Executive Summary

The purpose of this report is to assess the economic health and well-being of the workers and families in Massachusetts. The recent past, at least in broad economic terms, has been positive in many respects. In early 2000, the U.S. economy achieved the longest continuous economic expansion in its history. The economic news in Massachusetts was also positive in many respects. Since 1992, the state has added 525,000 jobs. By 2000, the unemployment rate had dropped to 2.6 percent, our lowest rate in the last thirty years. Productivity increases, measured by gains in output per worker, were among the highest in the country over the last decade.

These facts give us an overall sense of the progress of the Massachusetts economy, but they tell us little about how ordinary workers and families have fared. Much has been written nationally about how the New Economy is affecting working-class and middle-class families, but there is little information at the state level. MassINC has published a number of studies on related topics, including our inaugural report, *The State of the American Dream in New England* (1996). Other MassINC research has analyzed the contribution of immigrants, the types of skills needed to succeed in the New Economy, changes in the state's labor force, and factors determining the state's high cost of living.

This research project finds that most middle-class families are working harder today than ever to hold onto their standard of living, despite the economic prosperity of the last decade. In arriving at this conclusion, we examined the economic data of the last twenty years and used the most up-to-date information available from a wide variety of government and other data sources. It is worth noting, however, that the purpose of this study is not to advocate for specific policy prescriptions or recommendations. Rather, our goal is to present the facts in the most comprehensive and straightforward way possible. We hope that by objectively laying out the facts, this report will be a catalyst for a more informed and thoughtful public dialogue. As will become clear, there are a lot of challenging questions for opinion leaders, decision-makers and concerned citizens in the public, private, and non-profit sectors to address. We also hope that this report will help place in larger context the changes that we all are experiencing within our families and at our workplaces.

To begin, we find that there are four key factors at work in shaping the economic condition of Massachusetts families:

1. The Changing Family

- Over the past two decades, high rates of divorce and births outside of marriage have changed the way people form families. Today, there are fewer married couples in the Commonwealth. At the same time, there has been a rise in single-parent families, which has had a number of negative economic consequences for families in general.
- Within married couples, the economic role of women has changed substantially. Two-income families are now the rule, and these families have increasingly come to depend upon the earnings of the woman to maintain and improve their standard of living. Not only are more wives working outside the home, they are also working more hours than ever before.
- A large part of a family's economic success depends on how many hours the family members work. Not surprisingly, those who work more hours do better financially. We find that most families at the low end of the income ladder do not work very many hours. In contrast, middle- and upper-middle-income families work a tremendous number of hours in order to achieve and maintain their high standards of living.

2. The Growing Importance of Education and Skills

- Over the past twenty years, formal education with a strong base of literacy skills has become the economic fault line, dividing those who enjoy economic success from those who do

not. While workers with higher levels of education continue to have more and higher paying opportunities, those with limited education have been losing ground, with fewer chances to succeed.
- The earnings premium for additional years of schooling has grown. As a consequence, the income gap between the least and the most educated families has widened considerably.

3. The Geography of Success

- The New Economy has affected geographic regions of our Commonwealth quite differently. There are at least three stories to tell. First, the economic fortunes of Greater Boston (Essex, Middlesex, Norfolk, Plymouth, and Suffolk Counties) and Central Massachusetts (Worcester County) are largely stories of success.
- Second is a mixed story for Southeastern Massachusetts (Barnstable, Bristol, Dukes, and Nantucket Counties). Although the region has created many jobs, these jobs often pay less than the new jobs in other regions.
- Finally, this report tells the story of Western Massachusetts (Berkshire, Franklin, Hampshire, and Hampden Counties)—a story that is as sobering as it is stark. The state's economic growth of the mid to late 1990s largely bypassed the entire western half of the state. Today, the economic divide between different regions of Massachusetts is larger than it has been at any time over the last thirty years.
- A core element of the American Dream is the ability to own one's home. Yet, Massachusetts has one of the lowest home ownership rates in the country. Our high housing costs wipe out the advantages of our state's above-average incomes. While most of our analysis of home ownership pertains to the state as a whole, the problem of high housing costs is particularly acute in Greater Boston. In Eastern Massachusetts, these high housing costs have also become an issue of economic competitiveness. They contribute to the out-migration of workers and exacerbate labor shortages, increasing difficulties in attracting and retaining workers.

WHAT DO WE MEAN WHEN WE SAY....

American Dream—The ideal of freedom and opportunity that motivated the Founding Fathers. At its simplest, the American Dream is the notion that success is within reach of anyone—regardless of one's circumstances of birth—through one's own hard work. The core material elements of the American Dream include: the ability to improve one's earnings over time through hard work, a family income that provides a reasonably secure middle-class standard of living, and the opportunity to own one's home.

Families—For the purpose of this research, we rely on the Census Bureau's definition of a family household, which is any household that includes two or more individuals who are related by blood, marriage, or adoption. Note that according to this definition a family may or may not include children. By this definition, about two-thirds of all households in Massachusetts are families. This standard definition is incomplete, most notably because it does not include domestic partners (gay or heterosexual) if they do not have children. However, this widely used definition is the best available option for our analysis.

Median Income—The median is the middle point of the income distribution. One half of the families (or households) will have an income below the median, while the other half will have an income above the median. We often use the term "typical" to refer to the median family or household income. (This report also looks at the median earnings of workers.)

Middle Class—There are a number of ways that people define the middle class. For the purpose of our analysis, we define the middle class as families in the middle three quintiles (i.e. the middle 60%) of the income distribution. Under this definition, families in Massachusetts who earn $24,000 to $103,000 would be considered part of the middle class. It is important to note that if we considered the three middle quintiles of the country, New England, or specific regions of the state, the income boundaries would be different. Some researchers prefer an absolute standard, arguing that families are middle class if they are within fixed income boundaries that correspond with a certain standard of living.

***Important Note About Comparing Incomes and Earnings Over Time**

In order to adjust for the effects of inflation and to compare the purchasing power of workers or families over time, we have converted dollars into real terms. Unless otherwise specified, all of our comparisons are in real terms. In addition, when we use the Current Population Surveys (CPS) after 1994, we rely on two-year averages because of the reduced sample size.

4. A Transformed Economy

- The nature of work is fundamentally different today than it was twenty years ago. In not even the span of a generation, the Massachusetts economy has fundamentally changed its industrial and occupational structure. The shift from a goods-producing to a primarily services-providing economy has had profound implications for the types of jobs available and for the demand for workers. There has been a substantial loss of semi-skilled blue-collar jobs that have traditionally paid good wages to workers with limited education. From 1979 to 2000, the only workers who improved their real earnings were professional, technical, and service workers. Workers in all other occupations actually lost ground, although each occupation was affected differently. Opportunities today for workers with limited education are narrower than ever before, while there are many more job options, and better paying ones, for college graduates.
- The conventional wisdom says that the Massachusetts economy diversified substantially after the recession of the early 1990s. Our analysis of recent data on job growth since 1992, however, indicates that job creation in our economy has not been evenly distributed across a broad array of industries. To the contrary, the economic recovery since 1992 has been led by strong growth in a relatively small number of industries, especially business services and other private services industries.

1. THE CHANGING FAMILY

Over the last twenty years, there have been a number of changes in how people form families and in the economic role of married women. These changes have had dramatic implications for the economic condition of families. In order to analyze the data, we rely on the Census Bureau's definition of a family household: a household that includes two or more individuals who are related by blood, marriage, or adoption. This definition is incomplete because it does not include domestic partners (gay or heterosexual) if they do not have children. However, this widely used definition among researchers is the best available one for our analysis. This report examines the important developments of the changing family in great detail, and we have organized the findings into three general categories: 1) changes in family composition, especially the decline in married couples; 2) the expanded economic role of women within married couples; and 3) the long hours of work needed to attain a middle-class standard of living.

The Changes in How People Form Families

Over the last two decades, high rates of divorce, births outside of marriage, and decisions to marry later in life have changed the composition of families. In 1970, 85 percent of all families in Massachusetts were married couples. Today, only about 74 percent of all families consist of married couples, and Massachusetts has a slightly lower proportion of married couples than the nation (74% compared to 77%). There are 38,000 fewer married couples (with and without children) today in the Bay State than there were in 1980. At the same time, there are more single-parent families in Massachusetts and in the country. In our state, single-parent families have increased by approximately 39,000 since 1980.[1] These changes in family formation have had a number of negative consequences for the financial well-being of families and have contributed to growing family inequality and poverty.[2] Due to the presence of two earners and higher levels of education, married couples are more likely to be able to achieve the American Dream.

Trends in Income and Family Composition

Married couples tend to have considerably higher incomes than families headed by a single parent. Over the last twenty years, in our state, the typical married couple's income has increased by $11,000, to an income of $70,000. (Throughout this report, unless otherwise

1 Single-spouse families (with and without children under age 18) have increased by 94,000. Single-spouse families include single parents with children, siblings who live together, and adult children who live with their parents or grandparents.

2 Some scholars argue that the problem is not one of marriage but rather one of early child-bearing. Most scholars also argue that helping prevent out-of-wedlock births, especially in the teen years, would be the best anti-poverty measure.

specified, we have converted dollars into real terms in order to adjust for the effects of inflation and to be able to compare the purchasing power of workers or families over time.)[3] In contrast, the typical female-headed family's income did not change at all in real terms, instead remaining at $25,200. By 1999-2000, the typical married couple earned $45,000 more than the typical female-headed family. Not surprisingly, a single-parent family is more than six times as likely to be at the bottom of the income ladder (bottom quintile) than at the top.

