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Counting on Care Work: Human Infrastructure in Massachusetts

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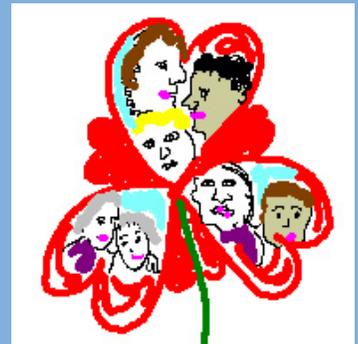
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COUNTING ON CARE WORK

Human Infrastructure in Massachusetts
September 2009



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EXECUTIVE SUMMARY

In Massachusetts, as in every other place in the world, all children need to be cared for and educated, everybody has physical and mental health needs that require attention, and some individuals need assistance with the daily tasks of life because of illness, age, or disability. The labor of meeting these needs – which we call *care work* – is a complex activity that has profound implications for personal, social and economic well-being. Care work is not just a cornerstone of our economy – it is a rock-bottom foundation. Care work provides the basis for our human infrastructure, and we need it to navigate through life as surely as we need our roads and bridges.

This report measures the role of care work in the Commonwealth in 2007 by examining in detail three intersecting spheres: paid care work, unpaid care work, and government investment in care. We include in the *care sector* the labor and resources devoted to the daily care of Massachusetts residents, especially children, the elderly and those who are disabled; the provision of K-12 education; and the administration of health care to both the well and the sick, regardless of age.

The Care Sector in Massachusetts

- In 2007 paid care work accounted for 22 percent of the Commonwealth's paid labor force (800,000 workers).
- Care industries generated a total value of \$46.8 billion, making up 13 percent of Massachusetts' state Gross Domestic Product (GDP).
- Commonwealth residents 16 years and older spent an average of 4.8 hours a day providing unpaid care or supervising those who need care.
- All together, Massachusetts residents perform 24.9 million hours a day of unpaid care work (the equivalent of 3.1 million full-time workers).
- Valuing unpaid care work at the typical wages for paid care workers, the total value of unpaid care time is \$151.6 billion annually.
- If the value of the Massachusetts GDP were expanded to include unpaid labor, unpaid and paid care work together would account for 36 percent of the total.
- Women comprise 75 percent of paid care workers and provide 64 percent of all time devoted to unpaid care activities.

- In fiscal year 2007, state and local governments in Massachusetts spent \$24 billion on the care sector.
- State and local government spending accounts for just under half (49 percent) of the total value of paid care services in the Commonwealth.

Why Care?

There are at least three important and related reasons to identify the care sector as a distinct segment of economic activity.

The combined successful outcomes of health, education, and other types of care work define our overall well-being and allow us to function effectively as a society.

Like our physical infrastructure, a well-developed human infrastructure is critical for other economic and social activity in the state to thrive. In order to work, to be an active part of families and communities, and to participate in the political process, people have to be fed, nurtured, educated, and have all of their daily needs met.

Because care work has benefits that extend beyond the individual directly receiving the care, market mechanisms do not always work to effectively provide the quantity or the quality of care we need.

The market is not well-equipped to deal with transactions that fall outside of the realm of individual exchange. Care, whether paid or unpaid, creates sizable benefits beyond those who are directly involved. Therefore, public policy and government fiscal support play a critical role in maintaining the well-being of this sector.

The majority of care work is labor that is closely linked to personal relationships.

Nurses, social workers, teachers, day care providers, and home care aides provide intimate care directly to the residents of the Commonwealth. Parents care for children and adult children care for aging parents in the context of complex relational interactions. The central role of emotional attachment and relational obligation in care work makes the labor of care unique, and further complicates market dynamics.

An Investment in the Future

Maintaining the human infrastructure of the Commonwealth is socially and economically vital. In addition, the unique characteristics of care work require thoughtful public and employer policies and sustained public financing.

Governments and employers must work together with the market to assure that care workers receive fair pay.

To attract and retain talented people to fill the expanding number of jobs in the paid care sector, the jobs at the top of the pay scale must be competitive with other jobs that require similar levels of education and commitment. And those workers who are at the bottom of the pay scale must be assured a living wage and decent working conditions. Formal worker protections are especially important for this group of workers who are particularly vulnerable due to the relational context of their work.

Increasing pressures on families from paid work require thoughtful government and employer policies to facilitate the ability to deliver unpaid care work.

The adoption of paid leave and paid sick days policies as well as employer and employee negotiated worktime flexibility are imperative to allowing families to continue to make this critical contribution to the state. The provision of viable part-time options – including

access to health insurance for part-time workers – is also critical to giving families support for unpaid care work. Ironically, many of the workers who fall into this part-time category are paid care workers, stretched between care obligations at work and at home.

The maintenance of the Commonwealth's human infrastructure requires sustained and adequate public financing.

Spending on care is indispensable to the effective development and utilization of the human capabilities of all of the residents of Massachusetts. Investing in the education of children leads to a better educated workforce for us all. Investing in the care of those with disabilities enables their greater participation in work and community life. And investing in the care of the elderly provides all of us with the security of knowing we will be cared for as we age – a fundamental motivator to labor force and community participation.

Efforts to promote healthy and sustainable economic development on the state level are likely to intensify but it is unclear whether states have the fiscal capacity to handle adequate funding of the care sector or if families have the physical and financial capacity to handle care needs. What is clear is that the paid and unpaid care that our families and communities rely upon will continue to require special attention from both federal and state policy makers. Our economic well-being depends on it.

INTRODUCTION

In Massachusetts, as in every other place in the world, all children need to be cared for and educated, everybody has physical and mental health needs that require attention, and some individuals need assistance with the daily tasks of life because of illness, age, or disability. The labor of meeting these needs – which we call *care work* – is a complex activity that has profound implications for personal, social and economic well-being. Care work is not just a cornerstone of our economy – it is a rock-bottom foundation. Care work provides the basis for our human infrastructure, and we need it to navigate through life as surely as we need our roads and bridges.

This report measures the role of care work in the Commonwealth in 2007 by examining in detail three intersecting spheres: paid care work, unpaid care work, and government investment in care. We include in the *care sector* the labor and resources devoted to the daily care of Massachusetts residents, especially children, the elderly and those who are disabled; the provision of K-12 education; and the administration of health care to both the well and the sick, regardless of age.¹ We examine the number, demographic make-up and wages of paid workers involved directly in care provision (jobs tending to children, elderly, or the disabled as well as those employed in elementary and secondary education and health care). We also total the hours spent by family members in feeding and maintaining households, in caring for and supervising children, and in caring for and helping others, including volunteer work. Applying the typical wages of care workers in the paid care sector we then estimate the value of unpaid time devoted to care. Finally, we add up state and local government financial contributions to the care sector in the Commonwealth.

The care sector comprises a substantial portion of our economic activity:

- In 2007 paid care work accounted for 22 percent of the Commonwealth's paid labor force (800,000 workers). Care industries generated a total value of \$46.8 billion, making up 13 percent of Massachusetts' state Gross Domestic Product (GDP).²

- Commonwealth residents 16 years and older spent an average of 4.8 hours a day providing unpaid care or supervising those who need care, for a total of 24.9 million hours a day. If paid workers were hired to perform this work instead, 3.1 million workers, working 8 hour shifts, would be required.
- Valuing unpaid care work at the typical wages for paid care workers, the total value of unpaid care time is \$151.6 billion annually.
- If the value of the Massachusetts GDP were expanded to include unpaid labor, unpaid and paid care work together would account for 36 percent of the total.
- Women provide the majority of the labor in both the paid and unpaid care sectors. Women comprise 75 percent of paid care workers and provide 64 percent of all time devoted to unpaid care activities.
- In fiscal year 2007, state and local governments in Massachusetts spent \$24 billion on the care sector, accounting for just under half (49 percent) of the total value of paid care services in the Commonwealth.

Why Care?

We argue that we can and should think about the care sector as a whole to build an understanding of its vital role in the Massachusetts economy. The care sector encompasses both paid employment and family labor, and cuts across several domains that usually operate in separate spheres and sometimes compete for the same state dollars. In addition, because of the special nature of care work, the public sector plays a key role in its provision and is an important partner in this landscape.

There are at least three important reasons to identify the care sector as a distinct segment of economic activity. First, the combined successful outcomes of health, education, and other types of care work define our overall well-being and allow us to function effectively as a society. The labor of care accomplishes some of the most fundamental tasks of a society. And, like our physical infrastructure, a well-developed human infrastructure is critical for other economic and social activity in the state to thrive. In order to work, to be an active part

of families and communities, and to participate in the political process, people have to be fed, nurtured, educated, and have all of their daily needs met.

The second unique characteristic of care work is closely related to the first. Precisely because care work has benefits that extend beyond the individual directly receiving the care, market mechanisms do not always work

to effectively provide the quantity or the quality of care we need, requiring public attention and funding. The market is not well-equipped to deal with transactions that fall outside of the realm of individual exchange, and is particularly ill-suited to the complex interactions between family labor and paid work in the care sector. Care, whether paid or unpaid, is a “public good” and

BOX 1

The Public Role in Care: Public Goods and Externalities

Economists recognize that there are several scenarios in which the private market place fails to produce the right amount of certain goods and services. By private market place, we refer to the market exchanges that occur between individual consumers purchasing goods and services (based on their income, needs and desires) and individual firms that produce goods and services (usually because they can make money by doing so).

In particular, there are two major instances when the market place fails, requiring alternative solutions for delivering goods or services. The first is the case of “public goods,” when individual participants in a market exchange cannot preclude others from benefiting from that exchange, and the cost of additional consumers or users is low. For example, a business that paved a street or put up a stop sign would have a hard time charging every user for the cost of this service, and it would not be efficient to do so. A better solution is to collectively provide street paving and stop signs through a neighborhood organization or local government.

Another and closely related way the private market place fails is when exchanges involve positive or negative externalities. In this case, those not directly involved in the exchange are directly affected – for better or for worse. For example, a manufacturing plant that emits pollution negatively affects many more people than purchase the goods produced at the plant. This is “costly” to those directly affected by the pollution. Absent regulation (such as limits on or financial penalties for pollution), these costs are not reflected in market price, so the price paid for producing the goods is too low. Negative externalities result in overproduction. Conversely, in the case of positive externalities, when many benefit but do not pay, the true benefit received from the goods is actually higher than reflected in the market price. Positive externalities result in underproduction.

Market failures require a response from the public sector, either through regulation, or public financing and provision. The extent of the failure and the importance of the good or service to society matters in deciding how much and how the public sector helps to correct the failure.

Care work has many individual-based benefits but it is also a “public good” and carries with it considerable positive externalities to all residents of Massachusetts. For example, children in stable high-quality day care are very likely to become better students, better workers, and better community members – and the parents of those children are certainly more productive workers. We as a society need and highly value the outcomes we derive from care work, including a well-educated labor force, healthy and productive adults, the security of knowing there will be care for us when we are sick or old, and the general well-being of the population, especially of those who cannot care for themselves.

creates sizable benefits beyond those who are directly involved (see Box 1, previous page). Therefore, public policy and government fiscal support play a critical role in maintaining the well-being of this sector.

