



# The Future of the Human Services Workforce in Massachusetts

*Commissioned by*  
The Massachusetts Council  
of Human Service Providers, Inc.

APRIL 2006





# Donahue Institute

OFFICE OF THE PRESIDENT

The University of Massachusetts Donahue Institute is the public service, outreach and economic development unit of the University of Massachusetts President's Office. Established in 1971, the Institute strives to connect the Commonwealth with the resources of the University, bridging theory and innovation with real world public and private sector applications.



## Massachusetts Council of Human Service Providers, Inc.

The Massachusetts Council of Human Service Providers, Inc., widely recognized as the leading voice for change within the human services sector, is the largest statewide trade association for community-based organizations providing social, rehabilitation, education and health care services. People served by member organizations include: individuals with mental, developmental and physical disabilities; people who are homeless; the frail elderly; abused children or those in danger of abuse; victims of domestic violence; troubled children and others. The mission of the Providers' Council is to promote a healthy, productive and diverse human services industry.

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220 Middlesex House, Amherst, MA 01003-9255  
[www.donahue.umassp.edu](http://www.donahue.umassp.edu)

**Christina Citino, Research Manager**

**Michael Goodman, Ph.D., Director Economic  
and Public Policy Research**

**John Gaviglio, Data Manager**

**Alexandra Proshina**



## Massachusetts Council of Human Service Providers, Inc.

250 Summer Street, Suite 237, Boston MA 02210  
[www.providers.org](http://www.providers.org)  
(617) 428-3637

**Michael Weekes, President/CEO**

**Christine Power, Director of Membership Development**

Dear Reader,

The Donahue Institute of the University of Massachusetts was commissioned by The Massachusetts Council of Human Service Providers (MCHSP) to provide a comprehensive analysis of the state of the human services workforce in Massachusetts and implications for the future, titled *Help Wanted: The Future of the Human Services Workforce in Massachusetts*. We are proud to present these findings to our friends, supporters and colleagues.

This report sheds light on the human services sector in two seemingly opposed ways: the industry's strong economic impact on the Commonwealth and its communities; and the current and future workforce crisis facing human services. Workforce issues have led the MCHSP agenda for reform. Our Board of Directors formed a Workforce Committee with the charge "to research, articulate and implement processes and procedures intended to assist member organizations in recruiting, developing and retaining employees."

Some human services agencies report turnover rates as high as 60 percent for direct care staff. Anecdotal data show a concurrent increase for services coupled with a decline in potential staff; Massachusetts is one of few states with a population currently in decline, a trend that is expected to continue. This report is intended to ferret out the truth and/or misconceptions of the anecdotal data, and to provide a base from which all stakeholders can plan next steps and act accordingly.

The Members of the MCHSP Workforce Committee deserve recognition for lending their time and expertise to develop this report: David Jordan, Seven Hills Foundation, Chair; Bill Barnes, Community Resources for Justice; Barbara Brown, Amego, Inc.; Susan Colwell, Community Care Center; Ed DeBity, Veterans Benefits Clearinghouse; Chris Liebke, Casa Myrna Vasquez; Bill Lyttle, The Key Program; Michael Moloney, Horace Mann Educational Associates; and Sue Stubbs, ServiceNet, Inc.

Special thanks also goes to Michael Weekes and Christine Power, MCHSP staff, who worked diligently toward our common goal.

The staff of the UMass Donahue Institute has provided an intelligent analysis. We thank Donahue representatives Michael Goodman and Christina Citino for their patience, time and effort, and for their willingness to go the extra distance.

On behalf of MCHSP and its members, we hope this report helps to elevate discussion, engage in seeking solutions, ameliorate the crisis and restore the promise of the Commonwealth to serve our most vulnerable citizens.

Sincerely,



Barbara L. Brown, Ed.D.  
Chair, MCHSP Board of Directors



David A. Jordan, DHA  
Chair, MCHSP Workforce Committee

Executive Summary .....	2
Introduction .....	4
Part I: A Workforce with Social and Economic Impact .....	6
Defining the Human Services Industry .....	6
Outpatient Mental Health and Substance Abuse Centers .....	7
Residential Mental Retardation, Mental Health, and Substance Abuse Facilities .....	7
Individual and Family Services .....	7
Community Food, Housing, Emergency or Other Relief Services .....	8
Vocational Rehabilitation Services .....	8
Child Day Care Services .....	8
Magnitude and Impact of the Human Services Workforce .....	9
Employment .....	9
Establishments .....	11
Economic Impact .....	14
Part II: Current Human Services Reality and Workforce Trends .....	18
Human Services Occupations .....	18
Characteristics of Human Services Workers .....	21
Human Services Workforce Growth .....	24
Findings and Conclusion .....	26
Methodology and Data Sources .....	28
2003 Estimates of Employees, Establishments and Payroll .....	28
Economic Impact .....	29
2003 Occupational Distributions .....	29
Employee Projections through 2014 .....	30
Data Sources .....	30

# Executive Summary

Each day and every night, thousands of people across the Commonwealth of Massachusetts turn to human services providers for help. This workforce cares for people in nearly every segment of society, including children, the elderly, persons with mental retardation, mental illness or substance abuse difficulties, the poor, the homeless, the disenfranchised, people in crisis, and survivors of abuse. Human services workers make decisions every day that directly impact lives, and they often do so in the face of seemingly insurmountable difficulties.

The human services workforce in Massachusetts is significant. In 2003, nearly 100,000 workers made up the Commonwealth's human services industry. These workers represent 3.3 percent of the state's total workforce. This human services workforce is comparable in size to the Commonwealth's telecommunications estimated workforce in 2004. As community-based workers, human services employees live and work in every region of the Commonwealth.

During state fiscal year 2005, the Massachusetts Executive Office of Health and Human Services contracted with approximately 1,100 providers to deliver community-based services throughout the Commonwealth. The state's investment in these services for vulnerable residents totaled \$2.6 billion. While the public generally understands the social impact of such services, the economic impact of the human services industry is far less appreciated. But as this study shows, the Massachusetts human services sector is not just a social necessity — it is a significant economic contributor. According to the Department of Commerce's Economic Census, in 2002 the Massachusetts human services industry generated \$4.6 billion in revenue and in 2003, industry payroll alone exceeded \$2 billion. The economic impact of the spending of human services workers in Massachusetts is significant: the workforce supports nearly 34,000 additional jobs and annually contributes more than \$112 million to the Commonwealth in state and local taxes.

The Commonwealth's human services workforce grew 18 percent between 1998 and 2003. Notably, the industry continued to add new jobs during the recent recession. In comparison, the Commonwealth's total workforce grew 1.7 percent during the same period and the healthcare sector grew less than 1 percent. The net five-year growth in the human services workforce nationally is one and one-half times greater than the growth in Massachusetts (26.4 percent compared to 18.2 percent). The median earnings among human services workers overall is approximately \$9,000 less than in healthcare and other industries. Among direct service providers, the gap is even greater, at nearly \$15,000 less than the same workers in healthcare and nearly \$5,000 less than their counterparts in other industries.

In recent years, increasing attention has been paid to the needs of the human services workforce. In 2003, the Annie E. Casey Foundation published a report on the condition of the frontline human services workforce.

1 The Annie E. Casey Foundation. *The Unsolved Challenge of System Reform: The Condition of the Frontline Human Services Workforce*. 2003.

2 Light, Paul C. Center for Public Service, The Brookings Institution. *The Health of the Human Services Workforce*. March 2003.

As part of the year-long study, the foundation concluded that “frontline human services work is characterized by low pay, heavy workloads, and excessive regulation,” while at the same time requiring skill, compassion, and dedication.<sup>1</sup> A related survey by the Brookings Institution found that 67 percent of human services workers agreed that their pay was low, 62 percent agreed they worked long hours, and 51 percent described their work as unappreciated.<sup>2</sup>

As the demographics of our nation shift, the need for human services workers is expected to grow significantly. The U.S. Bureau of Labor Statistics estimates 37.5 percent growth in this industry between 2004 and 2014. In contrast, the most recent New England Economic Partnership forecast for Massachusetts predicts that between 2005 and 2009, overall employment in Massachusetts will grow at just under one percent per year.

This growth disparity is in part due to demographic changes taking place, which are expected to increase the demand for health and human services over the next two decades. Over the next 25 years, the U.S. Census Bureau estimates that the number of Massachusetts residents of traditional working age (20 to 65 years old) will grow much more slowly than the younger and elderly populations. Today, for every 100 working-age residents of Massachusetts, 65 residents are being supported. By 2030, this will increase to 83 residents for every 100 working-age residents. Essentially, the need for human services workers is expected to grow significantly during a period in which the working age population is expected to decline.

As an industry focused on meeting the needs of vulnerable populations, human services providers must rely on workers at home. They, unlike other employers, are not able to “outsource” work to other regions when they are unable to find the skilled and unskilled workers they need. Given the realities of rising demand for human services, changing demographics, and increasing competition for qualified workers, the human services industry will confront greater challenges with workforce recruitment and retention in the coming years. The costs of failing to meet these challenges will undoubtedly be high, with significant implications for both the cost and quality

of critical services required by the Commonwealth’s most vulnerable residents.

*The findings of this report strongly suggest that, absent significant public policy attention, Massachusetts human services employers can expect to find it increasingly difficult to find workers willing to provide essential services to vulnerable populations in a highly demanding work environment for relatively low wages.*

Massachusetts human services providers can also expect increasing competition for both skilled and unskilled workers from healthcare and other service sectors that are also expected to grow, but which presently provide their employees with comparatively higher wages, training and support. Funders, clients and advocates for vulnerable populations can expect upward pressure to be placed on both the costs of services and staffing ratios, which will have significant implications for both public budgets and the quality of provided services.

Developing public policies to assist human services agencies in overcoming these challenges will not be easy. There is no “silver bullet” solution to these problems. What is clear is that meeting the human services needs of the Massachusetts population will require workers, employers, and public and private funders to work together to find ways to obtain and effectively utilize the resources that will be required to recruit, retain and sustain the Massachusetts human services workforce of the future. As this report demonstrates, the consequences of failing to meet these challenges are significant, both socially and economically. These issues require the serious attention of state leaders and policymakers. Our most vulnerable neighbors and a significant and growing employer in Massachusetts deserve nothing less.

# Introduction

Demographic trends in the Commonwealth raise disturbing questions about the long-term ability of employers to recruit and retain a qualified workforce in all industries, including human services. According to U.S. Census Bureau estimates, Massachusetts is the only state to have lost population between 2003 and 2004. Since 2000, Census population estimates indicate that the state's population has grown at an anemic rate of just over 1 percent between 2000 and 2004, which is the eighth slowest rate in the nation. Within the Commonwealth, population growth in recent years has been concentrated along the periphery of the Greater Boston region, while Boston itself and the Berkshires have experienced population declines since 2000.

The Massachusetts birth rate has been flat in recent years, resulting in an increasing median age of the population. This has long been a recipe for stagnant population growth in the Commonwealth. This pattern is not new. For much of its history, Massachusetts has relied on two sources of new residents and workers to compensate for its slow population growth: young adults moving into the state in order to study, and immigrants from other nations. However, recent migration patterns strongly suggest that this defense against slow population growth may not be sufficient in coming years.

As documented in *MassMigration*, a report prepared by the University of Massachusetts Donahue Institute and MassINC, over 213,000 more domestic residents moved out of Massachusetts than moved into the state between 1990 and 2002. Between 2002 and 2004, this imbalance grew. A review of recent tax data indicate that the Bay State experienced a net loss of over 100,000 residents during this period. Migrants from other nations helped to offset these population losses in absolute terms, but these new residents frequently arrive with much lower levels of educational attainment and skill than the residents they are replacing.