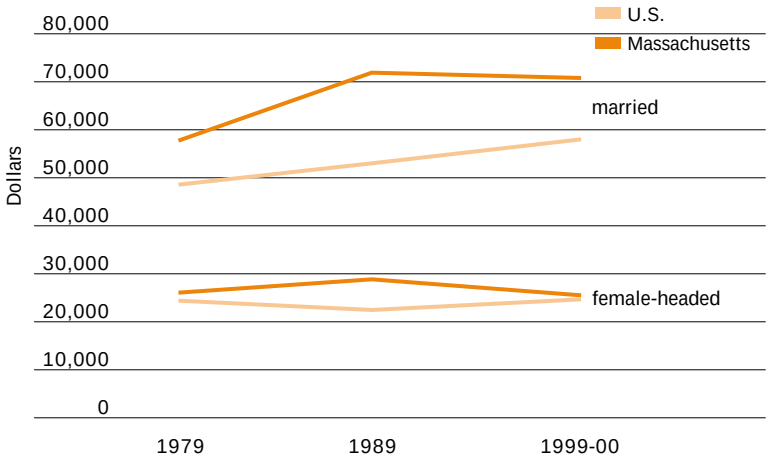
While married couples in Massachusetts earn 19 percent more than their national peers, our female-headed families earn the same income as their national peers. Depending on the methodology, the cost of living in the Bay State is estimated to be 10 to 26 percent higher than the national average. This means that our female-headed families are worse off than their national counterparts in terms of their standard of living. Single-parent families are likely to struggle with limited incomes, with few making their way into the middle class.

Growing Family Income Inequality

Massachusetts, like the country, has seen a substantial rise in income inequality between families over the last twenty years. By the end of the 1990s, the degree of household and family income inequality in Massachusetts generally exceeded that of the nation. Based on a range of inequality measures, our state frequently ranked as one of the top ten most unequal states, together with other Northeast states such as Connecticut, New York, New Jersey, and Rhode Island. At the end of the 1990s, Massachusetts families in the top 20 percent of the income distribution earned 3 times as much as families in the middle, and 11 times as much as families in the bottom quintile.[4] The gap between families at the top and families at the bottom has grown even wider. One exception to this general trend was that the gap narrowed slightly between families in the middle and families at the bottom. On this measure of inequality, Massachusetts was in the middle of 50 states, while on other measures our state ranked near the top.

CHART 1

Incomes of Married Couples and Female-headed Families in the U.S. and Massachusetts



Family Composition, Education, and Poverty

Both family composition and educational attainment are important to economic success, and looking at them together tells a dramatic story. Consider this: Among Massachusetts families headed by a single woman who lacked a high school diploma, nearly 55 percent are poor. That number drops to 26 percent if the woman has a high school degree and drops to only 5 percent if she has a four-year college degree. Among married couples, only 2.4 percent of those families headed by a person with a high school degree are poor, and the poverty rate falls close to 1 percent if the family head holds a bachelor's or higher degree. In Massachusetts, family poverty has essentially been eliminated among married couples with a college education and has come close to being eliminated among married couples headed by a high school graduate since the earnings of wives strongly supplement those of their husbands. Family poverty remains a dire problem for families headed by a single parent, especially for those with low levels of education.

3 As is the standard procedure for converting nominal dollars into real dollars, we use the Consumer Price Index for All Urban Consumers (CPI-U) for the U.S. and for Massachusetts we use the CPI-U index for Greater Boston.

4 The report also assesses household income inequality, which is greater than family income inequality, both nationally and in our state. The very limited incomes of many non-family households, especially those in the bottom quintile of the distribution, create greater income disparities between the top and bottom of the household income distribution.

The Changing Economic Role of Women within Married Couples

Over the past two decades in Massachusetts, the income of the typical married couple (with a husband under age 65) increased by 23 percent to almost $76,000.[5] The fact is that this gain would not have occurred if it were not for the changing economic role of the women in these families. More married women have started working outside the home, working wives have begun logging in more hours at work, and the real earnings of the typical woman have increased over the past two decades. As a result, the income gains enjoyed by married couples are overwhelmingly the result of increased earnings by the wives in these families.

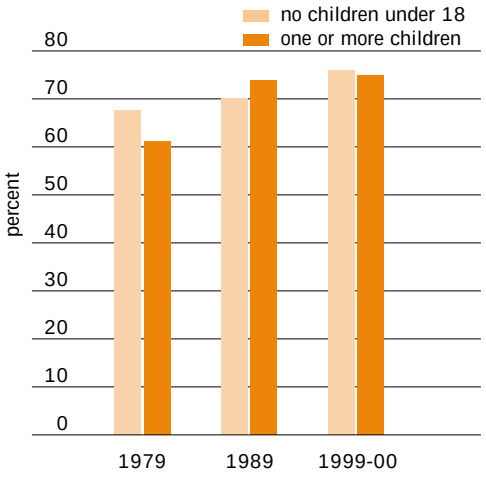
More Wives Are Working Outside the Home

Two-income families are now the rule, not the exception, both here and across the nation. By 1999-2000, three out of every four wives in Massachusetts worked outside the home. While women without children have been working outside the home for many years, the biggest change has occurred in families with children. In the last twenty years, the number of mothers with children under 18 who work outside the home increased from 61 to 75 percent. The result is that today women with children and women without children work outside the home at essentially the same rate.

There are also substantial differences in work behavior depending on the family's education. Women in more educated families are more likely to work outside the home than women in less educated families. In Massachusetts today, 80 percent of wives in couples where the husband has a graduate degree work.[6] That number drops to 57 percent in families where the husband is a high-school dropout. These gaps have widened over the last twenty years, as more wives in well-educated families have entered the labor market.

CHART 2

Proportion of Massachusetts Families with Both Husband and Wife Employed



Wives Work More Hours

Not only do more wives work, but they also work more hours than in previous generations. Consider that a full-time, year-round worker will work a minimum of 1,800 hours per year.[7] Over the last two decades, working wives in Massachusetts have added an extra 456 hours of work outside the home. The typical working wife now works 1,976 hours per year. That is more than the equivalent of a full-time job. Moreover, because that number refers to the median hours worked, it also means that half of all working wives actually work even more than 1,976 hours. Today, the typical wife without children present in the home works 2,080 hours in a year. But it is mothers with children who have added the most hours of work to their days. In 1979, the typical mother with children worked about 20 hours per week. Twenty years later, mothers with children work about 30 hours per week (1,560 hours per year).

The Gender Earnings Gap Narrows

Over the last twenty years, the typical full-time, year-round Massachusetts worker's annual earnings increased by about 7 percent, from $33,000 to $35,000. That story, however, is different for male and female workers. During this period, male workers struggled to

5 This analysis is based only on married couples in which the husband is under age 65. Our earlier analysis looked at all families, which explains the slightly different income figures.

6 We measure the education of the family by the education of the husband in a married couple. However, since people tend to marry others with similar educational backgrounds, a well-educated husband is often married to a well-educated woman.

7 1,800 hours is the number of hours that economists consider "full-time, year-round." This assumes a person works 35 hours per week for 52 weeks.

keep pace financially, losing just under 2 percent of their earnings, while female workers improved their earnings by 22 percent. Women, however, still earn less than men. In 2000, the typical woman earned $30,000 per year, while the typical man earned $40,000. If we control for differences in years of work experience, occupation, and other human capital characteristics, employed men earn about 16 percent more than women. Because of the larger gains of women, the earnings gap between men and women has narrowed considerably.

CHART 3

Median Hours of Work Among Working Married Women in Massachusetts, 1999-00

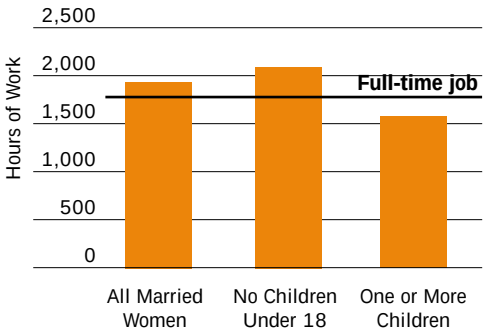
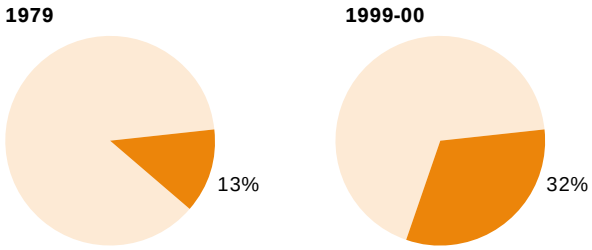


CHART 4

Wives' Share of Total Family Income in Massachusetts



What Would Have Happened If Wives Had Not Worked?

As more wives have worked more outside the home and made gains in their earnings, they have contributed a larger share of their family's income. In 1999-2000, wives' earnings in Massachusetts accounted for almost one third of the total earnings of both spouses, while in 1979 wives' share of the total earnings was only 13 percent. Families have increasingly come to depend on wives' earnings to maintain and improve their living standards.

Remember that the lion's share of the $14,000 gain that married couples enjoyed was a result of the increased earnings of wives. What would have happened if wives had not worked? In the absence of wives' earnings, the income of married couples in Massachusetts would have increased by only $3,200 (6.5%) over the past two decades.[8] Wives' earnings accounted for more than three-quarters of the income gains that married couples made over the last twenty years.

Married couples with children benefited the most from wives' earnings. In these families, 93 percent of the increased income came from wives' earnings. Their income increased by $15,000 (25%); without the wives' earnings, their income would have increased by only $1,100 (2%). The impact of the earnings of wives was also substantial among married couples without children. Their median income increased by $13,000 (20%). Without the wives' earnings, their income would have increased by $6,200, only half the actual amount.

Only married-couple families headed by high school dropouts did not enjoy a higher income relative to twenty years ago. In these families, even the wives' earnings could not prevent their incomes from declining by $6,000, but without the wives' earnings, they would have lost even more ground. The typical married couple in which the husband was a high school graduate needed the wife's earnings to boost its incomes by $4,000; without her earnings, the family income would have declined by $4,200. Wives of college graduates contributed significantly to their families' $16,400 gain. Without the wives' earnings, these families would have gained only $2,500. The gains were even larger in families with education beyond a bachelor's degree.

8 This analysis assumes that husbands work the same number of hours independent of their wives' earnings. Empirical evidence generally supports this assumption.