Finally, the majority of care work is labor that is closely linked to personal relationships. Nurses, social workers, teachers, day care providers, and home care aides provide intimate care directly to the residents of the Commonwealth. Parents care for children and adult children care for aging parents in the context of complex relational interactions. The central role of emotional attachment and relational obligation in care work makes the labor of care unique, and further complicates market dynamics.

Measuring Up: Data and Categories of Care

Care work is a complex human activity that defies categorization and is not easily measured. In this report we use very different data sets with different ways of categorizing and measuring care activities. Each section of the report provides a detailed explanation of the data used. Here we provide a brief overview.

To measure paid care work, we turn to the American Community Survey, an annual survey that provides information on workers across the nation.³ By identifying the industries devoted to care, coupled with occupations within those industries, we are able to count the number of workers involved in care industries in Massachusetts, as well as explore their demographic characteristics and wages.

However, not all care work is performed for a wage (see Box 2). The American Time Use Survey allows us to add up the amount of time adults (persons 16 and older) spend maintaining their households and caring for themselves and their family members. The survey asks respondents to report how many minutes of a selected day are spent directly in care activities as well as the amount of time (sometimes overlapping) adults are supervising children even if involved in other types of activities simultaneously. We estimate hours spent in care for all men and women and also take a closer look at adults ages 25-64. To translate hours into dollars, we apply median wages for paid care workers to unpaid care work.

BOX 2 Paid “versus” Unpaid Care?

What is the economic relationship between unpaid and paid care work? Sometimes paid care can be a substitute for unpaid care work. For example, paying a provider to care for children or buying prepared meals can certainly free up time for unpaid family providers. In many cases, responsibilities for providing care often accompany efforts to earn money, creating a strain on the time and energy available for unpaid care.

But it is also the case that paid and unpaid work can complement one another, enhancing the quality of both. For example, caring for a person with dementia by a trained home health aide (or nursing assistant in a nursing home) typically supplements, not substitutes for, the care provided by family members. Similarly, when parents work with children on homework, they reinforce teachers’ instruction and lessons. In these cases, it is the combination of paid and unpaid care that makes each one more effective. This is why under-investing in the publicly provided care sector (and relying more heavily on unpaid care work or no care work at all) reduces the effectiveness of family-provided care as well as the effectiveness and efficiency of schools, nursing homes, and hospitals.

Having measured the value of both paid and unpaid care work, we then compare those values to the Bureau of Economic Analysis’s (BEA) information on Gross Domestic Product (GDP) by state for Massachusetts. The GDP measures the output produced and paid for in the state economy as a whole, and comparing the value of care work to state GDP demonstrates the relative size of the care sector.

Finally, we look at FY07 state operating budget and local expenditures to tease out the combined amounts invested in care of children, elders and the disabled, K-12 education and health care. We compare state versus local government spending on care in Massachusetts. Finally, we weigh the combined government spending against the total paid care sector as measured in BEA’s accounts.

Within the paid and unpaid care sector, we distinguish two types of care labor: interactive care work and care support work. *Interactive care work* describes labor that directly responds to the needs of a patient, family member, student, or client through a face-to-face relationship. A father giving a child a bath, a daughter helping her elderly mother get dressed, and a brother helping his sister with her homework are all engaged in interactive care work. In the paid labor force, interactive care workers include doctors, nurses, teachers, social workers, child care workers, and others who work directly with recipients of care.

There are many unpaid and paid activities that are not considered interactive care and yet are essential to the care sector in Massachusetts. In the paid labor market, administrative assistants, managers, janitors, and cafeteria cooks and servers who work in schools, hospitals, and nursing homes are among the many *care support workers* who keep these institutions of care running. Likewise, in families, in addition to the time they spend in direct relationship with those they are caring for, family members also maintain their households, prepare meals for elderly parents, clean children's laundry, and attend to the needs of children who may be engaged in another activity. Care support work is often less visible, but critically important to the meeting of care needs.

An Investment in the Future

The role that care plays in all our lives is substantial. The 6.5 million individuals who live in Massachusetts all rely on some amount of care work for their physical and mental health and to meet their daily needs. In addition, according to the 2007 American Community Survey, there are over 1.5 million Massachusetts children under the age of 18, who need more intensive care and education. Another 864,000 individuals over 65 and 138,000 of these over 85 have particular care needs. In addition, 213,000 Massachusetts residents have significant personal care limitations.⁴

Despite substantial public investment in the care sector in Massachusetts, profound care gaps are apparent in both the availability and quality of care across a number of areas. Even though Massachusetts has vastly extended health insurance coverage, 7.1 percent of residents ages 18 to 64 were uninsured in 2007 while 4.1 percent of those with a health problem were underinsured.⁵

According to a report produced by the Massachusetts Medical Society in 2008, there is a critical shortage of family care physicians in the state.⁶ And waiting lists for subsidized child care and home care are long.

Care is both a private and a public good with widespread benefits. It involves a complex network of unpaid family members and paid care workers. Ironically, care is most intensively needed for those least able to bear its costs – children, the elderly and those who are ill or disabled. While substantial portions of care are and will remain unpaid, a large and growing portion will be carried out by paid care providers. This work represents an integral contribution to economic development. Maintaining the health of this vital sector requires thoughtful and sustained public investment and involvement.

First, as a public good with especially important positive spillover effects, governments must play a substantial role in the care sector. Left to the private market place, care work will be under-produced and costly. As a result, some people will end up with no or inadequate care, eating away at our human infrastructure. As we show in this report, the Commonwealth's state and municipal governments already make significant contributions, but even before the current recession there were substantial unmet care needs. The recent state cuts are placing additional extraordinary challenges on paid and unpaid care workers and on those for whom they care – demonstrating that the government's role in care financing is particularly vulnerable to economic downturns and government budget cuts. The future of the Commonwealth's human capabilities will depend on finding a way for governments to continue to co-invest adequately in care.

Second, care work has characteristics that distinguish it from other forms of work. Paid care workers typically develop a deep sense of obligation to their patients, clients, or students. This can be a rewarding benefit of care work, but it can also dampen workers' demands for higher wages or improved working conditions. Instead, many workers simply leave their jobs and seek work in sectors in which wages and conditions are better. In care work, it is also uniquely difficult to define and monitor quality. Consumers operating in very real need without clear information cannot make the kinds of choices that drive markets to meet demand, and the quality of care can be undermined. The role of gov-

ernment in assuring minimum standards and accurate information is crucial.

Without adequate government policy and public funding for paid care and without employer and government support for unpaid care, both the quantity and quality of care can fall short of what is needed. As a result, many paid care occupations are vulnerable to depressed wages or difficult working conditions, leading to difficulty attracting qualified workers, high turnover, and sometimes shortages of workers. Similarly, unpaid care work is usually unrewarded and often unrecognized, leaving family members without the necessary support to carry out this time- and labor-intensive work. The unique characteristics of the care sector – and especially the particularities of interactive care – mean that developing and maintaining the human infrastructure of the Commonwealth requires thoughtful policy and public investment.

PAID CARE WORK

This section examines in detail one aspect of the care economy: the distribution of workers in care work industries. Using the industrial classifications in the American Community Survey, we identify 20 industries that have the primary goal of assuring the health of all, the education of young children, and/or the well-being of those who are too young, too old, or too infirm to be able to provide all of their care needs themselves.

Paid workers in health care, K–12 education, child care, and other social services are a critical part of the human infrastructure of the Commonwealth. In 2007, almost 800,000 individuals (22 percent of all workers) worked in these care work industries, meeting the most essential needs of state residents.⁷ Workers in paid care industries have among the lowest median wages and a large portion work part-time. Three out of four paid care workers are female while black, Hispanic and other non-white ethnic and racial groups are disproportionately represented among the lower paid care occupations.

Paid care workers make up an important and growing part of the paid labor force in Massachusetts, as over one-fifth of all workers in 2007 worked in the paid care sector. Understanding paid care work is essential to providing quality care to some of the most vulnerable residents of the Commonwealth, as well to supporting job growth in these expanding industries.

Paid Care Industries are Critical to the Massachusetts Economy

Paid care industries include hospitals, child day care services, residential care facilities, doctors' offices, home care services and elementary and secondary schools. By counting workers within these industries, we identify care work activities in the paid labor market (see Box 3, next page).

In 2007, almost one-quarter of the paid labor force in Massachusetts worked in these industries. Figure 1 (page ten) demonstrates that care workers represent a substantial proportion of the paid labor force. The greatest proportion of these individuals worked in health care industries (13 percent), followed by K–12 education (6 percent), social services (2 percent), care of children and youth (2 percent), and private household

BOX 3 Measuring Care Work Industries

We use the American Community Survey (ACS) to collect information on the jobs people hold in Massachusetts. The ACS is the largest household survey in the United States with an annual sample size of 3 million households (see <http://www.census.gov/acs> for more information about the ACS). Respondents to the ACS are asked, among other things, to describe the employment status and type of work of all persons 16 years and older in that household.

Based on information collected from individuals, the U.S. Bureau of the Census assigns each individual an industry and an occupation classification. Industry is defined as the “type of activity at a person’s place of work” (e.g. hospitals, grocery stores, or tire manufacturing). An occupation describes “the kind of work a person does” (e.g. registered nurse, elementary school teacher, or truck driver).

We use the industry classifications to measure the number of paid workers in Massachusetts whose labor is directed towards assuring the health of all, the education of young children, and/or the well-being of those who are too young, too old, or too infirm to be able to provide all of their care needs themselves.

Of the 261 industrial categories in the American Community Survey, we identify 20 as care industries:

Health Care

- Pharmacies and drug stores
- Offices of physicians
- Offices of optometrists
- Offices of dentists
- Offices of other health practitioners
- Home health care services
- Other health care services
- Nursing care facilities
- Residential care facilities, without nursing
- Hospitals
- Outpatient care centers
- Offices of chiropractors

