

# Immigrant Workers in the Massachusetts Health Care Industry

Prepared for  
The Immigrant Learning Center, Inc.

By

Ramon Borges-Mendez, PhD, Department of Public Policy, John W. McCormack Graduate School of Policy Studies and Mauricio Gaston Institute, University of Massachusetts Boston

James Jennings, PhD, Urban and Environmental Policy and Planning, Tufts University

Donna Haig Friedman, PhD, Center for Social Policy, University of Massachusetts Boston

Malo Hutson, PhD, Department of City and Regional Planning,

University of California at Berkeley

Teresa Eliot Roberts, PhD, RNC, College of Nursing and Health Sciences,

University of Massachusetts Boston

MAY 2008

## Acknowledgements

The debts incurred in the preparation of this study are many. Therefore, the members of the research team are pleased to express our gratitude to those who helped make this work possible. We are grateful to The Immigrant Learning Center, Inc. (ILC) and its Co-Founder and Director, Diane Portnoy, for her vision of educating the public about immigrants and raising the resources to do the research. We thank Dr. Marcia Drew Hohn of The ILC for her constant help throughout the project and masterfully performing the duties of both encouraging and prodding us.

We leaned heavily on research assistants who included:

Janet Curtis, Briane C. Knight, Amy Kuykendall and Jennifer Lawrence of Tufts University;

Berna Kahraman, Rebecca Moryl and Jennifer Shea of the University of Massachusetts Boston.

The research team would also like to thank Melissa Colon, Associate Director of the Gaston Institute; Kathleen Powers, formerly at the University of Massachusetts Boston and Professor Carol Upshur at the University of Massachusetts Worcester for their support and technical assistance. Many thanks also go to Roy Williams, Donahue Institute affiliate, and Professor Alan Clayton-Matthews at the University of Massachusetts Boston for their assistance with 2000 Census data.



## Preface

In 2003, The Immigrant Learning Center, Inc. (ILC) launched a public education initiative to raise the visibility of immigrants as assets to America. Spurred by certain anti-immigrant sentiments that were increasingly voiced since September 11, The ILC set forth to credibly document current economic and social contributions.

Central to this effort are ILC sponsored research studies about immigrants as entrepreneurs, workers and consumers. To provide thoughtful and substantive evidence that immigrants are vital contributors to our nation, The ILC commissioned teams of university researchers to examine immigrants' contributions in their various roles and present those contributions within larger economic and social frameworks. Three studies about immigrant entrepreneurs and one study on immigrant homebuyers have been published to date.

“Immigrant Workers in the Massachusetts Health Care Industry” is the first ILC commissioned study about immigrants as workers. It is a groundbreaking study that provides basic and new data about immigrants' presence across the spectrum of health care providers and the vital role immigrants play in this essential industry to Massachusetts. The study also examines the breadth and scope of the health care industry across the state, its current and future workforce needs and promising models for developing the future workforce. The importance of immigrants as a pipeline for this future workforce is examined in depth.

The ILC hopes this study will reinforce our continuing mission to raise the visibility of immigrants as critical contributors to our nation and to our Commonwealth. It also provides data and insight to inform policy and promote thoughtful dialogue about key roles played by immigrants.

Diane Portnoy, Co-Founder and Director  
The Immigrant Learning Center, Inc.

Marcia Drew Hohn, Director of Public Education  
The Immigrant Learning Center, Inc.

May 2008



# Immigrant Workers in the Massachusetts Health Care Industry

## Executive Summary

For the purposes of this report, the terms foreign-born and immigrant are used interchangeably. Foreign-born is the term used by official data sources.



## Executive Summary

This Executive Summary focuses on three key and related questions that will help the public better understand the challenges and opportunities presented by a growing immigrant population and its role and impact on the Massachusetts health care workforce. These questions include:

- In which health care occupations are foreign-born workers concentrated, and in which type of establishments (hospitals, community health centers, long-term care facilities, etc.) do they work?
- How is the health care sector impacted by immigration?
- What are promising models and institutional practices that support opportunities for foreign-born workers to improve their working conditions and realize occupational mobility within the health care sector?

The summary is part of a larger report to be completed by a team of researchers from the University of Massachusetts Boston, Tufts University and the University of California at Berkeley. The Executive Summary is organized into six sections:

- Overview of the U.S. health care industry and presence of foreign-born workers;
- Select overview of the Massachusetts health care economy;
- Presence of foreign-born workers in the Massachusetts health care industry from 2000 to 2005;
- Current and future demands for new health care workers;
- Immigrants and the Massachusetts health care sector: challenges and opportunities;
- Conclusions: Linking the Massachusetts health care economy with immigrants.

## Overview of the United States Health Care Industry and the Presence of Foreign-Born (Immigrant) Workers

In 2000, 1.7 million foreign-born workers (immigrants) accounted for 11.7 percent of all health care workers in the United States. This included non-medical personnel and maintenance workers that do not necessarily deliver health services but whose work highly influences the quality of care. The share of foreign-born workers in direct health care service provision was higher at 13 percent and slightly higher than the 12.4 percent of foreign-born workers in the total U.S. labor force. According to the U.S. Bureau of Labor, both high and low-skilled employment within health occupations is projected to grow from 11.5 million in 2002 to over 15 million in 2012. The rate of growth of new jobs in health care occupations is projected to be 30.1 percent as compared to the rate of growth projected for non-health occupations at 13.5 percent.<sup>1</sup>

The health care industry accounted for a significant percentage of the gross domestic product (GDP), and it is projected that the health care sector will continue to grow rapidly. In 2007, it accounted for more than \$2 trillion or 16 percent of GDP<sup>2</sup>. The U.S. Bureau of Labor Statistics predicts that between 2002 and 2012 the health care industry will add nearly 3.5 million new jobs, an increase of 30 percent. Nationally, the health occupations that are expected to grow by the largest number of jobs between 2002 and 2012 are the following:

- Registered Nurses (623,000);
- Nursing Aides, Orderlies and Attendants (343,000);
- Home Health Aides (279,000);
- Medical Assistants (215,000); and
- Licensed Vocational and Practical Nurses (142,000).

Immigrant populations are now integral to the nation's health economy workforce as captured by Table 1 below. In 2000, a number of key health care occupations showed a large presence of foreign-born workers with Physicians and Surgeons leading at 24.8 percent. Health Aides, Pharmacists and Clinical Technologists also showed a significant presence.

**Table 1**  
Occupation and Industry of Health Care Workers in the U.S., 2000

Major Health Care Occupation and History	Foreign-Born	Native-Born	Percentage of Foreign-Born by Occupation
<b>Health Care Occupation</b>			
Dentist	21,966	131,274	14.4
Pharmacist	33,724	180,931	15.7
Registered Nurse	249,986	2,024,991	11.0
<b>Health Diagnosing and Treating, All</b>			
Clinical Technologists and Technician	65,165	665,145	8.9
Licensed Practical and Vocational Nurse	48,896	253,681	16.2
<b>Health Technologist and Technician, All Other</b>			
Nursing, Psychiatric and Home Health Aide	82,499	999,305	7.5
Medical Assistant and Other Support	305,266	1,495,054	17.0
<b>Health Care Support, All Other</b>	60,086	536,510	10.1
<b>Column Total</b>	39,113	318,992	10.9
<b>Column Total</b>	1,135,873	7,678,790	12.9
<b>Health Care Industry</b>			Percentage of Foreign-Born by Location
Hospital	677,592	4,675,997	12.7
Nursing Care Facility	187,553	1,420,637	11.7
Office of Practitioners	292,502	2,511,079	10.4
Other Health and Social Services	213,750	1,609,598	11.7
<b>Column Total</b>	1,371,297	10,217,311	13.4

Source: Ruggles et al (2004) census microdata. Adapted from Lowell and Gerova, 2004.

## Select Overview of the Massachusetts Health Care Economy

The enormous importance of the Massachusetts health care sectors has been widely acknowledged. The Massachusetts Division of Employment and Training estimates that between 2002 and the end of 2008, jobs in the health services industry are expected to expand by 20 percent. This is twice as fast as the average for all industries and will generate 66,000 new jobs, with the lion's share being created in the City of Boston.<sup>3</sup> In Boston alone, Home Health Aides are expected to grow by 51 percent, followed by Medical Assistants (50%), Physician Assistants (43%), Medical Records/Health Information Technicians (39%), Respiratory Therapists (36%), Surgical Technologists (35%), Dental Hygienists (34%) and Biological Scientists (31%).<sup>4</sup> This projection assumes that the supply of skilled health professionals will be available. These figures are only for the health services industry and do not include the expected growth for non-health care related employment (i.e. food services, security and safety personnel and environmental service jobs).