These trends have troubling implications for the state economy, including the human services sector. Massachusetts employers have consistently reported difficulty in obtaining workers with required skills and experience. The most recent Job Vacancy Survey released by the Massachusetts Department of Workforce Development reported nearly 72,000 vacant positions during a period in which more than 140,000 workers were unemployed statewide. If this situation persists, it is easy to imagine that many employers may, like many of our residents, seek greener economic pastures elsewhere.

Over the next 25 years, the U.S. Census Bureau estimates that the number of Massachusetts residents of traditional working age (20 to 65 years old) will grow much more slowly than the younger and elderly populations. In fact, Census population projections predict that the Commonwealth's "dependency ratio," which measures the proportion of "productive" residents against the proportion of more "dependent" residents, will rise from 64.8 percent in 2005 to 83.3 percent by 2030.<sup>3</sup>

<sup>3</sup> The "dependency ratio" equals the total population of persons under 20 and over 64 years of age divided by the population aged 20-64 years.



Today, for every 100 working-age residents of Massachusetts, 65 residents are being supported. By 2030, this will increase to 83 residents for every 100 working-age residents. Furthermore, “dependent populations” are expected to grow more rapidly than the working-age population. At present pace, dependent populations will grow 24.3 percent over the next 25 years, while the working-age population will shrink by 3.3 percent.

As the demographics of our nation shift, the need for human services workers is expected to grow significantly. The U.S. Bureau of Labor Statistics estimates 37.5 percent growth in this industry between 2004 and 2014. In contrast the most recent New England Economic Partnership forecast for Massachusetts predicts that between 2005 and 2009 overall employment in Massachusetts will grow at just under one percent per year.

*In this scenario, the human services industry will face a dual challenge: the population will need an increased level of services, even as the workforce available to deliver these services shrinks.*

The human services industry does not have the option of relocation. As an industry focused on meeting the needs of vulnerable populations in community-based settings, it must rely on local workers. The challenge facing the human services industry will be exacerbated by the fact that the Bureau of Labor Statistics predicts home health aides, personal and home care aides, registered nurses, and child care workers will be the occupations with the largest job growth over the next decade. Not only are these workers critical to the human services industry, they are also in demand in other sectors, notably healthcare, which competes for workers in these occupations with human services employers.

The Massachusetts Council of Human Service Providers (MCHSP) has addressed human services workforce issues through educational and legislative initiatives. These programs have had a positive effect on the current workforce, but do not provide solutions for the looming issues of future recruitment and retention with a dwindling pool of workers and increased need for services. MCHSP engaged the Donahue Institute of the University of Massachusetts to provide the factual data needed to begin the

discussion among providers, legislators, the executive branch of the government, funders and other stakeholders. This report sheds light on the challenges ahead for the Massachusetts human services industry and is a first step in bringing all parties to the table to ensure that the most vulnerable citizens of the Commonwealth continue to be provided with the services they need and deserve.

## About this Report

This report provides a snapshot of the human services workforce in Massachusetts. The first part defines the industry and describes the workforce, including its size, geographic locations, and economic significance in the Commonwealth. The second part of the report provides occupational information about the workforce, including characteristics and growth projections, and draws conclusions about the industry’s workforce outlook.

Most of the data included in this report are from the U.S. Census Bureau’s County Business Patterns, an annual data release that provides number of employees, number of establishments, and payroll by industry for the nation, states and counties. Additionally, data from the 2000 Decennial Census, 2002 Economic Census and the U.S. Bureau of Labor Statistics are utilized to describe the characteristics of the human services workforce, the types of occupations in the industry, and expected 10-year workforce growth. Detailed information about data sources and methodology are provided in the *Methodology and Data Sources* section of this report.

Copies of this report can be obtained by contacting the Massachusetts Council of Human Service Providers at [mchsp@providers.org](mailto:mchsp@providers.org) or 617-428-3637.

# Part I: A Workforce with Social and Economic Impact

## Defining the Human Services Industry

The Commonwealth's human services industry consists of a range of establishments<sup>4</sup> or provider sites with a common mission to improve the overall quality of life of individuals and families who are among society's most vulnerable populations. As this definition suggests, the human services industry is defined not by a product or service, but by people.

Establishments operating within the human services sector assist a range of vulnerable populations with a variety of services and many of those seeking assistance do so from multiple providers. This study defines vulnerable populations as: low-income individuals and families; persons living in poverty; persons lacking resources to meet basic needs (e.g., food, shelter); the elderly; the homeless; persons with mental retardation, mental health and/or substance abuse disorders; persons involved in the criminal justice system; survivors of abuse; at-risk children and youth; and pre-school aged children.

Although some healthcare, public health and social advocacy establishments conceptually fit within the defined human services industry, these types of establishments were not included in this study. In the case of certain healthcare and public health establishments (e.g. family planning centers and community health centers), industry data were not able to be extracted from larger sector categories (i.e., all outpatient centers), the majority of which solely provide medical care. Including these data would have extended the definition of human services well into the field of medical care. Furthermore, while many social advocacy agencies are committed to assisting vulnerable populations, these establishments generally employ a workforce different from that which is being analyzed in this study.

The definition of the human services industry used in this report is based upon a subset of categories in the North American Industry Classification System (NAICS) Health Care and Social Assistance sector. NAICS is the standard classification system in use by federal statistical agencies in classifying business establishments for the collection, analysis, and publication of statistical data related to the business economy of the nation. The defined human services industry consists of six subsectors: outpatient mental health and substance abuse centers; residential mental retardation, mental health, and substance abuse facilities; individual and family services; community food, housing, emergency or other relief services; vocational rehabilitation services; and child day care services. Throughout this report, the six subsectors are presented in the order in which they appear in NAICS.

<sup>4</sup> An establishment is a business or industrial unit at a single, physical location that produces or distributes goods or performs services (e.g., clinic, shelter, group home, etc.). An establishment may or may not be part of a larger human services agency or organization. For example, an agency providing homeless services may have several shelters at off-site locations. The agency and each of its shelters would be considered a unique establishment.

## **Outpatient Mental Health and Substance Abuse Centers**

This subsector comprises establishments primarily providing outpatient services related to the diagnosis and treatment of mental health disorders and substance abuse. These establishments treat patients who do not require inpatient treatment and may provide counseling, information about a wide range of mental health and substance abuse issues, or referrals to more extensive treatment programs. Types of outpatient, non-hospital establishments in this subsector include:

- Detoxification centers and clinics
- Alcoholism treatment centers and clinics
- Substance abuse treatment centers and clinics
- Mental health centers and clinics
- Psychiatric centers and clinics

## **Residential Mental Retardation, Mental Health, and Substance Abuse Facilities**

This industry subsector comprises establishments primarily engaged in providing residential care (but not licensed hospital care) to people with mental retardation, mental illness, or substance abuse problems. Although medical services may be available at these facilities, they are incidental to the core services of room, board, protective supervision, counseling and other social services. Establishments typical to this subsector include:

- Group homes
- Intermediate care facilities for people with mental retardation
- Staffed apartments or facilities for individuals with mental retardation or mental health needs
- Convalescent homes or hospitals for psychiatric patients
- Residential substance abuse facilities
- Homes for emotionally disturbed adults or children
- Halfway houses for persons with mental illness or substance abuse disorders

## **Individual and Family Services**

The individual and family services subsector covers a wide range of establishments within the human services industry, including those specifically targeting children and youth, the elderly, persons with disabilities and disenfranchised adult populations. Establishments included in this subsector are primarily engaged in the provision of child welfare in such areas as adoption and foster care, drug prevention, life skills training, and positive social development; nonresidential social assistance services to improve the quality of life for the elderly, persons diagnosed with mental retardation, or persons with disabilities; and nonresidential individual and family social assistance. Typical establishments in the individual and family services subsector include:

- Adoption and foster care agencies and services
- Community centers (except those solely providing recreational activities)
- Child welfare services
- Senior centers
- Activity centers and companion services for persons with disabilities
- Adult day care and non-medical homecare/home-maker services
- Support groups and self-help for persons with disabilities
- Self-help organizations (e.g., addiction, offender, or ex-offender)
- Crisis intervention, crisis centers and hotline centers
- Family welfare and social service agencies
- Counseling, support, rehabilitation, referral and mediation services



### Community Food, Housing, Emergency or Other Relief Services

This subsector comprises a range of establishments providing basic needs, including establishments primarily engaged in the collection, preparation, and delivery of food for the needy, as well as the distribution of clothing and blankets to the poor or displaced persons. Additionally, this includes establishments primarily engaged in providing one or more of the following community housing services: short-term emergency shelter for victims of domestic violence, sexual assault or child abuse; temporary residential shelter for the homeless, runaway youths and patients and families caught in medical crises; transitional housing for low-income individuals and families; volunteer construction or repair of low-cost housing, in partnership with the homeowner who may assist in construction or repair work; and repair of homes for elderly or disabled homeowners.

Typical establishments include:

- Community meals, soup kitchens, or food banks
- Meal delivery services
- Shelters (e.g., emergency, homeless, domestic violence, or runaway youth)
- Energy assistance
- Transitional housing
- Home construction and housing repair services
- Emergency and disaster relief
- Immigrant resettlement

### Vocational Rehabilitation Services

This subsector comprises establishments primarily engaged in providing vocational rehabilitation or habilitation services, such as job counseling, job training and work experience to unemployed and underemployed persons, persons with disabilities, and persons who have a labor market disadvantage because of lack of education, skills, or experience, as well as establishments primarily engaged in providing training and employment to persons with disabilities. Provider sites typical to this subsector include:

- Job counseling and training (vocational rehabilitation or habilitation)
- Sheltered workshops or work experience centers
- Workshops for persons with disabilities
- Supported work sites

### Child Day Care Services

The child day care subsector comprises establishments primarily engaged in the provision of day care for infants or children. These establishments generally care for preschool children, but may care for older children when they are not in school and may also offer pre-kindergarten educational programs. The following establishments are typical for this subsector:

- Day care centers
- Home-based babysitting or day care services
- Before or after-school care
- Head start programs
- Nursery schools
- Pre-school or pre-kindergarten centers



## Magnitude and Impact of the Human Services Workforce

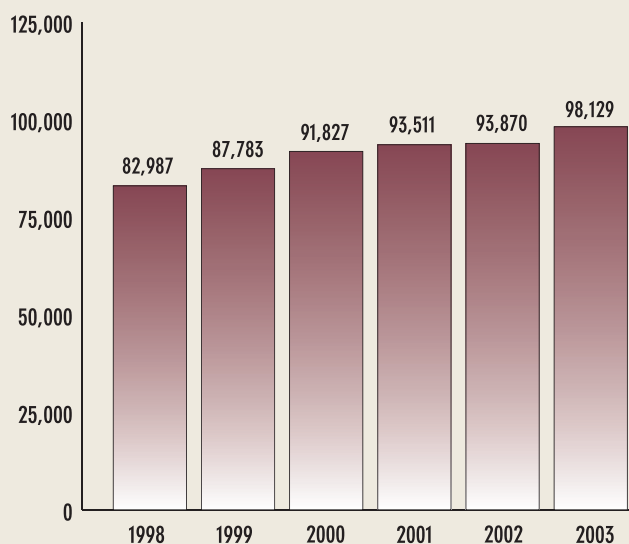
Defining the human services industry is but a first step in describing the magnitude and impact of the human services workforce. The most recently available data from the U.S. Census County Business Patterns provide three

**The human services workforce is of significant size, is present in every region of the state, and its workers contribute significantly to the Massachusetts economy.**

measures of the human services workforce—employment figures, number of establishments, and payroll. Data presented in the remainder of this

section demonstrate that the workforce is of significant size, that it is present in every region of the state, and that these workers contribute significantly to the Massachusetts economy.