K-12 Education

- Elementary and secondary schools

Care of Children and Youth

- Child day care services
- Other schools, instruction and educational services

Social Services

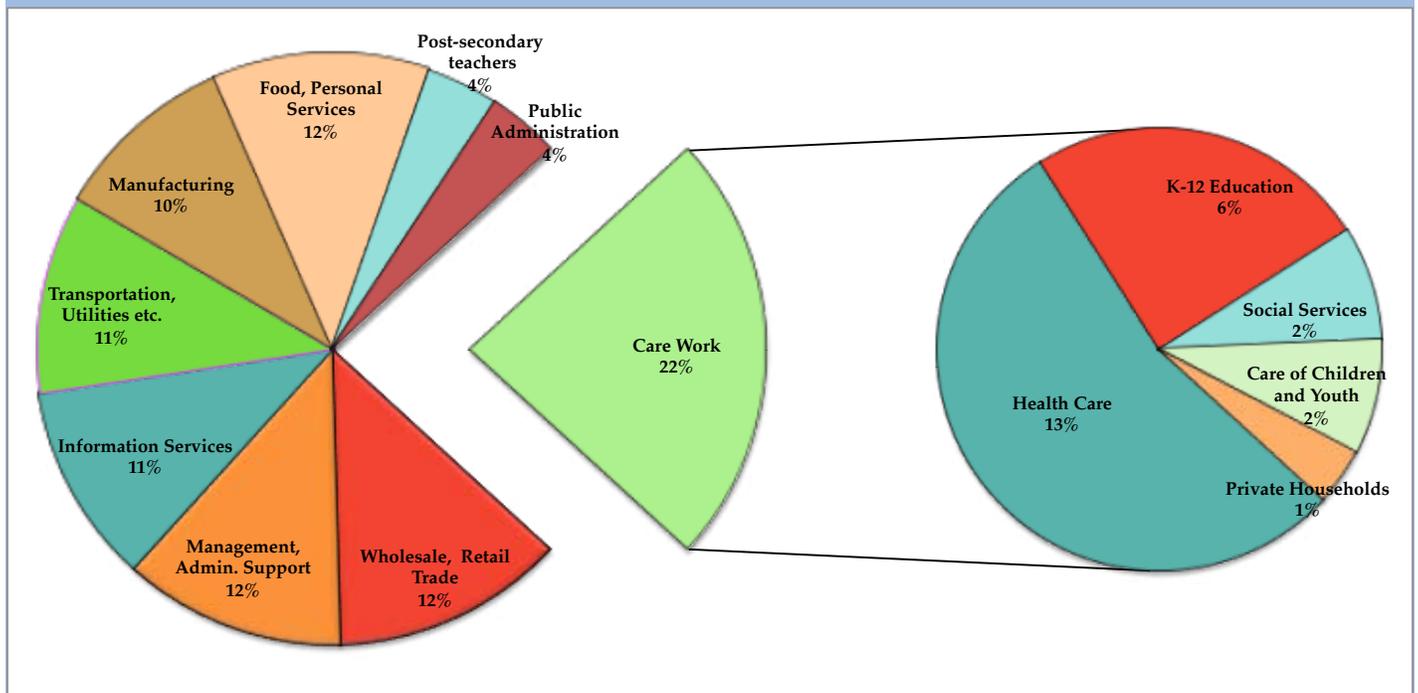
- Individual and family services
- Community food, housing and emergency services
- Religious organizations
- Vocational rehabilitation services

Private Households

- Private households (primarily nannies and housekeepers)

Each broad industrial group in Figure 1 also includes a number of detailed industry categories that are grouped together.

FIGURE 1
Massachusetts Workers in Care Work Compared to Other Industries (2006-2007)



Data from American Community Survey pooled sample 2006-2007. For more information see technical documentation at www.countingcare.org.

work, primarily nannies and housekeepers (1 percent). These percentages exceed those of the U.S. as a whole, where care industries employ 20 percent of the paid labor force.

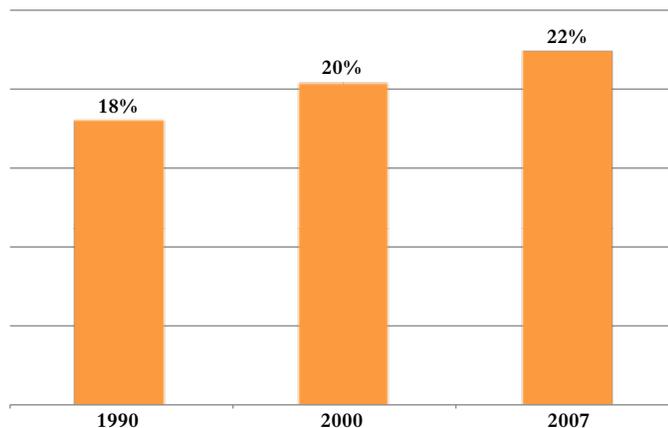
The paid care sector in the Commonwealth has seen significant and steady growth in recent decades (see Figure 2, next page). Between 1990 and 2000, the size of the paid care sector grew 15 percent to over 671,000 workers. Another 100,000 workers were added to the paid care workforce between 2000 and 2007. Unlike other sectors, such as manufacturing, that have experienced a decline during this same period, jobs in the care sector are difficult to outsource and the need for them continues to grow. As a result, care industry jobs are becoming an even larger proportion of the Massachusetts workforce.

So far, employment in these industries has continued to expand even during the deep economic recession that began in December 2007.⁸ Paid care workers meet some of the most fundamental needs of residents of the

Commonwealth, and demand for care services actually increases in difficult economic times. Almost one in four workers in paid care industries are public sector employees (mostly teachers), and many more rely heavily on state funding sources. The substantial role of public support in the care sector makes it particularly vulnerable to budget cuts at both the state and federal level. In light of the severe budget cuts Massachusetts is now facing, paid care workers and those for whom they care will see resources diminishing and may experience layoffs.

The importance of paid care work to the economy as a whole extends far beyond the workers who are employed in this sector. The provision of quality child care, health care, and social services facilitates paid employment and promotes local economic development throughout Massachusetts. In addition, care workers who help to educate children and provide needed services to adults ultimately add to the human capital of the Commonwealth by preparing many of these citizens to participate in the workforce and in other activities. Care workers

FIGURE 2
Percentage of Massachusetts Workers in Paid Care Industries (1990–2007)



Data from IPUMS samples of US Census for 1990 and 2000 and from American Community Survey pooled sample 2006–2007 for 2007. For more information see technical documentation at www.countingcare.org.

work in every city, town, region, and community in the state, making the care sector a foundational part of the statewide economy.

Who Are Paid Care Workers?

Well over half of the workers in the paid care sector in Massachusetts are directly involved in what we have called interactive care (see Box 4). These are the doctors, nurses, teachers, child care workers, social workers and home care aides on the front lines of caring for the residents of the Commonwealth. Their jobs entail meeting care needs as basic as a diaper change or as complex as a sophisticated medical procedure. These workers share the common goal of promoting the health, development, and well-being of Commonwealth residents through face-to-face interaction. Workers in interactive care occupations make up 61 percent of those in paid care industries, and represent a wide range of occupational diversity (see Table 1, next page). Three out of the ten largest occupational groups in the state are interactive care occupations – registered nurses; elementary and middle school teachers; and nursing, psychiatric and home health aides.

BOX 4 **Measuring Interactive Care Occupations**

While we use industry categories to define which workers are in the paid care sector, we use occupational categories to distinguish between interactive care workers and care support workers within that sector. For instance, within the industry category of hospitals we find a wide range of occupations including physicians, registered nurses, nursing aides, physical therapists, psychologists, secretaries, managers, janitors, cooks, and laundry workers.

Those jobs that entail substantial face-to-face interaction with patients, clients, or students to provide for their health, education, or well-being we have classified as interactive care. Physicians, registered nurses, nursing aides, physical therapists, and psychologists are among those workers in the hospital industry who would be included in the category of interactive care.

A significant number of workers work in care industries whose jobs are not interactive care occupations. For example, hospitals employ a large number of secretaries, managers, janitors, cooks, and laundry workers. These are workers whose labor provides direct support for interactive care, and we refer to them as care support workers.

A measure of interactive care that is based on occupations is imperfect, as it does not capture the complexities of the work of all of these individuals. However, as the data cannot tell us about variation in individual work practices, we are relying on the standard expectations of an occupation as a guide to estimate the number of interactive care workers within the overall sector.

The paid care sector in Massachusetts also includes over 300,000 workers who do not work in interactive care occupations. These are workers whose time is not spent in a direct relationship with the recipients of care, but whose work provides direct and crucial support for interactive care (see Box 4). Just under 40 percent of the paid care sector is comprised of these support oc-

TABLE 1
Occupational Distribution of Workers
within Paid Care Industries in
Massachusetts (2006-2007)

	Occupation	# of Workers
Interactive Care Workers	Health Care	
	Registered Nurses	72,634
	Nursing/Home Health Aides	50,289
	Physicians and Surgeons	26,929
	Physical/Occupational Therapists	16,601
	Personal and Home Care Aides	16,340
	Practical and Vocational Nurses	11,957
	Dental Hygienists/Assistants	10,191
	Other Health Practitioners	8,251
	Pharmacists	5,233
	Dentists	5,097
	Paramedics and EMTs	3,976
	Recreation and Fitness Workers	3,614
	Physician Assistants	2,578
	K-12 Education	
	Elementary/Middle School Teachers	72,826
	Teacher Assistants	22,264
	Secondary School Teachers	20,829
	Other Teachers and Instructors	14,598
	Special Education Teachers	9,652
Care of Children and Youth		
Child Care Workers	27,904	
Preschool/Kindergarten Teachers	16,660	
Mental Health and Social Services		
Social Workers	16,696	
Counselors	15,759	
Religious Workers	8,567	
Psychologists	6,515	
Community/Social Service Specialists	5,228	
Residential Advisors	2,360	
Total	473,548	
Care Support Workers	Management/Administrative Support	145,420
	Healthcare Technical and Support	42,145
	Construction, Maintenance and Grounds	35,197
	Specialists (inclu. media/computer/legal)	20,064
	Food/Personal Services	20,157
	Sales	14,305
	Transportation and Protective Services	9,473
	Life, Physical, and Social Science	8,159
	Engineering, Education and Training	5,246
	Production	4,607
	Total	304,773

Data from American Community Survey pooled sample 2006-2007. For more information see technical documentation at www.countingcare.org.

cupations, workers whose labor is in the service of care. The largest occupational groups among care support workers are administrative assistants, managers, technicians, and maintenance and grounds workers.

In addition to the workers we have described, almost 56,000 workers in the Commonwealth work in interactive care occupations outside of paid care industries. This group includes nurses who are employed through employment services, social workers who work in human resources, and teachers and instructors who work outside school settings. Our estimate of the size of the paid care sector is therefore an underestimate of the total number of care workers in Massachusetts. For the sake of clarity of presentation, we limit most of our description to those workers in paid care industries, but the scope of paid care work extends beyond even what we describe here.

Women Carry the Paid Care Sector

In Massachusetts, 75 percent of the workers in paid care industries in 2007 were women (see Figure 3). By contrast, women made up only 41 percent of all other workers in the state. Women are especially concentrated among interactive care workers, among whom almost 80 percent are female. Interestingly, the proportion of women in interactive care has been steadily increas-

FIGURE 3
Percent of Workers in Massachusetts
Industries by Gender (2006-2007)



Data from American Community Survey pooled sample 2006-2007. For more information see technical documentation at www.countingcare.org.

TABLE 2
Median Annual and Hourly Earnings of
Massachusetts Workers by Industry Sector
(in 2007 dollars)

	Annual Earnings	Hourly Earnings
Public Administration	\$51,600	\$24.75
Information Services	\$48,600	\$24.25
Management, Administrative Support	\$46,600	\$24.00
Manufacturing	\$42,500	\$20.25
Transportation, Utilities etc.	\$40,500	\$20.00
Post-Secondary Education	\$35,400	\$20.00
Care Work	\$33,400	\$19.25
Wholesale, Retail Trade	\$25,900	\$14.50
Food, Personal Services	\$16,900	\$12.00

Data from American Community Survey pooled sample 2006-2007. For more information see technical documentation at www.countingcare.org. Excludes Armed Services; annual median income rounded to nearest \$100; hourly wage rounded to nearest \$0.25.

ing over the past several decades, driven by women’s entrance into previously male-dominated fields such as medicine and psychology combined with a lack of comparable male entry into female dominated fields such as nursing and child care.⁹

Fully 35 percent of women in the labor force in Massachusetts in 2007 worked in the care sector. Substantial research shows that occupations dominated by women have lower wage rates than those dominated by men, even when controlling for level of education and other important factors that help determine wage levels.¹⁰ To the extent that this translates into relatively lower wages across paid care, this may reduce the quality of care, as low wages are linked to high turnover rates, difficulty attracting and retaining qualified workers, and low worker morale and motivation. In addition to the economic importance of the care sector generally, conditions in and funding for the care sector have important gender equity consequences in the Commonwealth.