The health professions represent a critical component of the Massachusetts economy. There have been various estimates provided in terms of the total number of health care establishments depending on the particular categories utilized. According to information provided by Applied Geographic Solutions based in Newbury, California (AGS 2002: Consumer Spending), between \$8 and \$9 billion were spent on health care for Massachusetts in 2002. This included \$4.2 billion in health insurance; \$2.6 billion in health care services and \$1.6 billion in health supplies and equipment. This same source indicates that the health care business sector in Massachusetts is enormous in terms of the total establishments, employees and sales generated in Massachusetts. In 2005, there were 19,158 total establishments associated with health services according to data from the North American Industry Classification System (NAICS).

The following table shows that these establishments retained 415,037 employees and expended over \$29 billion in sales in 2005.

Business Facts: Health Care Business Summary	Total Establishments	Total Employees	Sales \$ (Millions)	Establishments 20+ Employees
All Health Services	19,158	415,037	29,296	2,133
Offices of Doctors of Medicine	18,874	94,197	11,356	616
Offices of Dentists	4,063	20,469	1,432	63
Offices of Osteopathic Physicians	61	270	18	2
Offices of Other Health Practitioners	2,468	12,006	754	28
Chiropractors' Offices and Clinics	1,121	3,921	259	3
Optometrists' Offices and Clinics	793	4,225	238	23
Podiatrists' Offices and Clinics	362	3,823	255	1
Other Health Practitioners	192	37	2	1
Nursing and Personal Care Facilities	832	79,279	3,020	636
Hospitals (incl. psychiatric and specialty hospitals)	604	167,017	8,798	400
Medical and Dental Laboratories	523	7,340	538	47
Home Health Care Services	372	18,034	1,694	241
Specialty Outpatient Facilities	218	4,753	505	47

Source: This data is provided by Claritas, Inc., "Claritas 2005 Data for PCensus: Business Facts Health Care Business Summary" based on InfoUSA; the information is available at the county and census tract levels.

The Massachusetts Division of Career Centers and Division of Unemployment Assistance utilized Employment and Wages Reports (ES-202) to determine the size of the health industry under "Health Care and Social Assistance." Information derived from ES-202 forms show that there were 16,353 establishments under the category "Health Care and Social Assistance" (SIC/NAICS Category 62) as reported in Table 3. These establishments paid out approximately \$18.8 billion in wages in 2004. The total number of establishments reported here is different from the number of establishments reported in the prior table because in the prior table some businesses reported activity in more than one service area.

**Table 3**  
**Health Care and Social Assistance Establishments and Number of Employees for Massachusetts, 2004**

Health Care and Social Assistance Industry (SIC=62)	
Number of Establishments	16,353
Total Wages	\$18,797,835,692
Average Monthly Employment	451,464
Average Weekly Wages	\$801

Source: Based on tables prepared by the Massachusetts Division of Career Centers and Division of Unemployment Assistance based on Employment and Wages Report (ES-202) data, [http://lmi2.detma.org/lmi/lmi\\_es\\_a.asp](http://lmi2.detma.org/lmi/lmi_es_a.asp)

Clearly, whether one looks at the health care business establishments, the growth of jobs in health care, or the wages generated, the economy of some metropolitan areas in Massachusetts depends heavily on the health care sector. Beyond the overall importance of the health care sector as a source of employment, it is also a key source of infrastructure development that strongly impacts the physical contours and economy of entire neighborhoods. It is timely, therefore, to investigate the connections between the sector and the growing immigrant community as an increasingly important source of workers for health industries.

### The Presence of Foreign-Born Workers in the Massachusetts Health Care Industry in 2000 and 2005

One way of emphasizing the presence of the foreign-born population in the health care sectors is to note its proportion in the state's 16 Service Delivery Areas (SDAs). SDAs, renamed Workforce Investment Areas (WIAs) and also referred to as Workforce Areas (WAs), are geographical divisions created by the state for administering and delivering workforce development, employment and training-related services. For example, in the year 2000, as shown in Table 4 below, the projected number of employed persons in health services was the

largest category of workers in 10 out of the 16 SDAs. In the remaining service delivery areas, projected employment in health services was the second largest employer in 2000.

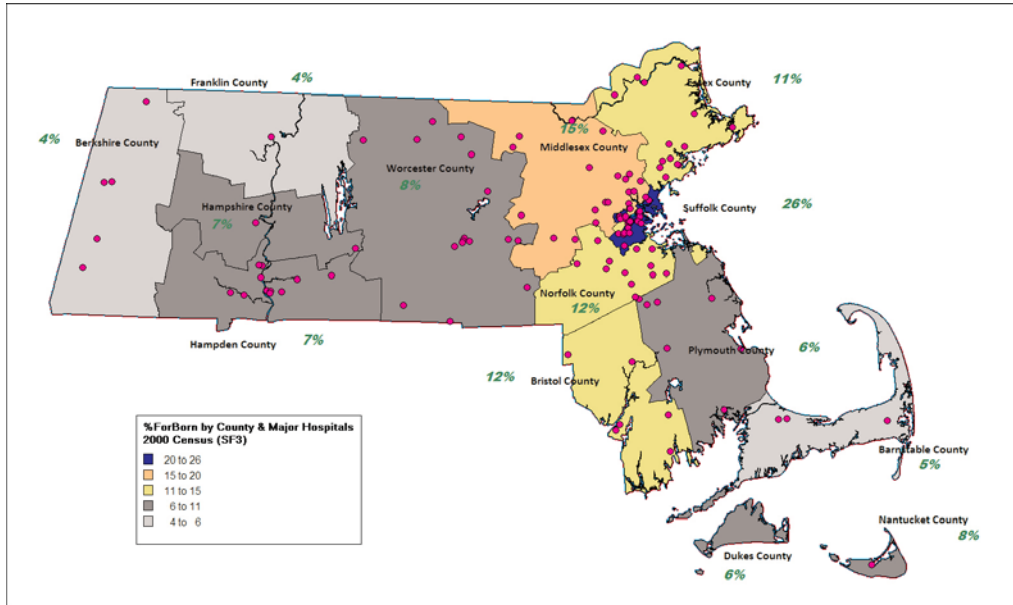
**Table 4**  
**Number of Health Services Employees by Service Delivery Area**

Top 10 Service Delivery Areas in Terms of Health Services Employees	
Boston	80,928
Southern Worcester	30,398
Hampden	26,040
South Coastal	22,346
Southern Essex	19,303
Bristol	15,451
Lower Merrimack	13,688
Brockton	11,283
New Bedford	9,229
Berkshire	7,213

Source: Assessing the SDA Economies, 1990-2000 Employment Growth in Massachusetts' 16 SDAs, Massachusetts Division of Employment and Training; [http://lmi2.detma.org/Lmi/pdf/2059B\\_0203.pdf](http://lmi2.detma.org/Lmi/pdf/2059B_0203.pdf)

The concentration of the health care industry, which includes hospitals, long-term care facilities and community health centers, are found in areas that have experienced significant growth in the foreign-born population between 1990 and 2000. The following map shows the distribution of public hospitals in Massachusetts by counties and the proportion of the foreign-born population in them.

Map 1: Public Hospitals in Massachusetts by Counties and % Foreign Born Population, 2000

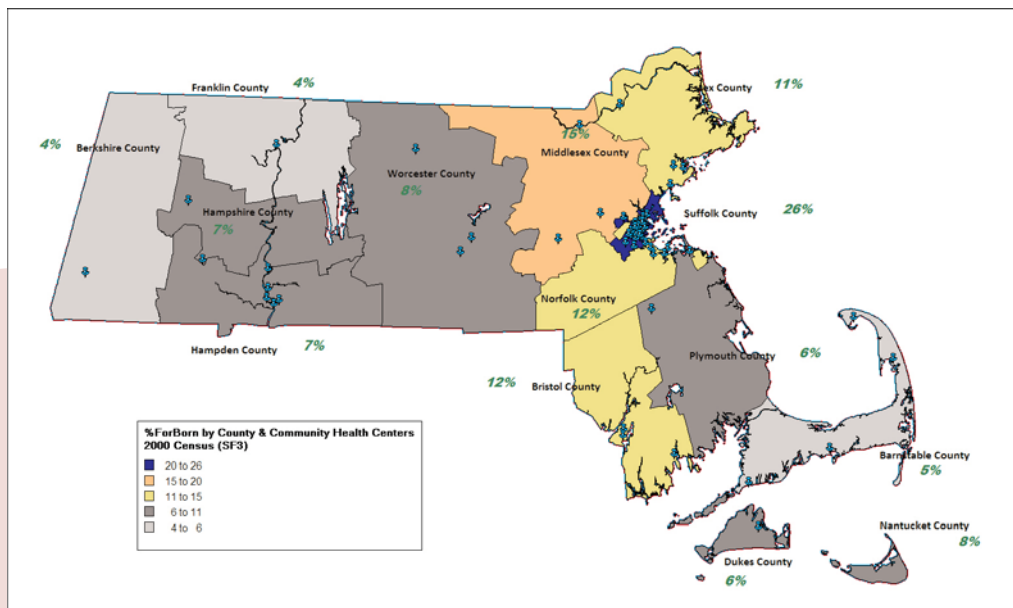


Source: Based on U.S. Census SF3 (2000) and <http://www.masshome.com/med.html>; <http://www.theagapcenter.com/Hospitals/Massachusetts.htm>; <http://www.mhalink.org/public/mahospitals>

Note: These presentations show the growth rate of immigrants at the county level. The growth rates can be higher or lower in cities or towns within these counties.

