

New Foreign Immigrant Inflows into  
Massachusetts, 2000-2005: An Assessment  
Of Their Size, Characteristics, and Impacts on  
State Population and Labor Force Growth

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## Table of Contents

Introduction.....	1
Overview of the Contents of the Report .....	2
Key Definitions and Data Sources.....	3
Foreign Immigration’s Contributions to Population Growth in Massachusetts from 1980-2005 ..	4
The Geographic Distribution of New Foreign Immigrants Across Counties of the State .....	12
National Origins of New Immigrants in Massachusetts, 2003-2004.....	15
The Demographic Characteristics of New Immigrants in Massachusetts, 2004 .....	19
The Educational Attainment and English-Speaking Proficiencies of New Immigrants.....	21
The Labor Force Behavior and Employment Status of New Immigrants in Massachusetts, 2004 .....	23
The Influence of New Immigrants on Labor Force and Employment Growth in Massachusetts, 2000 to 2005 .....	28
The Characteristics of the Jobs Held by New Immigrant, Established Immigrant and Native-Born Workers, 2003-2004.....	33
Summary of Key Findings and Their Workforce Development Implications.....	39

## Introduction

The formulation of state workforce development policy and the planning of workforce development programs at the state and local level are dependent in part upon knowledge of on-going population, labor force, and labor market developments. Changes in both the size and the demographic/human capital traits of the working-age population (16 and older) will influence the growth and quality of the resident labor force. The quantity and quality of available workers in turn will affect the output potential and the economic competitiveness of the state. Knowledge of trends in labor underutilization problems among key segments of the working-age population, including open unemployment, underemployment, and hidden unemployment, also is indispensable to efforts to target available resources upon those residents in need of employment and training assistance to improve their immediate employability.<sup>1</sup>

During the decade of the 1990s, Massachusetts as well as her two southern New England neighbors (Connecticut and Rhode Island) and the three Mid-Atlantic states of New Jersey, New York, and Pennsylvania were overwhelmingly dependent on new foreign immigration to generate their population and labor force growth.<sup>2</sup> All of the state's population growth and resident labor force growth during the decade of the 1990s was generated by new foreign arrivals, who came to our state from an increasingly diverse array of countries.<sup>3</sup> The educational attainment levels and English-speaking proficiencies of these new immigrant also were quite heterogeneous, and both played very important roles in determining the success of new and established immigrants in the state's and nation's labor markets.

This research report is primarily designed to track and assess changes in the size and demographic/socioeconomic composition of the new immigrant population and labor force in Massachusetts over the past five years (2000-2005). The impacts of this new wave of

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<sup>1</sup> The term "hidden unemployment" is often used to describe those individuals who want a job but are not currently looking for work, hence they are not included in the ranks of the official unemployed.

<sup>2</sup> See: Andrew M. Sum, Ishwar Khatiwada, and Kamen Madjarov, The Impacts of Foreign Immigration on Population Growth, the Demographic Composition of the Population, Labor Force Growth, and the Labor Markets of the Northeast Region During the Decade of the 1990s, report prepared for Fleet Bank, Boston, 2003.

<sup>3</sup> For a review of the impacts of immigration on the growth of the labor force of the state in the 1980s, the 1990s, and the first few years of the current decade,

See: (i) Andrew Sum, W. Neal Fogg, et.al., The Changing Workforce: Immigrants and the New Economy in Massachusetts, Massachusetts Institute for A New Commonwealth, Boston, 1999, (ii) Andrew Sum, Mykhaylo Trub'skyi, Sheila Palma, Foreign Immigration Developments in Massachusetts, 1990-2003: Their Influence on Population and Labor Force Growth, Report Prepared for the Commonwealth Corporation, Boston 2003.

immigration on state population, labor force, and employment growth will be identified, and the implications of these changes for future workforce development policies in the Commonwealth will be assessed.

## **Overview of the Contents of the Report**

The findings in this study will begin with a brief review of key concepts and measures of the “foreign born population” and “new immigrants” and the data bases used to produce estimates of the size, demographic/human capital characteristics, and labor force/employment behaviors of the new immigrant population. This discussion of concepts and data sources will be followed by a review of population developments in Massachusetts for selected time periods from 1980 to 2005 and the contributions of new foreign immigration to population growth in the state and selected substate areas. Estimates of immigrant impacts on population growth in the state from 2000 to 2005 will be compared to those for the nation as a whole, other states across the country, and each of the other New England states.

The countries of origin of new immigrant arrivals in Massachusetts since 2000 will be identified and compared to those of the U.S. The demographic characteristics of these new immigrants will be examined, including their age, gender, and race-ethnic characteristics. For those immigrants of working-age (16 and older), we will examine their educational characteristics and their English-speaking proficiencies, given the importance of both sets of human capital variables in influencing their labor force behavior and their labor market success in our state in recent years.<sup>4</sup>

The analysis of the demographic and human capital traits of new immigrants will be followed by an examination of their labor force participation behavior, employment rates, and unemployment rates in 2004. Findings will be presented separately for men and women, and the results for Massachusetts will be compared to those for the entire nation during that year. The growth of the Massachusetts civilian labor force over the 2000-2005 period will be examined, and the contribution of new foreign immigration to state labor force growth over this period will be estimated and compared to that of the nation and other states across the nation over the same

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<sup>4</sup> For a comprehensive review of relationships between the educational attainment/English-speaking proficiencies of immigrants and their labor market behaviors and outcomes, See: Andrew Sum, Johan Uvin, Ishwar Khatiwada, Dana Ansel, et.al, [The Changing Face of Massachusetts](#), Massachusetts Institute for a New Commonwealth, Boston, 2005.

five year period. The class of worker status of new immigrant workers (private sector wage and salary workers, self-employed, etc.) will be identified as well as the major industries of their employers and the occupational characteristics of their jobs. The final section of the paper will provide a brief summary of key findings and discuss their implications for the state's educational and workforce development systems.

## **Key Definitions and Data Sources**

This monograph is primarily focused on the growth of the foreign born population in Massachusetts, their demographic and socioeconomic characteristics, their national origins, their employment experiences, their labor force behavior, and their impacts on the state's labor force and the labor market. The definition of a "foreign born" person in this paper is primarily that of an individual who was born outside of the 50 states and the District of Columbia.<sup>5</sup> In accord with this definition, persons who were born in one of the territories of the United States (U.S. Virgin Islands, Puerto Rico, Guam) are considered to be "foreign-born". A person who emigrates from Puerto Rico to Massachusetts adds to the population of both the state and the nation in the same manner as an immigrant from Brazil, Canada, Haiti, or India. Besides, previous analyses of the demographic/socioeconomic characteristics and labor market, income, and poverty problems of immigrants from the U.S. territories have revealed that they are quite similar to those of many other immigrants from Central and South America and the Caribbean Basin.<sup>6</sup>

At times, the research report refers to "new immigrants". The definition of a "new immigrant" depends on the specific time period being analyzed. When the analysis is focused on the 2000-2005 period, a "new immigrant" is defined as a person who arrived in the U.S. between 2000 and the time of the 2004 American Community Surveys or the 2005 CPS surveys. In a few instances, the 1990-2000 time period will be examined. A "new immigrant" for this analysis is someone who arrived in the U.S. between 1990 and the time of the 2000 Census in early 2000.

The bulk of the estimates of the numbers, demographic and socioeconomic characteristics, countries of origin, educational backgrounds, and labor market experiences of Massachusetts' immigrants are based on the findings of the 2004 American Community Surveys

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<sup>5</sup> Persons who were born outside the U.S. but to U.S. parents temporarily living abroad are classified as native-born individuals in this paper.

<sup>6</sup> See: Andrew M. Sum, W. Neal Fogg, et.al, The Changing Workforce: Immigrants and the New Economy in Massachusetts, Massachusetts Institute for a New Commonwealth, Boston, 1999.