Diversity and Economic Penalties Characterize Paid Care Work

In 2007 the median annual earnings for workers in the paid care sector was \$33,400, compared to an overall median of \$36,300 for all other workers. Relative to other sectors of the economy, the median earnings of care workers ranks near the bottom (see Table 2). This is particularly striking given the number of highly educated workers in the care sector. Within care industries, fully 50 percent of workers have at least a 4-year college degree, compared to 37 percent in the rest of the Massachusetts labor force.

Many of the occupations that require the highest levels of formal education are interactive care occupations. Researchers have found a 5 to 6 percent “wage penalty” in occupations involving interactive care.¹¹ That is, after controlling for other factors that are known to influence wages – such as education level, sex composition of an occupation, level of unionization, and other job characteristics – interactive care workers are still paid 5 to 6 percent less than other workers who are similar on these dimensions.

While as a whole, care sector workers are paid less than other workers in the labor market, there is considerable variation within these industries. Overall, the median hourly wage for care support workers (\$17.24) is lower than for interactive care workers (\$20.91). The lowest earning workers in the care sector earn wages that are at or below poverty level (see Table 3, next page).

Across the labor market, wage disparities are linked to both gender and race-ethnicity, and the paid care sector is no different. Looking at the composition of the care work occupations with the highest and lowest median annual earned incomes provides a clearer sense of these divisions (see Table 3, next page). Among the occupations with the lowest median annual earned income, women make up an overwhelming majority of employees in all of the categories. Among those occupations with the highest annual incomes, men have a much more significant presence. In fact, men represent about two-thirds (over 60 percent) of the workers in the two highest paid categories.

TABLE 3
Gender and Race Composition for Occupations within Care Work Industries with the Highest and Lowest Median Annual Earnings (2006-2007)

Occupation (interactive care workers appear in bold)	Number of workers	Median annual earnings	% Men	% White US born
Dentists	5,097	\$138,600	69%	67%
Physicians and surgeons	26,929	\$130,500	63%	66%
Pharmacists	5,233	\$82,900	50%	79%
Medical and health services managers	16,322	\$67,400	29%	79%
Education administrators	16,137	\$62,200	31%	88%
Cooks	7,467	\$18,200	32%	64%
Maids and housekeeping	14,185	\$16,900	21%	33%
Personal and home care aides	16,340	\$16,600	21%	53%
Teacher assistants	22,264	\$15,200	10%	78%
Child care workers	27,904	\$11,600	8%	67%

Data from American Community Survey pooled sample 2006-2007. For more information see technical documentation at www.countingcare.org. Only occupations with at least 5,000 workers were included in this analysis; all dollar amounts are 2007 dollars.

The patterns of racial-ethnic segregation are a bit more complex. The occupations within the care sector where foreign-born, Black and Hispanic workers are most heavily concentrated are some of the lowest paying. White US-born workers make up only 33 percent of maids and housekeeping cleaners and only 53 percent of personal and home care aides, despite making up almost 75 percent of the Massachusetts labor force as a whole. By contrast, among many of the highest paying care occupations, White US-born workers are overrepresented. The exceptions are physicians, surgeons and dentists, occupations which include a large proportion of foreign-born workers.

A relatively high number of paid care workers are employed part-time (see Table 4). Part-time workers (those working less than 35 hours a week) are less likely than full-time workers to have access to employer-sponsored health care, paid sick leave or retirement benefits. Furthermore, part-time workers are paid less per hour than full-time workers even after controlling for factors like age and experience.¹²

Paid care workers make up a large and growing part of the labor force of the Commonwealth, and represent a wide range of workers geographically, occupationally, and socioeconomically. What these workers all share is

the vulnerability to particular economic penalties and problematic market dynamics because of the unique characteristics of care work. Adequate and stable public financing is critical to ensuring both the quantity and quality of paid care needed by state residents. Equally important are policy tools to ensure fair wages and working conditions for these workers.

TABLE 4
Percent of Massachusetts Workers Who Work Part-time, by Industry (2006-2007)

Food, Personal Services	42%
Post-Secondary Education	33%
Care Work	32%
Wholesale, Retail Trade	32%
Management, Administrative Support	19%
Information Services	15%
Transportation, Utilities etc.	13%
Public Administration	12%
Manufacturing	9%

Data from American Community Survey pooled sample 2006-2007. Part-time workers are those who reported working less than 35 hours a week. For more information see technical documentation at www.countingcare.org.

UNPAID CARE WORK

While paid care workers are a critical part of the human infrastructure of the state, a large amount of care work is performed every day by unpaid family members and friends. This unpaid labor is a vital part of the care sector in Massachusetts, meeting daily needs of many residents, improving our health, strengthening our relationships with one another, and helping negotiate the complexities of obtaining paid care services such as getting to a doctor, finding a good child care center, or learning about elder care services.

Unpaid care work includes not only maintaining households and caring for children and other family members, but also helping friends and neighbors and volunteering time to community organizations. Sometimes this work takes the form of specific activities such as playing with or reading to children, but it also includes being “on call,” available to meet the needs of dependents who need supervision or assistance.

On an average day, Massachusetts residents devote a total of about 24.9 million hours to unpaid care work.

Translated into people and dollars, we would need to hire about 3.1 million workers on any given day –

working 8 hour shifts – to provide paid replacement for the unpaid time that individuals provide, on average, to care work. Assigning the typical paid care workers’ wage to this work, the total market value of care work performed in the Commonwealth of Massachusetts in 2007 amounted to about \$151.6 billion dollars.

By comparison, the total value of state GDP in 2007 was \$352 billion. Including the value of unpaid work in total state GDP would increase our output to \$504 billion, with unpaid care work accounting for 30 percent.

Measuring Unpaid Care Work

Unpaid care workers don’t punch a time clock. By definition, they are not paid by the hour – though some receive a share of a family member’s income partly as a reward for their efforts. One way to determine what they do is to ask them to report in some detail how much time they devoted to various activities on the previous day: What time did you wake up? What did you do then? What did you do after that? Where did you do it? Was anyone else present while you did it?

Social scientists have been collecting and analyzing time use surveys for decades, so we have some sense of how daily activities have changed over time. For example,

BOX 5 Unpaid Care Activities and Responsibilities

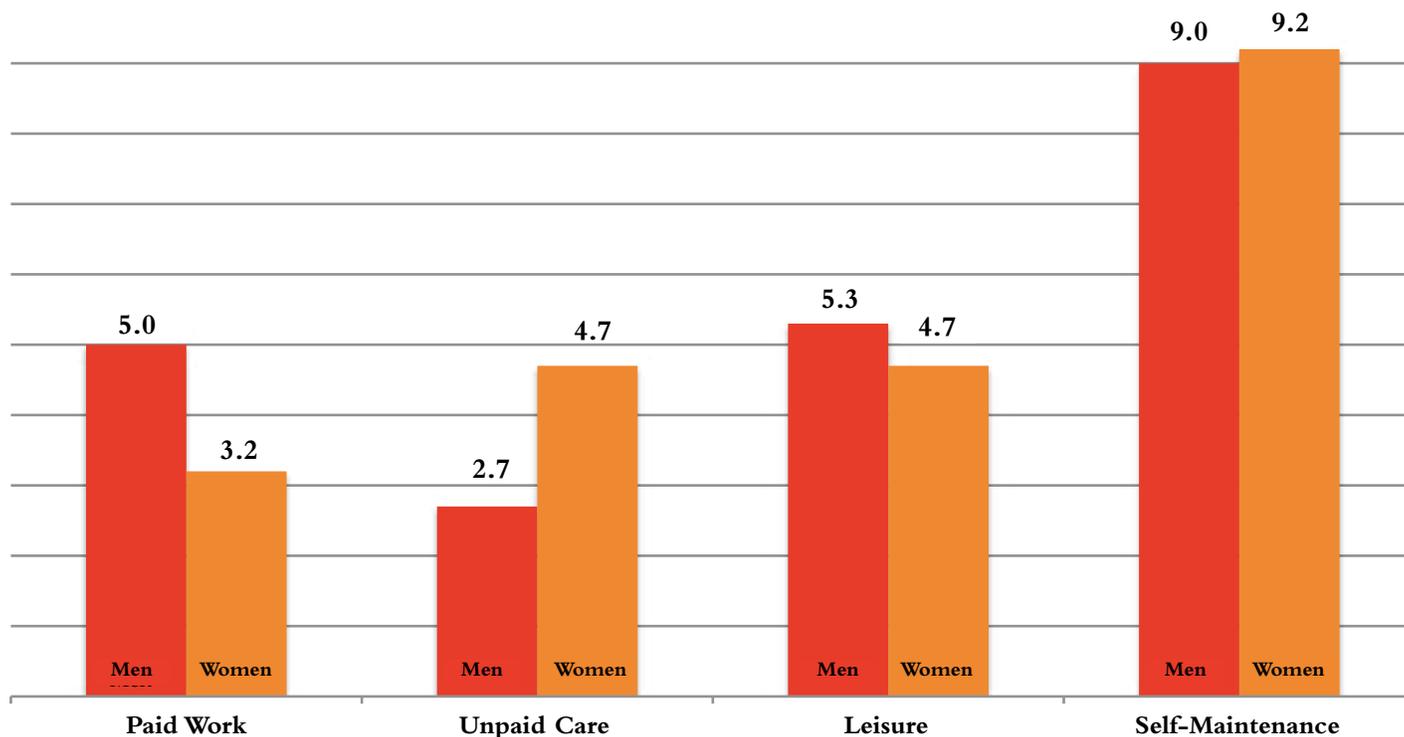
Interactive care activities are those that involve direct interaction with care recipients, engaging in activities that typically require personal contact and often require cooperation from a care recipient. Examples include feeding or dressing a child, reading aloud to or instructing a child, feeding or bathing a sick adult.

Support care

- a. *Household support care* activities are those that may not involve direct interaction but provide support for interactive care, such as cooking, shopping, cleaning, and organizing the household. Often other adults, as well as children, benefit from support care.
- b. *Social support care* activities are volunteer activities that provide assistance to others. Some of these activities probably include interactive care, but the data do not allow us to distinguish these. Thus, all volunteer activities are categorized as social support care.

Supervisory care entails responsibilities for supervising or being available to someone who needs assistance, such as a small child who cannot be left alone or a sick person who may call out for help at unpredictable times.

FIGURE 4
How Do Massachusetts Men and Women Spend Their Time?
(average hours per day, 2003–2007)



Data from American Time Use Survey pooled sample 2003-2007, adults over 16. Daily hours may not sum to 24 because of omission of unspecified time and rounding.

mothers are much more likely to be employed today than they were in 1965, but actually devote more time to the interactive care of children and less time to housework than they did then. Fathers spend significantly more time providing child care now than in 1965 – though still only about half as much as mothers.¹³

Since 2003, the United States Census Bureau has administered the American Time Use Survey (ATUS) to a representative sample of the U.S. population 16 years and older every year on a randomly selected day. (For more information about the survey, see <http://www.bls.gov/tus/>). We use the ATUS to examine the time use of Massachusetts residents, pooling data for six years (2003–2007) to ensure a large enough sample to examine specific patterns.