**Figure 1. Massachusetts Human Services Workforce Employees, 1998-2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003

### Employment

In 2003, the human services workforce exceeded 98,000 employees (Figure 1) in Massachusetts, representing 3.3 percent of the state's total workforce (nearly 3 million workers) and 3.4 percent of all 2.9 million human services workers nationwide. The Massachusetts human services workforce was approximately three times the size of the biotech industry in 2001,<sup>5</sup> when it employed an estimated 30,000 persons, and is of comparable size to the Commonwealth's telecommunications industry estimated workforce in 2004.<sup>6</sup>

## Uncounted Human Services Workers

In considering the size of the human services industry, it is important to mention that two groups that contribute to the industry are not included in employment figures—self-employed workers and volunteers. According to 2003 non-employer statistics compiled by the U.S. Census Bureau, approximately 14,500 self-employed persons worked in human services.

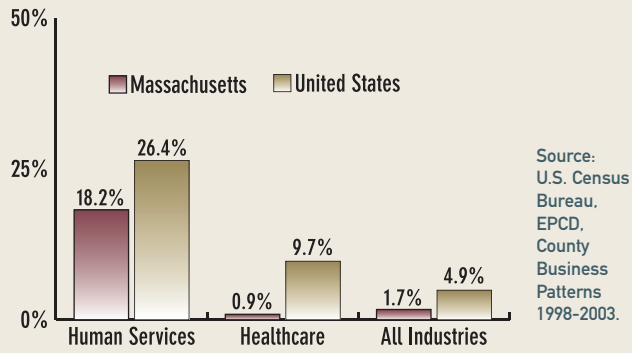
Although no documented figures on the number of volunteers in the industry are available, anecdotal information suggests that reliance on volunteer labor within this industry is significant. Nearly every type of industry establishment has opportunities for volunteers to contribute substantively to daily workloads.

Volunteers shoulder significant responsibilities throughout the industry and alleviate the increasing demands on human services providers. As human services needs increase throughout the Commonwealth, so too will the need for such dedicated volunteers.

<sup>5</sup> Massachusetts Biotechnology Council and the Boston Consulting Group. *MassBiotech 2010: Achieving Global Leadership in the Life-Sciences Economy*. 2002.

<sup>6</sup> Massachusetts Telecommunications Council. *The Telecommunications Industry in Massachusetts: Employment and Business Landscape*. October 2004.

**Figure 2. Massachusetts and U.S. Workforce Growth: Industry Comparisons, 1998-2003**

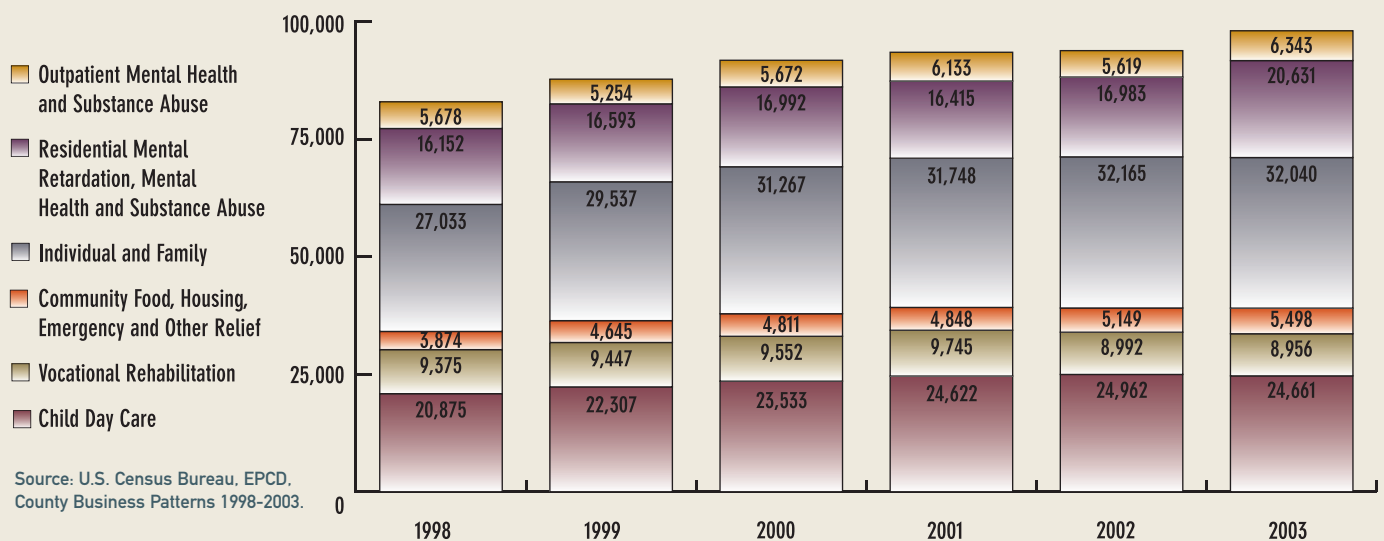


The Commonwealth’s human services workforce grew from 82,987 employees in 1998 to 98,129 in 2003. Notably, the industry experienced 18.2 percent growth between 1998 and 2003, having continued to add new jobs during the recent recession (Figure 2). In contrast, overall employment growth in the Commonwealth during the same period was 1.7 percent or approximately 50,000 employees, and growth in healthcare was less than 1 percent. The net five-year growth in the human services workforce nationally is one and one-half times greater than the growth in Massachusetts (26.4 percent compared to 18.2 percent). There are no definitive explanations for why growth in the human services workforce nationally exceeded the Commonwealth or why the national growth in healthcare employment was nine times that of Massachusetts.

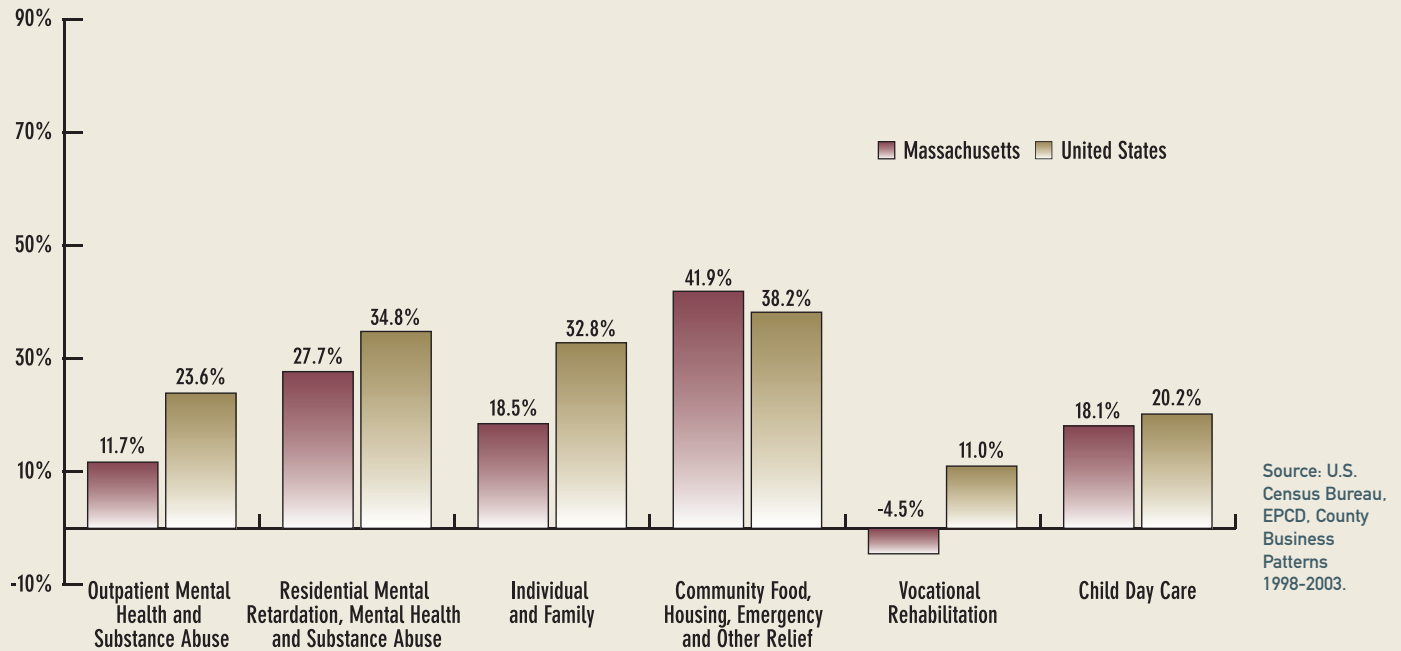
One-third of the human services workforce is employed in the individual and family services subsector (Figure 3), representing more than 32,000 workers. Of the six industry subsectors, individual and family services provides the greatest diversity of services to the widest range of populations. The child care services sector is the second largest, employing 25 percent of the industry’s workforce or nearly 25,000 workers. Residential mental retardation, mental health, and substance abuse centers subsector is the third largest, employing 21 percent of the workforce. The three remaining subsectors each employ fewer than 10,000 workers.

As shown in Table 1, overall employment growth between 1998 and 2003 was 18.2 percent. The largest employment growth occurred within the community food, housing, emergency and other relief services subsector, where the workforce grew 41.9 percent during the same five-year period. The residential mental retardation, mental health and substance abuse facilities subsector also experienced significant job growth between 1998 and 2003. Of the human services subsectors, vocational rehabilitation was the only one to experience a net workforce decline between 1998 and 2003. The subsectors offering outpatient and residential services at mental retardation, mental illness or substance abuse centers saw their greatest increases in workforce between 2002 and 2003 while the subsectors traditionally defined as social assistance experienced their greatest increase in employees between 1998 and 1999.<sup>7</sup>

**Figure 3. Massachusetts Human Services Workforce Growth by Subsector, 1998-2003**



**Figure 4. Massachusetts and U.S. Workforce Growth by Subsector, 1998-2003**



Between 1998 and 2003, the nation exceeded the Commonwealth in human services workforce growth in all subsectors except community food, housing, emergency and other relief services (Figure 4). The Commonwealth’s workforce in that subsector grew 41.9 percent during that time, compared to 38.2 percent for the nation. While Massachusetts experienced a net decline in vocational rehabilitation workers, the workforce in this subsector increased 11 percent nationally.

7 NAICS categorizes individual and family services; community food, housing, emergency and other relief services; vocational rehabilitation services; and child day care services as social assistance.

### Establishments

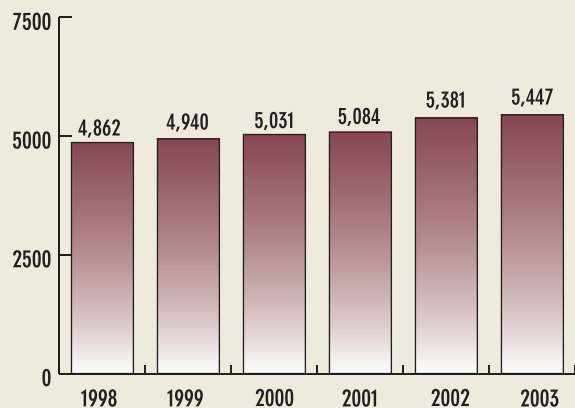
In 2003, 5,447 establishments or sites in Massachusetts were primarily engaged in activities emblematic of the human services industry (Figure 5). Included in this number are all physical locations where services are provided (e.g., clinics, shelters, group homes). These sites may or may not be connected to larger human services agencies. While the human services industry is generally described in terms of agencies or providers, definitive counts of agencies for this industry were not

**Table 1. Human Services Workforce Annual Growth by Subsector, 1998-2003**

Human Services Subsectors	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	1998-2003
Outpatient Mental Health and Substance Abuse	-7.5%	8.0%	8.1%	-8.4%	12.9%	11.7%
Residential Mental Retardation, Mental Health, and Substance Abuse	2.7%	2.4%	-3.4%	3.5%	21.5%	27.7%
Individual and Family Services	9.3%	5.9%	1.5%	1.3%	-0.4%	18.5%
Community Food, Housing, Emergency and Other Relief Services	19.9%	3.6%	0.8%	6.2%	6.8%	41.9%
Vocational Rehabilitation Services	0.8%	1.1%	2.0%	-7.7%	-0.4%	-4.5%
Child Day Care	6.9%	5.5%	4.6%	1.4%	-1.2%	18.1%
<b>Total Human Services Industry</b>	<b>5.8%</b>	<b>4.6%</b>	<b>1.8%</b>	<b>0.4%</b>	<b>4.5%</b>	<b>18.2%</b>

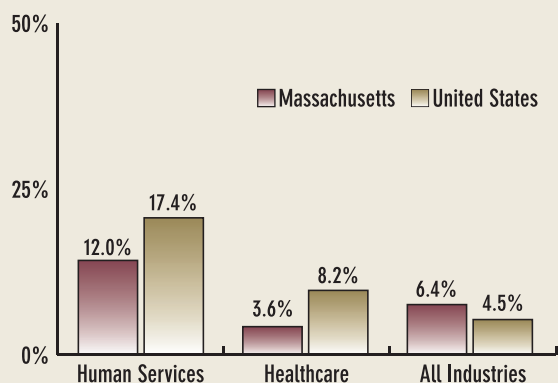
Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

**Figure 5. Massachusetts Human Services Establishments, 1998-2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

**Figure 6. Massachusetts and U.S. Growth in Establishments: Industry Comparisons, 1998-2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

available for this report. However, in a collaborative project of the Massachusetts Taxpayers Foundation and the Massachusetts Council of Human Service Providers, it was estimated that in 2003 there were “about 1,100 private providers, primarily nonprofit corporations” in the Commonwealth.<sup>8</sup> These 1,100 human services providers included agencies contracting with the state to provide human services. The same report estimated that these agencies were employing 60,000 people. Given that the County Business Patterns data for 2003 demonstrate a significantly larger workforce in the human services industry as defined in this report, it is likely that the 1,100 figure underestimates the number of human services agencies in the Commonwealth.