(ACS). The ACS survey is a household survey conducted by the U.S. Bureau of the Census using a questionnaire similar to the long form questionnaire in the 2000 Census. Interviews were completed with approximately 14,000 households in Massachusetts. In some cases, comparisons are also made with findings from the 2000 Census. The monthly CPS public use files for calendar year 2005 serve as the basis for estimates of the numbers and labor force status of new working-age immigrants residing in Massachusetts in 2005.<sup>7</sup>

## **Foreign Immigration's Contributions to Population Growth in Massachusetts from 1980-2005**

Following a decade marked by an approximately stagnant population, the resident population of the state grew more markedly during the 1980s and the 1990s.<sup>8</sup> Between 1980 and 1990, the resident population of the Commonwealth increased from 5.737 million to 6.016 million, a rise of nearly 280,000 or 5 percent (Table 1). Over the decade, a large new wave of foreign immigrants from a growing array of countries came to live in the state.<sup>9</sup> Slightly over 285,000 new immigrants were living in our state at the time of the 1990 Census. They accounted for all (103%) the net growth in the state's resident population over the 1980s decade.

Between 1990 and 2000, the state's population increased by just under one-third of a million persons (Table 1). New immigrants again arrived in increasingly large numbers. At the time of the 2000 Census, there were slightly over 350,000 new immigrants residing in the state. These new arrivals over the decade again accounted for all of the growth in the state's population. The national origins of these new immigrants were highly diverse. There were 83 different countries (territories) that sent 500 or more immigrants to the state between 1990 and

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<sup>7</sup> The CPS household survey is a national labor force survey of 60,000 households that is conducted monthly by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. Typically 1,200 to 1,300 households are surveyed per month in Massachusetts. For details on the purposes and design features of the CPS survey, See: U.S. Bureau of Labor Statistics, Employment and Earnings, January 2005, "Appendix A," Washington, D.C. 2005.

<sup>8</sup> During the 1970s, the state experienced very modest population growth of only 47,867 or less than 1 percent. The number of new foreign immigrants into the state over the decade was estimated at nearly 175,000, accounting for all of the state's population growth over that decade.

<sup>9</sup> For a comprehensive review of immigration's contributions to population growth in Massachusetts during the twentieth century and especially the 1970s, 1980s, and 1990s, See: (i) Andrew M. Sum, W. Neal Fogg, et.al., The Changing Workforce: Immigrants and the New Economy in Massachusetts, The Massachusetts Institute for A New Commonwealth, Boston, 1999; (ii) Andrew Sum, Johan Uvin, Ishwar Khatiwada, Dana Ansel, et.al., The Changing Face of Massachusetts, Massachusetts Institute for A New Commonwealth, Boston, June 2005.

2000.<sup>10</sup> The five countries (territories) sending the largest number of new immigrants were Puerto Rico, Brazil, the Dominican Republic, China, and India. Only one European country (Russia) made the top ten list, and none of the top ten sending countries was an English-speaking country although some of the more highly educated immigrants from these countries had learned English in their home countries.

Table 1:  
The Number of New Immigrants<sup>(1)</sup> and Their Share of Population  
Growth in Massachusetts, 1980-1990 and 1990-2000

	(A)	(B)
Population Variable	1980 – 90	1990 – 2000
Resident Population Growth	279,358	332,672
Number of Immigrants into State Over Decade	285,034	350,209
New Immigrants as % of Population Growth	103	105

Sources: 1980, 1990, and 2000 Censuses of Population and Housing, PUMS files, tabulations by authors.

Notes: <sup>(1)</sup> New immigrants are persons born outside of the U.S. who migrated to the U.S. over each of the two decades. They include persons born in Puerto Rico and the outlying territories of the U.S.

Since 2000, population growth in the Commonwealth first slowed considerably, then the overall population declined modestly over the past two years, according to the population estimates of the U.S. Bureau of the Census (Chart 1). Between July 2000 and July 2001, the state gained an additional 33,000 residents, but population growth slowed considerably over the following two years, falling slightly below 6,000 over the July 2002-July 2003 period. Over the following two years, the state’s population is estimated to have declined, falling by 10,183 and 8,639 over the July 2003-04 and July 2004-05 periods (Chart 1).

Over the entire five year period, July 1, 2000 to July 1, 2005, the state’s resident population grew by only 36,611, representing a growth rate of less than .6%. In comparison, the U.S. population grew by nearly 15 million or by 5.3% over the same five year period.<sup>11</sup> Thus, Massachusetts captured only .25% of the nation’s population growth over the past five years. Only North Dakota (which lost population) and West Virginia grew at a lower rate than

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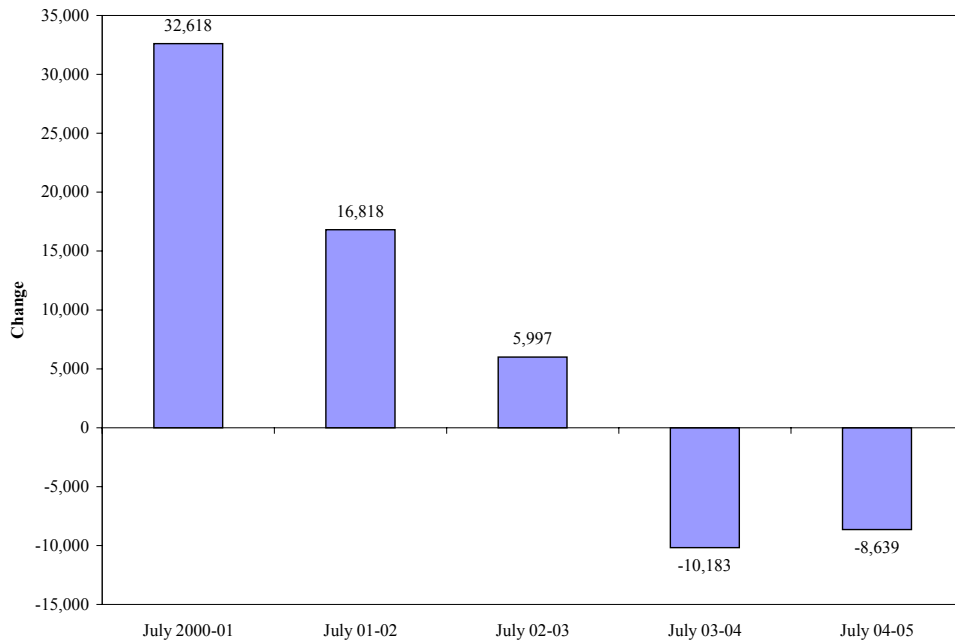
<sup>10</sup> Not all of these immigrants came directly to Massachusetts. Some lived elsewhere in the nation (New Jersey, New York, Florida) before migrating to Massachusetts. For a more detailed review of the English-language proficiencies and educational backgrounds of these new immigrant arrivals,

See: Andrew M. Sum, Johan Uvin, et.al., The Changing Face of Massachusetts.

<sup>11</sup> The U.S. population growth estimates are for the April 1, 2000 to July 1, 2005 period.

Massachusetts over the 2000-2005 time period.<sup>12</sup> Our state, thus, ranked 3<sup>rd</sup> lowest among 50 states on its population growth rate over the past five years. During the 1990s, our population growth rate was 10<sup>th</sup> lowest in the nation.

Chart 1:  
Estimated Growth in the Resident Population of the State of Massachusetts,  
July 1, 2000 to July 1, 2005



Why did the state’s population grow so slow over the past five years despite a continued high level of foreign immigration into the state? To answer this key question, we analyzed the individual components of population change over the past five years. The sources of population change within a state over a given time period can be classified in the following three categories.<sup>13</sup>

- Natural increase, representing the difference between the number of births and deaths over a given time period.

<sup>12</sup> The District of Columbia also lost population (-21,500) over the 2000-2005 period despite the fact that it attracted more than 20,000 new immigrants.

<sup>13</sup> There is also a “residual” component estimated by the U.S. Census Bureau, primarily consisting of the net movement of federal employees and their dependents and the return of military personnel from abroad.