We first divide all reported activities into four major categories: paid work time, unpaid care time, self-maintenance, and leisure time¹⁴:

- *Paid work* is time spent working for pay and traveling to and from paid work.
- *Unpaid care* is time devoted to activities such as child care, adult care, and the cleaning and maintenance of the home – activities that you could in principle pay someone else to do on your behalf, plus travel time associated with these activities. Volunteer work is also included in this category. Unpaid care can be divided into activities of interactive or support care.
- *Self-Maintenance* is time spent sleeping, bathing, tending to personal needs, and eating, plus travel time associated with these activities.
- *Leisure* is time spent socializing, reading, watching TV, engaging in sports and other activities that people engage in as recreation plus travel time associated with these activities.

Women Carry the Unpaid Care Work Load

Figure 4 (previous page) depicts the average daily time that Massachusetts men and women residents allocated to these four categories (including those who devoted no time to them on the survey day). We don't report differences based on race and ethnicity, because these are small. However, men's and women's time use patterns are very different, leading us to break the numbers down by gender.

Virtually everyone engaged in leisure and self-maintenance on the survey day (which could have landed on a week-end) but not all engaged in paid work or unpaid care. However, adult women engage in almost twice as many hours of unpaid care as men – 4.7 hours a day compared to 2.7 hours for men.¹⁵ On average, men spend more time in paid work (5.0 hours a day) than women (3.2 hours a day).

Average total hours of work (the sum of paid work and unpaid work time) are about the same – 7.7 hours for men, and 7.9 hours for women. Women take slightly less leisure time than men do on average (about half an hour per day), but spend slightly more time in self-maintenance (which includes sleep). These patterns resemble those for residents of the U.S. as a whole, although men and women in Massachusetts spend slightly more time, on average, in paid work.

Based on estimates of the average size of the adult male and female population in Massachusetts over the 2003–2007 period the total amount of time devoted to unpaid care activities on an average day was about 19.2 million hours – very close to the amount of time devoted to paid work activities, 20.9 million hours.¹⁶

Unpaid Care Work Activities

Peoples' activities vary over the life cycle. Young adults between the ages of 16 and 24 often spend considerable time in school, and many adults ages 65 and older are retired. The working-age population between 25 and 64, which comprises about 72 percent of the population of the state, is most likely to provide interactive care for others. As a result, we focus on this age group for our descriptive analysis. We will return later to an analysis of the activities of the entire population 16 and over.

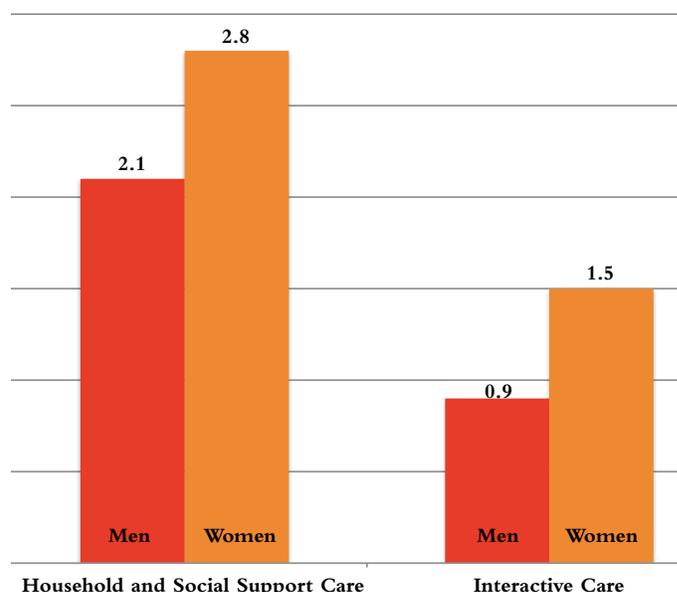
Unpaid care activities take a variety of forms. In order to simplify the picture, we fit these activities into two categories: interactive care activities for children or adults needing assistance and household and social support care (housework, shopping, and volunteering).¹⁷ These interactive care activities are not necessarily restricted to household members.

Household support care activities consume far more of women's and men's time than interactive care activities. About 86 percent of working-age men and 94 percent of working-age women engaged in household or social support activities on the day they were surveyed. Among these, men averaged 2.1 hours per day and women 2.8 hours; they averaged 0.9 and 1.5 hours respectively on interactive care (see Figure 5).

A Closer Look at Interactive Care Activities

The American Time Use Survey reports the amount of time adults devote to care activities on behalf of children and adults needing assistance. Because not all adults live with children or elders, fewer than half (44 percent) of working-age men and only slightly more

FIGURE 5
Unpaid Care Activities in Massachusetts
(average hours per day, 2003–2007)



Data from American Time Use Survey pooled sample 2003–2007. Includes only adults ages 25–64 who devoted at least some time on survey day to these activities.

than half (56 percent) of working-age women report engaging in an interactive child care or adult care activity on the survey day.

Interactive child care consists of a variety of different types of activities, including physical care (feeding, bathing etc.) and developmental care such as talking to or reading aloud to children. Traveling with children – transporting them to various activities – and waiting for them also consumes a significant amount of time. Of those who devote any time during the day to interactive child care, women devote substantially more time to physical care of children than men do; gender differences are smallest in traveling and waiting for children (see Table 5).

Women spend more time than men in child care activities on both weekdays and weekends (see Figure 6, next page). However, women spend slightly less time in child care activities on the average weekend day than the average weekday, while men spend the same amount. Parents are more likely to spend time in leisure activities with children on weekends, and leisure time enjoyed together takes the place of some specific interactive care activities.

Interactive care for other adults consumes less time than care for children, on average. The needs of adults who require assistance are far more variable than those of young children – some need only a small amount of assistance, while others suffer extreme illness or infirmity and call for almost constant attention.

TABLE 5
Types of Interactive Child Care
(average minutes per day, 2003–2007)

	Men	Women
Physical	25	53
Developmental	30	49
Traveling and Waiting	33	34
Other	17	24

Data from American Time Use Survey pooled sample 2003–2007. Includes only adults ages 25–64 who devoted at least some time on survey day to interactive child care.

Interactive care for dependent adults outside the household is defined more broadly than for those within it (following the ATUS definitions of care). Among men who provide care, the amount of time devoted to interactive care for non-household adults (primarily the elderly) is greater than that provided by women on weekend days.

Supervisory Care

Time devoted to activities of interactive care understates the temporal demands that dependents impose. Young children require constant supervision. Even though infants spend about half their time asleep, they wake up at unpredictable times demanding immediate attention. While care needs change with age, children need some level of supervision in their daily activities at least through their pre-teen years. Adults who are sick, disabled, or infirm also often need someone to remain near by “on call” to help them take medication, be mobile, or obtain medical assistance. Needs for supervisory care constrain the activities of unpaid care takers, making it necessary for them to purchase care services in order to engage in paid employment.

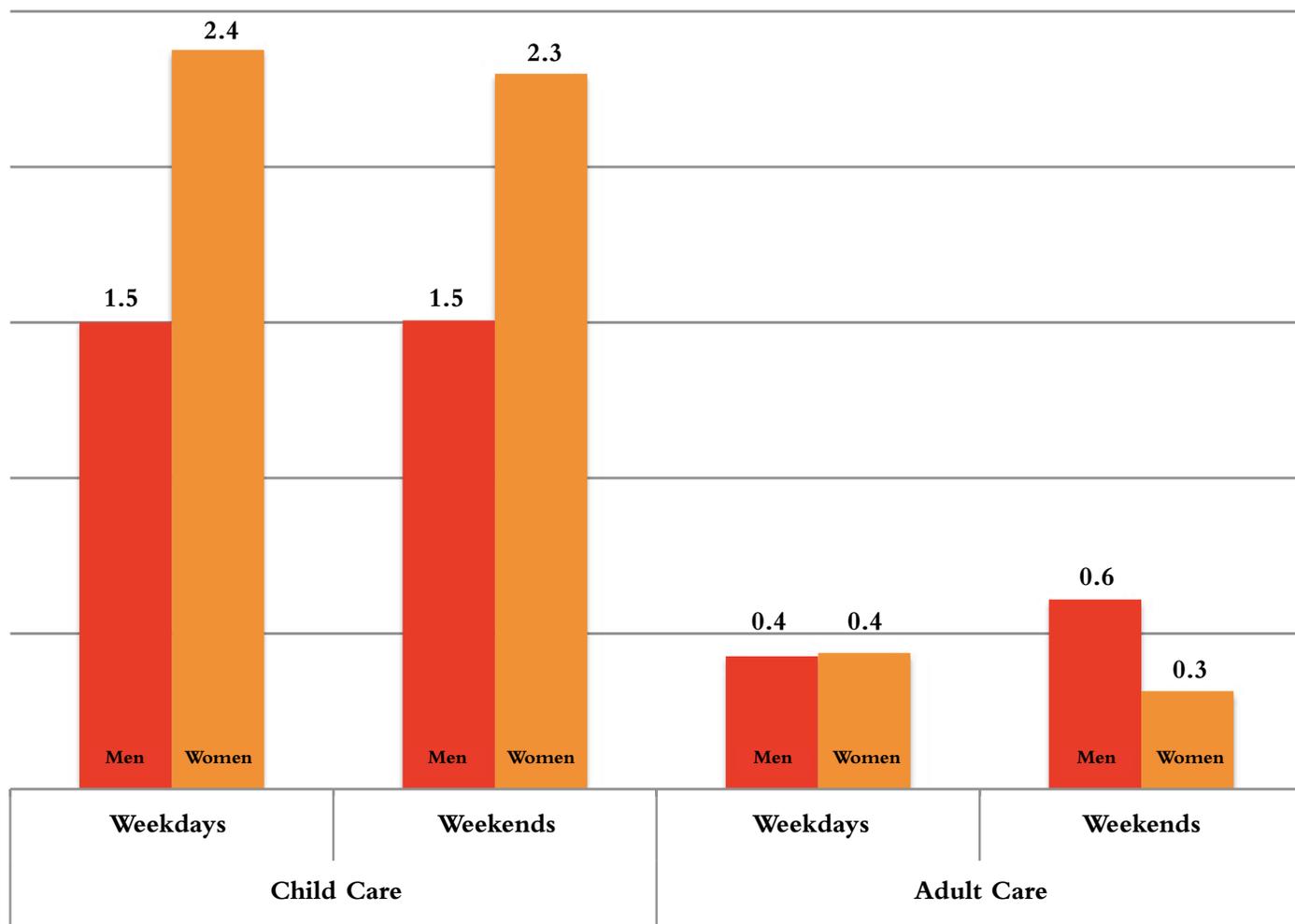
The American Time Use Survey captures the constraints of supervisory care for children under the age of 13 but not for adults. Each respondent in the survey is asked to report the amount of time that a child under the age of 13 was “in your care.” We categorize this time as supervisory care, distinguishing it from the interactive care activities described above.¹⁸

About 81 percent of both working-age women and working-age men who are living in a household with at least one child under the age of 13 reported that a child was in their care on the day they were surveyed. The average number of hours that they reported spending with supervisory care obligations was far higher than time spent in explicit interactive care activities (6.4 hours for women and 4.0 hours for men).¹⁹

The Total Value of Unpaid Care Work in Massachusetts

All these forms of unpaid care work represent an important contribution to the Massachusetts economy. To estimate their total magnitude, we return to a consid-

FIGURE 6
Time Devoted to Interactive Care (average hours per day, 2003–2007)



Data from American Time Use Survey pooled sample 2003–2007. Includes only adults ages 25–64 who devoted at least some time on survey day to these activities.

eration of the entire population ages 16 and over, and estimate the average amount of unpaid care work time per person per day (including those who provided no unpaid care on the survey day).²⁰

Multiplying these per-person averages by a Census-based estimate of the size of the Massachusetts population 16 and over in 2007 (about 5.2 million), adults in the Commonwealth provided about 24.9 million hours of unpaid care per day (see Table 6, next page). The equivalent number of paid workers required to do this work (at 8 hours per day) would be about 3.1 million – almost four times the 800,000 paid care workers currently working in Massachusetts.