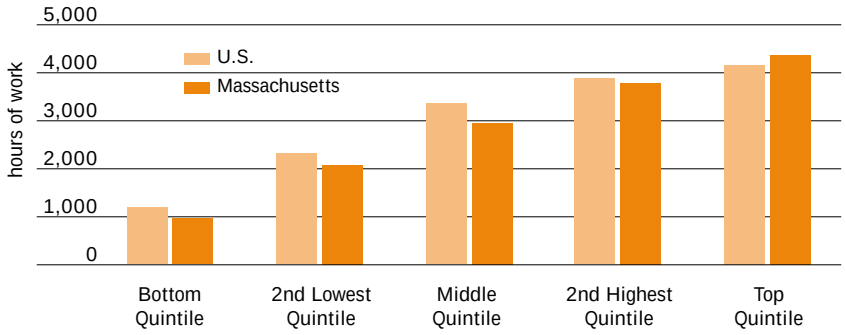
Working Long Hours to Join the Middle Class

In Massachusetts, in 1999, the average family, including all adults, worked 2,850 hours—the equivalent of about one and one-half full-time workers. This average number of hours does not tell the whole story, however, because of the big differences among families and, not surprisingly, those who work more hours do better financially.

Middle-class families work long hours—about 2,000 to 3,900 hours per year. They rely on more than the equivalent of a full-time worker. Upper-middle-class and most affluent families rely on more than the equivalent of two full-time workers. While higher wages certainly help middle-class families achieve their standard of living, it is also clear that their long working hours also make a big difference. Working long hours is a necessary part of the strategy to hold onto a middle-class standard of living.

CHART 5

Average Hours of Work Among All Family Members by Quintile, 1999



Families at the top of the income ladder (the top 20%) work the most hours—a major factor in their economic success. These families work an average of 4,384 hours a year—substantially more than the equivalent of two full-time, year-round workers. Families at the bottom of the income ladder (the bottom 20%) work an average of 992 hours—substantially less than the equivalent of one full-time worker. In other words, the most affluent Massachusetts families worked 4.4 times as many hours as the poorest families.

How hard do Massachusetts families work compared to their national peers? Again, this varies significantly depending upon the income bracket. Even though middle-class families in Massachusetts work many hours, they actually work slightly fewer hours than their national peers. The difference is more striking though at the bottom of the income ladder. The poorest families in our state work far fewer hours than their national peers (992 compared to 1,235 hours). The opposite is true for families at the top of the income ladder. Upper-income families in Massachusetts work more hours than their national peers (4,384 hours compared to 4,101 hours).

A variety of demographic and economic factors influence how many hours a family works. One key reason that families in the top quintile work more hours is because the vast majority of these families are married couples who are highly educated. Having two working adults helps families log the necessary hours to achieve financial security. Significant educational differences also separate the families in the top quintile from those in the bottom quintile. The limited schooling of families at the bottom (many of whom lack a high school diploma) makes it difficult for them to secure stable, well-paying jobs. They are more likely to be out of the labor force, unemployed, or underemployed. In addition, child-care difficulties and health problems further complicate their ability to work more hours. Finding ways to help these families more actively participate in the labor market is critical.

2. THE GROWING IMPORTANCE OF EDUCATION AND SKILLS

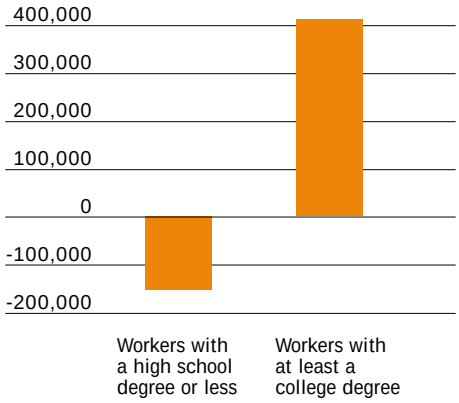
Increasingly, formal education has become the fault line dividing those who enjoy economic success from those who do not. The earnings premium from additional years of schooling has grown steadily as the demand for better educated workers has increased. At the same time, the Massachusetts economy has become

less forgiving, sharply penalizing those with limited education and literacy skills.[9]

As the demand for workers has changed, so has the educational composition of the workforce. Today, there are 415,000 more workers who have at least a four-year college degree than there were twenty years ago. During this same time period, the number of full-time workers with a high school diploma or less has decreased by 156,000. Because of more limited opportunities for work and low wages, some high school dropouts have withdrawn from the labor force, others have retired early, and still others have left the state. By 2000, 37 percent of the workers in Massachusetts held a bachelor's or higher degree.

CHART 6

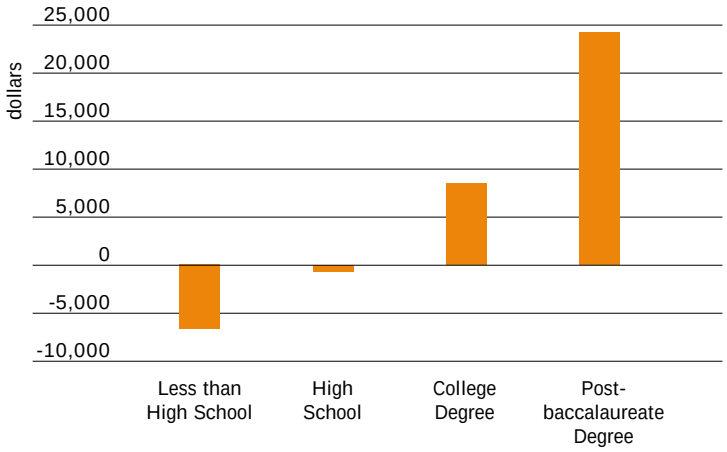
Changes in the Education of Full-Time Workers in Massachusetts Since 1979



Over the last twenty years, workers with a college degree or higher saw their real annual earnings increase, while those with a high school degree or less suffered substantial declines in their real earnings. In Massachusetts, families headed by high school dropouts lost considerable economic ground. Their incomes declined by almost $7,000, a 21 percent decline. Families headed by high school graduates struggled to keep pace, and their incomes declined by 1 percent. Even families headed by someone with some college education lost 10 percent of their incomes. In sharp contrast, families headed by four-year college graduates enjoyed an increase of almost $8,000 (11%), and families headed by someone with a master's degree or higher were the big winners, increasing their incomes by $24,000 (30%).

CHART 7

Change in Family Income by Education in Massachusetts Since 1979



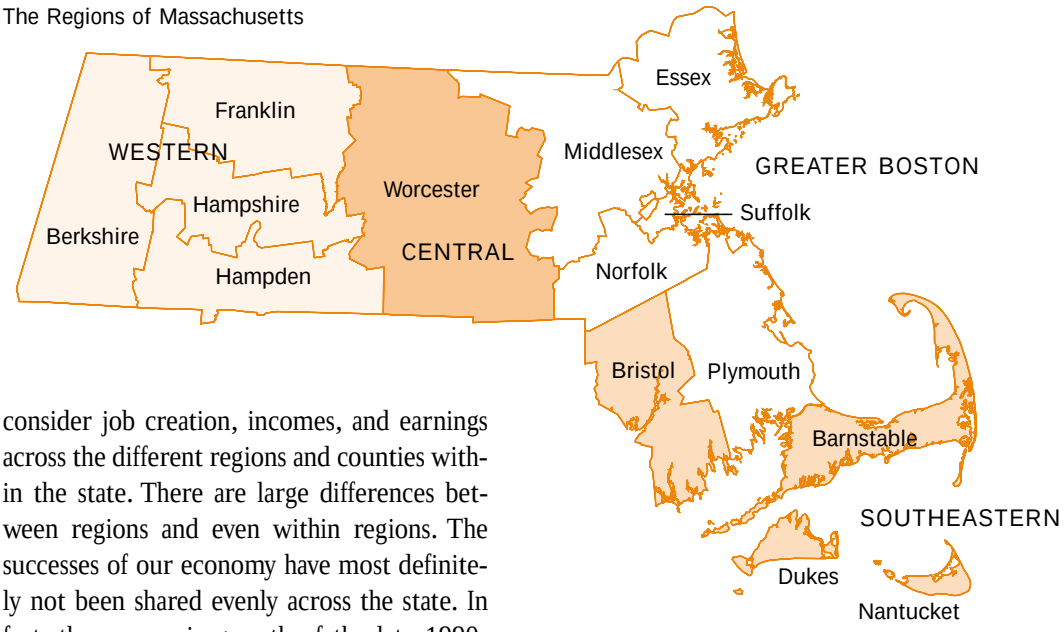
Not surprisingly, families with more education are clustered at the top of the income ladder. The majority of families in the top 20 percent are headed by someone with at least a college degree, and less than 2 percent of these families are headed by a high school dropout. Moreover, the difference in income between the best and least educated families has widened considerably. In 1979, Massachusetts families headed by a college graduate earned 2.2 times as much as families headed by a high school dropout. By 1999-2000, that factor had increased to 3.1. A four-year college degree, or at least a two-year college degree, has become more of a necessity in order to achieve the material elements of the American Dream, especially in the Commonwealth.

3. THE GEOGRAPHY OF SUCCESS

The story of how the middle class in Massachusetts has fared is really two stories. One is the story of the great economic disparities across the geographic regions of our state and the second is about the high cost of living, in particular the cost of housing, in our state compared to the rest of the country. First, we

9 For more discussion on the role that a person's basic skills play in shaping his or her economic success, see John Comings, Andrew Sum, and Johan Uvin, *New Skills for a New Economy: Adult Education's Key Role in Sustaining Economic Growth and Expanding Opportunity,* Boston: MassINC, 2000.

CHART 8
The Regions of Massachusetts



consider job creation, incomes, and earnings across the different regions and counties within the state. There are large differences between regions and even within regions. The successes of our economy have most definitely not been shared evenly across the state. In fact, the economic growth of the late 1990s largely bypassed the entire western part of Massachusetts. The result is that the economic divide between different regions of Massachusetts is larger today than it has been at any time over the last thirty years.