- Net domestic migration, which represents the difference between the number of persons who migrated into the state from all other states and the number who left Massachusetts to reside in another state or the District of Columbia.
- Net international migration, which represents the difference between the number of persons moving to Massachusetts from countries abroad and the number of persons leaving Massachusetts to live abroad.<sup>14</sup>

Estimates of the components of population change in the state of Massachusetts between July 2000 and July 2005 are presented in Table 2. The number of births outpaced the number of deaths by nearly 124,000 over this five year period. Births exceeded deaths by a fairly uniform 25,000 each year. The natural increase in the resident population, however, was more than offset by high and rising levels of net out-migration to other states.<sup>15</sup> Over the entire five year period, the number of domestic out-migrants exceeded in-migrants by nearly 233,000 (Table 2). Net domestic out-migration rose from a level of 22,900 for the 2001-2002 period to 60,000 and over for the 2003-2004 and 2004-2005 periods.<sup>16</sup> The improvement in the state’s job market from early 2004 to mid 2005 did little to stem the outflow of residents to other states across the country.

Table 2:  
Components of Population Change in Massachusetts from July 2000 to July 2005

Source of Change	Amount
Natural Increase	123,781
• Births	405,330
• Deaths	281,549
Domestic Out-Migration	-232,945
Net International Migration	153,980
Residual	-8,205
Total Change, 2000-2005	36,611

Source: U.S. Census Bureau, website, tables on state population change by individual component, [www.census.gov](http://www.census.gov).

<sup>14</sup> Puerto Rico and the other outlying territories of the United States (Virgin Islands, Guam) are considered as foreign countries in estimating net international migration. A person moving from Puerto Rico to Massachusetts will be counted as an immigrant inflow into the state and the nation.

<sup>15</sup> For an assessment of the political and fiscal consequences of these population developments and the causes of high levels of domestic out-migration,

See: Scott Helman, “Census Estimate A Concern for State,” The Boston Globe, December 23, 2005, pp. A-1, A-15.

<sup>16</sup> Each annual component of population change is measured from July 1 of one year to July 1 of the following year.

In the absence of continued high levels of foreign immigration, the state's population would have declined between 2000 and 2005. Over this five year period, net international migration into Massachusetts was estimated by the U.S. Census Bureau to be just under 154,000 (Chart 2). Net international migration into Massachusetts was in the 26,000 to 33,000 range each year from 2000 to 2005 (Chart 2). The level of net foreign immigration did, however, decline steadily from July 2001-02 to July 2004-05, falling from 33,347 to 26,515. This drop in international migration combined with the large increase in domestic out-migration was responsible for shifting the state's population from positive growth at the outset of the decade to negative growth during the past two years. The decline in net international migration into the state in recent years was attributable to a combination of a lower level of net international migration for the country as a whole and a modestly declining state share of the national new immigration inflow.<sup>17</sup> Massachusetts' share of net international migration for the country fell from slightly over 2.60% between 2000-03 to 2.52 percent in 2004-05 (Chart 3). Further declines in net immigration inflows into Massachusetts will place additional downward pressures on state population growth unless domestic out-migration can be substantially curtailed in the coming years.

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<sup>17</sup> The estimated national level of net international migration fell from 1.221 million in 2003-2004 to 1.050 million in 2004-05.

Chart 2:  
Net International Migration into the State of Massachusetts, by Year From  
July 2000 to July 2005

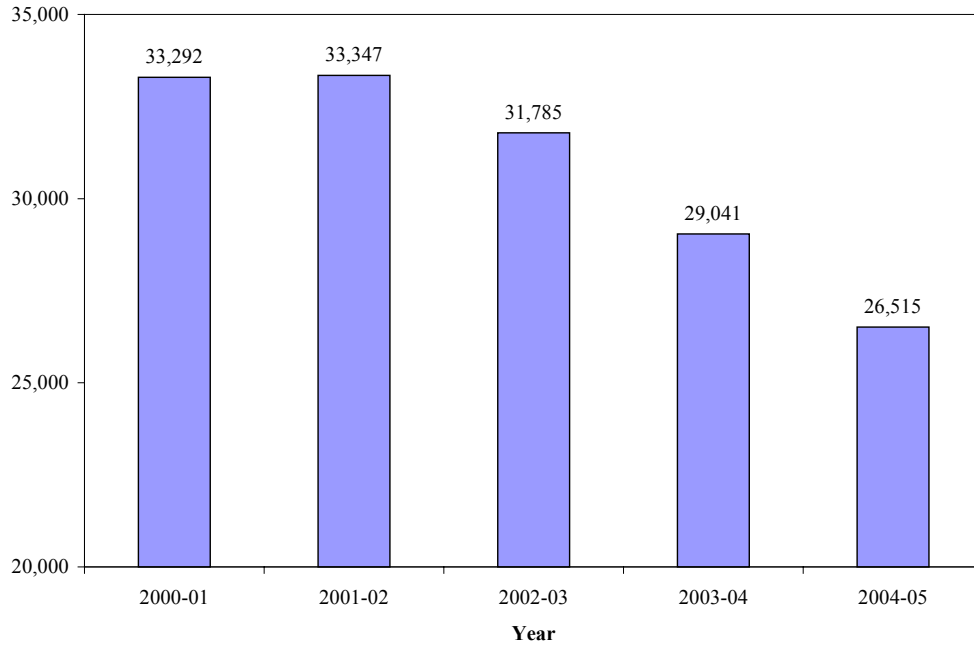
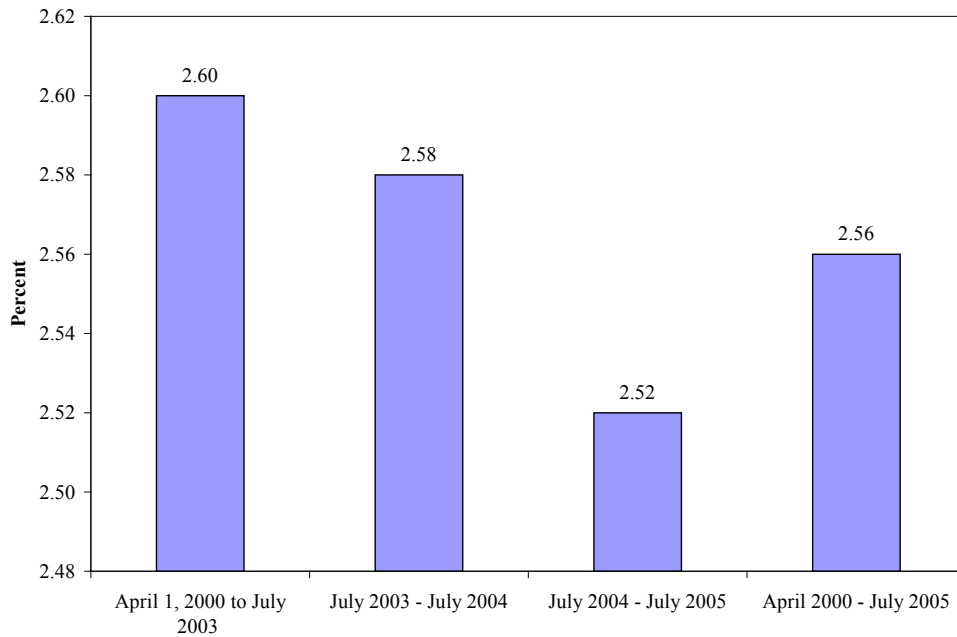
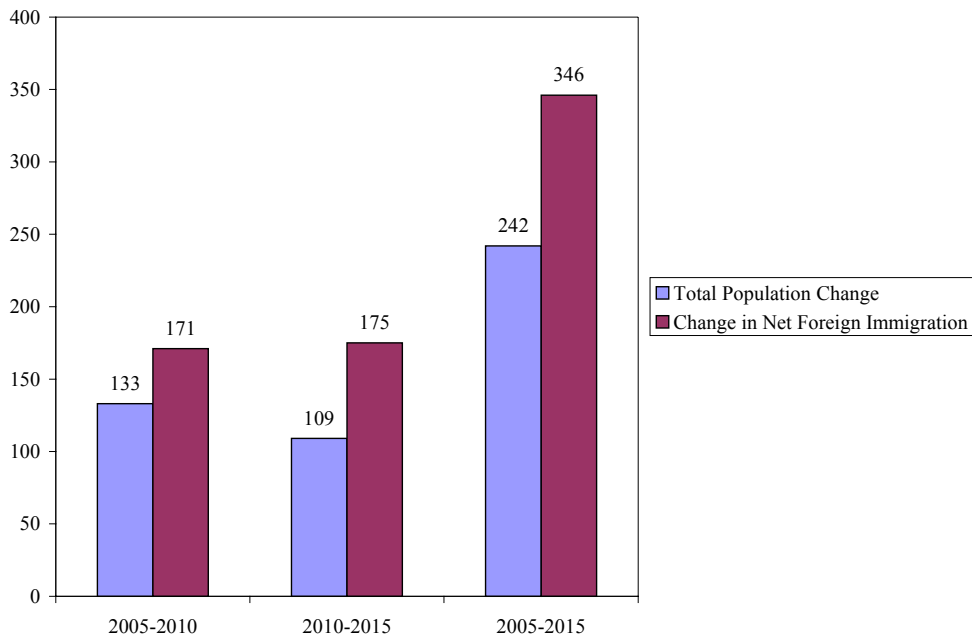