What was the market value of this time? One way to estimate the value of unpaid work is to ask how much it would cost to hire someone to do comparable work.²¹ Paid substitutes for some kinds of non-market work are obvious: families can hire a housekeeper, a nanny, or an elder care worker to come to their home. However, it is important to note that the market does not offer perfect substitutes for the care individuals provide outside the cash economy. Family members develop relationships and person-specific skills that increase their value as caregivers. It requires an experienced caregiver to acquire this knowledge and level of performance. In addition, as discussed earlier, many paid caregivers in the labor market do not earn wages that fully reflect the value of their services. As a result, estimates of the market value

TABLE 6**Average Annual Amount and Value of Time Devoted to Unpaid Care Work in Massachusetts (2003-2007)**

	Daily Average Hours Per Person	Daily Average for Mass. Residents (millions of hours)	Hourly Replacement Cost	Annual Value (billions of dollars)
Household and Social Support Care Activities (not overlapping with supervisory care)	2.3	11.9	\$17.24	\$75.2
Household and Social Support Care Activities (overlapping with supervisory care)	0.5	2.6	\$ 20.91	\$19.8
Interactive Care Activities (may or may not overlap with supervisory care)	0.9	4.7	\$20.91	\$35.7
Supervisory Care (not overlapping with any other form of care)	1.1	5.7	\$10.00	\$20.9
Total	4.8	24.9		\$151.6

Data from American Time Use Survey pooled sample 2003-2007 and from American Community Survey pooled sample 2006-2007. Includes all Massachusetts residents ages 16 and over. All dollar amounts in 2007 dollars.

of unpaid care based on market wages represent only an approximate lower bound.

According to the analysis of the American Community Survey presented in the previous section, care support workers earned a median wage of \$17.24, while interactive care workers earned a median wage of \$20.91.²² To estimate the value of supervisory care, we apply two different wage rates because supervisory care can be combined with other forms of work or with leisure. When individuals engaged in support care while simultaneously providing supervisory care, we assign the same value as to interactive care. When combined with leisure we apply the national average wage for babysitters (about \$10 an hour in recent years). Massachusetts wages are higher than the national average (the Massachusetts minimum wage in 2007 was \$7.50, compared to the national minimum of \$6.55), but \$10.00 per hour represents a reasonable and perhaps even lower-bound estimate of the value of this type of supervisory care.²³

Based on these assumptions, we estimate the annual value of unpaid care work in the Commonwealth of Massachusetts in 2007 to be \$151.6 billion. The value of interactive and supervisory care alone (not counting

any overlaps with support care), comes to \$56.6 billion – considerably more than the value of all manufacturing output in Massachusetts in 2006, which amounted to \$33 billion.²⁴

Unpaid Care Matters

Our economic success is currently measured only in terms of the value of goods and services that are bought and sold. Yet, both paid and unpaid care work contribute to sustainable economic development. Imagine what would happen if those providing unpaid care to one another in the state economy today decided to withdraw their services – even for a day. It would be impossible for an already overextended paid care sector to fill the gap.

Policies designed to support and reward family care cannot be considered costly “luxuries” but instead are necessary investments in our work force as well as a testimony to our humanity.²⁵ Paid time off from paid work – including family leave, sick leave, and vacation days – represents a way of recognizing and supporting the many hours of unpaid work that family members devote to caring for one another.

GOVERNMENT INVESTMENT IN CARE WORK

Care work's positive spillover effects necessitate public investments in care and all levels of government have become key partners to families and businesses in the provision and financing of quality care work. In particular, state and local governments invest heavily in K-12 education, health care, and in the care of young children, disabled adults and elders.

In fiscal year 2007, the Commonwealth spent \$24 billion – or 57 percent of combined state and local expenditures – to support care work in the state. Total state GDP on paid care came to \$46.8 billion, so government contributions financed more than half of all care expenditures. About half of those government expenditures were on K-12 education.

State and local governments spend a good deal on care. But, these funds are allocated for very specific sets of services through a budget process and rarely seen as comprising a larger whole that is the crux of the state's human infrastructure. The fragmented nature of the allocations (as well as the debates over their funding) and limited funds can mean that some parts of the care sector see themselves in direct competition for funding from other parts of the care sector.

The amount of funding supplied is limited by the amounts taxpayers can and are willing to spend on care. Yet, despite significant levels of spending, the demand for government-funded care outstrips the supply. In 2009, the Department of Early Education and Care had a waiting list of just under 20,000 children who were eligible for financial assistance with child care but not able to receive aid because of funding limitations.²⁶ In a survey of over two dozen non-profit members of Mass Home Care in February of 2009, there were 675

BOX 6 Counting Government Expenditures

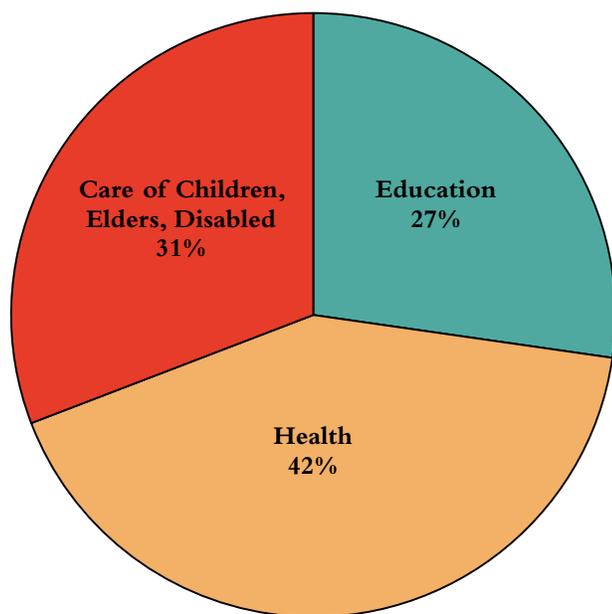
To measure state investment in care, we use data on actual spending for FY07 (July 1 2006–June 30, 2007) retrieved from the Mass.gov website. We include only the revenue expended from appropriations by the state through its operating budget. We identify 231 line items in which funds are used to assure the provision of pre-k and K-12 educational services, health care and other related health services (such as public health) as well as care services for children, disabled adults and elders.

To calculate local revenue and expenditures we rely on various spreadsheets made available from the Department of Revenue's Division of Local Services municipal data bank reports. These spreadsheets provide much less specific information on types of expenditures than does the state budget, but they do include information for each of 351 cities and towns (and in the case of school funding, regional school districts) as well as federal funds that go directly to cities and towns.

Intergovernmental expenditures – the amounts one level of government provides to another – complicate our accounting of state and local government's investment in care. For example, when the Commonwealth provides "Chapter 70" money to cities and towns to help pay for schools, this is a state expenditure that is also recorded by cities and towns as a local expenditure. But, when it comes to counting combined total state and local government expenditures on care, it should only be counted once. In reporting data here, we distinguish between total state expenditures and state expenditures minus those allocated to municipalities. Just under one-quarter (23 percent) of the state's budget appropriations go directly to cities and towns, and about 30 percent of all local expenditures are financed from intergovernmental revenues.

A more detailed description of where we retrieved the data, what is included and how we calculated the estimates reported here can be found in the technical documentation at www.countingcare.org.

FIGURE 7
State Expenditures within the Care Sector
(FY07)



Includes allocations to cities and towns. For more information on data and methods see technical documentation at www.countingcare.org.

income-eligible seniors on a waiting list for home care.²⁷ And these are only an indication of the needs of those with incomes low enough to get on these waiting lists. Other indicators of need include well-documented health disparities by race and income, the reported reluctance of some to seek a health care provider for fear of the cost of co-payments or premiums and stories of those who do not take prescribed medication because it is too costly. Local school systems clamor for more state aid as they increase the charges to parents for school-related activities, while high drop-out rates in low-income communities speak to long-term and chronic need for more investment in children's education. Economic downturns make the care gap even larger.

State and Local Expenditures on Care

Using state and local budgets, we added up the combined state and local dollars spent in FY07 on K-12 education, health care, child care (and other state-provided care of youth), and care for disabled adults and for elders.²⁸ Since the state budget clearly identifies funds going to

municipal governments, we were able to determine combined state and local government spending.

In FY07, Massachusetts state and local governments together spent approximately \$42 billion.²⁹ We estimate that \$24 billion – or 57 percent – of those combined state and local expenditures was used to finance care in the Commonwealth. That amounts to about \$3,500 per person, split fairly evenly between K-12 education (49 percent) and health care and all other types of care (51 percent).

The state spent a larger portion of its budget on the care sector than localities did. In FY07, total state expenditures totaled \$26.2 billion, with \$16.6 billion allocated toward care, including over \$6 billion going as aid to cities and towns. This is close to two-thirds of the state's operating budget. The state allocated 27 percent of its care expenditures (including aid to cities and towns) toward education (see Figure 7). Almost two out of every five dollars (42 percent) spent by the state on care went to health care and 31 percent to the care of children, elders, and individuals with disabilities.³⁰

Total local expenditures comprised just over \$21 billion (including revenue received from the state). Fifty-six percent of total local expenditures (and 47 percent of non-state financed spending) went toward care. Almost all (97 percent) of total care expenditures on the local level went toward education.