Between 1998 and 2003, the number of sites delivering human services increased from 4,862 to 5,447 unique establishments. This 12 percent increase in human services establishments exceeded the growth in healthcare establishments and all industry establishments in the Commonwealth (Figure 6). However, Massachusetts lagged behind the country in the growth of human services establishments.

The 12 percent increase in human services establishments across the Commonwealth (Table 2) amounted to a net gain of 585 new establishments. The most significant increases occurred in the community food, housing, emergency and other relief services (28.8 percent) and outpatient mental health

<sup>8</sup> Massachusetts Taxpayers Foundation and Massachusetts Council of Human Service Providers. *Reforming the Commonwealth's \$2 Billion Purchase of Human Services: Meeting the Promise for Clients and Taxpayers*. 2003.

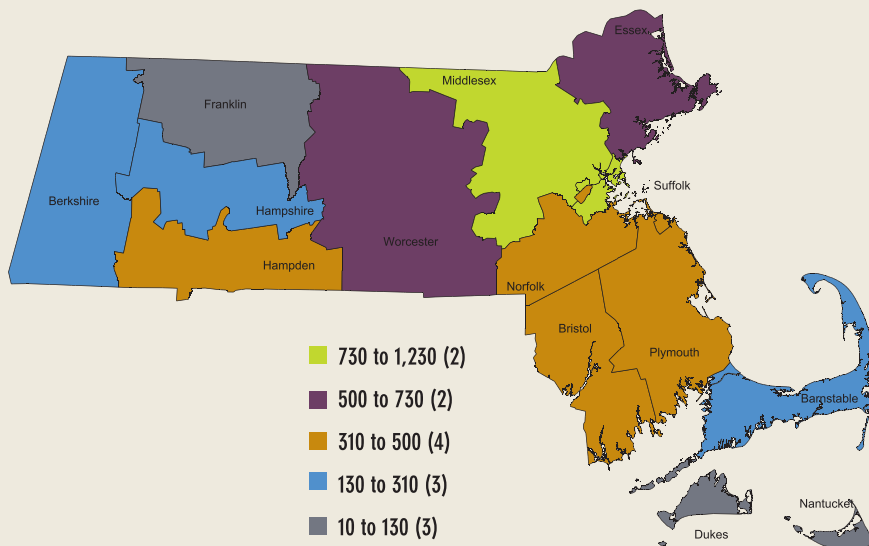
**Table 2. Human Services Establishments by Subsector, 1998-2003**

Human Services Subsectors	1998	1999	2000	2001	2002	2003	% Change 1998-2003
Outpatient Mental Health and Substance Abuse	205	211	225	255	252	258	25.9%
Residential Mental Retardation, Mental Health, and Substance Abuse	1,037	1,063	1,088	1,099	1,137	1,218	17.5%
Individual and Family Services	1,319	1,321	1,333	1,347	1,478	1,441	9.2%
Community Food, Housing, Emergency and Other Relief Services	295	297	296	291	315	380	28.8%
Vocational Rehabilitation Services	256	258	260	258	253	253	-1.2%
Child Day Care	1,750	1,790	1,829	1,834	1,946	1,897	8.4%
<b>Total Human Services Industry</b>	<b>4,862</b>	<b>4,940</b>	<b>5,031</b>	<b>5,084</b>	<b>5,381</b>	<b>5,447</b>	<b>12.0%</b>

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.



**Map 1. Human Services Establishments by County, 2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

and substance abuse centers (25.9 percent). In comparison, the national rate of growth in these subsectors was slightly lower than in the Commonwealth. Community food, housing, emergency or other relief services and outpatient mental health and substance abuse centers experienced 21 percent growth nationally.

Unlike other industries, such as biotechnology, which are concentrated in certain regions or communities, the human services workforce can be found in establishments located in every region of the Commonwealth (Map 1). The presence of human services providers throughout the state is demonstrative of the industry's mission of reaching out to vulnerable populations in community-based settings.

And since the human services industry is defined by the people it serves, it is not surprising that the number of establishments per county is highly correlated with the total population per county (Table 3). Furthermore, the distribution of establishments across counties is highly correlated with the distribution of persons living below 100 percent of the federal poverty level<sup>9</sup>—a characteristic of nearly all of the vulnerable populations served by the industry. However,

<sup>9</sup> The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or non-cash benefits (such as public housing, Medicaid, and food stamps).

**Table 3. Establishments, Population and Poverty by County**

County	Human Services Establishments, 2003		Distribution of Population, 2000		Distribution of Persons in Poverty, 1999	
	#	%	#	%	#	%
Massachusetts	5,447	100.0%	6,138,444	100.0%	573,421	100.0%
Middlesex	1,228	22.5%	1,415,664	23.1%	92,705	16.2%
Suffolk	734	13.5%	657,730	10.7%	124,918	21.8%
Worcester	613	11.3%	726,438	11.8%	67,136	11.7%
Essex	586	10.8%	706,651	11.5%	63,137	11.0%
Norfolk	499	9.2%	633,203	10.3%	29,377	5.1%
Bristol	452	8.3%	521,285	8.5%	52,236	9.1%
Hampden	376	6.9%	441,027	7.2%	65,024	11.3%
Plymouth	311	5.7%	460,919	7.5%	30,649	5.3%
Barnstable	248	4.6%	218,058	3.6%	15,021	2.6%
Berkshire	159	2.9%	129,056	2.1%	12,204	2.1%
Hampshire	133	2.4%	133,933	2.2%	12,585	2.2%
Franklin	69	1.3%	70,216	1.1%	6,634	1.2%
Dukes	26	0.5%	14,810	0.2%	1,083	0.2%
Nantucket	13	0.2%	9,454	0.2%	712	0.1%

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.  
U.S. Census Bureau, 2000 Census of Population and Housing, Summary File 3.

the number of establishments per county is not correlated with the poverty rate. For example, nearly 15 percent of persons in Hampden County live below the federal poverty line, while only 7 percent of human services establishments are located in that county.

The correlation between the number of establishments by county and the number of persons in poverty does not suggest uniformity in the composition of the human services industry in the regions of the state. For instance, while 22.4 percent of human services establishments are classified as residential mental retardation, mental health, and substance abuse services (Table 4), this figure ranges from a high of 34.6 percent of establishments in Berkshire County to a low of 7.7 percent of establishments on Nantucket. The share of child care services establishments also varies significantly across counties.

## Economic Impact

The Massachusetts human services sector is not just a social necessity — it is a significant economic contributor. According to the Department of Commerce’s Economic Census, in 2002, the Massachusetts human services industry generated

**The industry provides substantial economic as well as social returns to both the people and the economy of Massachusetts.**

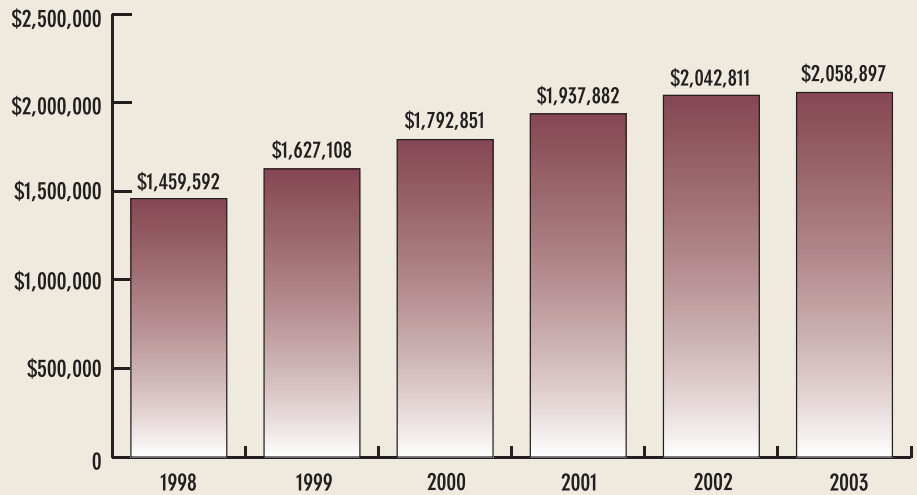
\$4.6 billion in revenue and in 2003, industry payroll alone exceeded \$2 billion. Considering that the state provided \$2.6 billion in state funds to human services providers in FY06, it is clear that the industry provides substantial economic as well as social returns to both the people and the economy of Massachusetts.

**Table 4. Establishments by County and Subsector, 2003**

	Human Services Subsectors						
	Human Services Industry	Outpatient Mental Health & Substance Abuse	Residential Mental Retardation, Mental Health, & Substance Abuse	Individual & Family Services	Community Food/Housing & Emergency/Relief Services	Vocational Rehabilitation Services	Child Day Care
<b>Massachusetts Total</b>	<b>5,447</b>	<b>4.7%</b>	<b>22.4%</b>	<b>26.5%</b>	<b>7.0%</b>	<b>4.6%</b>	<b>34.8%</b>
<b>County</b>							
Barnstable	248	4.4%	19.0%	29.0%	12.1%	2.4%	33.1%
Berkshire	159	5.0%	34.6%	26.4%	5.7%	5.7%	22.6%
Bristol	452	5.5%	29.4%	23.9%	2.9%	3.1%	35.2%
Dukes	26	3.8%	15.4%	23.1%	38.5%	3.8%	15.4%
Essex	586	5.3%	27.0%	20.6%	8.0%	4.8%	34.3%
Franklin	69	4.3%	15.9%	30.4%	21.7%	5.8%	21.7%
Hampden	376	5.3%	16.2%	25.3%	7.7%	11.2%	34.3%
Hampshire	133	4.5%	20.3%	21.8%	8.3%	3.0%	42.1%
Middlesex	1,228	3.5%	21.4%	25.4%	5.7%	4.2%	39.7%
Nantucket	13	0.0%	7.7%	23.1%	7.7%	0.0%	61.5%
Norfolk	499	4.0%	23.2%	20.8%	3.8%	2.6%	45.5%
Plymouth	311	6.4%	17.4%	29.6%	5.8%	3.5%	37.3%
Suffolk	734	4.9%	18.4%	34.6%	11.2%	5.2%	25.7%
Worcester	613	5.5%	25.0%	29.7%	4.2%	5.1%	30.5%

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

**Figure 7. Massachusetts Human Services Industry Annual Payroll (in thousands), 1998-2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

As there are no sufficiently detailed data describing how the industry spends its non-payroll related revenue and this report is focused on the Massachusetts human services workforce, the following analysis estimates the economic contributions of the wages paid to human services workers to the Massachusetts economy. Undoubtedly, the economic impact of overall industry spending is substantially larger than that described in the pages that follow.