Chart 3:  
Massachusetts' Share of Net International Migration into the  
U.S., Selected Time Periods, 2000-2005  
 (in %)



Projections of state population and the components of that growth for the 2005-2015 indicate that the state will continued to be overwhelmingly dependent on foreign immigration for its population growth over the coming decade. Between 2005 and 2015, the U.S. Census Bureau projects that the state’s population will rise by 242,000 or nearly 4 percent, a substantial increase over its performance during the past five years (Chart 4). Over this ten year period, net international migration will be 346,000, accounting for 143 percent of the projected increase in the overall resident population. New foreign immigration will generate all of the state’s population growth over both the 2005-2010 and 2010-2015 periods. The degree of success in assimilating these new immigrants into the labor markets of the state and boosting their productivity and earnings will have a major influence on the labor market performance of the state over the coming decade and the real wages and earnings of Bay State workers.

Chart 4:  
Comparisons of Projected Population Change and Projected Net International  
Immigration into Massachusetts, Selected Time Periods, 2005 – 2015  
 (Numbers in 1000s)



Over the 2000-2005 period, Massachusetts was considerably more dependent on foreign immigration for its population growth than the nation as a whole. In fact, Massachusetts ranked highest among the 50 states in the share of its population growth attributable to net international immigration (Table 3). Between April 2000 and July 2005, net international immigration into the U.S. was estimated by the U.S. Census Bureau at 6.334 million. It accounted for 42% of the

growth in the resident population of the nation over this time period. The contributions of net foreign immigration to population growth across state varied quite considerably over the past five years. The net new immigrant share of population growth ranged from lows of 6% in Montana and 11% in Maine and Idaho to highs of 240% in New York and 327% in Massachusetts. New York and Massachusetts were the only two states completely dependent on net international migration for their population growth over the past two years although Illinois and New Jersey relied on new immigration for nearly all of their population growth.<sup>18</sup>

Table 3:  
The Five States Most Dependent on Net International Migration for  
Their Population Growth, April 2000 – July 2005  
 (Excluding D.C. and North Dakota, both of which lost population over this time period)

State	Percent
Massachusetts	327
New York	240
New Jersey	96
Illinois	95
Iowa	75

Source: U.S. Census Bureau, website, [www.census.gov](http://www.census.gov), “Cumulative Estimates of the Components of Population Change for the U.S. and States. April 1, 2000 – July 1, 2005.

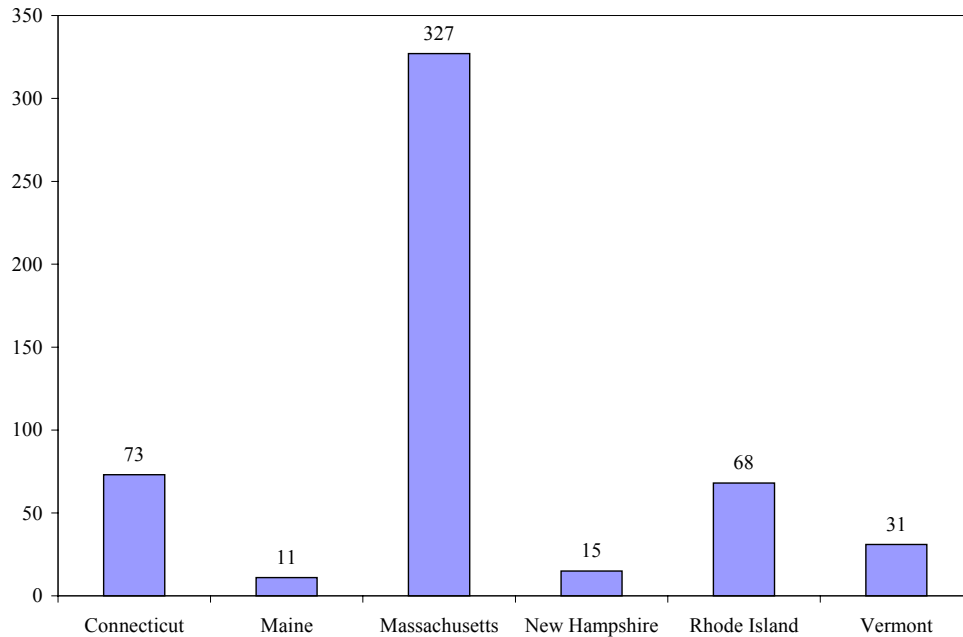
To place the immigration findings for Massachusetts into regional perspective, we also estimated immigration’s contributions to population growth over the 2000-2005 period for each of the other New England states. The dependence of the six New England states upon immigration for their population growth over the past five years varied quite widely across the six New England states (Chart 5). The shares of population growth due to net new immigration ranged from lows of 11% in Maine and 15% in New Hampshire to highs of 73% in Connecticut and 327% in Massachusetts. As was true of the 1990s, the southern tier of New England states was much more reliant on immigration for their population growth than the northern tier of Maine, New Hampshire and Vermont. Both Maine and New Hampshire have benefited from the

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<sup>18</sup> The analysis excludes the state of North Dakota and the District of Columbia, both of which lost population between 2000 and 2005. They incurred these population declines despite the existence of new foreign immigration, including nearly 21,000 net new immigrants in D.C.

out-migration of Massachusetts residents to their states, keeping domestic migration flows positive in both of these states over the past five years.<sup>19</sup>

Chart 5:  
Net International Migration as a Percent of Population  
Growth in Each New England State, 2000-2005



### **The Geographic Distribution of New Foreign Immigrants Across Counties of the State**

Historically, the immigrant population of Massachusetts has not been uniformly distributed across geographic areas of the state. Immigrants were traditionally concentrated in several eastern counties of the state (Bristol, Middlesex, and especially Suffolk) and the state’s central cities, particularly Boston, Fall River, Lawrence, and New Bedford.<sup>20</sup> Findings of the 2004 American Community Surveys can be used to identify the number of new immigrant arrivals residing in most counties of the state and their relative degree of concentration in each of

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<sup>19</sup> In 2004, according to the findings of the American Community Surveys, New Hampshire received 17,000 in-migrants from Massachusetts while the state lost only 6,400 of its residents to Massachusetts. Rhode Island also was a net recipient of migrants from the Bay State.

<sup>20</sup> For findings on the geographic distribution and relative concentrations of the foreign born population of the state by county, metropolitan area, and central city in the 1990s, See: Andrew Sum, W. Neal Fogg, et.al., The Changing Workforce: Immigrants and the New Economy in Massachusetts, pp. 39-42.

these counties.<sup>21</sup> In 2004, the number of new immigrants living in each of eight counties of the state ranged from lows of approximately 6,300 in Bristol and 8,000 in Plymouth counties to highs of 38,600 in Suffolk and 51,000 in Middlesex counties (Table 4). Suffolk and Middlesex counties combined accounted for nearly 53% of all new immigrant arrivals in the state between 2000 and 2004.

