is the change in the composition of families. Both the state and the region experienced an increase in families that are more prone to poverty, such as single parent families and families headed by recent immigrants. Another likely reason is the lopsided distribution of income gains from the economic recovery to affluent families. A previous section of this paper provides evidence in support of wide income discrepancies within the towns located in the New Haven area.

There were 11 percent more female-headed families and 4 percent fewer married couple families in the New Haven region in 2000, compared to 1990. Although data on the nativity of the family householder in the New Haven region are not yet available, one can conclude from a sharp rise in the foreign-born population that occurred in the region that there also was a sizable increase in families headed by recently arrived foreign-born persons—another group of families more likely to be poor. Householders of these families—headed by single females and recent immigrants—tend to have lower levels of education and literacy proficiencies resulting in lower rates of employment, lower earnings, lower incomes, and higher poverty rates.

The level and trends in the family poverty rate in the New Haven region varied by type of family. The poverty rate of families with children was higher than that of their childless counterparts. Female-headed families had higher poverty rates than other types of families, and the incidence of poverty among female-headed families with children was even higher. Trends in the family poverty rate varied by family type. The poverty rate among all families increased by 0.9-percentage point, and among families with children the incidence of poverty increased by 0.5-percentage points (Table 19). The

incidence of poverty among all female headed families and their counterparts with children under 18 also declined by 2.6-percentage points and 7.7-percentage points, respectively, between 1989 and 1999.

Table 19:
Trend in the Family Poverty Rate in the New Haven
Region, by Type of Family, 1989-1999

	1989	1999	Absolute Change
All families	6.4%	7.3%	0.9%
with related children under 18	10.9%	11.5%	0.5%
Female headed	25.3%	22.7%	-2.6%
with related children under 18	38.6%	30.9%	-7.7%

The decline in the poverty rate of female-headed families was not unique to Greater New Haven. The rate of poverty among these families declined in the entire state of Connecticut and the New England region, as well. The passage of the 1996 welfare reform law, and the resulting increase in the labor force participation and employment among former welfare recipients, likely resulted in sizable reductions in poverty among these families. Unfortunately, many of these families hover on the brink of poverty and their income could easily slip back below the poverty line with a small downturn in the economy. Despite the decline in their poverty rates, nearly 23 percent of all female-headed families in the region were poor, and 31 percent of female-headed families with children continued to remain poor at the end of the 1990s. In 1999, 56 percent of all poor families in the New Haven region were families headed by single females, down from 67 percent in 1989.

The family poverty rate also varies by age of the family householder. Families headed by young householders are much more likely to be poor than families headed by older householders. In 1999, the poverty rate of families headed by a householder under age 25 was 37 percent, with the poverty rate progressively declining as the age of the householder increased (Table 20). The poverty rate of elderly families (householder 65 years old and over) was only 3.5 percent. In addition to having limited amount of labor

market work experience which exerts a downward pressure on their earnings and income, younger family householders are more likely to be single mothers, poorly educated, and recent immigrants—all groups with low level of earnings and income.

Table 20:
The Poverty Rate of Families by Age of Householder in 1999

Age of Householder	New Haven Region	Connecticut	U.S.
Under 25 years	37.1%	31.2%	30.3%
25 to 44 years	9.9%	7.4%	11.4%
45 to 64 years	4.4%	3.1%	5.9%
65 years and over	3.5%	3.1%	5.4%
All families	7.3%	5.6%	9.2%

The poverty problems of families are also closely associated with the labor market attachment of the householder and spouse (if present). The rate of poverty declines considerably among families that supply large amounts of labor measured by annual hours of labor supply. The association between annual hours of labor supply and family poverty is particularly strong in New England, where, due to the higher average wages in the region, there is a strong association between an increase in employment intensity and a reduction in poverty. In 2000, the median hourly earning of families in New England were 11 percent higher than that of their counterparts in the nation.⁶ For every \$1 of hourly wage earned by family members in New England, their national counterparts earned \$0.90. Consequently, families that supplied a large numbers of hours of labor supply were very successful in escaping poverty. In 1999-2000, the poverty rate of families with an annual labor supply in excess of 4,000 hours was only 0.6 percent.⁷

While data on the hours of labor supply of family members in Greater New Haven are not available, the 2000 decennial census did provide data on the incidence of poverty

⁶ Neeta Fogg and Andrew Sum, “Recent Trends in Poverty and Other Income Inadequacy Problems in New England: Implications for Future Anti-Poverty and Workforce Development Policies,” *Workforce Development Report for New England*, prepared for U.S. Department of Labor, Boston Regional Office, Employment and Training Administration, November 2002.

by intensity of labor market work effort of the householder and spouse in married couple families, and of householders in single householder families. Table 21 contains data from our analysis of these data for the New Haven area, the state of Connecticut and the nation. All resident families were grouped into 9 categories, based upon the presence of the spouse of the householder in the household and the labor market work effort of the householder and spouse (if present) during 1999. The work effort of each householder and spouse is classified into three categories—employed full-time and year-round (about 1,850 hours annually), employed less than full-time and year-round, and not employed at all during 1999.