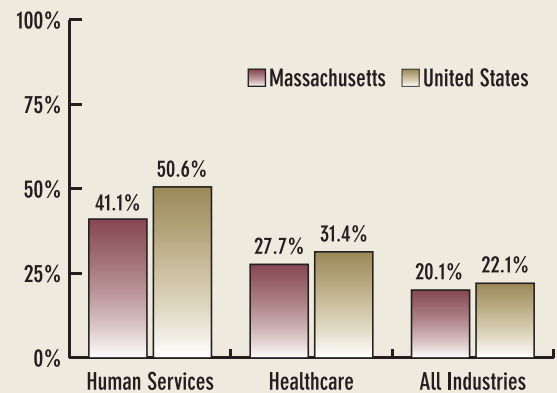
In 2003, according to the U.S. Census Bureau the Massachusetts human services industry paid its workers over \$2 billion (Figure 7). Though the industry represented 3.3 percent of the Commonwealth's total workforce that year, its payroll was only 1.6

**Though the industry represented 3.3 percent of the Commonwealth's total workforce that year, its payroll was only 1.6 percent of the total annual payroll for Massachusetts.**

percent of the total annual payroll for Massachusetts. The comparatively low share of state payroll is consistent with the low wages paid to many workers in the Massachusetts human services industry.

While overall industry wages are comparatively low, between 1998 and 2003, annual industry payroll increased 41 percent (Figure 8). This increase was nearly twice that seen in Massachusetts overall (22.1 percent), but less than annual payroll growth in the industry nationally. In part, payroll growth is due to

**Figure 8. Massachusetts and U.S. Payroll Growth: Industry Comparisons, 1998-2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

the 18.2 percent increase in the workforce between 1998 and 2003. However, the fact that payroll growth exceeded employment growth indicates rising wages in the industry during this period. This growth is partly the result of additional funding, provided by the Commonwealth of Massachusetts, to state funded agencies expressly for the purpose of raising the salaries of direct care human services workers. According to local industry observers, these salary reserve funds were provided in 1998, 1999, and 2000 and likely were responsible for a good deal of the high growth in industry payroll between 1998 and 2003.

**Table 5. Human Services Annual Payroll Growth by Subsector, 1998-2003**

Human Services Subsectors	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	1998-2003
Outpatient Mental Health and Substance Abuse	7.8%	8.4%	13.0%	4.8%	4.5%	44.5%
Residential Mental Retardation, Mental Health, and Substance Abuse	6.5%	10.4%	4.0%	6.9%	13.0%	47.8%
Individual and Family Services	14.9%	10.3%	8.2%	4.3%	-3.4%	38.3%
Community Food, Housing, Emergency and Other Relief Services	16.0%	6.3%	7.1%	11.0%	5.2%	54.2%
Vocational Rehabilitation Services	13.1%	8.0%	7.0%	0.8%	-7.6%	21.7%
Child Day Care	10.0%	12.6%	10.4%	6.5%	-2.4%	42.2%
<b>Total Human Services Industry</b>	<b>7.8%</b>	<b>8.4%</b>	<b>13.0%</b>	<b>4.8%</b>	<b>4.5%</b>	<b>41.1%</b>

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.



The nearly \$600 million increase in payroll was seen in all but one industry subsector—vocational rehabilitation services (Table 5). However, the relatively low five-year payroll growth in vocational rehabilitation occurred during a period when the subsector lost 4.5 percent of its workforce. In comparison, national payroll increases outpaced Massachusetts in all subsectors but outpatient mental health and substance abuse centers.

The \$2 billion in payroll to Massachusetts human services workers in 2003 had a significant impact on the state economy (see Methodology and Data Sources for details of this analysis). As shown in

**The nearly \$1.4 billion in local spending of disposable income by human services workers generated an estimated \$620 million in additional economic activity across the Commonwealth.**

Table 6, of the \$2 billion earned by the 98,129 human services workers in 2003, nearly \$1.4 billion was disposable income. This income was largely spent on basic living expenses, goods and services within Massachusetts. The balance of the payroll (approximately \$600 million) was spent on taxes, fringe benefits, and spending on goods and services that were purchased outside of the Commonwealth.

**Table 6. Economic and Employment Effects of the Human Services Workforce**

Impact*	Economic	Employment
Direct spending of disposable income	\$1,367,212,690	98,129
Indirect impact of spending on the Massachusetts economy	\$273,173,726	12,384
Induced effects of spending on the Massachusetts economy	\$346,544,697	21,534
<b>Total</b>	<b>\$1,986,931,121</b>	<b>132,047</b>

\* "Direct" measures the economic effects of the disposable income of human services employees in Massachusetts. "Indirect" measures the economic effects of the spending of human services employees in Massachusetts. "Induced" measures the economic effects on Massachusetts industries that are supported by the spending of human services employees.

Note: All data input into the IMPLAN® Model were taken from the U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

The nearly \$1.4 billion in local spending of disposable income by human services workers generated an estimated \$620 million in additional economic activity across the Commonwealth. This \$620 million represents the money earned and spent by persons employed in establishments where human services workers purchased goods and services (e.g., grocery stores, clothing stores, etc.) in Massachusetts. The direct spending of disposable income and the \$620 million in additional economic activity suggests that the total economic impact of the disposable income earned by human services workers in Massachusetts was nearly \$2 billion. Furthermore, spending by human services workers in the Commonwealth is estimated to have supported an additional 33,918 jobs in the Bay State in 2003.

**Table 7. State and Local Tax Payments of Human Services Workers**

	State Taxes Paid on \$2 billion Payroll
Sales Tax	\$38,481,951
Estate and Gift Tax	\$0
Income Tax	\$18,964,824
Motor Vehicle License	\$451,116
Fines and Fees	\$1,714,850
Other Taxes	\$38,734
Property Taxes	\$158,480
Social Insurance Tax Employee Contribution	\$368,398
Social Insurance Tax Employer Contribution	\$1,001,288
<b>Total</b>	<b>\$112,355,036</b>

Note: All data input into the IMPLAN® Model were taken from the U.S. Census Bureau, EPCD, County Business Patterns 1998-2003.

**Furthermore, spending by human services workers in the Commonwealth is estimated to have supported an additional 33,918 jobs in the Bay State in 2003.**

As shown in Table 7, wages to human services workers in Massachusetts resulted in more than \$112 million in state and local tax revenues in 2003. This total consists of \$61,179,642 paid in state and local taxes by the employees themselves (including personal taxes and fees, social insurance taxes, and sales taxes) and about \$60 million paid by Massachusetts businesses that generated additional income as a result of spending by human services employees.



# Part II: Current Human Services Reality and Workforce Trends

Although important, quantifying the magnitude and impact of the human services workforce sheds little light on the realities of this workforce. Throughout the remainder of this report, national and state data are presented about this workforce that bear out a number of assertions found in the Annie E. Casey report. Primary among them is the fact that *these workers are paid less than workers in all other sectors and that the difficulty in attracting the future workforce will be complicated by the shifting demographics of the nation.*

This section of the report presents information about the types of occupations common to the human services workforce, as well as demographic and socioeconomic characteristics of these workers. These data demonstrate both the nature of human services work and the daily realities of this workforce. This section concludes with estimates of workforce growth and draws conclusions about the likely difficulties employers will face in recruiting and retaining a qualified human services workforce in the future.

## Human Services Occupations<sup>10</sup>

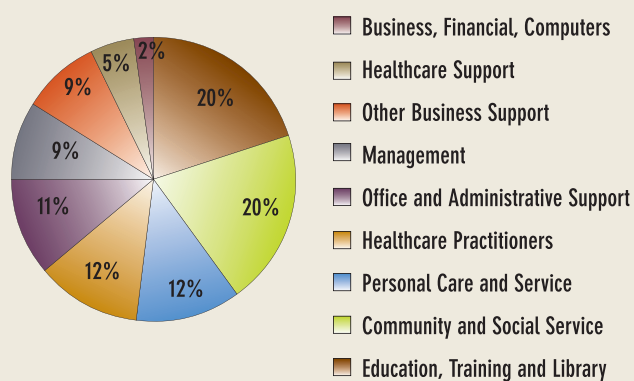
In Massachusetts, human services providers receiving state contracts are required to complete an annual Uniform Financial Report (UFR) and an Independent Auditor's Report. Among other reporting requirements, human services providers report personnel data for state-defined job titles or occupations. These job titles are commonly used by employers, government administrators and the state legislature when discussing the human services workforce. Unfortunately, employee counts, characteristics and workforce projections for these state-defined occupations are not available.

Instead, the available occupations data discussed in this section are based on the Standard Occupational Classification (SOC) System. The SOC is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States. This classification is utilized by the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Massachusetts Department of Workforce Development. Given that these governmental agencies provide occupational counts, characteristics and projections, the SOC classifications were the only option for this report.

The nearly 100,000 human services workers in Massachusetts are employed in a variety of occupations. These occupations generally fall into three categories of workers: management and supervisory staff, professional and paraprofessional direct service staff, and administrative and agency support staff. According to data released by the Massachusetts Department of Workforce Development, nearly 70 percent of the human services workforce is concentrated in five of the SOC categories. These five categories largely represent direct service workers who interact with vulnerable populations through the provision of services and include both professional and paraprofessional staff.

<sup>10</sup> A report by the Massachusetts Department of Workforce Development, *Massachusetts Industry Staffing Patterns, Volume 5 of 5*, provides employee counts by occupation for the health and human services sector (NAICS 62) and for many of its subsectors. Although released in 2005, the report includes 2003 data. Because the total employee counts by sector in the state report are not consistent with the 2003 Census Bureau County Business Patterns data, a method was developed to apply the Massachusetts distributions to the 2003 County Business Pattern data in order to more accurately represent counts of human services providers across occupations. All data reported in this section are the result of this calculation (see the Methodology and Data Sources for more detail on methodology).

**Figure 9. Massachusetts Human Services Occupational Distribution (n=98,129), 2003**



Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003. Massachusetts Department of Workforce Development, Massachusetts Industry Staffing Patterns, Volume 5 of 5, 2005.

**Table 8. Human Services Occupational Distribution by Subsector**

	Human Services Industry	Outpatient Mental Health & Substance Abuse*	Residential Mental Retardation, Mental Health, & Substance Abuse	Individual & Family Services	Community Food/Housing & Emergency/Relief Services	Vocational Rehabilitation Services	Child Day Care
<b>Total Employed</b>	<b>98,129</b>	<b>6,343</b>	<b>20,631</b>	<b>32,040</b>	<b>5,498</b>	<b>8,956</b>	<b>24,661</b>
<b>Occupational Groups</b>							
Education	19.9%	4.2%	4.2%	8.1%	6.8%	5.8%	60.4%
Community & Social Service	19.6%	7.4%	7.4%	35.4%	46.2%	27.0%	3.7%
Healthcare Practitioners	12.4%	35.8%	35.8%	6.8%	3.2%	1.5%	0.0%
Personal Care	12.4%	5.0%	5.0%	15.0%	5.7%	15.0%	17.6%
Administrative Support	10.9%	16.3%	16.3%	12.3%	12.0%	9.2%	3.6%
Management	9.2%	5.2%	5.2%	10.9%	12.0%	10.5%	10.1%
Other Business Support	8.6%	8.7%	8.7%	7.0%	14.3%	21.9%	4.6%
Healthcare Support	4.9%	16.1%	16.1%	1.4%	0.0%	0.0%	0.0%
Business, Financial, Computer	2.2%	1.5%	1.5%	3.1%	0.0%	9.1%	0.0%

\*The Massachusetts Department of Workforce Development did not provide occupation counts for NAICS code 62142 (outpatient mental health and substance abuse services). Instead, distributions were only available for all outpatient care centers. Given that the other types of establishments included in outpatient care centers are more focused on medical care, it was assumed that outpatient mental health and substance would more closely resemble residential mental retardation, mental health and substance than outpatient care centers as a whole. A full description of the methodology used to calculate these figures is described in the Methodology section of this report.