To tell the second story, we compare the cost of housing in Massachusetts to the rest of the country. Housing costs are the primary determinant of a state's cost of living, and our high housing costs account for much of our state's high cost of living. Our state's low rate of home ownership is primarily the result of our high housing costs.

Job Creation Across Regions

Job creation in the 1990s varied widely across the different regions. Each of the four regions of the state lost jobs at roughly the same rate during the recession of the early 1990s. As the state recovered from the recession, though, the rates of new job creation were quite different from region to region. Southeastern Massachusetts led the state, increasing the number of its jobs by 27 percent—although some analysts have voiced concern about the relatively low wages of these jobs. Greater Boston and Central Massachusetts added jobs at a rate of about 20 percent. Western Massachusetts, however, lagged far behind, increasing the number of its jobs by only 11 percent. By 2000, despite a period of strong economic expansion within the state, Western Massachusetts still had not recovered all of the jobs it had lost during the recession.

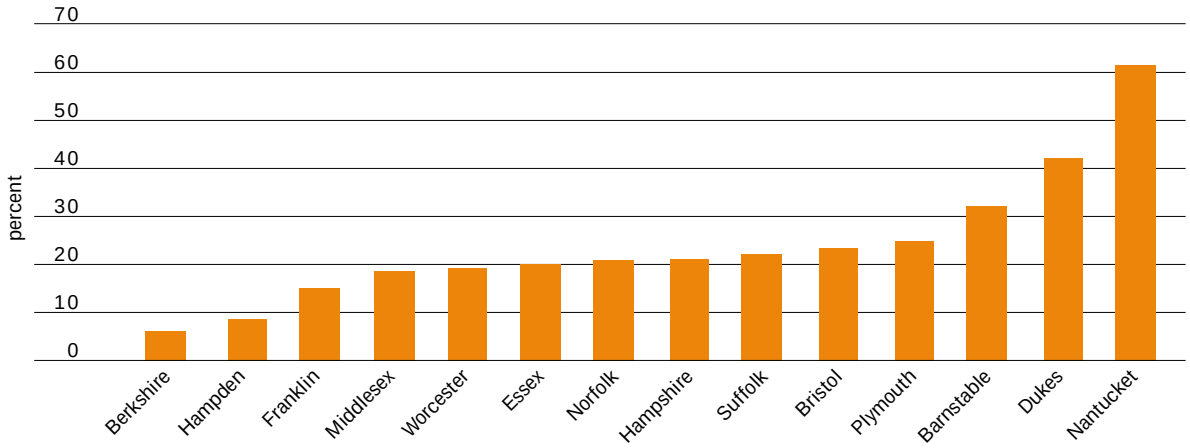
TABLE 1
Growth in Job Creation and Wages, by Region
1991-2000

	Job Creation (%)	Wages (%)
Central Mass.	20	20
Greater Boston	21	27
Southeastern Mass.	27	12
Western Mass.	11	6

There were even more significant differences across the counties, and even within counties there are vast differences. For instance, the city of Lawrence has been plagued by one of the highest unemployment rates in the state, but Essex County, where Lawrence is located, has been able to expand its jobs by 20 percent. Nantucket led the state in job creation, adding 61 percent new jobs from 1991 to 2000. Other leading counties included Barnstable, Bristol, Dukes, Middlesex, Plymouth,

CHART 9

Job Creation by County, 1991-2000



and Suffolk. Even Hampshire County in Western Massachusetts was able to expand its jobs by 21 percent during the economic boom. It was Berkshire and Hampden counties that really struggled. Both counties expanded their jobs by less than 10 percent during the recent economic prosperity. These findings challenge policymakers, both state and local, to find ways to help those areas of the state that have not shared as fully in the state's economic prosperity.

Earnings and Incomes Across Regions

In the last ten years, average wages and salaries per employee have grown in each of the state's four regions, but there were great disparities in the rate of growth. The wages and salaries per employee in Greater Boston increased more than four times as much as in Western Massachusetts (27% versus 6%).[10] There are, however, important unanswered questions about the degree to which these real earnings increases in Greater Boston were shared across workers. Earning inequalities appear to have increased. There are even larger differences across the state's counties and more differences within counties. At the very top, our wage increases were among the best in the country. The typical worker's earnings in Middlesex County increased by 36 percent. During this same period, the average worker's earnings in Hampshire County increased by less than 1 percent. As most of the state surged forward, workers in Western Massachusetts struggled to keep pace financially.

Over the last twenty years, the gaps between the incomes of families and residents in different counties have become more pronounced. In 2000, the typical families in Middlesex and Norfolk Counties earned about $75,000. In Suffolk (Boston) and Hampden (Springfield) Counties, the two poorest counties, the typical family earned $45,000 to $48,000. Some of these differences in incomes are offset by the differences in the cost of living. In particular, the cost of housing is much less in the western part of the state. Suffolk County, one of the poorest counties as measured by family income, is also located in Greater Boston, the region with the highest cost of living. Overall, a family's economic opportunities and well-being are increasingly being shaped by where the family lives within the state.

The High Costs of Home Ownership

The ability to own one's home is a core element of the American Dream. For most working-class and middle-class families, the home is the most important part of their economic

10 The ES202 data are based on the location of the jobs, not the place of residence of the worker. For instance, workers at a firm in Greater Boston might commute to work from another region. Therefore it is important to interpret these findings with a certain degree of caution. This is particularly true for Suffolk County, where a high fraction of jobs are held by people who commute from other counties or even other states. In addition, the ES202 wage and salary data do not include income earned by self-employed workers.

wealth. During the last twenty years, Massachusetts has made modest improvements in the rate of home ownership, with 62 percent of all households owning their own home by 2000. These gains have narrowed a historic gap between our state and the U.S., but Massachusetts still has the fifth lowest rate of home ownership among the 50 states, despite our state's above-average incomes. The gaps in home ownership rates between U.S. and Massachusetts households are the largest for households with incomes below $55,000.

The lower rates of home ownership in Massachusetts are primarily a result of the high cost of housing. In 1980, the median home in our state cost roughly twice as much as the median household's income. By this measure, housing was more affordable than the national average, and Massachusetts ranked in the middle of the pack of the 50 states. During the 1980s, home prices shot up more rapidly in Massachusetts than in any other state. In 1990, the median house cost 4.41 times as much as the typical household's income, a tremendous increase in only ten years.

TABLE 2

A Measure of Housing Affordability* in the U.S. and Massachusetts, 1980-2000

Year	U.S.	Massachusetts	Massachusetts Rank Among 50 States
1980	2.22	1.99	26th
1990	2.63	4.41	3rd
2000	2.92	3.89	3rd

*The ratio of median housing price to median household income.

In 2000, the median house cost 3.9 times as much as the median household's income—a slight improvement from ten years earlier. Nonetheless, this ratio was well above that of the nation as a whole (2.9) and ranked 3rd highest among the states. In recent years, home prices in Massachusetts also rose far more rapidly than in the nation. Our research finds that if median home prices in Massachusetts in 2000 had been equal to those of states in the middle of the pack—where Massachusetts was just twenty years ago—an additional 160,000 Massachusetts households would own their homes.

The failure to build more housing in Massachusetts is a critical factor in the high cost of housing. The rate of new home construction in Massachusetts during the 1990s was one of the lowest in the country. The limited supply of new housing combined with the very high average prices of new homes has contributed to growing affordability problems and increased housing burdens on renters and home owners. We believe there are several reasons to be concerned about the high housing burden in our state, both for families and for our state's economic competitiveness. High housing costs increase inequality among families. They also contribute to the outmigration of workers and exacerbate labor shortages, including difficulties in attracting and retaining skilled workers.

4 . A TRANSFORMED ECONOMY

Over the last two decades, the Massachusetts economy has fundamentally changed, shifting from a goods-producing to primarily a services-providing economy. These changes have had profound impacts on the types of jobs and opportunities that are available to Massachusetts workers. The nature of these changes becomes evident as one analyzes three distinct economic periods: the 1980s expansion, the recession of 1989 to 1991, and the recovery and job boom of the 1990s. As the economy has changed, the opportunities for economic success have narrowed for those workers with limited education and skills.

The 1980s Expansion

After the national recession of the early 1980s, which affected our state less than many other states, Massachusetts was well positioned for an economic expansion. At that time, the state's jobs were concentrated in three key

sectors: manufacturing, trade, and private services. Manufacturing industries, traditionally the source of many good-paying blue-collar jobs, accounted for one in four jobs in our state. During the 1980s expansion, Massachusetts added many new jobs, but the jobs were not distributed evenly across sectors. Employment in some sectors surged ahead rapidly. The private services sector, the leading source of new jobs, expanded by more than 190,000, accounting for 44 percent of all the new jobs created between 1983 and 1988. Wholesale and retail trade also experienced large gains in employment. And although the construction sector represented a small portion of the economy, it was an important source of new jobs, adding nearly 60,000. The only major sector to shrink during this period of economic prosperity was manufacturing. By 1988, manufacturing jobs had declined by 7 percent (44,000 jobs).

The Recession of 1989 to 1991

The prosperity of the 1980s ended abruptly in December 1988, and for almost four years, the Commonwealth experienced substantial job losses, more severely than in any other part of the country. Massachusetts lost 11 percent of its wage and salary jobs, a decline not seen since the Great Depression. Overall, the recession cost Massachusetts 335,000 jobs.

The recession wiped out much of the job gains that the state had made in the 1980s. Job losses were concentrated in specific sectors, most notably manufacturing, construction, and wholesale and retail trade. The state's manufacturing sector entered the recession in a weakened position (having lost jobs during the 1980s expansion), and during the recession, one out of every five manufacturing positions was lost (118,000 jobs). Construction industry jobs fell by nearly half between 1988 and 1992. Together, manufacturing and construction jobs accounted for 55 percent of all jobs lost in Massachusetts. These severe job losses had a huge impact on blue-collar workers. But these losses did not happen in isolation. Employment in other sectors, such as trade, retail, and construction, also dropped considerably.