Findings from our analysis indicate that in the New Haven area, the poverty rate of a married couple family with both spouses working full-time and year-round during 1999 was zero. The poverty rate of married couple families with this level of annual employment effort was also very low in Connecticut (0.1 percent) and the nation (0.2 percent). In fact, married couple families with two employed spouses or at least one full-time and year-round employed spouse had a poverty rate of 3.4 percent or less in the New Haven region and in the state of Connecticut. The incidence of poverty was somewhat higher among the nation's families, where the poverty rate was nearly 5 percent among married couple families with only one spouse employed at a full-time and year-round job, and 7 percent among married couple families with both spouses employed in 1999 in jobs that were less than full-time and year-round.

The poverty rate in the Greater New Haven area was much higher (8.4 percent) among married couple families with only one spouse employed in a less than full-time and year-round job during 1999. However, the poverty rate of this group of families was nearly twice as high in the nation (14.8 percent versus 8.4 percent in the New Haven area). Some of these differences between the family poverty rate in the New Haven region, as well as Connecticut and the nation, might be attributable to the age composition of these married couple families and/or the wage differentials. Nonetheless, these findings suggest that employment of adults in married couple families leads to lower poverty rates in Greater New Haven and Connecticut in comparison to the nation.

⁷ Ibid

Families in which the householder and spouse did not participate in the labor market were much more likely to be poor. The poverty rate of nonworking married couple families was 11.2 in the Greater New Haven area. The rate of poverty in this group of families would be considerably higher if elderly families were excluded. Employment among elderly families is very low, but their poverty rate also is low because they have non-earned sources of income like social security and other retirement income that raises their income above the official poverty threshold income level. Unfortunately, data on the poverty rate of non-elderly families by their labor market work efforts are not yet available for the New Haven area.

Table 21:
Poverty Rate of Families by Presence of Spouse and Intensity of Employment
During 1999, New Haven Area, Connecticut, and the U.S.

Family type & work experience of householder and spouse in 1999	New Haven Area	Connecticut	U.S.
<u>Married couple families:</u>			
-both spouses full-time & year-round (FTYR)	0.0%	0.1%	0.2%
-one spouse FTYR, both employed	0.4%	0.4%	1.2%
-one spouse FTYR, one employed	2.4%	1.8%	4.8%
-both spouses less than FTYR	3.4%	3.4%	7.0%
-one spouse less than FTYR, one employed	8.4%	7.5%	14.8%
-both not employed	11.2%	8.6%	12.8%
<u>Single householder:</u>			
-employed FTYR	3.0%	3.7%	6.5%
-employed less than FTYR	29.6%	26.8%	33.8%
-not employed	38.7%	31.7%	40.7%

Among single householder families (male-headed or female-headed) in the New Haven region, the poverty rate was only 3 percent, if the householder was employed full-time and year-round in 1999. The rate of poverty of this group of single householder families was considerably higher in the nation (6.5 percent). This is likely the result of lower overall wages in the nation compared to Connecticut that result in high rates of working poverty in the nation compared to Connecticut and the New England region.

Also noteworthy, is the comparatively small difference between the poverty rates of married couple families with only one spouse employed full-time and year-round, and single householder families with the same level of work effort. In the Greater New Haven area, the poverty rate of married couple families with only one worker who was employed full-time and year-round was 2.4 percent, compared to 3 percent among single householder families with the same level of work effort. Nationwide, the difference between the poverty rate of these two groups of families was 4.8 percent and 6.5 percent, respectively, yielding a difference of 1.7-percentage points. These differences are, in

Table 22:
Communities in the New Haven Area Ranked in Ascending
Order by Change in the Family Poverty Rate Between 1989 and 1999

City or Town	1989	1999	Absolute Change
Clinton town	2.6%	2.0%	-0.6
Bethany town	2.1%	1.5%	-0.6
North Branford town	1.8%	1.2%	-0.5
East Haven town	3.9%	3.5%	-0.4
Percent of total New Haven area residing in these towns			14.5%
Percent of poor New Haven area residing in these towns			4.9
Madison town	0.7%	0.9%	0.3
Woodbridge town	1.1%	1.4%	0.3
Orange town	1.6%	2.1%	0.5
Wallingford town	1.9%	2.4%	0.5
Guilford town	1.7%	2.3%	0.6
North Haven town	1.5%	2.3%	0.8
Branford town	2.4%	3.3%	0.9
Hamden town	2.2%	4.5%	2.2
New Haven city	18.2%	20.5%	2.3
West Haven city	4.2%	6.6%	2.4
Percent of total New Haven area residing in these towns			85.5%
Percent of poor New Haven area residing in these towns			95.1%
New Haven Region	6.4%	7.3%	0.9
Connecticut	5.0%	5.6%	0.6

part, attributable to the generally lower levels of education among single householder families than among married couple families, which translates into lower wages among the former, even if they work at the same intensity as married couple families.