A Closer Look at State Funding

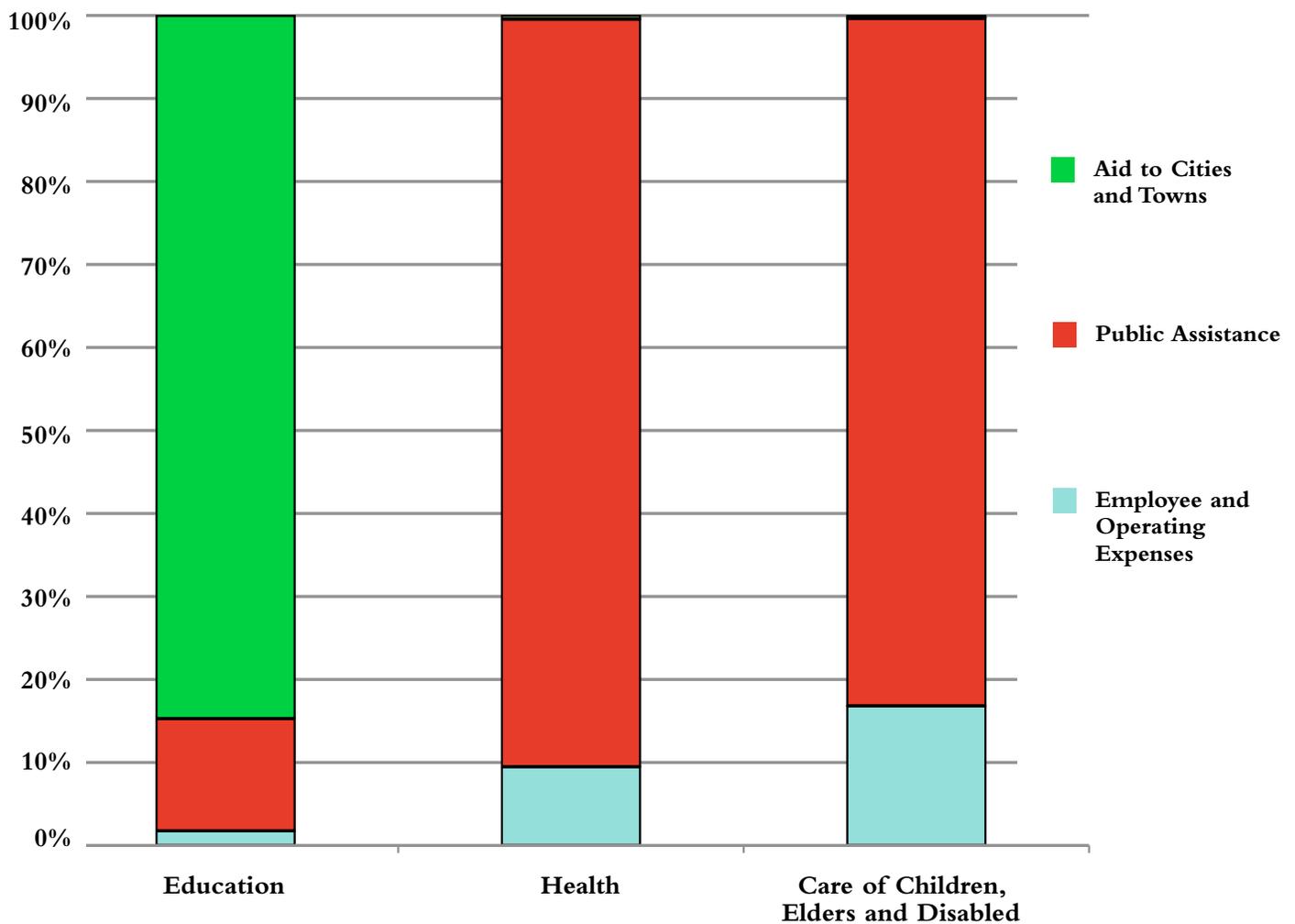
Based on the description of usage of funds provided in each line item of the state budget, we estimate that 96.5 percent of all care expenditures are allocated directly to the programs or entities providing care, while the remaining 3.5 percent are designated for state administration, outreach and coordination. While the state government financially supports care, it often does not actually provide the care directly. Like physical infrastructure spending on roads and buildings, human infrastructure spending on care is typically allocated to those who have the expertise and organizational structures to provide care, including municipal governments and non-governmental organizations like hospitals, health centers, nursing homes, and child care providers.

In its budget accounting, the state specifies how much of funding for each line item was spent in each of the following five categories: wages and salaries to state employees³¹; state employee benefits³²; state operating expenses; public assistance; and aid to cities and towns. Within the care sector, the first three categories relate to spending on care that is provided directly by the Commonwealth and its employees. Public assistance includes the “contracting out” of care work to non-governmental providers as well as direct transfers to individuals. And aid to cities and towns represents state financing of care that is provided by municipal governments.

In FY07, Massachusetts spent just under 10 percent of all care funding on state employee wages, salaries and benefits and operating expenses, representing the small scale of care provided directly by state government. Most of the care work the state financially supports is contracted to other organizations, with 67 percent going toward public assistance (to individuals and non-governmental organizations) and 23 percent to cities and towns.

This distribution differs substantially within the care sector, depending on the organizational structure for care provision in specific areas (see Figure 8). The vast

FIGURE 8
Distribution of State Investment in Care by Spending Category (FY07)



Includes allocations to cities and towns. For more information on data and methods see technical documentation at www.countingcare.org.

majority of state spending on education goes directly to cities and towns, as it is this local level of government that provides K-12 education directly. By contrast, almost all (90 percent) of the spending on health care goes to public assistance, funding health care provided by private hospitals and health centers as well as nursing homes. Some care of young children, elders and individuals who are disabled is provided directly by the state, explaining why 17 percent of spending in this category is on state employees and operating costs. Still, 83 percent of funding for care of these vulnerable groups is passed along to providers in the private market.

A Closer Look at Local Investment in Care

Data on local expenditures does not provide the level of detail available for the state budget. However, we are able to calculate the percentage of total local spending (including monies received from the state) that is allocated to care by individual cities and towns.³³

The average percent of total local expenditures devoted to care is 56 percent, and most municipalities spend close to this proportion of their budgets on care. There is some variation within the Commonwealth, ranging from a low of 18 percent (in Gosnold) to 78 percent (in Clarksburg). Cities do not spend a higher percentage on care than towns in the Commonwealth, as average percentage spent in each is virtually the same.

Finally, there is also very little variation among municipalities in the how care dollars are spent. Only one town spends less than 90 percent of its care expenditures on education (Nantucket), with half of the communities spending 97.5 percent of all care dollars on education. These numbers again reflect the concentration of the responsibility for education with local government, while other types of care are state-provided or provided by private organizations.

In sum, state and local governments in the Commonwealth are making a large investment in the care sector, committing over half of their budgets to support care work. And while the numbers are large, so are the needs.

CONCLUSION

Policy makers often emphasize the importance of private and public investments in physical infrastructure such as roads, bridges, and relay towers for broadband transmission. Private and public investments in human infrastructure are equally important to maintaining our quality of life and supporting this critical sector of the economy.

In this report we define care work broadly. We include unpaid care work, as the contribution that care work makes to economic development is often underestimated because much of it takes place outside the market economy in the form of unpaid services provided by family, friends, and neighbors. The provision of these unpaid services, in turn, is shaped by market institutions and by government policies.

We also see all care work as an important human investment. Often the term “investment in human capital” is understood only as investment in the younger generation that yields a specific payoff in terms of future contributions, especially higher market earnings. As such, care for the disabled or elderly who do not participate in paid employment is not seen as an “investment.” But care for all members of our society is indispensable to the effective development and utilization of human capabilities. It represents part of the cost of motivating and maintaining human capital. Care work contributes in fundamental ways to our living standards and quality of life.

To attract and retain talented people to fill the expanding number of jobs in the paid care sector, the jobs at the top of the pay scale must be competitive with other jobs that require similar levels of education and commitment. And those workers who are at the bottom of the pay scale must be assured a living wage and decent working conditions. Because of the unique characteristics of care work, governments and employers must work together with the market to assure that care workers receive fair pay. Formal worker protections are especially important for this group of workers who are particularly vulnerable due to the relational context of their work.

Likewise, sustaining the level of unpaid caring labor in the face of increasing pressures on families from paid work also requires thoughtful action by government and

employers. The adoption of paid leave and paid sick days policies as well as employer and employee negotiated worktime flexibility are imperative to allowing families to continue to make this critical contribution to the state. The provision of real part-time options – including access to health insurance for part-time workers – is also critical to giving families support for unpaid care work. Ironically, many of the workers who fall into this part-time category are paid care workers, stretched between care obligations at work and at home.

In addition to policy intervention by government and employers, the maintenance of the human infrastructure of the state requires sustained and adequate public financing. Spending on care is an investment in the future of the Commonwealth. Care for all members of our society is indispensable to the effective development and utilization of the human capabilities of all of the residents of Massachusetts. Investing in the education of children leads to a better educated workforce for us all. Investing in the care of those with disabilities enables their greater participation in work and community life. And investing in the care of the elderly provides all of us with the security of knowing we will be cared for as we age – a fundamental motivator to labor force and community participation.

Investment in the care sector is not only critical to economic development and quality of life, but also to the pursuit of gender equity. Women represent about three out of every four paid care workers, and perform about two-thirds of all unpaid care work. They often pay a high price for their commitments in the form of lower wages and greater economic vulnerability.

We rely heavily on a variety of care services, and that is why it is important to count them all. We cannot provide care only at home. Nor can we rely exclusively on the purchase or public supply of care services. Instead, most of us devise ways of combining and coordinating different modes of care.

This report shows that the wages of paid care workers combined with the imputed value of unpaid care comprise more than one-third of the value of all goods and services produced in the state. Over one out of every five wage earners in the state works in the care sector. State and local governments help finance slightly over

half of paid care work in the state, and payments for this work comprise over half of state and local government budgets.

Both the size and the complexity of the care sector shape the emergence of important policy debates concerning the provision of health care, child care, education, and elder care. Virtually all these debates arise from efforts to improve the interface between different forms of care provision: to improve equitable access to paid care, to provide more public support for families providing care, to improve working conditions and reduce turnover in order to improve paid care quality, or to make it easier for individuals to balance the competing demands of paid and unpaid work.

Efforts to increase public support for care work reflect appreciation of its contributions to the public good as well as awareness of the limits of purely market-based production.

As the venerable John Kenneth Galbraith noted long ago,

The line which divides our area of wealth from our area of poverty is roughly that which divides privately produced and marketed goods and services from publicly rendered services. Our wealth in the first is not only in startling contrast with the meagerness of the latter, but our wealth in privately produced goods is, to a marked degree, the cause of the crisis in the supply of public services. For we have failed to see the importance, indeed the urgent need, of maintaining a balance between the two.³⁴

In many respects, the Commonwealth of Massachusetts has played a vanguard role in the development of innovative public policies. Our state health insurance system, designed to provide virtually universal coverage, has become a model for many proponents of national reforms.³⁵ Our elder care system has moved more quickly than most to provide state-funded home and community-based services that allow many elders to avoid institutionalization in nursing homes.³⁶

However, the state has often faltered in its efforts to improve care policies. A legislative effort to implement a paid family leave policy in 2006 failed, despite research

demonstrating its economic benefits.³⁷ And a nominal commitment to providing universal pre-kindergarten has led to increased enrollments and some improved opportunities for teacher training for child care workers, but the program lacks an adequate and stable funding stream.³⁸

In recent years the pace of public spending in Massachusetts has lagged behind private sector growth. In fiscal year 2008 state spending represented 6.6 percent of personal income, compared to 6.9 percent in fiscal year 2008.³⁹ Recent budget cuts have hit public provision of care services particularly hard.⁴⁰ Similar problems are apparent in other states experiencing revenue shortfalls as a result of economic recession.

Federal aid, including fiscal stimulus funds made available through the American Recovery and Reinvestment Act, buffered somewhat the effects of state budget cuts in 2009. Many of these funds have been directed at health and education spending. But they are temporary. The current federal policy agenda now includes several proposed legislative and regulatory initiatives relevant to care work, including the Healthy Families Act (which would provide for paid sick leave) and efforts to extend the Fair Labor Standards Act to home care workers.⁴¹

Efforts to promote healthy and sustainable economic development on the state level are likely to intensify but it is unclear whether states have the fiscal capacity to handle adequate funding of the care sector or if families have the physical and financial capacity to handle care needs. What is clear is that the paid and unpaid care that our families and communities rely upon will continue to require special attention from both federal and state policy makers. Our economic well-being depends on it.