The only major sector that did not lose jobs during the recession was the private services sector. Despite the economic hard times, firms in services were able to add 17,000 net new jobs. These jobs were in industries such as health services and computer software and data processing services. Even during the recession, the mix of jobs continued to change. Many of the growth industries in the services sector employed large numbers of college graduates. Thus, during the recession, college graduates were more insulated from the job losses that plagued less educated workers.

The Recovery and Job Boom of the 1990s

Beginning in 1992, the Massachusetts (and New England) economy began to recover. The recovery was steady but slow. It took until late 1997 for the state to fully recover all the jobs that had been lost during the recession. Between 1992 and 2000, the state added 525,000 new jobs—recovering the 335,000 jobs that had been lost and gaining 190,000 new jobs. The Massachusetts economy continued to fundamentally change its industrial structure. Many of the new jobs were created in different industries than the jobs that had been lost, and this latest round of job creation further shifted the Massachusetts economy toward jobs that require college degrees.

The rates of job creation again varied considerably across industry sectors. The new jobs were heavily concentrated in the state's private services, trade, and construction industries. The services sector created 295,000 new jobs. It alone accounted for 56 percent of the new jobs. The trade sectors also added many new jobs. Together, the services sector and the trade sector accounted for three-quarters of the new jobs created from 1992 to 2000. The construction sector grew rapidly as well, although in 2000 it still had not recovered all of the jobs it

had lost during the recession. Other sectors, such as finance, insurance, real estate (FIRE) and transportation, communications and utilities (TCU) also added jobs. As the economy accelerated toward full employment, however, the manufacturing sector continued to lose jobs. In the past eight years, the Massachusetts economy shed another 30,000 manufacturing jobs.

As a consequence of this strong job growth and very limited labor force growth, from 1991 to 2000, the state's unemployment rate fell from 9.1 to 2.6 percent—the lowest rate recorded in the past thirty years. The combination of strong job growth and extraordinarily low unemployment rates led to labor shortages in a growing number of industries and occupations across many skill levels. In addition, the absence of any growth in the supply of native-born workers made Massachusetts employers highly dependent on new foreign immigrants to meet their needs.[11]

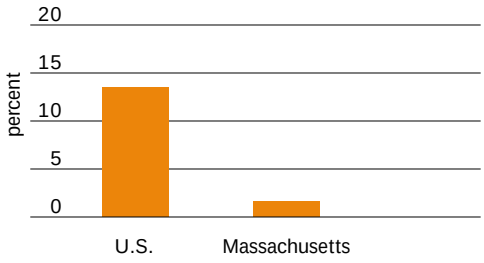
Slow Labor Force Growth and the Outmigration of Young, Well-Educated Workers

Massachusetts has built its economic success on the brains and skills of its workers. Human capital is our most important resource. Yet over the entire decade of the 1990s, our resident labor force grew by less than 2 percent, while the nation's labor force grew by nearly 14 percent. Our state had the fourth lowest rate of labor force growth in the country in the 1990s. In fact, our state's extraordinarily low unemployment rate at the end of the 1990s was partially a reflection of the lack of growth in the labor force. The slow growth in the size of the state's labor force poses a serious threat to the state's ability to sustain a healthy economy. The lack of adequate labor supply may prevent new companies from locating in Massachusetts and prevent existing firms from expanding their operations in our state.

The limited growth in the labor force is partially explained by the fact that Massachusetts has been losing workers to other states, even during the economic boom years of the late 1990s. Every year in the 1990s, more people moved out of Massachusetts than moved into it. In the recession of the early 1990s, we lost about 60,000 people each year. Even during the boom, we lost people. In 2000, the peak of the economic cycle, Massachusetts is estimated to have lost 20,000 people. What is also important to realize is that many of the people who leave Massachusetts are adults of prime working-age, and many are college-educated. Their departure is a double threat to a state with both a limited labor force growth and an aging population. Developing strategies to stop the outmigration of young, well-educated workers is a promising way to expand our labor force.

CHART 10

Labor Force Growth, 1989-2000



Foreign immigrants have helped to fill the gap, playing a key role in our state's economic success in the 1990s. Massachusetts and several of our neighboring states have become almost entirely dependent on immigrants to meet their needs for workers. New immigrant workers accounted for all of the net growth in the state's labor force over the past decade. Without these immigrant workers, the state's labor force would have actually shrunk. These workers allowed us to expand our labor force, and other states are waging active campaigns to attract new immigrants for precisely this reason. While some immigrants are highly skilled, many of the newer immigrants do not speak English well and also have limited formal schooling. As our state relies more and more on immigrant workers, we face the associated challenges of making certain they have the

11 The job growth of the late 1990s ended in the last quarter of 2000. In early 2001, the economy began to show signs of an economic slowdown. Preliminary indicators include rising layoffs, reductions in jobs, hiring freezes, increasing unemployment, and a marked slowdown in wage and benefits growth. Since the fall of 2000, unemployment in Massachusetts has risen by nearly two percentage points to 4.5 percent. The job losers in this economic downturn include many college graduates in information technology and telecommunications industries as well as production workers in manufacturing. Nationally, younger workers between the ages of 16 and 24 have been hit much harder by the job losses. While it will take some time to know the full scope and dimensions of this downturn, many workers and families are already feeling its effects.

skills needed to succeed in and contribute to today's economy.

The size of a state's labor force depends on the rate of participation of residents in the labor force—that is, how many of the working-age residents are either working or actively looking for work (unemployed). In terms of labor force participation, our comparative ranking has deteriorated since the late 1980s, and Massachusetts now ranks 32nd out of the 50 states. Thus, there is plenty of room for improvement. In Massachusetts, the labor force participation rate peaked in the late 1990s with 69 percent of the state's working-age population working or actively looking for work. Consider that the average participation rate of the top ten states in the country is 72.8 percent. If Massachusetts could have matched this rate, the state would have added 260,000 workers to its labor force in 2000. Depending on the educational and occupational backgrounds of these potential workers, the state could have effectively addressed many of the labor shortages it faced at the end of the 1990s. It is clear that we need to identify and remove barriers that discourage our working-age residents from seeking employment.

The Outcome: An Economy with Narrowed Routes to Success

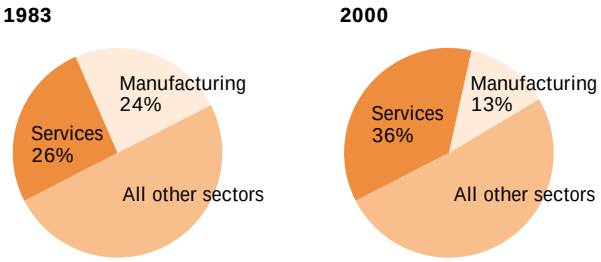
During the past two decades, the composition of industries and jobs in Massachusetts has dramatically changed. Since 1983, Massachusetts has gained 623,600 new jobs. During this same period, the state lost 193,100 manufacturing jobs. In 1983, manufacturing jobs represented almost one quarter of all jobs. By 2000, they had shrunk to 13 percent of the jobs in our state. In sharp contrast, the private services sector expanded from about one quarter of the state's jobs to 36 percent of all jobs in the Commonwealth by 2000.

How Diverse was the Recovery?

The conventional wisdom says that the Massachusetts economy diversified substantially after the recession of the early 1990s and would now be better able to generate long-term economic growth and withstand another economic downturn. An analysis of recent data on job growth since 1992, however, indicates that job creation in our economy was not evenly distributed across a broad array of industries. To the contrary, the recovery was led by strong growth in a relatively small number of industries.

CHART 11

Distribution of Employment by Sector



For instance, the business services sector (a subsector of private services) created more than 134,000 jobs. Although this sector represented only 6 percent of all jobs in the early 1990s, it accounts for more than 25 percent of the new jobs in the 1990s. The business services sector consists of a diverse array of industries, and much of the growth came from temporary-help firms and the computer software, computer services, and data processing industries. Another strong source of job growth was within the specialty trades construction industry. These workers engage in activities such as plumbing, painting, electrical work, and carpentry work that is often associated with residential and commercial construction and is less associated with the heavy construction of Boston's "Big Dig." The health services sector was also an important source of job growth, adding 37,000 new jobs. These jobs were mostly concentrated in outpatient services, such as home health care, physicians' offices, and nursing homes. Because of the narrowness of the jobs recovery, the Massachusetts economy might be more vulnerable to economic

downturns than has been widely assumed. Equally important are the implications for today's workers. The evidence suggests just how difficult it is for families to succeed if they are not connected to one of the handful of job-creating sectors. In addition, it highlights the need for better education and job-training opportunities.

Labor Productivity

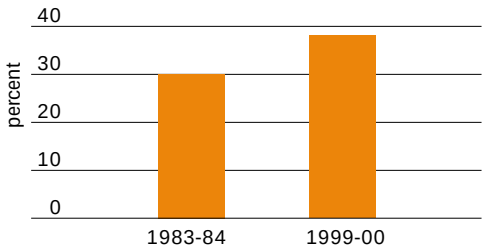
Over the last decade, real output per worker —a key measure of labor productivity—grew at a strong rate, although well below our performance in the 1980s. Even during the recession of the early 1990s, output per worker in Massachusetts increased. Overall, from 1989 to 1999, real output per worker in Massachusetts increased by 24 percent, surpassing a rising national rate by 10 percentage points. On this measure, Massachusetts ranked 5th highest among the 50 states in the 1990s. The growth in output, however, varied considerably among different industries. A very high share of the output growth occurred in a few key industries (electrical and electronic equipment, industrial machinery, stockbroker and mutual fund industries, business services, and real estate). This relatively small number of industries also saw very high rates of growth in real wages and salaries per worker. Thus, the very large gains in labor productivity in Massachusetts were specific to a few industries and not widespread across all industries.

Changing Demand for Workers

Shifts in employment across industries have contributed to powerful changes in the demand for workers by education and occupation. In addition, the skills requirements of jobs have changed considerably. As the state has shifted from a goods-producing to primarily a services-providing economy, the increase in demand for workers has been almost exclusively for occupations dominated by college graduates. But lower-skilled jobs in service occupations have also increased at an above-average rate. Employment in executive and managerial positions has grown tremendously since the early 1980s. Professional employment has also increased strongly, and jobs in technician occupations grew modestly as well. The jobs within these occupations generally require workers to have a college education. In 1983-84, 30 percent of all jobs in the state were concentrated in occupations that generally require a college degree. By 1999-2000, that number had increased to at least 38 percent.[12] According to employment projections, the future likely holds more of the same: more demand for workers with four or more years of college.