Table 4:  
The Distribution of New Immigrant Arrivals<sup>(1)</sup> into Massachusetts  
By County and their Relative Degree of Concentration in these Counties, 2000-2004

County	(A) Number of New Arrivals	(B) Percent of All New Arrivals In State	(C) Percent of Population of State in County	(D) Percent of New Immigrants/Percent of State Population in County, 2004
Bristol	6,277	3.7	8.6	.43
Essex	22,899	13.5	11.6	1.16
Hampden	11,624	6.8	7.2	.94
Middlesex	50,960	29.9	22.8	1.31
Norfolk	15,672	9.2	10.3	.89
Plymouth	7,958	4.7	7.7	.61
Suffolk	38,595	22.7	10.2	2.22
Worcester	11,834	7.0	12.2	.57
Balance of State	4,353	2.5	9.4	.27

Source: 2004 ACS surveys, U.S. Census Bureau website, tabulations by authors.

Note: New immigrant arrivals include persons born in Puerto Rico and the other outlying territories of the United States.

To identify the degree of concentration of new immigrants across counties of the state in 2004, we compared each county's share of new immigrants with their share of the total resident population of the state in 2004. Ratios over one imply that the county is an above average recipient of new immigrants, a ratio close to one implies that the county received a proportionate share of new immigrants, and ratios below one indicate that new immigrants are under-represented in the county. During 2004, these ratios ranged from lows of .27 in the balance of the state (Barnstable, Berkshire, Hampshire, the Island counties) and .43 in Bristol County to highs of 1.31 in Middlesex County and 2.22 in Suffolk County, which is dominated by the city of Boston. Clearly, in 2004 as was the case in 2000, a disproportionate share of new immigrants in

<sup>21</sup> The 2004 ACS survey does not provide any estimates for Barnstable, Berkshire, Dukes, Franklin, Hampshire, or Nantucket counties. Immigrants were substantially under-represented in these counties in 1990 and 2000.

the state choose to locate in Boston and Chelsea. The Western and Southeastern counties tend to attract a below average share of new immigrants.

Earlier, we noted that the state had become overwhelmingly dependent on new foreign immigrants for its population growth over the past five years. We have used U.S. Census Bureau estimates of population growth by county over the 2000-2004 period together with ACS estimates of new immigrants by county in 2004 to identify the degree to which their population growth was generated by the arrival of new immigrants since 2000. Three of the state's 14 counties (Berkshire, Middlesex, and Suffolk) were estimated to have experienced a decline in their resident population between 2000 and 2004 despite a rise in their immigrant populations over this time period.<sup>22</sup> The population losses in Middlesex and Suffolk counties were influenced by high levels of out-migration due in part to more severe job losses in these two counties between 2000 and 2004. In Bristol, Plymouth, and Worcester Counties, new immigrants generated between 40 and 50 percent of their recent population growth. In contrast, Essex, Hampden, and Norfolk Counties were completely dependent on new immigrant arrivals for their population growth. Their resident populations would have declined in the absence of new immigration over the 2000-2004 period. Most areas of the state were dependent on new immigrants to maintain their population levels over the past four years.

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<sup>22</sup> Berkshire's population also declined by nearly 2,500 or 1.8% over this time period; however, the ACS survey does not produce estimates of the characteristics of Berkshire County's population.

Table 5:  
Number of New Foreign Immigrants Residing in Massachusetts Counties in 2004, Total and as a Share of the Change in the Resident Population<sup>(1)</sup> of the County Between 2000-2004

	(A)	(B)	(C)
County	2000-2004 Population Change	New Immigrants In 2004 <sup>(2)</sup>	New Immigrants as % of Population Change
Bristol	13,498	6,277	46
Essex	15,565	22,899	147
Hampden	5,616	11,624	207
Middlesex	-768	50,960	N.A. <sup>(3)</sup>
Norfolk	3,309	15,672	473
Plymouth	17,833	7,958	45
Suffolk	-23,785	38,595	N.A. <sup>(3)</sup>
Worcester	28,525	11,834	41
Balance of State	7,615	4,353	57

Sources: (i) U.S. Census Bureau, Population Estimates of States by County, 2000-2004, web site;

(ii) American Community Surveys, U.S. Census Bureau, web site, tabulations by authors.

Notes: (1) Population counts exclude all persons residing in group quarters (dormitories, sororities/fraternities, juvenile homes, jails, prisons, nursing homes).

(2) New immigrants are those foreign born persons who arrived in the U.S. between 2000 and the time of the 2004 ACS surveys. New immigrants include persons born in Puerto Rico and other outlying territories of the U.S.

(3) N.A.: not applicable due to a population decline in this county between 2000 and 2004.

### **National Origins of New Immigrants in Massachusetts, 2003-2004**

Information on the countries of origin of new immigrants residing in Massachusetts was available from both the 2003 and 2004 ACS surveys. We have combined the findings from these two surveys to identify both the regions of the world and the individual nations from which new immigrants originated. The distribution of new immigrants in Massachusetts and the U.S. by region of the world are displayed in Table 6. For the state, the set of nations accounting for the largest share of new immigrants in 2003-2004 was South America. Just under 19 percent of all new immigrants had migrated from a South American country, with Brazil accounting for the lion's share of this group (Table 6). The next three largest groups of new immigrants came from East Asia (China, Japan, Vietnam, Thailand), the Caribbean (Dominican Republic, Haiti, Jamaica), and South Asia (India, Nepal). Central American countries contributed only six percent of the new immigrants in Massachusetts versus nearly 39 of every 100 new immigrants in the U.S. Mexico was by far the dominant generator of immigrants into the U.S., but it played only a very minor role in our state. Only 9 percent of the new immigrants residing in

Massachusetts came from Europe including Russia. These European countries and Canada had dominated immigration in the state in the 1800s and the first half of the 20<sup>th</sup> century.<sup>23</sup>

A listing of the 20 countries (and island territories) accounting for the largest number of new immigrants in Massachusetts and the U.S. in 2003-2004 is presented in Table 7. In our state, Brazil was the largest single sender of new immigrants. More than 1 of every 7 new immigrants had arrived from Brazil while in the U.S. less than 2 percent of the new immigrants hailed from Brazil. Mexico, which is by far the dominant source of new immigrants in the U.S., does not even make the top 20 list in Massachusetts. Only 1,200 Mexican immigrants arriving in the U.S. since 2000 were living in Massachusetts. While Massachusetts was the home for 2.6% of all new immigrants in the U.S., the state obtained less than .1% of all new immigrants from Mexico. In contrast, we captured 23% of all new immigrants from Brazil.

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<sup>23</sup> For a more detailed historical overview of the national origins of immigrants in Massachusetts, See: Andrew Sum, W. Neal Fogg, et.al, The Changing Workforce: Immigrants and the New Economy in Massachusetts...

Table 6:  
Regions of Birth of New Foreign Immigrants in Massachusetts and the U.S.  
(2003-2004 Averages)

<b>Massachusetts</b>			<b>U.S.</b>		
Region	Number	Percent	Region	Frequency	Percent
South America	28,700	18.9	Central America	2,255,280	38.7
East Asia	20,066	13.2	East Asia	541,691	9.3
Caribbean	16,064	10.6	South America	549,939	9.4
South Asia	13,917	9.1	South Asia	401,827	6.9
U.S. Islands Area	12,204	8.0	South East Asia	340,635	5.8
Africa	10,982	7.2	Caribbean	349,136	6.0
Central America	8,654	5.7	Africa	260,463	4.5
South East Asia	6,801	4.5	U.S. Islands Area	174,148	3.0
South Eastern Europe	5,084	3.3	Middle East	135,914	2.3
Central Europe	4,711	3.1	Central Europe	134,265	2.3
Middle East	4,560	3.0	Northern America	116,588	2.0
Northern America	4,129	2.7	Western Europe	130,358	2.2
Western Europe	3,033	2.0	South Eastern Europe	107,608	1.8
Russia	2,948	1.9	Eastern Europe	73,772	1.3
Eastern Europe	2,879	1.9	Russia	72,170	1.2
South West Europe	1,697	1.1	Oceania	44,928	0.8
Southern Europe	1,512	1.0	South West Asia	38,297	0.7
Asia, Country Not SP	1,402	0.9	Northern Europe	21,276	0.4
Northern Europe	1,172	0.8	Southern Europe	23,606	0.4
South West Asia	859	0.6	South West Europe	21,549	0.4
Oceania	1,688	1.1	Asia, Country Not SP	22,588	0.4
Total	152,212	100.0	Europe, Country NP	3,757	0.1
			Central Asia	2,718	0.0
			At Sea	770	0.0
			Total	5,823,276	100.0

Source: 2003 and 2004 American Community Surveys (ACS), U.S. Census Bureau., tabulations by authors.