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003. Massachusetts Department of Workforce Development. 2003 Massachusetts Industry Staffing Patterns, Volume 5 of 5.

As shown in Figure 9, the two largest categories of human services workers include those employed in education, training and library occupations (20 percent) and those employed in community and social service occupations (20 percent). Additionally, nearly one-quarter of the human services workforce is employed in personal care occupations or healthcare practitioner occupations. Although not as large as the others, healthcare support occupations are the fifth occupational group that encompasses direct service providers.

With nearly 70 percent of the workforce providing direct services, the remaining 30 percent is employed in occupations that either manage or support the human services industry. These occupations include office and administrative support (11 percent); management (9 percent); other business support, such as food preparation, maintenance, or transportation occupations (9 percent); and business, financial and computer occupations (2 percent).

The distribution of occupations varies across the human services subsectors (Table 8). For instance, outpatient and residential establishments are more likely to employ healthcare practitioners when compared to other subsectors, and the child care subsector is the most likely to employ persons in educational occupations. Furthermore, community and social service occupations are most prevalent among community food, housing, emergency and other relief services (46.2 percent), followed by individual and family services (35.4 percent) and vocational rehabilitation services (27.0 percent).

The broad occupational categories discussed above provide only a glimpse of the composition of the human services workforce. To better understand the types of workers driving this industry, specific occupations in the direct service groups must be examined. It is important to note that the UFR job

titles of Direct Care I, II, and III, as well as program staff, program staff supervisor and case worker, are most closely aligned with the SOC occupational categories of community and social service assistants, child care workers, nursing/psychiatric/home health aides, personal/home care aides, and other personal care and service workers. SOC occupations that are consistent with UFR direct care job titles are noted on tables and in text.

Educational occupations include persons employed in the human services industry as primary, secondary, and special education teachers; post-secondary teachers; adult education and self-enrichment teachers; librarians; and instructional coordinators and teaching assistants.<sup>11</sup> As shown in Table 9, persons employed as preschool, primary, secondary and special education teachers are the single largest occupational group in the industry, representing 14.3 percent of all human services workers in Massachusetts. These workers are primarily employed in the child day care subsector.

Community and social service occupations include persons employed as counselors and therapists, social workers, and community and social service assistants. Community and social service assistants, who make up 7.7 percent of the workforce, are predominantly paraprofessional direct care staff and caseworkers. Additionally, counselors and therapists comprise 6.6 percent of the workforce and social workers are 4.6 percent. While the

Massachusetts UFR distinguishes between professional and paraprofessional workers within these latter occupational groups, the SOC does not. As a result, licensed practitioners with advanced degrees are grouped with non-licensed counselors.

Healthcare practitioners include persons employed as registered nurses; licensed practical nurses; physicians, surgeons and dentists; and medical therapists (e.g. occupational or physical therapists), medical technicians and technologists. As shown in Table 9, the human services industry employs over 6,000 registered nurses, representing 6.5 percent of the workforce.

11 Occupational data are presented for only those workers included in the defined human services industry in the private sector. For example, primary and secondary school teachers employed in the public and private schools are part of the education sector and are not included in these figures.

**Table 9. Human Services Detailed Occupational Distribution**

	Number	Percent
<b>All Occupations*</b>	<b>98,129</b>	<b>100%</b>
<b>Direct Service Occupations</b>	<b>65,324</b>	<b>66.5%</b>
Preschool, Primary, Secondary, and Special Education School Teachers	13,986	14.3%
Community and Social Service Assistants**	7,539	7.7%
Counselors and Therapists	6,452	6.6%
Registered Nurses	6,426	6.5%
Child Care Workers**	4,801	4.9%
Social Workers	4,552	4.6%
Nursing, Psychiatric, and Home Health Aides**	4,058	4.1%
Instructional Coordinators and Teaching Assistants	3,913	4.0%
Personal and Home Care Aides**	3,556	3.6%
Other Personal Care and Service Workers**	3,409	3.5%
Health Technologists and Technicians (excluding LPNS)	1,670	1.7%
Adult Education and Self-Enrichment Teachers	1,578	1.6%
Other Healthcare Support Occupations	1,196	1.2%
Health Diagnosing and Treating Practitioners (excluding nurses)	1,172	1.2%
Licensed Practical and Licensed Vocational Nurses	1,016	1.0%
<b>Management and Support Occupations</b>	<b>32,803</b>	<b>33.5%</b>
Office and Administrative Support Occupations	11,751	12.0%
Management Occupations	9,491	9.7%
Other Business Support Occupations	9,195	9.4%
Business, Financial, Computer	2,366	2.4%

\* Occupational data are presented for only those workers included in the defined human services industry. For example, public and primary school teachers employed in the education sector are not included in these figures.

\*\* These SOC occupational groups are closely aligned the UFR job titles of Direct Care I, II, and III, as well as program staff, program staff supervisor and case worker.

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003. Massachusetts Department of Workforce Development. 2003 Massachusetts Industry Staffing Patterns, Volume 5 of 5.



Personal care workers include those persons employed as child care workers; personal and home care aides; and other personal workers such as recreation/activity therapists and residential advisors. Personal care workers are likely to be those workers classified as direct care staff by the UFR. Child care workers comprise 4.9 percent of the industry workforce, at nearly 5,000 employees. An additional 3.6 percent of workers (3,556) are employed as personal or home care aides. Personal or home care aides are distinguished from home health aides by the SOC in that home care aides assist with activities of daily living, such as housekeeping and preparing meals, while home health aides provide routine personal healthcare (e.g., bathing, dressing, grooming) to elderly, convalescent or persons with disabilities.

Healthcare support occupations include persons employed as nursing/psychiatric/home health aides; occupational and physical therapist assistants; and other medical assistants. Although healthcare support occupations are a relatively small portion of the industry, nearly all persons in this category are employed as nursing/psychiatric/home health aides.<sup>12</sup> These workers account for over 4,000 industry employees and represent 4.1 percent of the total workforce and, like personal care occupations, are likely to include what the UFR defines as direct care jobs.

## Characteristics of Human Services Workers

This section presents key demographic and socioeconomic characteristics for selected direct service occupations. Characteristics are compared across occupations for three major groups—human services workers, healthcare industry workers,<sup>13</sup> and workers in all other industrial sectors.

Due to small sample sizes in the U.S. Census Bureau’s 5-Percent Public Use Microdata Sample File, racial and ethnic characteristics of the human services workers were not available for inclusion in this report.

As shown in Table 10, women dominate the human services and healthcare industries. More than 80 percent of human services occupations and more than three-quarters of healthcare jobs are filled by women, which is dramatically different from all other sectors, where less than half of the jobs are filled by women (45.5 percent). The vast majority of direct service occupations also employ women, not only within human services and healthcare, but in other industries. In fact, more than 80% of direct service jobs are filled by women, regardless of the industry setting in which they work.

12 In the Standard Occupational Classification, home health aides are distinguished from personal or home care aides in that home health aides provide routine personal healthcare (e.g., bathing, dressing, grooming) to elderly, convalescent or disabled persons while personal or home care aides are limited to assisting with activities of daily living such as housekeeping and preparing meals.

13 The human services industry is based upon a subset of categories in the 2002 NAICS Health Care and Social Assistance sector. All subsectors in healthcare and social assistance not classified as human services are classified as healthcare.

**Table 10. Gender by Selected Direct Service Occupations: Industry Comparisons, 2000**

	Percent Female		
	Human Services	Healthcare	All Other Sectors
All Employees	80.9%	77.9%	45.5%
Selected Direct Service Occupations	87.6%	91.7%	83.0%
Preschool and Kindergarten Teachers	97.0%	80.0%	98.2%
Community and Social Service Assistants*	65.9%	78.7%	58.9%
Counselors and Therapists	68.9%	66.9%	65.1%
Registered Nurses	97.1%	94.9%	94.7%
Child Care Workers*	94.1%	100.0%	91.7%
Social Workers	73.1%	84.5%	75.8%
Nursing, Psychiatric, and Home Health Aides*	78.9%	89.1%	81.6%
Instructional Coordinators and Teaching Assistants	95.8%	83.3%	91.2%
Personal and Home Care Aides*	86.6%	92.8%	80.5%
Licensed Practical and Licensed Vocational Nurses	84.9%	95.3%	94.5%
All Other Occupations	70.0%	69.1%	44.6%

\* These SOC occupational groups are closely aligned the UFR job titles of Direct Care I, II, and III, as well as program staff, program staff supervisor and case worker.

Source: U. S. Census Bureau, 2000 Census of Population and Housing, 5-Percent Public Use Microdata Sample (PUMS) Files.

The average age of human services workers is 38.4 years. This is slightly younger than healthcare workers, but comparable to workers in all other industries. The human services workforce employed in direct care is younger than direct service workers in healthcare and other industries (36.6 years compared to 42.1 and 41.0 years, respectively).

Slightly more than one-third of all human services workers have a four year college or advanced degree (Table 11). This is consistent with workers in other industries (33.3 percent) and slightly less than persons employed in healthcare (38.9 percent). However, educational attainment among selected direct service occupations in the human services industry is lower than the same workers in healthcare and significantly lower than direct care occupations in all other industries. (31.9 percent compared to 35.3 percent and 43.6 percent, respectively).

There is no consistent pattern when comparing selected direct service occupations across the three industry groups. For instance, social workers employed in healthcare (89.4 percent) are more likely to have a college degree than social workers employed in human services (68.2 percent) or other sectors (78.6 percent).<sup>14</sup>

<sup>14</sup> Educational attainment data presented in Table 11 provide evidence that the SOC system of classifying jobs is inconsistent with the UFR classification. According to UFR definitions, all social workers are classified as professional staff with advanced degrees.

However, personal care and home care aides in the healthcare sector are less likely to have college degrees than those employed in the human services industry and other sectors.

Having similar education does not ensure human services workers wages that are comparable to those paid to workers in healthcare and other industries. Despite employing a comparable percentage of persons with college education, the *median earnings among human services workers overall is approximately \$9,000 less than in healthcare and other industries (Table 12). Among direct service providers, the gap is even greater*; the median wage of human services workers is nearly \$15,000 less than the same workers in healthcare and nearly \$5,000 less than their counterparts in other industries.

Few direct service occupations in human services earn more than their counterparts in healthcare or other industries. One notable exception is personal and home care aides. While these occupations earn relatively low median wages, human services workers in these occupations earn more than their

**Table 11. Educational Attainment by Selected Direct Service Occupations: Industry Comparisons, 2000**

	Percent with College or Advanced Degree		
	Human Services	Healthcare	All Other Sectors
All Employees	34.4%	38.9%	33.3%
<b>Selected Direct Service Occupations</b>	<b>31.9%</b>	<b>35.3%</b>	<b>43.6%</b>
Preschool and Kindergarten Teachers	37.6%	40.0%	72.0%
Community and Social Service Assistants*	47.1%	42.6%	61.9%
Counselors and Therapists	49.5%	54.6%	68.4%
Registered Nurses	60.1%	57.0%	62.7%
Child Care Workers*	15.4%	36.4%	14.2%
Social Workers	68.2%	89.4%	78.6%
Nursing, Psychiatric, and Home Health Aides*	13.3%	7.8%	11.2%
Instructional Coordinators and Teaching Assistants	11.5%	16.7%	24.7%
Personal and Home Care Aides*	12.6%	8.5%	14.3%
Licensed Practical and Licensed Vocational Nurses	6.1%	10.8%	16.4%
<b>All Other Occupations</b>	<b>38.6%</b>	<b>41.2%</b>	<b>33.1%</b>

\* These SOC occupational groups are closely aligned the UFR job titles of Direct Care I, II, and III, as well as program staff, program staff supervisor and case worker.