CHART 12

Jobs in Massachuestts That Generally Require a College Degree



At the same time that the demand for college graduates has grown, there have been large declines in clerical and semi-skilled blue-collar jobs. Between 1983 and 1999-2000, largely because of the shrinking manufacturing industry, the state lost 103,000 semi-skilled blue-collar jobs. It also lost 48,000 administrative support/clerical jobs. Unskilled blue-collar employment fell by another 8,000 jobs. These declines substantially reduced the number of well-paid opportunities for high school dropouts and even for high school graduates. As the demand for workers has changed, so has the educational profile of workers. Many workers without a high-school degree have withdrawn from the labor force. They also experience relatively high rates of unemployment and underemployment when they seek to enter the labor market.

The economy's demand for certain types of workers is reflected in the willingness of

12 If we were to include workers in high-level sales occupations (sales representatives, stock brokers, buyers) which often require college degrees, that number would rise to above 40 percent.

employers to pay them more, while reducing the pay of workers not in demand. From 1979 to 2000, only workers in a few occupational groups saw their earnings increase, while most other workers actually lost ground. In our state, the only workers who improved their earnings were professional, technical, and service workers. Technical workers gained the most, increasing their salaries by 25 percent. The median earnings of executives and managers stayed the same, but earnings for those in the higher management ranks increased sharply. All other workers lost ground. Lower-level sales workers and unskilled blue-collar workers saw their earnings decline the most. Laborers, helpers, and cleaners have lost more than one third of their earnings since 1979. As a consequence of these divergent trends, the occupational salary structure in Massachusetts and across the country has become more unequal over the past two decades.

Concluding Thoughts

The routes to economic success have narrowed over the last two decades. Nowhere is this truer than in our state. While there are no iron-clad guarantees to achieving economic success, as the above analysis makes clear, certain behaviors make success more likely, while others forecast economic troubles. In fact, increasingly there appears to be a straightforward formula that enables families to achieve a middle-class standard of living. It is essential to understand the "rules of the game" for success in today's economy, whether one agrees with them or not. The families that are getting ahead financially look alike in key respects. Most are college-educated with two income earners who both work a substantial number of hours. Virtually every family who fits this description can be expected to achieve economic success.

How people choose to form families makes an important difference in their economic life chances. Getting into and staying in the middle class today tends to require two incomes, which for most people means being a married couple or being in a stable, long-term relationship. It turns out that families with two adults have a substantially better chance of being able to log the necessary hours to achieve financial security.

For much of the last twenty years, a key strategy that married couples have used to increase their income has been to work more hours, and they have accomplished this by having the women in these families work outside the home and work for more hours per year. This is particularly true for families with children. While we have come to understand the degree to which our economy rewards workers with advanced skills and college degrees, what we have not appreciated enough is the extent to which married couples have had to expand their working hours to increase their family incomes. What is most troubling at this point is that most middle-class families have few, if any, hours left for the adults to add to their work-days. One of the principal strategies of working-class and middle-class families has come close to being exhausted.

In addition, as most people now know: a good education with a solid base of literacy skills is indispensable for economic success. With each educational degree—high school, associate's, bachelor's, and master's—a person's opportunities expand. In addition, extensive formal and apprenticeship training programs of employers also help a person's ability to succeed. The labor market continues to increase its rewards for highly educated workers. At the same time, the routes to success have narrowed for those who do not have some post-secondary education or who have limited basic skills. Some would even say that a college education, or at least a two-year degree, has become necessary to achieve the American Dream in the Commonwealth today.

Finally, increasingly, a family's economic fortunes are being shaped by where that family lives within Massachusetts. The economic prosperity of recent years has not been shared evenly across the Commonwealth. While average earnings per worker in most of Greater

Boston and Central Massachusetts increased considerably over the last decade, workers in Western Massachusetts struggled to make gains. Workers in Southeastern Massachusetts made gains but the wages of many of the jobs there are below the wages in other regions of the state. As a consequence, the income gaps between families in different counties of the state have widened considerably.

Overall, residents in our state have a hard time buying a house. Our state has one of the lowest rates of home ownership, and this is primarily due to high housing costs. High housing costs are a particular problem within Greater Boston. In addition, working-class and middle-class families bear the burden of high housing costs. The ability to own one's home is a central element of the American Dream and an important way for families to build wealth.

As we enter a new century, the rules for economic success are unmistakable. To be clear, we are not arguing that these are what the rules should be. Rather, we have presented the economic evidence of what it takes to succeed in today's economy. This study examines long-term economic trends, and the challenges raised are not ones that can be solved tomorrow.

Our findings raise interesting questions about the appropriate roles of the public, private and non-profit sectors. It is true that the government has an important role to play in expanding economic opportunity, especially through strategic investments in education, training, and infrastructure. As the government makes these investments, it is critical that it also play a role in reforming practices and measuring outcomes so that people and programs are held accountable for their performance. In some areas, the government's role may simply be to disseminate information and use the bully pulpit to spur actions by others.

While highlighting the important role that government can and should play in addressing many of the issues raised in this analysis, we must also acknowledge that many of our most innovative problem-solving efforts are taking place outside of government in the private and not-for-profit sectors. It is essential that we leverage the capacity of these sectors to contribute proactively to address our economic challenges.

It is our hope that by documenting the new economic reality—and especially what it takes to achieve a middle-class standard of living—an informed and ongoing public dialogue can take place. Middle-class families are at a crossroads. The time is ripe to engage in a thoughtful discussion of these issues, for the sake of the health and well-being of our families and our commonwealth.

Key Findings

*Important Note About Comparing Incomes and Earnings Over Time—In order to adjust for the effects of inflation and to compare the purchasing power of workers or families over time, we have converted dollars into real terms. Unless otherwise specified, all of our comparisons are in real terms. In addition, when we use the Current Population Surveys (CPS) after 1994, we rely on two-year averages because of the reduced sample size.

✔ THE CHANGING FAMILY

Family Composition

In Massachusetts and the U.S., the fraction of families that are married couples has declined. In Massachusetts, in 1970, 85 percent of all families were married couples. In 2000-01, 74 percent of all families were married couples. . . . . .page 151

Since 1980, the number of married couples (with or without children) in Massachusetts has decreased by 38,000, and the number of single-parent families has increased by 39,000. . . . . .page 105

Fewer Massachusetts families have children under 18 present in the home. There were 119,300 more childless families in the state in 2000-01 than in 1980 (17.3% increase). . . .page 105

Family Income and Family Composition

In 1999-00, median family income in Massachusetts was $59,597. Median family income was still below its 1989 peak level of $62,382. . . . . .page 108

Since 1979, the median income of married couples increased by $11,468 (19.6%) to $70,015. During this same period, the median income of female-headed families stayed virtually the same at $25,200. In 1979, married couples earned 2.4 times as much as female-headed families. In 1999-00, married couples earned 2.8 times as much as female-headed families. . . . . .page 108

Of the families in the top income quintile, 91 percent are married couples, even though married couples account for only 74 percent of all families. A married couple is more than two times as likely to be in the top quintile than in the bottom quintile. . . . . .page 132

Of the families in the bottom income quintile, 60 percent are single-adult families (with or without children), even though they account for only 25 percent of the state's families. A single-adult family is more than six times as likely to be in the bottom quintile than in the top quintile. . . . . .page 132

Only 2.5 percent of married couples are poor compared to 27 percent of female-headed households. The "feminization of poverty" has been more severe in Massachusetts than in the nation as a whole. . . . . .page 150

If the family composition in Massachusetts had been the same in 1999-00 as it was in 1980, then the state's family poverty rate would have been only 6.6 percent rather than nearly 8 percent. . . . . .page 152

Growing Income Inequality

The degree of household income inequality in Massachusetts as measured by the difference between the mean and the median was nearly twice as high in 2000 as it was in 1979 (34% vs. 18%). . . . . .page 122

In 1998-99, on each of our five measures of household income inequality, Massachusetts had a higher degree of income inequality than the nation. . . . . .page 125

During 1999, the top 10 percent of households received nearly one third of all income in the state, 32 times as large a share as the bottom 10 percent, which received only 1 percent of the income pie. . . . . .page 127

In-kind transfer programs of federal and state government and the federal EITC program helped to reduce the degree of family income inequality. The federal and state tax system reduced the relative size of the income gap between the top and bottom quintiles of the family income distribution in Massachusetts from 10 to 1 to 8.2 to 1 in the late 1990s. . . . . .page 140

Since 1993, individual poverty rates have declined sharply in the nation but have remained essentially unchanged in Massachusetts, ranging from 10 to 11 percent. In 1997-99, the state's poverty rate was only 1.7 percentage points below the nation's and ranked 20th lowest. . . . . .page 148

Poverty rates vary substantially by racial and ethnic group. Both Hispanics and Blacks face poverty rates in the thirty-percent-plus range, four to five times as high as the poverty rate of White, non-Hispanics. . . . . .page 149

In Massachusetts, poverty rates for families with children rise continuously with the number of children under 18 in the home. Children are the most poverty prone age group in Massachusetts. The poverty rate for families with one child was 6.5 percent, and it increased to 13.4 percent in families with two children and to 20.1 percent in families with three or more children. . . . . .page 156

The Changing Economic Role of Women

Since 1979, the number of Massachusetts women employed full-time, year-round has increased by 44 percent. By 2000, women accounted for nearly 40 percent of the state's full-time, year-round workers, up from 35 percent in 1979. . . . . .page 83

Women in Massachusetts have enjoyed a 22 percent gain in annual earnings since 1979. In 2000, the median annual earnings of women was $30,000. The median annual earnings of men has fallen 1.5 percentage points to $40,000 during the same period. . . .page 86