The next map shows the location of community health centers in Massachusetts by counties and proportion of the foreign-born population.

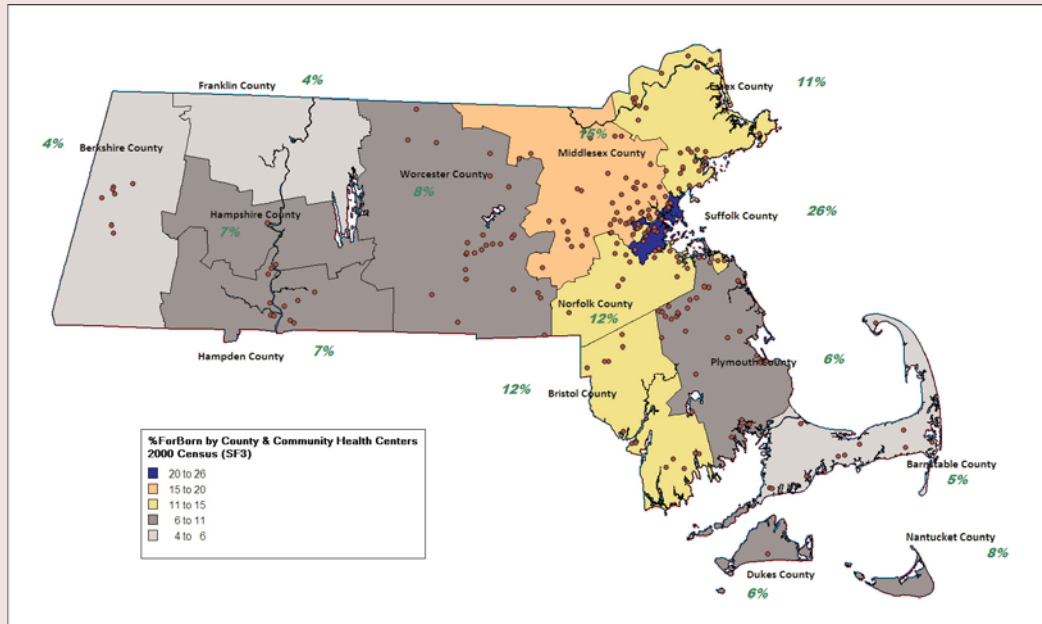
Map 2: Community Health Centers in Massachusetts by Counties and % Foreign Born Population, 2000



Source: U.S. Census SF3 (2000) and <http://www.massleague.org/HealthCenters> Note: These include only federally-designated (Section 330) community health centers.

The next map shows the location of long-term care health facilities by counties and growth in the foreign-born population.

Map 3: Long Term Care Facilities in Massachusetts by Counties and % Foreign Born Population, 2000



Source: U.S. Census SF3 (2000) and <http://www.vnacarenetwork.org>

This series of maps illustrate that the concentration of numerous kinds of health organizations are located in places experiencing significant presence and growth in the immigrant population. This population is both a current and potential workforce source as well as current and potential consumers of health care.

When examining the actual presence of foreign-born workers across the spectrum of health care occupations, Massachusetts presents a dramatic picture of overall presence as well as dramatic growth rates in some occupations between 2000 and 2005. Not all workers are employed in the health care sector directly since some are classified in the retail sector such as Pharmacists. However, these figures serve as a good approximation of the presence of foreign-born workers in health-related economic activity. As Table 5 shows, foreign-born Medical Scientists lead the way as more than half of all workers in this occupational category. The percentage of foreign-born Pharmacists doubled from 21 percent in 2000 to 40 percent in 2005. Physician Assistants also showed a spectacular increase, leaping from 11 percent to 28 percent. Foreign-born Physicians and Surgeons occupy a substantial percentage, close to one-third of workers in this category. With all of these high-skilled occupations, it is important to note that Massachusetts is reaping the benefits of education and training in other countries. While some of these foreign-born workers were educated and trained in the United States, many received preparation for and training in the medical professions in their native countries.

Less-skilled health care occupations that showed considerable presence and growth include Miscellaneous Health Technologists. This category groups Technologists and Technicians who are difficult to classify but include workers who assist patients with disabling conditions of limbs and spine or prepare braces and prostheses. Strong and growing categories also include Nursing Psychiatric and Home Health Aides, Dental Assistants and Dieticians and Nutritionists.

	2000	2005
Medical Scientists	50%	51%
Pharmacists	21%	40%
Physicians & Surgeons	29%	28%
Physician Assistants	11%	28%
Mics. Health Technologists	29%	36%
Aides-Nursing, Psych, Home	30%	33%
Dental Assistants	18%	26%
Dieticians & Nutritionists	15%	25%

Source: U.S. Bureau of the Census: Public Use Microdata Sample (PUMS), 2000 & American Community Survey 2005.

Table 6 shows categories where foreign-born workers range from 15 to 24 percent of all workers. Some declines are evident among Dentists as well as Clinical Laboratory Technologists. The latter are workers who perform complex microscopic and bacteriological tests. However, there were also big increases in foreign-born Licensed Practical Nurses, Licensed Vocational Nurses, Opticians and Recreational Therapists.

	2000	2005
Dentists	23%	17%
Clinical Laboratory Technologists	22%	21%
Licensed Pract. & Voc. Nurses	10%	21%
Opticians	13%	22%
Recreational Therapists	6%	15%

Source: U.S. Bureau of the Census: Public Use Microdata Sample (PUMS), 2000 & American Community Survey 2005.

Occupations showing smaller but still significant percentages of foreign-born workers include Chiropractors, Emergency Medical Technicians and Paramedics and Physical Therapists in the 14 percent category. It is notable that Registered Nurses, who are in high and increasing demand, remained steady at 10 percent between 2000 and 2005. Some occupations such as Occupational and Respiratory Therapists and Medical Record Technicians experienced declines in the percentage of foreign-born workers in the five-year period.

	2000	2005
Emergency Medical Technicians & Paramedics	4%	14%
Physical Therapists	11%	14%
Chiropractors	3%	14%
Registered Nurses	10%	10%
Dental Hygienists	8%	8%
Occupational Therapists	6%	2%
Respiratory Therapists	10%	5%
Medical Records/Infor. Techs	11%	8%
Speech-Language Pathologists	6%	2%

Source: U.S. Bureau of the Census: Public Use Microdata Sample (PUMS) 2000 & American Community Survey 2005.

Appendix B provides a detailed description of analysis of the 2000 PUMS and 2005 American Community Survey data used to generate Tables 5-7.

All of these tables paint a compelling presence of foreign-born workers across the spectrum of health care. These figures are made all the more significant by the fact that the overall foreign-born population in Massachusetts is 14.4 percent, yet these immigrants command substantial percentages of workers in many categories. Adding to the prominent presence of foreign-born workers in health industries is the fact that this group composes a substantial part of the 'gray market' in this area. This is described by the Health Resources and Services Administration (a division of the U.S. Department of Health and Human Services) in the following way, "...a substantial 'gray market' of individuals hired directly by individuals and families, who do not show up as employed in either BLS [Bureau of Labor Statistics] or other government data systems." Another national study found that 29 percent of workers providing assistance to the Medicare population in the home were self-employed. In some parts of Massachusetts, it may be immigrants who are most available for the provision of these kinds of services.

Foreign-born workers within the health care industry, both nationally and in Massachusetts, are not evenly dispersed as shown in the previous tables. The majority of foreign-born workers is concentrated in either lower-skilled health care occupations such as Home Health Aides or in higher-skilled occupations such as Physicians and Pharmacists. Nationally, when compared to natives, foreign-born workers are 2.2 times more likely to be Physicians but are 16 percent less likely to be Registered Nurses. Moreover, foreign-born workers are 1.3 times as likely to be Clinical Technicians and 1.4 times as likely to be Nursing Aides compared to natives (Lowell and Gerova, 2004). Foreign-born workers are 1.5 times as likely to be employed as Home Health Aides compared to natives, but 16 percent less likely to be employed in offices of Physicians (Lowell and Gerova, 2004). A greater proportion of foreign-born

workers is concentrated in lower-paying, occupations with little room for upward job mobility. This national scenario is generally repeated in Massachusetts.

## Current and Future Demands for New Health Care Workers

The demand for health care workers in the United States is projected to increase dramatically in the near future. It is estimated that five out of the 30 fastest growing occupations between 2000 and 2010 are expected to be in the field of health services (Wilson, 2006). The demand for direct-care workers will be among the fastest growing in the health care field (Prince, 2006).