The other countries (territories) making the top five list in Massachusetts were Puerto Rico, India, China, and the Dominican Republic. The state obtained an above average share of new immigrants from Puerto Rico, the Dominican Republic, China and Guatemala (Table 7). In contrast, the state received a relatively low share of immigrants from the Philippines (.9%) and a miniscule share of the new immigrant arrivals from Mexico. Not one European country made the top ten list in Massachusetts, and only two made the list of the top twenty (Russia and Poland). Only 1 of the top 20 countries (Canada) was an English-speaking country. These findings have important consequences for the English-speaking proficiencies of these new immigrant arrivals.

Table 7:  
Countries (Territories) Accounting for the Largest Number of New  
Foreign Immigrants in Massachusetts and the U.S. Between 2000 and 2003-2004  
(Annual Averages)

Rank	Country	Massachusetts		Country	U.S.	
		Number	Percent		Number	Percent
1	Brazil	22,537	14.8	Mexico	1,908,309	32.8
2	Puerto Rico	11,923	7.8	India	308,053	5.3
3	India	11,530	7.6	China	207,484	3.6
4	China	10,463	6.9	Philippines	182,867	3.1
5	Dominican Rep	8,541	5.6	Canada	115,427	2.0
6	Guatemala	4,826	3.2	Puerto Rico	152,959	2.6
7	Japan	4,615	3.0	Japan	109,253	1.9
8	Canada	4,073	2.7	Colombia	110,628	1.9
9	Jamaica	3,358	2.2	El Salvador	130,306	2.2
10	Haiti	3,311	2.2	Guatemala	110,117	1.9
11	Colombia	3,120	2.0	Korea	87,398	1.5
12	Albania	3,101	2.0	Haiti	75,314	1.3
13	Russia	2,948	1.9	Cuba	93,766	1.6
14	Vietnam	2,689	1.8	Vietnam	83,876	1.4
15	Poland	2,604	1.7	Brazil	97,083	1.7
16	Kenya	2,511	1.6	South Korea	70,023	1.2
17	Israel	2,294	1.5	Peru	71,446	1.2
18	Cape Verde	2,260	1.5	Russia	69,424	1.2
19	Nepal	2,061	1.4	Pakistan	57,668	1.0
20	Korea	1,967	1.3	Ecuador	62,491	1.1
	Top 20	109,696	72.1	Total of Top 20	4,105,891	70.5
	All New Immigrant	152,212	100.0	All New Immigrant	5,823,276	100.0

Source: 2003 and 2004 American Community Surveys (ACS), U.S. Census Bureau, tabulations by authors.

Table 8:  
Massachusetts Share of New Immigrants from Selected Countries in the U.S., 2000-2003/2004  
(in %)

Country	Massachusetts Share (in %)
Mexico	~0.1
Brazil	23.2
Puerto Rico	7.8
India	3.7
China	5.0
Philippines	.9
Dominican Republic	11.0
Guatemala	4.4
Japan	4.2
Canada	3.5
All Countries	2.6

Source: 2003/2004 ACS Surveys, public use files, tabulations by authors.

### **The Demographic Characteristics of New Immigrants in Massachusetts, 2004**

Who are these new immigrants residing in Massachusetts? To answer this question, we analyzed the demographic and human capital characteristics of new immigrants in the state. Key demographic characteristics of new immigrants in Massachusetts and the U.S. during 2004 are displayed in Table 9. Women accounted for a majority (55%) of all new immigrants in the state while males comprised a slight majority of new immigrants in the nation. The male share of new immigrants in the state was higher in 2003 than it was in 2004.<sup>24</sup> The higher share of women among new immigrants in Massachusetts is partly related to differences in the national origins of immigrants between the state and the nation. A much higher share of Mexican immigrants, especially labor force participants, are male, but our state attracts very few Mexican immigrants.

An overwhelming share (85%) of new immigrants in Massachusetts during 2004 were of working-age, i.e., 16 and older, and relatively few were teenagers (4%). Two-thirds of these new immigrants were in the prime working-age group (20-44 years old). This age distribution tends to raise the share of new immigrants who will be active participants in the state's civilian labor

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<sup>24</sup> Taking a two year average, the female share of new immigrants in Massachusetts during 2003-04 was only 51%, quite close to its share in the 1990s decade.

force. Only six percent of the new immigrants were 55 and older, a share basically identical to that for the U.S.

The new immigrants in Massachusetts were about evenly divided into three race-ethnic groups: Asian, Hispanic, and White, non-Hispanic, with each group accounting for somewhere between 28 and 31 percent of new immigrants in the state. Another 8 percent of the immigrants were Black, primarily reflecting immigration from several of the Caribbean nations (Haiti, Jamaica and Africa. In the U.S., Hispanics comprised a majority (53%) of new immigrants, largely reflecting the impact of the high levels of Mexican immigration into the nation during the past five years. The immigrants from Mexico contain a disproportionate share of young adults with limited formal schooling and English-speaking proficiencies.

Table 9:  
Age, Gender, and Race-Ethnic Characteristics of New Immigrants Residing in Massachusetts and the U.S. at the Time of the 2004 American Community Surveys

Group	Massachusetts		U.S.	
	Number	Percent	Number	Percent
<b><u>Gender</u></b>				
All	172,711	100.0	6,468,920	100.0
Male	78,473	45.4	3,359,847	51.9
Female	94,238	54.6	3,109,073	48.1
<b><u>Age</u></b>				
Under 16	25,716	14.9	1,287,608	19.9
16-19	7,285	4.2	491,919	7.6
20-24	26,475	15.3	996,883	15.4
25-34	59,071	34.2	1,959,641	30.3
35-44	29,142	16.9	965,459	14.9
45-54	14,928	8.6	427,734	6.6
55-64	5,153	3.0	198,581	3.1
65 +	4,941	2.9	141,095	2.2
<b><u>Race-Ethnic Origin</u></b>				
Asian	54,006	31.3	1,067,463	16.5
Black	13,281	7.7	442,861	6.8
Hispanic	48,247	27.9	3,424,222	52.9
Mixed	1,010	0.6	33,649	.5
Other	7,396	4.3	101,533	1.6
White	48,771	28.2	1,398,992	21.6

Source: 2004 American Community Survey (ACS), U.S. Census Bureau, tabulations by authors.

## The Educational Attainment and English-Speaking Proficiencies of New Immigrants

The human capital characteristics of immigrants in both the state and the nation play a critical role in determining their labor market success, especially their access to professional, managerial and technical occupations, their weekly earnings, and their annual earnings.<sup>25</sup> The distribution of working-age new immigrants in Massachusetts and the U.S. by their educational attainment in 2004 is presented in Table 10. Slightly under one of every five new immigrants in the state lacked a high school diploma from their home country or from the U.S. A majority of these new immigrants had completed at least one year of post-secondary education, and nearly 4 of 10 held a Bachelor's or higher degree in 2004.

Table 10:  
Educational Attainment of Working-Age New Immigrants  
(16 and Older) in Massachusetts and the U.S. in 2004

Group	Massachusetts		U.S.	
	Number	Percent	Number	Percent
1-12 Years of School, No Diploma	27,539	18.7	1,853,637	35.8
High School Diploma	41,283	28.1	1,162,110	22.4
Some College	21,225	14.4	781,797	15.1
Bachelor's Degree	30,525	20.8	827,977	16.0
Master's or Higher Degree	26,423	18.0	555,791	10.7
Total	146,995	100.0	5,181,312	100.0

Source: 2004 American Community Survey (ACS), U.S. Census Bureau, tabulations by authors.

The new immigrants in Massachusetts in 2004 were considerably better educated than their national counterparts. New immigrants in Massachusetts were only one-half as likely as their national counterparts to lack a high school education (19 vs. 36 percent), and they were much more likely to have obtained a Bachelor's or more advanced academic degree (39 percent vs. 27 percent). Differences in the mix of new immigrants by national origin between our state and the nation play a key role in influencing this outcome. Very high fractions of Mexican and Central American immigrants lack high school diplomas. They loom large in the U.S. immigrant population but are much less represented in the ranks of the new immigrant population in Massachusetts.