In 1979, wives' earnings accounted for 13 percent of the total earnings of both spouses. By 1999-00, wives' earnings accounted for 32 percent of the total earnings. . . . . .page 118

In 1999-00, 75 percent of all married women in Massachusetts worked outside the home. In 1979, 64 percent of all married women worked outside the home. . . . . .page 115

The group whose economic role changed the most in the last twenty years was wives with children. In 1979, 61 percent of wives with children worked outside the home, and 68 percent of wives without children worked outside the home. Today, 75 percent of wives with children work outside the home, nearly identical to 76 percent of wives without children who work outside the home. . . . .page 115

Over the last twenty years, wives have substantially increased the annual number of hours that they work outside the home. Today, the typical working wife works 1,976 hours per year. Again, the biggest increases have occurred among wives with children. Over the last twenty years, their median hours of work increased from 1,040 to 1,560. They now work about 30 hours per week. Wives without children work 2,080 hours annually. (In chapter 5, we also include hours of work for all married women.) . . . . . .page 117

Wives with more education are more likely to work outside the home. In 1999-00, 77 percent of wives worked in families in which the husband is a college graduate compared to 57 percent of wives in families in which the husband is a high school dropout. More educated women also work more hours than less educated women. . . . . .page 115

The typical (nonelderly) married couple was able to increase its income by $14,200 (23.1%) since 1979. The bulk of this increase was due to the increased earnings of wives in these families. In the absence of wives' earnings, the median income of married couples in Massachusetts would have increased by $3,200 (6.5%). . . .page 114

Among married couples with children, the median family income increased by $15,000 (25%) since 1979. Without the wives' earnings, the median income of these families would have increased by only $1,100 (2%). Among married couples without children, their income increased by $13,000 (20%). In the absence of wives' earnings, the median income of these families would have increased by only $6,200 (13%).page 114

Wives in more educated families contributed more to family incomes. In Massachusetts, since 1979, the typical income of married couples with husbands who were high school dropouts would have declined by $7,700 (-21%) if wives' earnings were excluded—compare this to the actual decline of $6,000 (-14%). The median income of married couples in which the husband was a high school graduate would have fallen by $4,200 without the wives earnings. Instead, their incomes rose by $4,000 (7%). The median income of married couples with husbands holding a bachelor's degree rose by $16,400 compared to a gain of only $2,500 if wives' earnings were excluded. The median income among married couple families with a husband holding a post-baccalaureate degree rose by $40,200 compared to a gain of $13,900 if wives' earnings had been excluded. page 114

Working Long Hours to Join the Middle Class

In 1999, in the U.S., the average annual number of hours that families worked was 2,875. In Massachusetts, the average family worked 2,850 hours (These averages include all families, including those with no paid workers). . . . . .page 135

Middle-class families in Massachusetts work 2,000 to 3,900 hours per year. (This is the range of hours for the middle three quintiles). At the bottom end of the range, these hours are slightly more than the equivalent of one full-time worker. Upper middle-class families work more than the equivalent of two full-time workers. . . . . .page 135

Families in the middle quintile work 3 times as many hours as families in the bottom quintile (2,998 hours compared to 992 hours). Families in the top quintile work 4.4 times as many hours as families in the bottom quintile (4,384 hours per year compared to 992 hours). .page 135

The poorest families in Massachusetts work fewer hours than their national peers (992 hours compared to 1,235 hours). In contrast, the wealthiest families in Massachusetts work more hours than their national peers (4,384 hours compared to 4,101 hours). . .page 135

The average hourly wage for families in the bottom quintile was $7.29, while the average wage for families in the top quintile was $35.30. Average hourly wages for middle-class families ranged from $11.68 to $20.58. . . .page 135

The employment rates of poor families in our state are lower than those of their national counterparts. Only 41 percent of poor families in Massachusetts worked at some point during 1998-99 compared to 55 percent of their national counterparts. Work rates of poor families in our state varied considerably across age and educational level. The oldest (65 and older) and the youngest (under 25) family heads had the lowest employment rates, and poor high school dropouts were employed at only one-half the rate of poor high school graduates. . . . . .page 157

During 1998-99, the typical poor family in Massachusetts worked 15 weeks and 478 hours. . . . . .page 157

One third of Massachusetts families who were jobless in the late 1990s were poor compared to 21 percent of those who worked 1-1000 hours per year and only 1.5 of those who worked 1800 or more hours. . . . . .page 158

✔ THE GROWING IMPORTANCE OF EDUCATION AND SKILLS

The educational composition of the workforce has changed markedly over the past two decades. The state has added 415,000 full-time, year-round workers who have at least a four-year college degree, and the number of full-time, year-round workers with a high school degree or less has decreased by 156,000. . . . . .page 83

In Massachusetts, the proportion of full-time, year-round workers with a bachelor's or higher degree increased from 26 percent in 1979 to 37 percent in 2000. During that same time period, the proportion of full-time, year-round workers with a high school degree or less decreased from 58 percent to 38 percent. . . . . .page 83

The biggest difference between Massachusetts families and their U.S. counterparts is in level of education. The heads of families in Massachusetts are considerably more likely to be college graduates who have completed 16 or more years of schooling. . . . . .page 83

In 1983-84, 30 percent of employment in our state was concentrated in jobs that generally require a college degree. By 1999-2000, that figure had increased to 38 percent. .page 73

Since 1979, the earnings of full-time, year-round workers who lack a high school degree declined by $7,491 (27%). Full-time workers with a high school degree gained $468 (1.6%). Full-time workers with a four-year college degree gained $1,702 (3.8%), and those with more than a college degree gained $6,419 (12%). As a result, the gap in earnings between the most educated and less educated workers widened. . . . . .page 89

In Massachusetts, over the last twenty years, the median income of families headed by high school dropouts declined by almost $6,966 (-21%). The median income of families headed by high school graduates declined by $566 (-1%). In sharp contrast, families headed by college graduates gained $7,924 in additional income (11%), and families headed by someone with a master's or higher degree gained $24,630 (30%). . . . . .page 110

In 1979, the typical family headed by a person with a bachelor's degree earned 2.2 times as much as the typical family headed by a high school dropout. By 1999-00, this factor had increased to 3.1. . . . . .page 110

Of the families in the top quintile, 62 percent have at least a four-year college degree, although this type of family accounts for only 33 percent of the state's families. Only 1.4 percent of families at the top are high school dropouts, even though this type of family accounts for 15 percent of the state's families. . . . . .page 133

In the bottom quintile, 39 percent of families are headed by high school dropouts, even though this type of family accounts for 15 percent of the state's families. In contrast, only 6 percent of families in the bottom quintile are headed by someone with a college degree or higher, while this type of family accounts for 33 percent of the state's families. . .page 133

In Massachusetts, 21.7 percent of families headed by a high school dropout are poor, compared to only 8.3 percent of those headed by a high school graduate, and 2.7 percent of those headed by a college graduate. . . . .page 153

The employment rates of Massachusetts 20-64-year-old workers increase strongly with their amount of education, ranging from 66 percent for those adults lacking a high school diploma to 91 percent for those holding a bachelor's degree or higher. . . . . .page 55

The average annual weeks of employment among 20-64-year-olds in Massachusetts ranges from 31 weeks for high school dropouts to 45 weeks for those who have completed at least four years of college. . . . . .page 55

The average annual number of hours worked by all 20-60-year-olds (including the unemployed) varies widely by educational group, ranging from 1,200 hours for high school dropouts to 1,888 hours for four-year college graduates. . . . . .page 56

Less educated workers are also more likely to be underemployed and members of the labor force reserve. . . . . .page 57

✔ THE GEOGRAPHY OF SUCCESS

Earnings, Income, and Poverty Rates Across Regions and Counties

From 1980 to 2000, the total amount of wages earned in Greater Boston (Essex, Middlesex, Plymouth and Suffolk Counties) increased from $44.8 billion to $95.3 billion (112%), while in Western Massachusetts (Berkshire, Franklin, Hampden, and Hampshire Counties) it increased from $6.7 billion to $8.9 billion (33%). In Southeastern Massachusetts (Barnstable, Bristol, Dukes, and Nantucket Counties), it increased from $4.6 billion to $8.4 billion (83%), and in Central Massachusetts (Worcester County), it increased from $6.0 billion to $10.4 billion (73%). . . . .page 166

The growth of aggregate wage and salary payments was much more uneven in the 1990s than the 1980s. From 1989 to 2000, the total amount of wages and salaries paid to workers in Greater Boston increased eight times as much as in Western Massachusetts (40% versus 5%). In Southeastern Massachusetts and Central Massachusetts, it increased 26 percent and 28 percent, respectively. . . . . .page 167

Annual pay per employee grew in all regions of the state but at substantially different rates between 1989 and 2000. In Greater Boston, the average earnings per employee increased from $29,754 to $47,969 (61%). In Western Massachusetts, they increased from $26,057 to $30,474 (17%). In Southeastern Massachusetts, they increased from $22,587 to $29,650 (31%), and in Central Massachusetts, they increased from $26,906 to $37,667 (40%). . . . . .page 171

The income disparities between different counties are large. In the 1990s, average earnings in all of the state's 14 counties increased, but at vastly different rates. The earnings per private sector employee in Suffolk County increased by 39 percent, while earnings in Hampshire County increased by less than 1 percent. Other leading counties in terms of increased earnings include: Middlesex, Norfolk, Nantucket, and Essex Counties. . . .page 173

Over each of the past three decades, the rate of growth of the per capita incomes of Massachusetts residents varied widely from county to county. During 1999, the per capita incomes ranged from lows of $26,000 to $27,000 in Hampshire and Franklin Counties to highs of $42,000 to $46,000 in Norfolk, Middlesex, and Nantucket Counties. In 1979, the per capita income of the highest-income county (Norfolk County) was 39 percent higher than that of the lowest-income county (Hampshire County). By 1999, the per capita income of the highest-income county (Nantucket County) was 75 percent higher than that of the lowest-income county (Hampshire County). . . . . .page 176