Employment projections for 2000 to 2010 show that many advanced and entry-level jobs will be available in a range of health care occupations. The Massachusetts Division of Unemployment Assistance projects 72,480 job openings for 'health care practitioners and technical occupations' between 2000 and 2010. This information suggests that the foreign-born population, as well as the low-skilled native population, and perhaps older and retired workers, may have opportunities to fill job niches that do not require extensive training.

Shown in Table 8, Health Diagnosing and Treating Practitioners, which includes a range of occupations from Physicians, Pharmacists, Dentists and a variety of Therapists, is projected to grow to 49,000 jobs including 23,480 new jobs for the ten-year period in Massachusetts. Approximately 14,060 new jobs are projected for Registered Nurses in addition to 14,940 replacement openings. Under Nursing, Psychiatric and Home Health Aides, there will be a need to fill 13,670 new jobs in addition to 8,270 replacement openings.



Table 8:  
Massachusetts Health Care Employment in 2000 and Projected in 2010

Occupational Title*	Employment**		Percent Distribution		New Jobs		Replacement Openings***	Total Job Openings****
	2000	2010	2000	2010	Number	Growth Rate		
Health Diagnosing and Treating Practitioners	122,620	146,100	3.50%	3.80%	23,480	19%	25,510	49,000
Registered Nurses	73,990	88,050	2.10%	2.30%	14,060	19%	14,940	29,000
Nursing, Psychiatric and Home Health Aides	64,770	78,440	1.80%	2.00%	13,670	21%	8,270	21,940
Occupational and Physical Therapist Assistants and Aides	3,470	4,710	0.10%	0.10%	1,240	36%	1,020	2,260

Source: Table created using tables from Commonwealth of Massachusetts Employment Projections 2000-2010, Data on Current and Projected Employment and Education and Training Requirements, Massachusetts Division of Unemployment Assistance; access at: [http://lmi2.detma.org/Lmi/pdf/1030\\_0204.pdf](http://lmi2.detma.org/Lmi/pdf/1030_0204.pdf) Note: \* Listed for only those occupations providing 100 or more jobs; \*\* Includes self-employed; \*\*\* Replacements represent the number of job openings expected to arise from the need to replace workers who retire or move up the career ladder; \*\*\*\* Total job openings represent the sum of new jobs and replacements.

At the forefront of this expansion and among the nation's leaders is the Boston metropolitan region. In just the Longwood Medical and Academic Area (LMA) of Boston alone, there are over 21 health care and academic-related institutions, which combined have over 30,000 employees and exceed \$2.5 billion in annual revenues. In order to continue growing and performing at a high level, these institutions have focused on increasing their level of recruitment and retention of skilled health care professionals and ancillary employees in order to meet employment demands.

Based on the report published by the Massachusetts Department of Workforce Development, Critical Vacancies sorted by Standard Occupational Code (January 31, 2006), the greatest number of vacancies was in nursing. For one quarter in 2004 alone, there were 3,400 vacant positions for Registered Nurses. Nursing is a profession that requires a minimum of an Associate Degree and passing a rigorous licensure exam. According to this report, there were also 1,220 vacant positions for Practical Nurses that require postsecondary vocational training of approximately 18 months.

The job vacancies in occupations described as Health Care Support that include Nursing, Psychiatric and Home Health Aides also have projections of substantial job openings by 2010. All of these positions require only "short-term or on-the-job training." It is critical to recognize that the foreign-born population represents a potential source of workers for all health-related occupations experiencing critical job shortages, but Health Care Support occupations provide an easier entry route and more immediate job fulfillment.

There are a number of factors that are contributing to gaps between a growing health care economy and the availability of workers. According to the American Hospital Association Commission on Workforce for Hospitals and Health Systems, one of the biggest factors contributing to the labor shortage of health care professionals, especially among higher-skilled nurses, is the fact that the U.S. labor force has been aging.

The median age of the U.S. labor force was 34.8 years in 1978 and had increased to 38.7 years by 1998. By 2008, it is estimated that the median age of the U.S. labor force will be 40.7 years.<sup>5</sup> This trend is especially prominent in the nursing profession. The median age of a registered nurse in the U.S. in 2000 was 47 years<sup>6</sup> compared to 1980 when roughly 53 percent of registered nurses were under the age of 40.<sup>7</sup> As nurses age and eventually retire, many of their positions go unfilled or take a significant amount of time to replace, ultimately costing hospitals and medical clinics hundreds of thousands of dollars in recruitment fees and administrative costs.

Another factor contributing to the difficulty in filling vacant jobs within the health services sector is due to the overall U.S. labor force growing much more slowly than in past decades precisely at a time when the number of jobs in health care are increasing. The U.S. labor force is expected to grow by only one percent between 2000 and 2015, which is significantly less than the 2.6 percent growth between 1970 and 1980.

A third factor contributing to the shortage is the difficulty in retaining health service employees as certain health careers are perceived as less attractive than others. A survey administered by the Health Resources and Services Administration found that only 69.5 percent of Registered Nurses reported being satisfied in their current position. This number is significantly lower than in other professions. By comparison, data from the General Social Survey of the National Opinion Research Center indicate that from 1986 through 1996, 85 percent of workers in general and 90 percent of professional workers expressed satisfaction with their job.<sup>8</sup>

A fourth factor limiting the growth of new hospital workers is professional burnout. Too many workers become stressed by the current working conditions that exist in many health facilities, including hospitals and nursing homes, making it difficult to recruit new employees to the industry and to reduce soaring turnover rates. As the American Hospital Association

(AHA) Commission states, “Today, many in direct patient care feel tired and burned out from a stressful, often understaffed environment, with little or no time to experience the one-on-one caring that should be the heart of hospital employment.” Moreover, health care professionals face severe risks to their own health on the job. Health care workers involved in direct patient care must take precautions to guard against back strain from lifting patients and equipment as well as exposure to radiation, caustic chemicals and infectious diseases such as AIDS, tuberculosis and hepatitis.<sup>9</sup>

A final factor that is limiting the supply of the nation's health care supply is the shortage of qualified health care faculty and clinical instructors. This is especially challenging for the nursing profession. According to the American Association of Colleges of Nursing's (AACN) report on 2005-2006 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, U.S. nursing schools turned away 41,683 qualified applicants from baccalaureate and graduate nursing programs in 2005 due to an insufficient number of faculty, clinical sites, classroom space and clinical preceptors. Budget constraints also caused qualified applicants not to be accepted. Nearly 74 percent of the nursing schools responding to the 2005 survey mentioned faculty shortages as a major reason for not accepting more qualified applicants into entry-level nursing programs (AACN Nursing Shortage Fact Sheet, 2005).

## Immigrants and the Massachusetts Health Care Sector: Challenges and Opportunities

Based on the information and data in this report, the research team identified three key challenges linking Massachusetts health care industries and its workforce with immigration growth patterns in the state.

First, demographic projections indicate an increasing need for an expanded workforce in the health care industry and related occupations. First, demographic projections indicate an increasing need for an expanded



workforce in the health care industry and related occupations. In addition to the graying of baby boomers, longer life expectancy and technological advances in medicine will contribute to greater demand for health care. This is expected to increase the demand for health care services.

A second challenge emerges from the good news that Massachusetts employment growth within the health services sector ranked among the highest in the nation. Massachusetts is second highest of all states in health services employment per 100,000 people. Massachusetts had a higher percentage of total employment in health services than that of the entire United States. However, this generates tremendous pressure for finding new and replacement workers in health care.

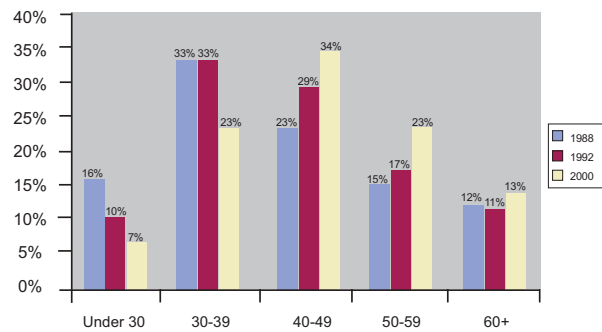
Table 9: Health Services Employment for U.S. and Massachusetts, 2000			
	Massachusetts	U.S.	MA State Rank
Health Services Employment	344,200	11,372,987	10
Health Services Employment per 100,000 Population	5,410	4,030	2
Percent of Total Employment in Health Services	10.5%	10.1%	7

Source: Table created using information from State Health Workforce Profiles for Massachusetts (HRSA, 2004).

This same HRSA report notes that the number of Registered Nursing positions is expected to grow in Massachusetts by 10 percent between 1998 and the end of 2008; Nursing Aides including Orderlies and Attendants by 11 percent; Physicians by 23 percent and Home Health Aides by 34 percent. If this growth is not addressed in terms of implications for training and retaining a future workforce, it will become a major problem. As noted earlier, the changing age structure associated with some medical professions

suggests the need for training a new workforce in the next several years. In the year 2000, 23 percent of all Registered Nurses in Massachusetts were between the ages of 50 and 59, and 13 percent were 60 years of age or older. This points to an impending and major turnover in RN personnel due to retirements.