Notes

- ¹ Inevitably, the boundaries of the care sector are somewhat ambiguous. Although many would argue post-secondary education contributes to the overall well-being of the Commonwealth, we have limited our definition in the paid labor force to work that serves those most vulnerable residents of the Commonwealth. We have also only included those industries where the primary tasks of the labor force are in direct relationship with those residents. So, while we include hospitals, we do not include the manufacturers of hospital equipment. Our definition is therefore conservative and attempts to capture the labor that most clearly reflects the unique characteristics of the care sector we describe here.
- ² Total state Gross Domestic Product (GDP), as calculated by the Bureau of Economic Analysis, is measured by summing up the income paid in the process of producing the goods and/or services within industries. This “value” includes wages, salaries and other benefits earned by workers, business taxes paid, and all income earned by individual owners of firms.
- ³ We used a pooled sample created by combining the 2006 and 2007 samples of the American Community Survey (ACS) available as part of the Integrated Public Use Microdata Series (IPUMS). For ease of communication, we refer to the numbers we calculate as 2007 estimates. For more information on the data see the technical documentation at www.countingcare.org.
- ⁴ According to the technical documentation of the IPUMS samples, individuals with a personal care limitation have a “physical or mental health condition that has lasted at least 6 months and makes it difficult for them to take care of their own personal needs, such as bathing, dressing, or getting around inside the home. This does not include temporary health conditions, such as broken bones or pregnancies.” *IPUMS: Variable Description, PERSCARE*. Retrieved August 2009 (<http://usa.ipums.org/usa-action/variableDescription.do?mnemonic=PERSCARE>).
- ⁵ Individuals are defined as “underinsured” if they had out-of-pocket health care expenses that amounted to 10 percent or more of their total family income. Sharon Long, *Who Gained the Most Under Health Reform In Massachusetts* (Policy Brief, Urban Institute, 2008). Retrieved August 2009 (<http://www.urban.org/publications/411770.html>); *Do the Insured have Adequate Protection?* (Policy Brief, Urban Institute, 2008). Retrieved August 2009 (http://www.urban.org/UploadedPDF/411771_mass_underinsurance.pdf).
- ⁶ Massachusetts Medical Society, *Physician Workforce Study 2008*. Retrieved July 2009 (<http://www.massmed.org/AM/TemplateRedirect.cfm?Template=/CM/ContentDisplay.cfm&ContentID=23166>).
- ⁷ Unless otherwise cited, all figures were calculated by the authors from a pooled 2006–2007 sample of the American Community Survey (ACS). For more information on the data see the technical documentation at www.countingcare.org.

- ⁸ See for example Robert Weisman, “In gloom, healthcare and education shine” *The Boston Globe*. 2009 January 11. Retrieved August 2009 (http://www.boston.com/business/articles/2009/01/11/in_gloom_healthcare_and_education_shine/); Christopher Rugaber, “Some bright spots emerge in tough job market” *Associated Press*. 2009 June 10. Retrieved August 2009 (http://www.usatoday.com/money/economy/2009-06-09-job-market_N.htm)
- ⁹ From Mignon Duffy, *Intimate Labors: A History of Gender, Race, Class and Paid Care Work*, manuscript under consideration by Rutgers University Press.
- ¹⁰ There is a large body of research documenting this phenomenon. For one example see Francine Blau, “Trends in the Well-Being of American Women, 1970–1995,” *Journal of Economic Literature* 36 (1998): 112–65.
- ¹¹ Paula England, Michelle J. Budig, and Nancy Folbre, “Wages of Virtue: The Relative Pay of Care Work.” *Social Problems* 49 (2002): 455–473. While the authors do not use the terminology “interactive care,” the list of occupations they include in their study is very similar to those occupations we include as interactive care.
- ¹² Chris Tilly, *Half a Job: Bad and Good Part-Time Jobs in a Changing Labor Market*. (Philadelphia: Temple University Press, 1996).
- ¹³ Suzanne M. Bianchi, John P. Robinson, and Melissa A. Milkie, *Changing Rhythms of American Family Life* (New York: Russell Sage Foundation, 2006) p.63.
- ¹⁴ Note that supervisory care is enumerated separately.
- ¹⁵ Combined, the average time spent by an individual on unpaid care work is 3.7 hours a day.
- ¹⁶ Population estimates for the state were derived from the Annual Estimates of the Population for Massachusetts, August 2000 to July 2007. Retrieved August 2009 (http://www.mass.gov/Eeohhs2/docs/dph/research_epi/city_town_pop_estimates07.pdf).
- ¹⁷ Since we want to know more about who performs this work (as well as the total amount provided in the state as a whole) we focus on those who reported engaging in one of these forms of unpaid care on the survey day.
- ¹⁸ We include here only supervisory care that does not overlap with interactive care – even though an adult could be supervising one child while interacting with another, we do not want to risk “double counting” their time.
- ¹⁹ These calculations do not include the hours the parents were asleep.
- ²⁰ We subtract the average hours of supervisory care that overlap with support care, in order to avoid double counting unpaid care time.
- ²¹ National Research Council, *Beyond the Market. Designing Non-market Accounts for the United States*, ed. Katharine Abraham and Christopher Mackie (Washington, D.C.: The National Academies Press, 2005).
- ²² These are before-tax wage rates; on the other hand, they do not include the value of health care or retirement benefits which represent a significant component of employee compensation. These two factors almost exactly counterbalance each other. Benefits accounted for about 30% of employee compensation in 2008 in the U.S. as a whole. See Bureau of Labor Statistics Employer Costs for Employee Compensation. Retrieved August 2009 (<http://www.bls.gov/news.release/ecec.nr0.htm>); the average effective tax rate for all families in the U.S. is also about 30%. See Citizens for Tax Justice, “Is Tax Day Too Burdensome for the Rich?” Retrieved August 2009 (<http://www.ctj.org/pdf/taxday2009.pdf>).
- ²³ For data on national wage rates for babysitters, see *Payscale: In-Home / Live-In Babysitter*. Retrieved August 2009 (http://www.payscale.com/research/US/Job=In-Home_%2F_Live-In_Babysitter/Hourly_Rate).
- ²⁴ For estimate of value of manufacturing output in Massachusetts see *Massachusetts Manufacturing Chartbook*, p. 12. Retrieved August 2009. (www.commcorp.org/researchandevaluation/pdf/Manufacturing_Chartbook_web.pdf).
- ²⁵ See Randy Albelda and Alan Clayton-Matthews. 2006. “Sharing the Costs, Reaping the Benefits. Paid Family and Medical Leave in Massachusetts,” (Labor Resource Center, University of Massachusetts Boston and Institute for Women’s Policy Research, Washington, D.C.) Retrieved August 2009 (<http://www.cpcs.umb.edu/lrc/paidleave>).
- ²⁶ Department of Early Education and Care, *EEC at a Glance*, June 2009. Retrieved August 2009 (www.eec.state.ma.us/docs/AAGRreport.pdf).
- ²⁷ Mass Home Care, “Home Care Waiting List Doubles” Press Release February 2009. Retrieved August 2009 (<http://www.mass-homecare.org/AlertsDetailEntire.asp?Issue=February-2009>).
- ²⁸ State spending on health care includes federal dollars allocated to the state for Medicaid. A large portion of state health care expenditures use Medicaid funding. Further, a large portion of Medicaid is devoted to long-term care in nursing homes. We cannot tease out which Medicaid funds are for medical care and which are for direct care provision for disabled persons and elders, therefore they are counted here as health care expenditures in state budgets.
- ²⁹ We only include expenditures in the state’s operating budget (which excludes spending allocated in outside sections of the budget as well as capital outlays) and local expenditures from general revenue, special revenue and trust funds (excluding expenditures from capital and enterprise funds). For more detail on data used see technical documentation at www.countingcare.org.
- ³⁰ Excluding the amounts the state sent to cities and towns, 6 percent of care expenditures went toward K–12 education, 54 percent on health care and 40 percent on the care of children, disabled and elders.
- ³¹ Expenses for state employee wages and benefits include administration costs as well the cost of direct care services provided by state workers (e.g. those employed as social workers and case workers).

- ³² Pensions paid to teachers (which include state funding) are included in an “outside” section of the budget and not included here.
- ³³ We include expenditures from general, trust and special funds. See technical documentation at www.countingcare.org for more explanation of these calculations as well as for a full list of spending by individual cities and towns.
- ³⁴ John Kenneth Galbraith, *The Affluent Society* (New York: Mariner, 1998), p. 186.
- ³⁵ Jon Kingsdale, “Massachusetts’ Experience with Health Care Reform Coverage Initiatives in the Context of National Reform,” Statement before the U.S. Senate Committee on Health, Education, Labor & Pensions, April 28, 2009. Retrieved August 2009 (http://help.senate.gov/Hearings/2009_04_28_b/kingsdale.pdf).
- ³⁶ Robert L. Mollica, Kristin Simms-Kastelein, and Enid Kassner, “State-Funded Home and Community-Based Services Programs for Older Adults” (Washington, D.C.: American Association of Retired Persons (AARP) Public Policy Institute, 2009). Retrieved August 2009 http://assets.aarp.org/rgcenter/il/2009_06_hcbs.pdf.
- ³⁷ Andrea Estes, “Family Paid Leave on Mass Agenda,” *Boston Globe*. 23 April 2006. Retrieved August 2009 (http://www.boston.com/news/local/massachusetts/articles/2006/04/23/family_paid_leave_on_mass_agenda/); Randy Albelda and Alan Clayton-Matthews “Sharing the Costs, Reaping the Benefits. Paid Family and Medical Leave in Massachusetts,” (Labor Resource Center, University of Massachusetts Boston and Institute for Women’s Policy Research, Washington, D.C., 2006). Retrieved August 2009 (<http://www.cpcs.umb.edu/lrc/paidleave>).
- ³⁸ For an overview and summary see the Early Education for All website. Retrieved August 2009 (http://www.strategiesforchildren.org/eea/EEA5_MassUpdate.htm).
- ³⁹ Massachusetts Budget and Policy Center, “Substantial Surpluses to Dangerous Deficits: A Look at State Fiscal Policies”. Retrieved August 2009 (http://www.massbudget.org/file_storage/documents/FiscalCrisisReport.pdf).
- ⁴⁰ Massachusetts Budget and Policy Center, “Budget Monitor: The Governor’s Revised 2010 Budget and the House-Senate Conference Differences”. Retrieved August 2009 (http://www.massbudget.org/documentsearch/findDocument?doc_id=647).
- ⁴¹ For more information about the Healthy Families Act, visit OpenCongress: S.910 – Healthy Families Act. Retrieved August 2009 (<http://www.opencongress.org/bill/110-s910/show>); for more information on the Fair Labor Standards Act and home care workers, see Peggie Smith, “Protecting Home Care Workers under the Fair Labor Standards Act,” *Direct Care Alliance Policy Brief #2*. Retrieved August 2009 (http://blog.directcarealliance.org/wp-content/uploads/2009/06/6709-dca_policybrief_2final.pdf).

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