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<sup>25</sup> Evidence on each of these issues can be found in the following report.  
See: Andrew Sum, Johan Uvin, Ishwar Khatiwada, et.al., The Changing Face of Massachusetts.

The English-speaking proficiencies of the foreign born population 18 and older in Massachusetts at the time of the 2004 ACS surveys are summarized in Table 5A. Findings are presented for all of the foreign born as well as for recent immigrants and established immigrants, i.e., those arriving in the U.S. prior to calendar year 2000. The ACS questionnaire asked respondents to identify their English-speaking proficiencies. The responses provided by respondents were assigned to one of the following four categories:

- Only speaks English
- Speaks English very well
- Speaks English well
- Does not speak English well or does not speak English at all

Nearly 1 of 5 members of the state’s foreign born population (both new and old) reported that they only spoke English while another third claimed that they spoke English very well. On the other end of the spectrum, approximately one of four immigrants indicated that they either could not speak English at all or could not speak it well (Table 11). Not surprisingly, new immigrants reported a much higher incidence of English-speaking difficulties than their established counterparts. Just under 40 percent of the newer immigrant arrivals reported that they either could not speak English or speak it well versus only 20 percent of their established immigrant counterparts. National research evidence shows that the English literacy and document proficiencies of immigrants improves significantly with the number of years that they have spent learning English.<sup>26</sup>

Table 11:  
The Self-Reported English-Speaking Proficiencies of the Foreign Born Population  
18 and Older of Massachusetts, All and by Timing of Arrival in the U.S., 2004  
(in %)

	(A)	(B)	(C)
Self-Reported English-Speaking Proficiency	All	Arrived Before 2000	Arrived from 2000 on
Only speaks English	18.7	20.0	12.0
Speaks very well	34.6	35.9	28.0
Speaks well	22.8	23.3	20.2
Does not speak English well <u>or</u> does not speak it at all	24.0	20.9	39.8

Source: 2004 American Community Surveys, public use files, tabulations by authors.

<sup>26</sup> See: Andrew Sum, Irwin Kirsch, and Kentaro Yamamoto, A Human Capital Concern: The Literacy Proficiencies of U.S. Immigrants, Educational Testing Service, Princeton, 2004.

The English-speaking proficiencies of new immigrants is closely though far from perfectly linked with their educational attainment. In 2004, approximately two-thirds of all new immigrants with 12 or fewer years of schooling could not speak English well or speak it at all (Table 12). The share of new immigrants with such severe English-speaking difficulties fell to 27 percent among those with 1-3 years of post-secondary schooling, to 18 percent for those with a bachelor's degree, and to a low of 10 percent among those with a Master's or more advanced degree. Well educated immigrants with limited English-speaking skills face very serious problems in obtaining jobs in the professional/managerial ranks and will earn considerably less than their more proficient English-speaking peers.

Table 12:  
The Self-Reported English-Speaking Proficiencies of the New Immigrant  
Population in Massachusetts in 2004 by Educational Attainment  
(in %)

	(A)	(B)	(C)	(D)	(E)
Self-Reported English Speaking Proficiency	1-12 Years of School, no Diploma	H.S. Diploma/ GED	1-3 Years of College	Bachelor's Degree	Master's or Higher Degree
Only speaks English	18	6	9	15	15
Speaks English very well	11	16	38	31	51
Speak English well	4	14	26	36	24
Does not speak English well <u>or</u> does not speak English at all	67	65	27	18	10

Source: 2004 ACS surveys, public use files, tabulations by authors.

### **The Labor Force Behavior and Employment Status of New Immigrants in Massachusetts, 2004**

The questionnaire used in conducting the 2004 ACS survey collected information on the labor force status of all working-age respondents at the time the survey was completed.<sup>27</sup> The information on labor force activities was used to assign each working-age respondent into one of the following three, mutually exclusive labor force status groups:

<sup>27</sup> The ACS survey does not include interviews with persons living in group quarters, such as college dorms, fraternities, juvenile homes, jails, prisons, nursing homes.

- Employed. This category includes all persons working for pay or profit in the week prior to the survey, those with a job but not at work for reasons such as vacation, temporary illness, weather-related reasons, and persons working in a family owned business for 15 or more hours without pay.

- Unemployed. This category includes those persons who were not employed in the reference week, but were either on lay off from a job awaiting recall, or actively looking for work and available for work at the time of the survey.<sup>28</sup>

- Out of the labor force. This group consists of those persons who were neither employed nor unemployed. Some of these individuals may desire immediate employment but are not counted as unemployed since they do not meet either the job search test or the work availability test.

The sum of the employed and unemployed is equal to the labor force. With the data on the labor force status of the working-age population, we can estimate three key labor force activity measures:

- The civilian labor force participation rate, which is equal to the ratio of the civilian labor force to the civilian working-age population.<sup>29</sup>

- The unemployment rate, which represents the ratio of the unemployed to the civilian labor force.

- The employment/population ratio (E/P), which is the ratio of the employed to the civilian, non-group quarters population. The value of the E/P ratio is determined uniquely by the labor force participation rate and the unemployment rate.<sup>30</sup>

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<sup>28</sup> Those on layoff must have been told by their employer that they will be recalled to work within the next six months to be classified as unemployed. They also must have been available to take a job in the week prior to the survey.

<sup>29</sup> As noted earlier, the group quarter population is excluded from the scope of the ACS survey. Persons serving in the armed forces in the U.S. also are excluded from the analysis.

<sup>30</sup> The E/P ratio is determined algebraically by the following relationship:

$$E/P = L/P \bullet E/L$$

Where L/P = Labor force participation rate

E/L = The percent of the labor force that is employed

$$E/L = 1 - U/L$$

Where U/L = the unemployment rate

Estimates of the labor force status of new immigrants in Massachusetts and the U.S. at the time of the 2004 ACS survey are displayed in Table 13. Of the approximately 147,000 new immigrants of working-age who were residing in Massachusetts at the time of the 2004 survey, somewhat over 96,000 were actively participating in the labor force, representing a civilian labor force participation rate of 65.4%, which was slightly higher than the participation rate for their U.S. counterparts (64.8%). These new immigrants faced a relatively high unemployment rate (9.7%), yielding an E/P ratio of 59%. In other words 59 of every 100 new immigrants in Massachusetts were employed in 2004, an employment rate basically identical to that of new immigrants across the nation.

Table 13:  
Labor Force Status of Working-Age New Immigrants in Massachusetts and  
the U.S. (16+) at the Time of the 2004 American Community Survey, Total and by Gender

Labor Force Variable	Massachusetts			U.S.		
	Male	Female	Total	Male	Female	Total
Civilian Labor Force	52,616	43,464	96,080	2,175,087	1,179,767	3,354,854
Employed	49,097	37,698	86,795	2,011,407	1,024,567	3,035,974
Unemployed	3,519	5,766	9,285	163,680	155,200	318,880
NILF	13,725	37,190	50,915	528,558	1,291,444	1,820,002
Total	66,341	80,654	146,995	2,703,645	2,471,211	5,174,856
Labor Force Participation Rate (In %)	79.3	53.9	65.4	80.5	47.7	64.8
Unemployment Rate (In %)	6.7	13.3	9.7	7.5	13.2	9.5
Employment-Population Ratio (In %)	74.0	46.7	59.0	74.4	41.5	58.7

Findings for the 1990s and 2000 revealed that, there were very large gender gaps in the labor force participation rates and employment rates of new immigrants in Massachusetts and the U.S. similar patterns prevailed during 2004. Just under 80 percent of new immigrant males in the state were participating in the civilian labor force during that year versus only 54 percent of immigrant women. The gender gap in participation rates among new immigrants was even larger in the U.S. (33 percentage points). When they did enter the labor force, immigrant women in Massachusetts were twice as likely as men to be unemployed (13.3% vs. 6.7%). As a consequence of their considerably higher participation rate and their lower unemployment rate, new immigrant males were much more likely than women to be employed in Massachusetts in 2004. Nearly three of every four immigrant males were working versus only 47 percent of new