Chart 1: Age Distribution of RNs Employed in Nursing (1998-2000)



Source: Chart created using information from State Health Workforce Profiles for Massachusetts (HRSA, 2004).

The increasing need for culturally competent care is a third challenge that emerges, in part, due to the state's immigration patterns in recent years and as projected into the future. Almost all public health officials have called on the health care industry to enhance the attention to cultural competency as critical in the provision of quality health services to new groups of racial and ethnic minorities.

The more diverse health care staffs are, the stronger the capacity to meet the diverse needs of Massachusetts communities. As noted by the Institute of Medicine (2004), "Greater diversity among health professionals is associated with improved access to care for racial and ethnic minority patients, greater patient choice and satisfaction, better patient-provider communication and better educational experiences for all [health professions] students." Immigrant workers help to expand the racial, ethnic and linguistic diversity of the health care workforce. Diversity of health care providers has to be approached as a necessary resource for Massachusetts and its residents.

## Preparing a New Workforce: Promising Models.

The leadership of health care sectors must consider strategies for maintaining a robust workforce. Although some responses are based on importing nurses and other health workers from abroad, a more targeted strategy focuses on nurturing and strengthening educational and professional opportunities for immigrant and minority health care workers who are already residents in the United States (Lowell & Gerova, 2004). Supporting immigrant nurses and other health care workers as well as helping them realize career mobility are both efficient and effective in strengthening the state's workforce.

Based on interviews with key informants, workers from these groups and groups that occupy the lower-paying and lower-skilled jobs have a number of needs: basic skills training; advanced training and certification for workers; English for Speakers of Other Languages (ESOL); inter-personal skills training (conflict management) and training that facilitates upward mobility within the health care sectors. There are a number of promising models and related practices that respond to these kinds of needs. The research team has been able to identify some emerging best practices aimed at strengthening the health care workforce in terms of new and immigrant workers.

It is worth noting that the foreign-born (immigrant) population is young. A snapshot of this population in 2004 by the Center for Labor Market Studies at Northeastern University found that two-thirds of new immigrants were in the prime working-age group (20-44 years old). This means that the immigrant population will have many working years to grow and develop in health care occupations. It will be beneficial to the state to invest in their future. Another report by MassINC (2005) also demonstrates that immigrants were the main source of population growth in the state between 1980 and 2004, and their presence in the labor force nearly doubled from 8.8 percent to 17 percent during the same period. The labor force of the state would have shrunk if not for the inflow of foreign-born workers.

A first-line, but rarely used, strategy for improved retention and promotion rates is improving recruitment strategies that ensure new hires have the technical and interpersonal skills to succeed as well as the job and aptitude to advance. More investment in better recruitment policies pays off by reducing turnover and improving care (Prince, 2006).

Another lesson is that employee education and development cannot be seen as an end in and of itself; it is best incorporated as a larger strategy of organizational development that takes into consideration current staffing resources and future needs. Similarly, workforce development policies should not be viewed as temporary strategies to fund; they must be institutionalized within health organizations and receive continual attention. Program development in this area has to be an ongoing effort that requires a constant commitment to understanding the changing workforce needs of the organization and its employees and how those fit with the programs meant to address the needs (Lemay and Messier, 2005).

Another idea discussed by some observers and health care providers is that there has to be focus on the health care workers' mobility into and upward through the workforce. Workplaces that foster learning environments by making education and advancement a central part of the organizational culture facilitate career and professional mobility for workers. This may also include better training for managers so they have the capacity to mentor staff and support their educational and career goals (Wilson, 2006).

Initiatives marked by some success include education and training programs that help adult working students balance the competing demands of work, school and family. Providing supports such as access to child care or transportation helps workers gain credentials they need to advance their careers (Wilson, 2006). Combining workplace and educational institution strategies is even more effective. For example, there are two CNA-to-LPN (Certified Nursing Assistant to Licensed Practical Nurse) programs in Massachusetts.

Long-term care employers partner with local community colleges to deliver a full sequence of courses from basic math and English skills training in the workplace to customized evening LPN programs. As a result of these programs, the employers have reaped financial benefits; the patients have experienced improved care and staff retention rates have improved (Silverston and Rubin, 2006).

Finally, our research suggests that strategies aimed at strengthening the health care workforce must also reflect collaborative efforts among federal, regional, state and urban sectors to fund and implement appropriate programs. While programmatic initiatives take many forms, some of the most promising ones are large, include multiple sectors and are funded from public and/or private sources. Partnership projects can face certain kinds of limitations such as the degree of commitment from all participants; capacity to dedicate time and resources to developing and maintaining the partnership and the capacity to provide resources associated with communications, documentation and trouble-shooting. However, there are important advantages to partnerships in the areas of outreach and impact and in helping the public understand the importance of a strong and vibrant health care workforce.

## Conclusions: Linking the Needs of the Massachusetts Health Care Economy with the Growing Immigrant Population in the State

This Executive Summary focuses on the critical importance of the Massachusetts foreign-born population in its health and health-related economy. Across the nation, the growth in immigration can provide a key resource for the vibrancy and future well-being of health industries and occupations. This possibility is enhanced in Massachusetts due to its strong reliance on the health economy. The general public should be aware of the impact that immigration is having and can have on our state. Hopefully, this realization can be a basis for informing public discourse about how immigration

is significant for the well-being of all residents in Massachusetts. The implementation of two major state policy initiatives (Health Reform and the Governor's Life-Sciences Initiative) stands to gain significantly from the meaningful incorporation of foreign-born workers.

The data and information in this report show that while immigration is increasing as a proportion of workers in various health occupations, the change is not uniform but reflects the very diversity of immigrants in Massachusetts. While some occupations experience relatively little immigration penetration, others experience more. And, in the latter case, the occupations experience immigration differently in terms of the schooling levels and country of origin that are represented in immigrant workers.

This report suggests that health care sectors, and thereby the quality of health, will be impacted by immigration along several dimensions. One is certainly a workforce dimension. As the health care economy grows, it will need new and continuing workers in a range of occupations. Some of these occupations will require advanced training, but others will need short-range and on-the-job training. All of these categories, however, will have some role to play in the delivery of quality health care for all people.

In some places, the concentrations or clusters of health institutions can be a particularly important factor in tapping new immigrant workers for a number of occupations. The leadership of health care institutions must become cognizant of future workforce needs that will be intensified in these kinds of areas. They must work diligently to ensure that strong linkages exist between immigrant communities and mediating institutions and programs that can help prepare this workforce for health care industries. Community health centers and long-term care health facilities share this burden. The leadership of these kinds of institutions must strategize about maintaining a strong pipeline of workers who will also represent resources for responding to the needs of new groups being served.

This report has briefly outlined some of the workforce challenges that must be overcome in order to ensure that the workforce necessary for growth and vibrancy in the state's health care economy is maintained. However, this also places a burden on this sector to ensure that workforce strategies and initiatives represent best practices for linking the supply of immigrants to the demands of our health care industry. Along this line, we think it would be a big mistake not to focus on using such strategies and initiatives to raise the living standards of all workers in the health care industries. This report, therefore, also examined what might be some best practices regarding this dual challenge. The forthcoming and more comprehensive report that will follow this Executive Summary will examine these issues in greater detail.

## Appendix A: Note about Methodology

The economic characteristics associated with the foreign-born population in Massachusetts health industries are based on a review of data provided by several organizations. These include the U.S. Census Bureau, Bureau of Labor Statistics (BLS) and HHS' Health Research and Services Administration (HRSA). The Geographic Profile of Employment and Unemployment (GPS) contains information from the CPS for census regions and divisions, states, fifty large metropolitan areas and 17 central cities.

Findings are also based on information and data provided by the Massachusetts Department of Workforce Development. This agency collects and reports comprehensive labor and employment information on a range of topics for the state, metropolitan, Labor Market Areas (LMAs), New England City and Town Areas (NECTAs), Workforce Division Areas, city or town and county levels. The team also utilized the Census 2000 Public Use Microdata Sample, 5% file and the American Community Survey 2005 to show the distribution and changes in the number of foreign-born workers by health care occupations. In addition to the collection and analysis of data reported in the above sources, key informants from across the state were interviewed in order to determine what are best practices in integrating an immigrant labor force with the Massachusetts health care sector.