The poverty rate of single householder families was nearly 30 percent when the householder was employed less than full-time and year-round in 1999. Among nonworking single householder families, the poverty rate was 40 percent. This rate of poverty would have been higher, if elderly families were excluded from this group.

Analysis of the family poverty rate within 14 communities located in the New Haven area reveals that between 1989 and 1999, over 70 percent of the communities (10 out of 14) saw an increase in the incidence of family poverty. But these communities contained most of the region's families. In 2000, nearly 86 percent of all families in the Greater New Haven area, and 95 percent of all poor families in the region, lived in these 10 communities that experienced an increase in the family poverty rate. A list of all 14 communities ranked by the percentage-point change in the family poverty rate between 1989 and 1999 is presented in Table 22. The increase in family poverty rates ranged from 0.3-percentage points in Madison to 2.4-percentage points in West Haven. Only four communities saw a decline in the family poverty rate between 1989 and 1999. These communities were small and were home to 15 percent of the region's families and only 5 percent of the region's poor families.

Summary and Conclusions

The decade of the 1990s has not been good for the economic well being of most residents of the Greater New Haven Workforce Investment Area. On the measures of income growth and poverty reduction, the region has performed poorly. Residents of this area have not participated fully in the national economic recovery of the 1990s, and on most measures are well below the highs attained in the late-1980s at the peak of the previous business cycle.

Most communities in the region suffered a decline in median household and family incomes. A comparison of the mean and median family income in each town

within the New Haven Workforce Investment Area indicates a high degree of income inequality in these communities. Labor market developments with declining employment in manufacturing industries and increasing employment in service sector industries and demographic developments including rising immigration, increases in single mother households, and declines in married couple families, led to a widening of income inequality in the region.

Income declines combined with increased income inequality were accompanied by rising poverty rates in the New Haven region. The rate of poverty increased in the entire region, as well as in most of its 14 communities. The incidence of poverty increased among resident individuals, as well as families. The incidence of poverty was much higher among younger and single parent families. However, single mother families in the region saw a sizable reduction in their poverty rates over the decade of the 1990s, although their rate of poverty continued to remain quite high, even at the end of the decade. Most of this decline is likely attributable to the passage and implementation of welfare reform. Unfortunately, systematic statewide impact evaluations of the outcomes of people leaving welfare after they leave the welfare rolls have not been undertaken. These kinds of evaluations would enable us to assess the connections between the decline in poverty of female-headed families and welfare reform.

In the analysis of the population and labor force growth and employment developments in the Greater New Haven area, we found that the region had an anemic population growth of 2.1 percent between 1990 and 2000. In contrast, the nation's population grew by 13.2 percent and the rate of population growth in New England was 5.4 percent. Moreover, all of the population growth in the New Haven region was attributable to immigration. Between 1990 and 2000, the region's total population increased by 9,141 while the number of foreign-born individuals increased by 17,660 over the same time period. The increase in the foreign-born population in the Greater New Haven area was nearly two times (1.93) as high as the increase in the total population. In the absence of immigration, the population in the Greater New Haven area would have declined during the 1990s. If we add recently arrived (in the 1990s) individuals who were born in Puerto Rico or the U.S. Islands, then the region had 21,452

recently arrived immigrants—a number that was 2.3 times the increase in the region’s population.⁸

The working age population of the Greater New Haven region grew by only 0.4 percent, while the labor force, which constitutes the supply side of its labor market, declined by 2.8 percent during the 1990s. Nationwide, the labor force grew by 11.5 percent over the same time period. The entire decline in the resident labor force of the New Haven region was attributable to a decline in the labor force attachment of the working age population. The labor force participation rate of the working age population declined by over 2-percentage points from 67.7 percent in 1990 to 65.5 percent in 2000, resulting in 6,700 fewer people in the region’s labor force.

The job creation performance of the New Haven region during the 1990 to 2000 time period was also quite poor. Over the decade, the region added only 9,200 jobs, yielding a job growth rate of less than 4 percent. The region’s job growth was about the same as the state as a whole, but much smaller than the nation (19.3 percent) over the same time period. Between 1993 and 2000 all of the job growth in the Greater New Haven area occurred outside the New Haven city, where the number of jobs actually declined by 1,400 or 6 percent over the same 7-year time period.

In addition to the lackluster overall job growth, the region suffered disproportionate job losses in the high wage industries of manufacturing and finance, insurance, and real estate by 10.5 percent and 15 percent, respectively, which likely resulted in poor wage growth in the area.

⁸ The foreign born population includes estimates of individuals born in Puerto Rico and US outlying areas who entered the New Haven region during the 1990s. According to data from the Current Population Surveys, 31.9% Puerto Ricans in the New England area had entered the country in the 1990s. Applying this ratio to the 11,887 individuals residing in the New Haven area who were born in Puerto Rico or the US outlying areas, we estimate that out of this total, 3,792 entered the US during the 1990s. Our estimate of the foreign-born population in the New Haven area that entered the US in the 1990s (21,452) consists of those who were born in Puerto Rico or other US outlying areas (3,792) plus those who were born on other countries of the world (17,660).