Source: U. S. Census Bureau, 2000 Census of Population and Housing, 5-Percent Public Use Microdata Sample (PUMS) Files.

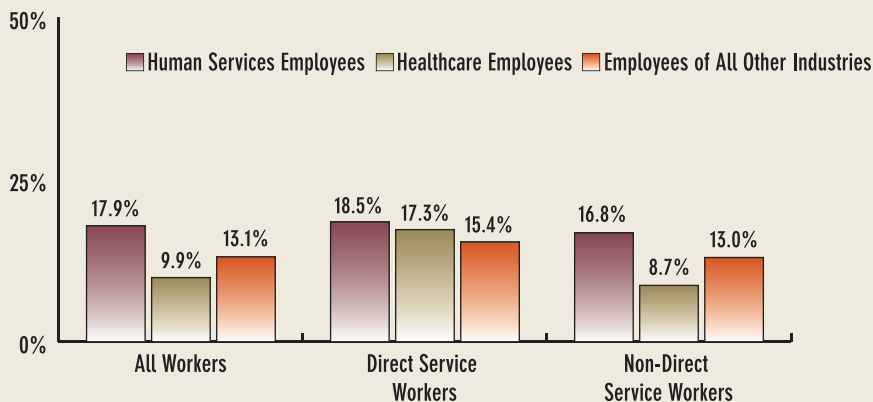
**Table 12. Wages and Salaries by Selected Direct Service Occupations: Industry Comparisons, 2000**

	Full Time Equivalent Median Wages and Salaries (1999 Income)		
	Human Services	Healthcare	All Other Sectors
All Employees	\$23,833	\$32,500	\$31,127
Selected Direct Service Occupations	\$21,875	\$36,200	\$26,500
Registered Nurses	\$42,348	\$49,889	\$41,600
Licensed Practical and Licensed Vocational Nurses	\$32,800	\$35,000	\$32,000
Social Workers	\$30,000	\$38,000	\$35,500
Community and Social Service Assistants*	\$25,000	\$24,000	\$35,086
Counselors and Therapists	\$24,960	\$27,733	\$34,737
Nursing, Psychiatric, and Home Health Aides*	\$21,125	\$22,092	\$22,609
Preschool and Kindergarten Teachers	\$20,000	\$25,000	\$27,313
Personal and Home Care Aides*	\$20,000	\$17,479	\$18,304
Child Care Workers*	\$17,195	\$22,000	\$17,600
Instructional Coordinators and Teaching Assistants	\$14,791	\$20,800	\$19,663
All Other Occupations	\$27,000	\$31,000	\$31,200

\* These SOC occupational groups are closely aligned the UFR job titles of Direct Care I, II, and III, as well as program staff, program staff supervisor and case worker.

Source: U. S. Census Bureau, 2000 Census of Population and Housing, 5-Percent Public Use Microdata Sample (PUMS) Files.

**Figure 10. Percent of Workforce Living Below 150% of Federal Poverty: Industry Comparisons, 1999**



\* Percent in poverty is calculated using 1999 income and 1999 poverty thresholds.

Source: U.S. Census Bureau, 2000 Census of Population and Housing, 5-Percent Public Use Microdata Sample (PUMS) Files.

counterparts in healthcare and other industries. However, registered nurses and social workers earn higher median wages in healthcare than human services, and median wages for counselors and therapists are much higher in sectors outside of human services and healthcare.

In addition to comparatively low salaries, a significant proportion of human services workers lack health insurance. In a 2001 survey about healthcare insurance costs, the Massachusetts Council of Human Service Providers documented that 45 percent of human services workers did not receive health insurance from their employer or some other means.<sup>15</sup>

According to the 2000 Census, 17.9 percent of human services workers reported a total 1999 income that was below 150 percent of the federal poverty level (Figure 10). Regardless of industry, direct service workers are more likely than those in other occupations to have been living below 150 percent of 1999 poverty thresholds, which is not surprising, given the relatively low median incomes reported for most of the direct service occupations. Nearly twice as many human services workers are in poverty than healthcare workers. More than 20 percent of child care workers, personal and home care aides, and home health aides reported income below 150 percent of the federal poverty level.

15 The Massachusetts Council of Human Service Providers. *The State of Health Care Insurance Costs for Human Service Providers in Massachusetts*. June 2001.

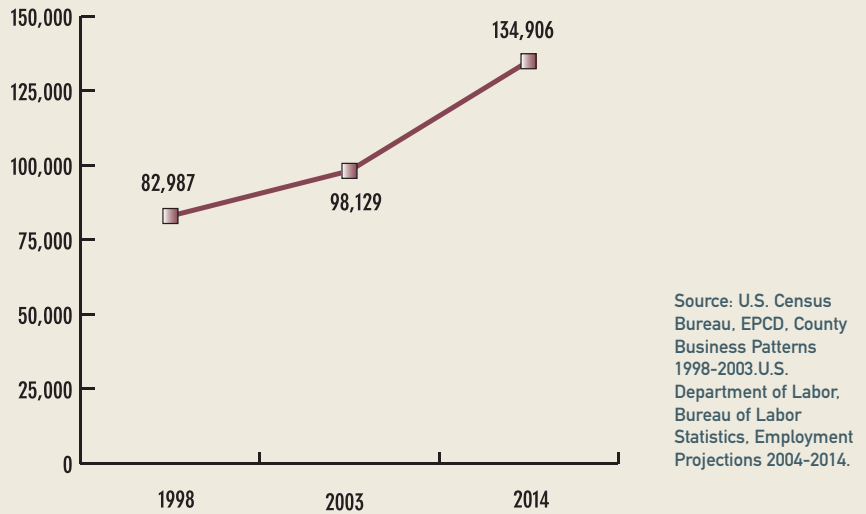
# Home Healthcare Services

According to the U.S. Bureau of Labor Statistics, the home healthcare services sector is expected to be among the fastest growing industries in the nation over the next decade. Although home healthcare services were not included in the operational definition of human services used in this report, it is important to note that this sector shares significant characteristics with human services and will be competing for the same workforce.

In 2003, the home healthcare sector in Massachusetts employed 19,096 workers at 605 establishments across the Commonwealth, with an annual 2003 payroll of nearly \$500 million. While this sector has experienced significant declines in both employees and payroll since 1998 (decreases of 41.9 percent and 19.3 percent, respectively), this trend is expected to change significantly in the near future.

Of importance to the human services industry is that nearly 40 percent of this sector's workforce is employed as a nursing, psychiatric or home health aide, or a personal care or home care aide. Given that the Bureau of Labor Statistics predicts home health aides will be the fastest growing occupation in the nation through 2014 at 56 percent, competition for these low-paid positions is likely to increase.

**Figure 11. Massachusetts Human Services Industry Workforce Growth, 1998-2014**



## Human Services Workforce Growth

The U.S. Bureau of Labor Statistics projects that the professional and business services and health care and social assistance sectors will account for almost one-half of all new jobs nationally between 2004 and 2014.<sup>16</sup> During the same time period, agriculture and manufacturing employment are expected to decline.

According to these labor force projections, human services industry employment will grow 37.5 percent over the next decade. Assuming growth in Massachusetts is similar to what is expected nationally, the number of human services workers in the Bay State will increase to 135,000 by 2014 (Figure 11). In comparison, this growth rate is twice that expected of private general medical and surgical hospitals (16 percent) and half the projected growth in home health care services (69.5 percent).

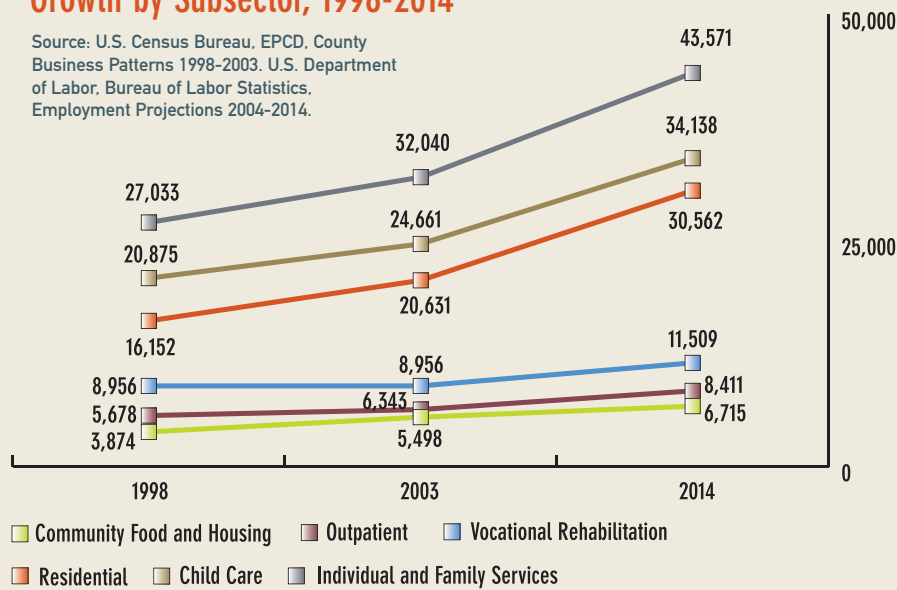
**...human services industry employment will grow 37.5 percent over the next decade.**

As shown in Figure 12, the residential mental retardation, mental health and substance abuse subsector will see the greatest increase in employment over the next decade, compared to other human services subsectors (48 percent). Significant growth is also expected in the child care subsector (38 percent). The individual and family services subsector is expected to remain the largest human services subsector in 2014, when it will employ an estimated 43,571 workers in the Commonwealth. If projections hold true, these three sectors will require an estimated 30,000 additional human services workers by 2014.

<sup>16</sup> Berman, Jay C. Monthly Labor review, November 2005.

**Figure 12. Massachusetts Human Services Industry Workforce Growth by Subsector, 1998-2014**

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003. U.S. Department of Labor, Bureau of Labor Statistics, Employment Projections 2004-2014.



Only two of the six human services subsectors are expected to experience less than 30 percent growth in the next ten years. These include community food, housing, emergency and other relief services, and vocational rehabilitation services.

Occupationally, each of the selected direct service occupations in human services is expected to grow at least 20 percent in the coming decade.<sup>17</sup> By 2014, growth in the number of nursing, psychiatric and home health aides is expected to exceed 50 percent, from 4,058 employees to more than 6,100. Employment of personal and home care aides is expected to grow 41 percent between 2004 and 2014. Both of these occupations are classified as very low paid employment by the Bureau of Labor Statistics. Additionally, growth rates of approximately 40 percent are projected for community and social service assistants and teachers.

17 When reviewing these figures, it is important to remember that the number of employees per occupation and subsector is estimated using two data sources (Massachusetts Industry Staffing Patterns and the U.S. Census County Business Patterns.) In addition, there is an assumption that national growth for specific occupations within subsectors will be similar to growth in Massachusetts.

**Table 13. Employment Projections through 2014 by Selected Direct Service Occupations**

	Massachusetts Human Services 2003 Employment	Projected 2014 Massachusetts Employees	Projected National Growth through 2014
<b>All Employees</b>	<b>98,129</b>	<b>134,906</b>	<b>37.5%</b>
<b>Selected Direct Service Occupations</b>			
Preschool, Primary, Secondary, and Special Education Teachers	13,986	19,742	41.2%
Community and Social Service Assistants*	7,539	10,821	43.5%
Counselors and Therapists	6,452	8,454	31.0%
Registered Nurses	6,426	8,992	39.9%
Child Care Workers*	4,801	6,554	36.5%
Social Workers	4,552	6,261	37.5%
Nursing, Psychiatric, and Home Health Aides*	4,058	6,178	52.2%
Instructional Coordinators and Teaching Assistants	3,913	5,457	39.4%
Personal and Home Care Aides*	3,556	5,027	41.4%
Licensed Practical and Licensed Vocational Nurses	1,016	1,374	35.3%

\* These SOC occupational groups are closely aligned the UFR job titles of Direct Care I, II, and III, as well as program staff, program staff supervisor and case worker.