## Appendix B

Tables 5-7 show estimates of the actual proportion of the foreign-born population in health care occupations. These tables are based on PUMS data, which is a 5% sample, and the 2005 American Community Survey generated by the U.S. Census Bureau. The occupational share are weighted averages in order to account for small sample sizes. For example, based on this data set, we report that the number of ‘Nursing, Psychiatric and Home Health Aides’ was 43,896 in 2000; and of this number, approximately 18,943 workers, or 30.1 percent of all persons in this occupational category, were born outside the United States. Or, of the 8,626 workers categorized as ‘Clinical Laboratory Technologists and Technicians’, 2,489 workers (22.4%) were foreign-born workers. Twenty-nine percent of all people in jobs classified as Miscellaneous Health Technologists and Technicians were foreign-born workers. We have been careful not to over-generalize about percentage share in occupational categories with less than ten observations.

# Notes

## REFERENCES

- Chong, N. (2002). A Model for the Nation's Health Care Industry: Kaiser Permanente's Institute for Culturally Competent Care. *The Permanente Journal*. Volume 6, No. 3.
- Institute of Medicine (2004). *In the nation's compelling interest: Ensuring diversity in the health-care workforce*. B. D. Smedley, A. S. Butler, L. R. Bristow (Eds.), Washington, D. C., The National Academy Press.
- Institute of Medicine. (2003). *Unequal treatment: Confronting racial & ethnic disparities in health*. B. D. Smedley, A. Y. Stith, & A. R. Nelson (Eds.), Washington, D. C., The National Academy Press.
- Lowell, B. L. and Gerova, S.G. (2004). "Immigrants and the Healthcare Workforce." *Work and Occupations*. Volume 31, No.4.
- Martiniano, R. et al. (2004). *Health Care Employment Projections: An Analysis of Bureau of Labor Statistics Occupational Projections, 2002-2012*. The Center for Health Workforce Studies.
- Prince, H. 2006, May. *Creating Careers, Improving Care: A Win-Win Economic Advancement Strategy for Certified Nursing Assistants in Long-Term Care*. Boston, MA: Jobs for the Future.
- Silverston, N. and Rubin, J. 2006, Spring. "An Innovative Approach to Developing Entry-Level Workers," *Insights*: 33-35.
- Sullivan Commission (2004). *Missing Persons: Minorities in the Health Professions*. A report of the Sullivan Commission on Diversity in the Workforce. <http://www.aacn.nche.edu/Media/pdf/SullivanReport.pdf>
- Sum, A., Khatiwada, I., Palma, S. & Tobar, P. (October, 2006). *Immigration's Impact on the Workforce Research Brief*. Boston, MA. Commonwealth Corporation.
- U.S. Department of Health & Human Services (2002). *Projected supply, demand, and shortage of registered nurses: 2000-2020*. Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis. Washington, D.C.
- Wilson, R. 2006, May. *Invisible No Longer: Advancing the Entry-level Workforce in Health Care*. Boston, MA: Jobs for the Future.



## FOOTNOTES

- 1 Martiniano, Robert et al. "Health Care Employment Projections: An Analysis of Bureau of Labor Statistics Occupational Projections, 2002-2012." The Center for Health Workforce Studies. March 2004.
- 2 Chong, Nilda. "A Model for the Nation's Health Care Industry: Kaiser Permanente's Institute for Culturally Competent Care. The Permanente Journal. Summer 2002. Volume 6, No. 3.
- 3 Massachusetts Division of Employment and Training. "Massachusetts Employment Projections Through 2008: A Focus on Jobs, the Industries, and the Workforce."
- 4 Massachusetts Division of Employment and Training. "SDA Long-Term Job Outlook Through 2008."
- 5 "Working in the 21st Century," U.S. Department of Labor. June 2001.
- 6 "The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses," U.S. Department of Health and Human Services Administration. 2001.
- 7 Ibid 3.
- 8 "The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses," U.S. Department of Health and Human Services Administration. 2001.
- 9 "Occupational Outlook Handbook 2002-2003." U.S. Bureau of Labor Statistics. 2002.

## ILC Donors

Access Investigations, Inc.  
Ace-Lon Corporation  
AgaMatrix, Inc.  
A. J. Martini, Inc.  
Adelaide Breed Bayrd Foundation  
Ahern Insurance  
Aires & Helena Donuts, Inc.  
All Sports Promotions  
American International Group  
Anthony & Wendy Bolland  
Charitable Trust  
Arbella Charitable Foundation  
Asgard Group  
Aspire Communications, Inc.  
AT&T  
Atlantic Bank of New York  
Atlantic Charter Insurance, Co.  
Atsco Footwear  
Azure/The Brian Group  
Banc of America Securities NY  
Bank of America Foundation  
Bayside Resort Hotel  
The Behrakis Foundation  
Berman & Sons  
BlackRock Financial Management  
Blackthorne Antiques & Interiors  
Blackwell Publishing, Inc.  
Blanchard's Revere, Inc.  
Blue Cross Blue Shield  
of Massachusetts  
Borders Books  
BoS (Boston), Inc.  
The Boston Company  
Boston Duck Tours  
Boston Herald  
Boston Private Bank  
& Trust Company  
Boston Red Sox  
Boston Steel & Manufacturing Co.  
Bradford College  
The Briar Group  
Brigham's, Inc.  
Build-A-Bear Workshops  
Building No.19 Foundation  
Business Copy Associates, Inc.  
Buyers Choice  
Carlson Communications  
Carlson Hotels Worldwide  
Catalogue For Philanthropy  
Catherine and Paul Buppenwieser  
Foundation  
Center for Healing Therapies  
Central Parking  
Charles Hotel  
Charles M. Cox Trust  
Charter Management Co.  
Chicago Title Insurance Co.  
Christ United Methodist Church  
Christmas Tree Shops  
Christos and Mary T. Cocaine  
Charitable Trust  
Christo's Restaurant  
Chubb Group of Insurance Companies  
Citizens Bank  
Citigroup  
Citybridge Foundation  
Coldwell Banker, Beverly, MA  
Combined Jewish Philanthropies  
of Greater Boston  
Comcast Cable Communications, Inc.  
Comcast Foundation  
Committee to Elect Gary Christenson  
Community Media & Development  
Computer Associates  
Congregation Beth Israel  
Consumer Electronics Association  
Conway Office Products/Konica  
Cookies by Miss Jackie  
Cornyn Foundation  
Corporate Express  
Cowan Slavin Foundation  
Cox, Castle & Nicholson LLP  
Cramer Productions  
Credit Suisse/First Boston  
Curves for Women  
Cypress Capital Management LLC  
Dan Clasby & Company  
Darling Consulting  
DeMarco Produce/Rosebud Farms  
DeSoto Foundation  
Dexter House  
Dimtrex Group  
DTZ FHO Partners LLC  
EAM Land Services, Inc.  
East Coast Motive Power  
Eastern Bank Capital Markets  
Eastern Bank Charitable Foundation  
Edith A. Pistorino Trust  
Eldredge & Lumpkin  
Ellis Family Fund  
at The Boston Foundation  
Emerge Spa  
Employment Resources, Inc.  
Epstein, Becker & Green PC  
Ernst & Young LLP  
F1 Boston  
The Fairmont Copley Plaza  
Federal Home Loan Bank of Boston  
Ferris Baker Watts, Inc.  
Fidelity Charitable Gift Fund/  
Fidelity Investments  
Fidelity Press  
First American Title Insurance Co.  
First Church in Malden Congregational  
First Data Western Union Foundation  
FleetCenter Neighborhood Charities  
Francis Beidler III and Prudence R.  
Beidler Foundation  
Friends of The ILC  
Fuller Associates  
G & B Norwood LLC  
George E. Safiol Foundation  
Gainsborough Investments  
Giggles Comedy Club/  
Prince Pizzeria & Bar  
GTE Government Systems Corporation  
Gillette Company  
Global Hyatt Corporation  
Goldman Sachs  
Good Shepherd United Methodist Church  
Gourdeau Limited  
Gourmet Caterers, Inc.  
Gradient Corporation  
Green Company  
Greenough Communications  
GTE Government Systems Corporation  
HarbourVest Partners  
Harlem Globetrotters  
The Hartford  
Harvard Pilgrim Health Care  
Health Tech Consulting LLC  
Healthy Malden, Inc.  
Hermes Investment, Inc.  
Hill Partners