The gaps between the incomes of families in different counties have also increased. In 2000, the median families in Middlesex and Norfolk Counties earned about $75,000. In Suffolk and Hampden Counties, the two least affluent counties in terms of family income, the median family earned $45,000 to $48,000. . . .page 179

The poverty rates of residents in different counties vary considerably. With a rate of 17.3 percent in 2000, Suffolk County has the highest poverty rate. Norfolk County has the lowest, with a rate of 4.9 percent. Over the last decade, poverty has increased the most in Hampden, Plymouth, and Worcester Counties. . . . . .page 180

Job Creation Across Regions

The rate of job creation has varied considerably across the different regions. All parts of the state lost jobs at about the same rate during the early 1990s. As the state recovered and then surpassed its previous employment peak, Southeastern Massachusetts led the state in job creation, increasing its jobs by 27 percent. Greater Boston and Central Massachusetts also added jobs, at a rate of 21 percent and 20 percent, respectively. Western Massachusetts increased the number of its jobs by only 11 percent. In 2000, Western Massachusetts had still not recovered all of the jobs it had lost during the recession of the early 1990s. . .page 169

Among the counties, Nantucket led the state in job creation, adding new jobs at a rate of 61 percent from 1991 to 2000. Other leaders in terms of job creation included Barnstable, Dukes, Bristol, and Plymouth. Even Hampshire County in Western Massachusetts was able to add new jobs at a rate of 21 percent during the economic boom. Berkshire and Hampden Counties lagged the rest of the state, adding new jobs at a rate of less than 10 percent during the recent economic prosperity. . .page 172

High Housing Costs

In 2000, with a rate of 62.2 percent, Massachusetts had the sixth lowest rate of home ownership in the country. . . . . .page 184

Home ownership rates of households in Massachusetts have consistently lagged behind those of their U.S. counterparts over the entire 1940-2000 period, although this gap has narrowed since the 1980s. By 2000, the gap between the home ownership rates of the nation and state had narrowed to 4 percentage points (66.2% compared to 62.2%). . . . .page 184

Across the 14 counties, home ownership rates varied considerably in 2000. Home ownership rates varied from a low of just under 34 percent in Suffolk County to a high of nearly 78 percent in Barnstable County. Three of the state's counties (Dukes, Plymouth, and Barnstable) had home ownership rates above 70 percent, ten had home ownership rates between 61 and 69 percent, and one, Suffolk County, ranked far behind at the very bottom of the distribution at 34 percent. . . .page 187

Since 1996, home prices have risen sharply in each of six large metropolitan areas, with Boston, Lawrence and Lowell experiencing a two-thirds increase in their housing prices between 1996 and 2001. In contrast, home prices only rose by 26 percent in the Springfield metropolitan area, reflecting the lower growth rates of jobs and incomes in the western part of the state during the 1995-2000 period. page 189

For homeowners in the Boston metro area, the median housing burden (monthly ownership costs as a percent of gross income) was 19 percent, versus 17 percent for the U.S. These housing burdens vary widely by income group, with the highest burden for lower middle and middle income families. Boston's median housing burden ratio ranked 7th highest among 21 metro areas across the country. . . .page 194

In Massachusetts, home prices more than tripled between 1980 and 1990, while they increased by only 71 percent in the U.S. over the same decade. Massachusetts led all 50 states on home price increases over the decade. During the first half of the 1990s, the prices of existing homes in the Commonwealth were basically stagnant, declining by 0.4 percent between 1990 and 1996. Following 1996, home prices in Massachusetts once again experienced explosive growth, rising by 62 percent between 1996 and 2001 while home prices increased by 36 percent in the U.S. over the same time period. . . . . .page 188

In 1980, in Massachusetts, the median home cost roughly twice (1.99 times) as much as the median household's income. During the 1980s, the extraordinarily rapid rise in home prices in our state far outstripped the growth in median household income. As a consequence, the relative housing affordability ratio more than doubled to 4.41. In 2000, the ratio decreased slightly to 3.89, but the state continued to have the 3rd highest housing burden in the country. . . . . .page 190

If the housing burden in Massachusetts in 2000 had been equal to the value for the median state (2.79), the home ownership rate in Massachusetts in 2000 would have been 68.2 percent, six percentage points higher than the actual rate of home ownership. This would have increased the number of homeowners in Massachusetts by 150,000 during that year. . . . . .page 196

Massachusetts has largely failed to add new houses to its housing stock. The number of housing permits in our state fell in the early 1990s and increased only modestly from 1992 onward; however, the relative size of the increase was considerably smaller than in the U.S. overall. In 2000, there were only 10 percent more housing permits in Massachusetts than there were in 1990. . . . . .page 192

Of the 115.7 million housing units in the U.S. in 2000, 17.1 percent had been built between 1990 and 2000. In contrast, only 8 percent of all of the housing units (rental and owner occupied) in Massachusetts in 2000 had been built in the prior decade. The percentage of "new" housing units in Massachusetts was less than one-half as high as that of the nation, and our performance ranked 48th among the 50 states. . . . . .page 192

✔ A TRANSFORMED ECONOMY

Over the period of 1983 to 2000, Massachusetts lagged well behind the nation in the rate of new job creation. During this period, the number of jobs in the U.S. increased by 46 percent. In Massachusetts, the number of jobs increased by 23 percent. . . . . . .page 62

The 1980s Expansion

In 1983, manufacturing industries accounted for nearly one in four jobs (24%) in the state. The private services sector was slightly larger and was the state's largest employer, accounting for 26 percent of all jobs in the state. . .page 64

During the expansion of the 1980s, the private services sector was the leading source of new job creation. The services sector accounted for 44 percent of all net new jobs. Construction jobs increased by nearly 60,000, a growth rate of 72 percent. . . . . . .page 65

The Economic Recession of 1989 to 1991

Between 1988 and 1992, wage and salary jobs declined by 335,000 jobs (10.7%) in Massachusetts. . . . . . .page 66

Between 1988 and 1992, the state's manufacturing sector lost one out of five positions (118,000 jobs). Construction jobs declined by more than 68,000 positions. During the same time period, the private services sector added 17,000 net new jobs. . . . . . .page 66

The Economic Recovery and Job Boom of the 1990s

It was not until late 1997 that the state fully recovered the jobs lost during the recession of 1989-1992. Overall, between 1992 and 2000, the state added 525,000 jobs—recovering the 335,000 jobs lost during the recession and gaining an additional 190,000 jobs. .page 69

The job expansion was led by the private services sector, which added 295,000 new jobs. The private services sector by itself accounted for 56 percent of the net increase in wage and salary employment from 1992 to 2000. During the recovery, manufacturing jobs continued to decline, losing 30,000 more jobs. . .page 69

Only one of every 500 labor force participants in Massachusetts experienced a hard-core unemployment problem in 2000 (unemployed for 27 or more weeks) compared to one out of every 33 workers in 1992. . . . . . .page 52

The Outcome: An Economy with Narrowed Routes to Success

Since 1983, Massachusetts has gained 623,600 new jobs. During this same period, the state lost 193,100 manufacturing jobs. In 1983, manufacturing jobs represented almost one quarter of all jobs. By 2000, they had shrunk to 13 percent of the jobs in our state. In sharp contrast, the private services sector expanded from about one quarter of the state's jobs to 36 percent of all jobs in the Commonwealth by 2000. . . . . . .page 69

The economic recovery was led by strong employment growth in a relatively small number of industries. The business services sector by itself created more than 134,000 jobs. In 1992, the business services sector accounted for only 6 percent of private sector employment, yet it accounted for more than one in four net new private sector jobs in Massachusetts. Another strong source of new job creation was the specialty trade construction industry. . . . . . .page 70

Slow Labor Force Growth

From 1989 to 2000, the Massachusetts resident labor force increased by only 57,000 workers —less than 2 percent—while the country's labor force increased by almost 14 percent. . . . . .page 43

During the 1990s, the working-age population of Massachusetts increased by 2 percent, while the working-age population in the nation increased by just under 11 percent. . . page 45

The proportion of 20-34-year-olds in Massachusetts declined by nearly 18 percent between 1990 and 2000. . . . . .page 50

In 2000, the labor force participation rate in Massachusetts was below the national average. Our state's ranking fell to 32nd place. The labor force participation rate of men in Massachusetts declined by nearly 4 percentage points over the last decade. . . . . .page 46

Labor Productivity

From 1991 to 1999, real output per capita in Massachusetts increased by 32 percent. Massachusetts ranked 6th highest among the 50 states. . . . . .page 75

From 1991 to 1999, real output per worker increased by 19.5 percent. Massachusetts ranked 5th highest among the 50 states. . . .page 76

Changing Demand for Workers

The changes in the industrial structure of employment in Massachusetts have led to marked shifts in the demand for workers by occupation and educational attainment. Employment in executive and managerial positions grew by 61 percent since the early 1980s. Employment in semi-skilled, blue-collar jobs fell by 41 percent. . . . . .page 72

The occupational characteristics of full-time workers in Massachusetts have changed over the past two decades and are different in a number of respects from the occupational characteristics of the country. In Massachusetts, a higher share of the full-time, year-round workforce is composed of professional and managerial workers than in the nation (39% vs. 36%); the state also contains more service workers (12% vs. 10%). On the other hand, the shares of Massachusetts workers in administrative support/clerical occupations and in semi-skilled blue-collar occupations were below the U.S. average (11.8% vs. 13.1% and 7.8% vs. 10.3%, respectively). . . . . .page 84

In 2000, the median earnings of full-time, year-round workers in Massachusetts ranged from $16,000 for lower level sales workers to $26,500 for administrative support workers to $50,000 for professional workers. Similar to developments across the country, the occupational earnings structure has become characterized by a higher degree of inequality over the past two decades. . . . . .page 91

At the end of the 1970s, earnings inequality both in Massachusetts and in the U.S. was lower than it was at the end of the 1990s, and the degree of earnings inequality in Massachusetts was generally lower than it was in the nation as a whole. During the last two years, however, earnings inequality in Massachusetts has been essentially identical to that of the nation. . . . . .page 92