Source: U.S. Census Bureau, EPCD, County Business Patterns 1998-2003. Massachusetts Department of Workforce Development. 2003 Massachusetts Industry Staffing Patterns, Volume 5 of 5. U.S. Department of Labor, Bureau of Labor Statistics, Employment Projections 2004-2014.

# Findings and Conclusion

## Findings

### *General Massachusetts population*

- Massachusetts population has grown at just over 1 percent between 2000 and 2004, which is the eighth slowest rate in the nation.
- Massachusetts is the only state to have lost population between 2003 and 2004.
- The Massachusetts birth rate has been flat in recent years, resulting in an increasing median age of the population.
- Over 213,000 more domestic residents moved out of Massachusetts than moved into the state between 1990 and 2002. Between 2002 and 2004, this imbalance grew.
- The most recent job vacancy study of all industries across the Commonwealth indicates all employers have at least 70,000 vacant positions and 140,000 people are unemployed.

### *Human services workforce profile*

- The Commonwealth's human services workforce grew 18 percent between 1998 and 2003; the Commonwealth's total workforce grew 1.7 percent during the same period and the healthcare sector grew less than 1 percent.
- The state's human services workforce totaled 98,129 in 2003, which is comparable in size to the 2004 telecommunications industry and three times the size of the 2001 biotechnology sector.
- The median earnings among human services workers overall is approximately \$9,000 less than in healthcare and other industries. Among direct service providers, the gap is even greater--nearly \$15,000 less than the same workers in healthcare and nearly \$5,000 less than their counterparts in other industries.
- Nearly 18 percent of human service workers had 1999 total income that was below 150 percent of the federal poverty level; nearly twice as many human services workers are in poverty as compared to healthcare workers.
- More than 80 percent of human services occupations are filled by women; fewer than half (45.5 percent) of jobs in other sectors are filled by women.
- Nearly 70 percent of the human services workforce provides direct service; 30 percent are in management or support positions.
- In 2001, 45 percent of human services workers did not receive health insurance from their employer or some other source.

### *Economic impact*

- Human services establishments grew by 12 percent during 1998-2003, which exceeded the growth of healthcare and all other industry establishments in Massachusetts.
- In 2002, the human services industry generated \$4.6 billion in revenue and the 2003 payroll exceeded \$2 billion. State contracted investment in 2005 was \$2.6 billion.
- Though human services represented 3.3 percent of the state's workforce, it represented only 1.6 percent of the total payroll. Low share of state payroll is consistent with low wages paid to many in the industry's workforce.
- In 2003, of the \$2 billion earned by the 98,129 human services workers, nearly \$1.4 billion was income spent on basic living expenses, goods and services in Massachusetts.
- The \$1.4 billion in local spending generated an estimated \$620 million in additional state economic activity.
- Human services workers' spending supported an additional 33,918 jobs across Massachusetts in 2003.
- Human services workers' wages generated more than \$112 million in state and local revenues in 2003.

### *Forecast of need*

- Currently, for every 100 working-age residents of Massachusetts, 65 residents are being supported. By 2030, this will increase to 83 residents for every 100 working-age residents.
- Census Bureau estimates that the number of Massachusetts residents of traditional working age (20 to 65 years old) will grow much more slowly than the younger and elderly populations over next 25 years.
- At present pace, dependent populations will grow 24.3 percent over the next 25 years while the working-age population will shrink by 3.3 percent.
- Human services employment is projected to grow 37.5 percent nationally over the next decade, indicating an estimated need for 135,000 additional human services jobs in Massachusetts by 2014. Overall employment growth in

Massachusetts is predicted to grow at just under 1 percent annually through 2009.

- Nearly 30,000 additional jobs will be needed by 2014 to staff the fields of mental retardation, mental health, child care and others.
- Home health aides and personal/home care aides are predicted to be among the occupations with the largest job growth over the next decade; these workers are imperative to the human services industry and are also in demand by healthcare and other industries, which will compete for the available labor force.

### **Conclusion**

The findings of this report strongly suggest that, absent significant public policy attention, Massachusetts human services employers can expect challenges to worsen in the years ahead. Employers can expect to find it increasingly difficult to find workers willing to provide essential services to vulnerable populations in a highly demanding work environment for relatively low wages. They can also expect increasing competition for both skilled and unskilled workers from healthcare and other service sectors that are also expected to grow but which presently provide their employees with comparatively higher wages, training and support. Funders, clients and advocates for vulnerable populations can expect upward pressure to be placed on both the costs of services and staffing ratios, which will have significant implications for both public budgets and the quality of provided services.

Developing public policies to assist human services agencies in overcoming these challenges will not be easy. There is no "silver bullet" solution to these problems. What is clear, however, is that meeting the human services needs of the Massachusetts population will require workers, employers and public and private funders to work together to find ways to obtain and effectively utilize the resources that will be required to recruit, retain and sustain the Massachusetts human services workforce of the future. As this report demonstrates, the consequences of failing to meet these challenges are significant, both socially and economically. These issues require the serious attention of state leaders and policymakers. Our most vulnerable neighbors and a significant and growing employer in Massachusetts deserve nothing less.

# Methodology and Data Sources

## 2003 Estimates of Employees, Establishments and Payroll

The majority of this report relies on 2003 County Business Patterns data, an annual release providing number of employees, number of establishments, and payroll by industry for the nation, states and counties. The data are organized into the following economic divisions: agricultural services, forestry, and fishing; mining; construction; manufacturing; transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Industries are organized within these divisions using the North American Industrial Classification System (NAICS). Data for self-employed persons, domestic service workers, most government employees, and employees on ocean-borne vessels or in foreign countries are not included in the County Business Pattern data.

Employment data shown in County Business Patterns are for the week of March 12, 2003, and include full- and part-time employees. These data also include regularly paid employees who are on sick leave or vacation. Proprietors and partners of unincorporated businesses are not included in the County Business Pattern employment data.

The term “establishment” used in County Business Patterns is a single, physical location where a business, service or industrial operation happens. Therefore, a company may be made up of one or several establishments. Establishments may also perform operations that fall into different industrial classification codes. In this case, the establishment and all its associated information will be classified on the basis of its major activity. Establishment data are shown as a total and by size of employment.

Payroll data on County Business Patterns include all forms of compensation, including salaries, wages, reported tips, commissions, bonuses, vacation allowances, sick-leave pay, employee contributions to qualified pension plans, and the value of taxable benefits. Payroll is reported before deductions for taxes, Social Security, etc. Payroll is reported as an annual total and a first quarter total covering January–March. County Business Patterns withholds data that would disclose the operations of an individual employer.



## Economic Impact

The economic impact of the payroll of the human services industry in Massachusetts was estimated using IMPLAN®, an economic impact assessment modeling system. IMPLAN® is an industry standard econometric modeling system for specifying economic impacts. It allows analysts to easily develop local input-output models to estimate the impacts of economic changes in their states, counties, or communities. In order to determine the economic impact of the human services industry's \$2 billion annual payroll, a disposable income factor was calculated. This methodology took into account industry-specific factors to determine the amount of money workers spend on expenses, excluding the amount paid for taxes, fringe benefits, or savings. The resulting total disposable income of human services workers was the basis for the IMPLAN® analysis, which generated the direct, indirect, and induced financial, employment and tax impacts for Massachusetts.

## 2003 Occupational Distributions

Occupations are classified using the 2000 Standard Occupational Classification (SOC) System. This system was developed in response to a growing need for a universal occupational classification system. Such a classification system allows government agencies and private industry to produce comparable data. It is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States. The 2000 SOC is the result of a cooperative effort of all federal agencies that use occupational classification systems to maximize the usefulness of occupational information collected by the federal government.

In September 2005, the Massachusetts Department of Workforce Development released *Massachusetts Industry Staffing Patterns, Volume 5 of 5*. Occupations presented in this publication utilized the SOC, and the data were based on the Occupational Employment Statistics (OES) Survey, conducted semi-annually by the Massachusetts Department of Workforce Development under the auspices of the United States Bureau of Labor Statistics (BLS). The current release includes data collected during a three-year period ending in 2003. It was compiled and

produced by the Economic Analysis Office of the Department of Workforce Development's Division of Career Services.

*Massachusetts Industry Staffing Patterns, Volume 5 of 5* provides employee counts by occupation for the health and human services sector (NAICS 62) and for many of the subsectors included within health and human services. However, the total employee counts by sector are not consistent with the 2003 Census Bureau County Business Pattern data. In order to more accurately represent counts of human services providers across occupations, the Massachusetts distributions were applied to the 2003 County Business Pattern data using the following process:

1. Counts of employees by occupation were extracted from the *Massachusetts Industry Staffing Patterns, Volume 5 of 5* for five of the six subsectors of interest NAICS 6232, 6241, 6242, 6243, and 6244, and proportions were calculated for each occupation by subsector.
2. Proportions were applied to the 2003 County Business Patterns total employee counts for NAICS 6232, 6241, 6242, 6243, and 6244.
3. The *Massachusetts Industry Staffing Patterns, Volume 5 of 5* data were not of sufficient detail to determine occupational distributions for NAICS 62142 (outpatient mental health & substance abuse). Unfortunately, applying the occupational distribution for all outpatient care centers (NAICS 6214) to the employee count for this subsector was not appropriate given that approximately 75 percent of persons employed in outpatient care centers are employed in facilities providing medical services. Instead, it was assumed that the occupational distribution within outpatient mental health and substance abuse centers was more consistent with the occupational distribution of residential mental retardation, mental health, and substance abuse facilities than with all outpatient care centers. Therefore, the occupational distributions for NAICS 6232 were applied to the 2003 CBP total employee counts for NAICS 62142.
4. New occupational estimates were summed across subsectors to determine the industry total and distribution.

## Employee Projections through 2014

Using the occupational distributions generated in the methodology described above, human services industry projections were calculated through 2014 using data from the Bureau of Labor Statistics' National Industry-Occupation Employment Matrix. The 2004-2014 National Employment Matrix presents employment for over 300 detailed industries and more than 700 detailed occupations. The 2004 matrix was developed primarily from the Occupational Employment Statistics (OES) survey, the Current Employment Statistics (CES) survey, and the Current Population Survey (CPS).

In order to calculate projections through 2014, 2004-2014 projected national employee growth rates were extracted from the National Employment Matrix for each occupational category of interest and each NAICS code included in the industry definition. These rates were applied to the 2003 occupational distributions for the industry. At the time of this report, County Business Patterns data for 2004 were not available. Therefore, the 2004-2014 growth rates were applied to 2003 employee counts. As a result, the overall projected growth in human services employees is underestimated because one year of growth (2003-2004) is not included in the projections.

For 10 of the major occupational groups, the Massachusetts human services industry had no employees (e.g., protective service occupations). However, the Bureau of Labor Statistics projects growth in these occupations nationally. In those instances where Massachusetts had no employees in an occupation category in 2003, it was assumed that there would be no employees in 2014. This introduces an additional source of error which may contribute to an underestimation of the overall projected growth in human services employees.

## Data Sources

Massachusetts Department of Workforce Development. *2003 Massachusetts Industry Staffing Patterns, Volume 5 of 5*. September 2005.

U.S. Bureau of the Census, *County Business Patterns*.

U. S. Census Bureau, *2000 Census of Population and Housing*, Summary File 3.

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## Donahue Institute

OFFICE OF THE PRESIDENT

220 Middlesex House, Amherst, MA 01003-9255



## Massachusetts Council of Human Service Providers, Inc.

250 Summer Street, Suite 237, Boston MA 02210

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