## ILC Donors

Hinckley, Allen & Snyder LLP  
Honda Village  
Howard C. Connor  
Charitable Foundation  
Hughes & Associates, Inc.  
Huntington Theatre Company  
Hyannis Whale Watcher Cruise  
IBM  
Immaculate Conception Parish  
Income Research & Management  
IncTANK  
INEX Capital and Growth Advisors  
Inland Underwriters  
Insurance Agency, Inc  
Insignia ESG  
Institute for Cooperation of Art  
and Research, Inc.  
IntegraTECH Solutions Corporation  
InterContinental Hotels Group  
1620 Investment Advisors, Inc.  
Investment Company Institute  
Ipswich Investment Management Co., Inc.  
James G. Martin Memorial Trust  
James J. Dowd & Sons  
Insurance Co. Agency, Inc.  
Janney Montgomery Scott LLC  
Jillian's Entertainment  
John Hancock Financial Services, Inc.  
Joseph H. & Florence A.  
Roblee Foundation  
Judith Wisnia & Associates  
The Kantor Family Private  
Foundation Trust  
Kappy's Liquors  
Kase Printing, Inc.  
Kernwood Country Club  
King & I Restaurant  
LandAmerica American Title Company  
Lappen Auto Supply Co., Inc.  
Lawyers Title Insurance Corporation  
Ledy-Gurren Bass & Siff LLP  
Lehman Brothers, Inc.  
Levine Family Charitable Gift Fund  
Lexington Insurance Company  
Loews Cineplex Theatres  
Loughran and Associates  
Lowell Police Superior Officers  
Associated Charity Fund  
M & M Liquors, Inc.  
M & P Partners Limited Partnership  
Mabel Louise Riley Foundation  
Malcolm Pirnie, Inc.  
Malden Clergy Association  
Malden Hospital  
Malden Industrial Aid Society  
Malden Police  
Malden Rotary Club  
Malden YMCA  
Margarett L. Robinson Trust  
Marsh, Inc.  
Martin D. & Jean Shafiroff Foundation  
Massachusetts Bay Line, Inc.  
Massachusetts Cultural Council  
Massachusetts Department of Education  
Massachusetts Literacy Foundation  
McLean Hospital  
MedTech Risk Management, Inc.  
Medford Bank  
Medford Co-Operative Savings Bank  
Mellon New England  
Mellon Private Asset Management/  
Alice P. Chase Trust  
Merrill Corporation  
Merrill Lynch  
Metro North Regional  
Employment Board  
Mintz, Levin, Cohn, Ferris,  
Glovsky and Popeo PC  
Morgan Keegan & Company, Inc.  
Morgan Stanley  
Museum of Science  
Museum Institute for Teaching Science  
Mystic Valley Development Commission  
Mystic View Design, Inc.  
National Amusements  
and Multiplex Cinemas  
Nellie Mae Education Foundation  
New England Aquarium  
New England Coffee Company  
New England Patriots  
Charitable Foundation  
New England Produce Center, Inc.  
Nicholas C. Sarris, Inc.  
Norfolk & Dedham Group  
North Atlantic Medical Services, Inc.  
North Shore Black Women's  
Association, Inc.  
North Shore Music Theatre  
North Suburban Access Corporation  
Obermeyer Rebmann  
Maxwell & Hippel LLP  
Office Resources  
Online Resources  
Oppenheimer & Co., Inc.  
Orion Commercial Insurance  
Services, Inc.  
Palmer Manufacturing Co., Inc.  
PEAR Associates LLC  
Pegasus Communications  
Penn, Schoen & Berland Associates, Inc.  
Pergola Construction, Inc.  
Perico P.C.  
Piantedosi Baking Company  
Pinnacle Financial Group  
Prince, Lobel, Glovsky & Tye LLP  
Professional Rehabilitation Center, Inc.  
Pollock & Pollock  
ProLiteracy Worldwide/NBSF  
Radisson Hotel Hyannis  
RBC Capital Markets  
Reit Management & Research LLC  
Research Data, Inc.  
Richards, Barry, Joyce & Partners LLC  
Richardson Insurance  
Ritz Carlton Hotel  
R.M. and M.S. Marino Charitable  
Foundation  
Robert J. Gottlieb Charitable Foundation  
Robinson Enterprises  
Ropes & Gray LLP  
RPM  
SalemFive Charitable Foundation  
Sallop Insurance Agency, Inc.  
Sarris, Inc.  
Satisfaction Transportation, Inc.  
Sharkansky and Company LLP  
Sharon & Jeff Chapple Foundation  
Sherin and Lodgen LLP  
Shields Health Care Group  
Shreve, Crump & Low  
Sidoti & Company LLC  
Silver Platters  
The Silverman Group/Merrill Lynch

## ILC Donors

Sir Speedy  
Skadden, Arps, Slate,  
    Meagher & Flom LLP  
Smith Barney, Inc.  
Sovereign Bank  
Space Planning and Commercial  
    Environment, Inc.  
Sparks Department Store  
SpeakEasy Stage Company  
Sports Therapy and Rehabilitation  
St. Anne's Guild  
St. Gabriel's Passionist Community  
St. Peter's Church  
Stanhope Garage, Inc.  
Staples  
State Street Bank  
Stella Realty Partners Lynnfield LLC  
Stevens and Ciccone Associates PC

Stifel Nicholson & Co.  
Stoneham Savings Bank  
Streetwear, Inc.  
Sullivan & Worcester LLP  
Sumitomo Bank, Limited  
Target Corporation  
Temple Tifereth Israel  
Thomas M. Sprague/  
    Laurie J. Anderson Fund  
Time Warner Cable  
Title Associates, Inc.  
TJX Foundation  
Travelers Resource  
Tri-City Community Action  
    Program, Inc.  
The Trustees of the Reservation  
UBS Investment Bank

Valet Park of New England  
Verizon  
Vitale, Caturano & Company Foundation  
Wachovia Capital Markets LLC  
Wald & Ingle PC  
Wardinski Family Foundation  
Wash Depot Holdings, Inc.  
Water Country  
Water Wizz Water Park  
Welch & Forbes  
Wellington Management Company LLP  
WISNIA  
Yankee Fleet  
Yankee Whale Watch  
Yawkey Foundation  
YWCA Malden  
Zurich

## ILC Donors

Mr. & Mrs. Anthony F. Abell  
Ms. Helen J. Rubel & Mr. Neal Allen  
Ms. Jacquelyn Anderson  
Mr. & Mrs. Arthur Anton  
Mr. Melvin R. Aucoin  
Dr. Susan Cahill &  
    Mr. Frank J. Bailey  
Mr. & Mrs. Victor Baltera  
Ms. Mary H. Hull &  
    Mr. Mark S. Baranski  
Ms. Diane Bastianelli  
Mr. & Mrs. George D. Behrakis  
Ms. Judy Bennett  
Mr. & Mrs. Everett W. Benton  
Mr. & Mrs. Peter P. Bishop, Jr.  
Mr. & Mrs. Timothy A. Bonang  
Mr. Jonathan Bourdeau  
Mr. & Mrs. Ethan Bornstein  
Mr. & Mrs. Paul Bornstein  
Mr. & Mrs. Stuart Bornstein  
Mr. Barry H. Bragen  
Mr. Timothy P. Brennan  
Mr. Daniel F. Bridges  
Mr. Albert R. Broude  
Mr. & Mrs. Joseph Broude  
Ms. Nancy Broude  
Mr. Donald Buckley  
Mr. & Mrs. Timothy Burns  
Ms. Dale Cabot  
Tushara & Krishan Canekeratne  
Mr. & Mrs. Leon M. Cangiano, Jr.  
Ms. Karen Canzanello  
Mr. Matthew Carlson  
Mr. Richard G. Carlson  
Mr. & Mrs. John Carty  
Ms. Denise J. Casper  
Mr. James Chung  
Ms. Margherita Ciampa-Coyne  
Mr. & Mrs. Michael Ciccone  
Mr. & Mrs. Frederick J. Cicero  
Mr. & Mrs. Tjarda Claggett  
Ms. Anne G. Clark  
Mr. & Mrs. William M. Clark  
Ms. Donna Coolidge-Miller  
Mr. & Mrs. Todd Copeland, Jr.  
Mr. & Mrs. Ralph Cote  
Mr. John Coyne  
Mr. & Mrs. Donald Cummings  
Dr. & Mrs. Douglas M. Dahl

Mr. & Mrs. George E. Danis  
Ms. Jane Willis &  
    Mr. Richard A. Davey, Jr.  
Ms. Gina Matarazzo &  
    Mr. Frank Deltorto  
Mr. Gregory G. Demetrakas  
Ms. Gayathri Arumugham &  
    Mr. Paul Desmond  
Mr. Petar Y. Dimotrov  
Ms. Susan Schwartz &  
    Mr. Patrick Dinardo  
Dr. & Mrs. Douglas Doben  
Mr. Daniel Doherty  
Mr. & Mrs. Patrick F. Donelan  
Ms. Kathleen R. Donovan  
Mr. Richard Donovan  
Ms. Eileen N. Dooher  
Mr. & Mrs. Richard Doyle  
Ms. Margaret Drees  
Mr. Philip G. Drew  
Ms. Sheila Driscoll  
Mr. & Mrs. Stanley J. Dudrick  
Mr. Brian Eddy  
Ms. Carmen W. Elio  
Mr. & Mrs. Neil M. Eustice, Jr.  
Mr. & Mrs. John E. Fallon  
Mr. & Mrs. Peter S. Farnum  
Ms. Elaine E. Fassett  
Liliya Pustilnick &  
    Volko Faynshteyn  
Mr. Richard Fernandez  
Ms. Elizabeth J. Finn-Elder  
Mr. Mario Finocchairo  
Mr. & Mrs. Carlos Flores  
Mr. & Mrs. Richard W. Fournier  
Friends of The ILC  
Mr. Thomas J. Furlong, Jr.  
Mr. Max Gandman  
Dr. & Mrs. Bruce Gans  
Mr. & Mrs. Ignacio Garcia  
Mr. & Mrs. Richard Garver  
Ms. Marianne Geula  
Ms. Pamela P. Giannatsis  
Ms. Barbara D. Gilmore  
Dr. & Mrs. Ronald P. Goldberg  
Mrs. Tonya Goldenstein  
Mr. & Mrs. Brian P. Goodman  
Mr. & Mrs. Louis A. Goodman  
Ms. Rashel Gurevich

Mr. Raymond J. Gosselin, Jr.  
Mr. Peter Grieve  
Ms. Nancy S. Grodberg  
Mrs. Gail A. Guittarr  
Mr. & Mrs. Michael J. Haley  
Mr. Jeff Hansell  
Mr. & Mrs. John L. Harrington  
Dr. Roger F. Harris  
Mr. Bob Hatch  
Ms. L. Merrill Hawkins  
Mr. & Mrs. Robert Haynes  
Mr. & Mrs. Terence J. Heagney  
Ms. Julie Heagney  
Mr. & Mrs. David J. Hegarty  
Mr. & Mrs. Warren Heilbronner  
Mr. & Mrs. Paul Hennigan  
Dr. & Mrs. Eugene Hill  
Mr. & Mrs. John Hindelong  
Mr. & Mrs. John R. Hoadley  
Dr. Marcia Drew Hohn  
Mr. & Mrs. Jonathan L. Hood  
Mr. & Mrs. David Horton  
Ms. Andra R. Hotchkiss  
Mayor Richard C. Howard,  
    City of Malden  
Mr. & Mrs. Richard F. Hughes  
Mr. & Mrs. Frank M. Hundley  
Mr. & Mrs. Robert P. Inches  
Ms. Candice Irvin  
Mr. Reno R. James  
Mr. Edgard Jean-Pierre  
Ms. E. A. Jobez  
Mr. Todd A. Johnston  
Ms. Holly G. Jones  
Mr. & Mrs. Tripp Jones  
Mrs. Susana Jovenich  
Ms. Silja Kallenbach  
Mr. & Mrs. Jim Kaloyanides  
Mr. Michael W. Kaloyanides  
Mr. & Mrs. John C. Kane, Jr.  
Ms. Esther N. Karinge  
Mr. & Mrs. Henry Katz  
Mr. Peter K. Kean  
Mr. Thomas J. Kent  
Mrs. Lynne Kinder  
Mr. & Mrs. Mark L. Kleifges  
Mr. Gordon Kluzak  
Ms. Elza Koin  
Mr. & Mrs. Arthur G. Koumantzelis

## ILC Donors

Mr. & Mrs. John LaLiberte  
Ms. Mary Louise Larkin  
Mr. Vern D. Larkin  
Mr. Joseph D. Lampert  
Mr. & Mrs. Joseph F. Lawless, III  
Mr. & Mrs. Jeffrey R. Leach  
Mr. Geraldo Pereira Leite  
Mr. & Mrs. David M. Lepore  
Mr. & Mrs. Michael J. Linskey  
Mr. & Mrs. Gary Lippe  
Ms. Linda Lobao  
Mr. & Mrs. Paul R. Lohnes  
Mr. & Mrs. Carlos Lopez  
Mr. Fishel Loytsker  
Mr. & Mrs. Jeffrey R. Lynch  
Mr. & Mrs. Edward E. Mackay  
Mr. & Mrs. Bruce J. Mackey  
Mr. & Mrs. John A. Mannix  
Mr. & Mrs. Joseph J. Marotta  
Mr. & Mrs. Gerard M. Martin  
Mr. Philip Masotta  
Mr. Matthew J. Matule  
Mr. & Mrs. Jeffrey Mazzone  
Ms. Antonia McCabe  
Mr. & Mrs. Thomas P. McDermott  
Mr. & Mrs. William McGahan  
Mr. Tom McGraw  
Ms. Rachael McPherson &  
    Mr. Patrick McMullan  
Mr. & Mrs. Arthur Meehan  
Mr. & Mrs. Patrick M. Merlino  
Mr. & Mrs. Thomas L. Michelman  
Mr. Brian Miller  
Ms. Elinore Miller  
Mr. & Mrs. Robert Miller  
Mr. & Mrs. Adam Milsky  
Mr. & Mrs. Lawrence Milstein  
Mr. Michael A. Mingoelli, Jr.  
Mr. Neal J. Miranda  
Ms. Meredith B. Misek  
Mr. Kevin P. Mohan  
Mr. Louis A. Monti  
Mr. & Mrs. William F. Murphy  
Mr. & Mrs. John G. Murray  
Mr. & Mrs. Charles G. Nahatis  
Ms. Cathy Nandhavan  
Ms. Alice V. Melnikoff &  
    Mr. Joseph H. Newburg  
Ms. Emily Newick  
Ms. Carol Ng  
Mr. & Mrs. Owen Nichols  
Mr. & Mrs. Andrew Nickas  
Ms. Carmen Nistor  
Mr. Len Noland  
Mr. Alexander A. Notopoulos, Jr.  
Ms. Ingrid H. Nowak  
Ms. Karen Oakley  
Mr. Thomas M. O'Brien  
Mrs. Phyllis Patkin  
Mr. & Mrs. Robert D. Payne  
Ms. Judith M. Perlman  
Ms. Marianne Pesce  
Ms. Ellie Miller &  
    Mr. Freddie Phillips  
Mr. Nat Phillips  
Mr. & Mrs. Nicholas Philopoulos  
Mr. & Mrs. Philip S. Place  
Ms. Barbara A. Plant  
Mr. Peter Pollack  
Mr. Ameek A. Ponda  
Mr. John C. Popeo  
Mrs. Evalore Poras  
Mr. & Mrs. Adam D. Portnoy  
Mr. & Mrs. Barry M. Portnoy  
Mrs. Blanche Portnoy  
Ms. Norma M. Portnoy  
Mr. & Mrs. Charles Poulas  
Mr. Ronald A. Pressman  
Mr. & Mrs. Thomas L. Rand  
Mr. & Mrs. Philip Redmond  
Mr. & Mrs. Vincent J. Rivers  
Ms. Susan Rojas  
Mr. Leonard Rosenberg  
Ms. Joanne M. Seymour &  
    Mr. Brian Ruh  
Mr. Joseph N. Russo  
Mr. & Mrs. George E. Safiol  
Ms. Linda Sallop  
Ms. Yves Salomon-Fernandez  
Ms. Lydia M. Sankey  
Mr. & Mrs. Nicholas Sarris  
Mr. & Mrs. Michael Schaefer  
Mr. & Mrs. Jorge A. Schwarz  
Ms. Nanda Scott  
Mr. Matthew F. Shadrick  
Mr. & Mrs. Brian J. Shaffer  
Mr. & Mrs. William J. Sheehan  
Ms. Joyce E. Silver  
Mr. & Mrs. Jason L. Silverman  
Ms. Victoria Slingerland  
Ms. Kathy G. Smith  
Ms. Lucille C. Spadafora  
Ms. Zhanna V. Stalbo  
Ms. Judith Stapleton  
Mr. Lee C. Steele  
Mr. John M. Steiner  
Mr. Roy L. Stephens  
Mr. Gary Sullivan  
Mr. & Mrs. Geoffrey Sunshine  
Mr. & Mrs. Makoto Suzuki  
Mr. & Mrs. Richard Teller  
Ms. Brenda Jovenich &  
    Dr. Joseph Terlato  
Ms. Reena I. Thadhani  
Ms. Karen R. Thande  
Ms. Sakina Paige &  
    Mr. Jamal Thomas  
Mr. & Mrs. Christopher C. Thompson  
Ms. Jennifer Thompson  
State Senator Richard R. Tisei  
Mr. Paul J. Titcher  
Ms. Elizabeth A. Tober  
Mr. & Mrs. Thomas N. Trkla  
Mr. Chris Tsaganis  
Ms. Kathleen Tullberg  
Ms. Laurie Vance  
Mr. Theodore C. Vassilev  
Ms. Yeva Veysman  
Dr. Jan T. Vilek  
Mr. Hong T. Vuong  
Dr. & Mrs. Amnon Wachman  
Mr. & Mrs. Robert Wassall  
Mr. David C. Weinstein  
Mr. & Mrs. James White  
Mr. & Mrs. Mark J. White  
Ms. Jacqueline Willett  
Ms. Beth S. Witte  
Mr. Mark R. Young  
Ms. Jodie Zalk  
Ms. Clotilde Zannetos  
Mr. & Mrs. Fred Zeytoonjian  
Mrs. Lila Zimmerman  
Mr. & Mrs. Stephen Zubricki, Jr.  
Mr. & Mrs. Stephen Zubricki, III