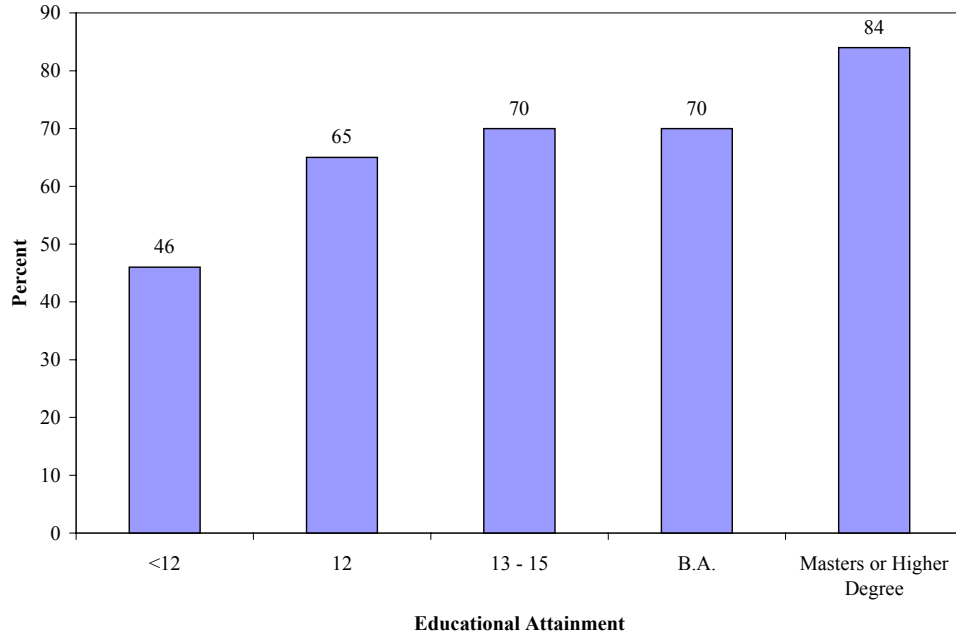
immigrant women. An even larger gender gap in employment rates prevailed among new immigrants in the U.S.

The much lower employment rates of immigrant women are influenced by a variety of factors, including their limited English-speaking abilities. Among all immigrants, employment rates are favorably influenced by their formal educational attainment and their English-speaking abilities (Charts 6 and 7). Immigrants lacking a high school diploma and those who could not speak English had the lowest employment rates while those with the most schooling (a Master's or higher degree) and stronger English-speaking proficiencies (speak English very well) were the most likely to be working. Immigrant women appear to be more adversely affected than men in the labor market by limited English-speaking skills. The absence of strong English communication skills reduces their access to clerical, administrative support, sales, and customer service occupations and sharply reduces their earnings potential. Lower expected wages from market work then reduces the incentive for them to seek paid work.<sup>31</sup> High unemployment rates among new immigrant women also likely create a discouragement effect, reducing the willingness of some women to seek work when job prospects are limited.

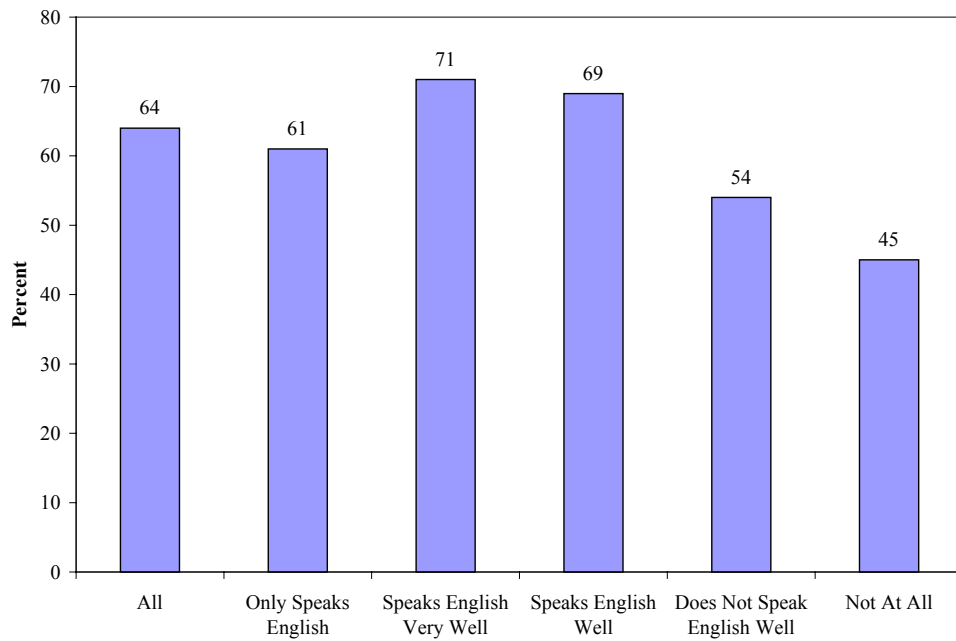
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<sup>31</sup> Findings from the 2000 Census also revealed that highly educated immigrants with weak English-speaking skills earn considerably less than their peers with stronger English-speaking proficiencies.

**Chart 6:**  
**Employment Rates Among the Foreign Born Population of**  
**Massachusetts by Educational Attainment, 2004**  
 (in %)



**Chart 7:**  
**Employment Rates Among the Foreign Born Population of**  
**Massachusetts by English-Speaking Proficiency, 2004**  
 (in %)



## The Influence of New Immigrants on Labor Force and Employment Growth in Massachusetts, 2000 to 2005

Flows of new immigrants into the state of Massachusetts were indispensable to labor force growth in the state during the 1990s. All of the increase in the state’s male resident labor force and nearly all of the growth in the female labor force in the 1990s was attributable to new immigrants.<sup>32</sup> To track the contributions of new immigrants to the growth of the Massachusetts resident labor force between 2000 and 2005, we analyzed the findings of the monthly CPS household surveys for Massachusetts for calendar years 2000 and 2005.<sup>33</sup>

Between 2000 and 2005, according to CPS estimates, the resident labor force of the state grew by only 43,000 or a little more than 1 percent (Table 14). Since 2002, the resident labor force of the state as measured by the LAUS methodology has actually declined. Yet, over this five year period, the number of new immigrants who were active in the civilian labor force grew by nearly 121,000. Thus, new immigrants accounted for well over 100 percent of the growth in the state’s labor force between 2000 and 2005 (Table 14). The number of native born persons and established immigrants (those arriving in the U.S. prior to 2000) in the state’s labor force must have declined by at least 77,000 over this five year period.

Table 14:  
Share of Growth in Massachusetts and U.S. Labor Force  
Due to New Foreign Immigration, 2000 – 2005

Area	(A) Growth in Civilian Labor Force	(B) Number of New Immigrants in Civilian Labor Force	(C) Percent of Growth Due to New Immigrants
Massachusetts	43,751	120,805	276
U.S.	6,945,506	4,387,133	63

Source: 2000 and 2005 monthly CPS public use files, tabulations by CLMS.

<sup>32</sup> The state’s native born male labor force declined considerably in the 1990s.

See: Andrew Sum, Ishwar Khatiwada, and Mykhaylo Trubs’kyy, The Influence of New Immigration on the Population and Labor Force of the Northeast Region, Report Prepared by the Center for Labor Market Studies, Northeastern University for Fleet Bank, Boston, 2003.

<sup>33</sup> The revised 2000 CPS public use files with sampling weights benchmarked to the 2000 Census population estimates were used in estimating the size of the resident labor force and employed in 2000. The CPS labor force estimate for 2000 is lower than the LAUS labor force estimate for that year. Thus, the CPS shows somewhat higher growth than the LAUS survey in the state’s labor force over this five year period (43,000 vs. 10,000).

Massachusetts was far more dependent than the nation on foreign immigration for its labor force growth over the past five years and, in fact, was more dependent on new foreign immigration than any other state in the nation. Between 2000 and 2005, nearly 4.4 million new immigrants joined the labor force of the nation, accounting for 63 percent of the nation's labor force growth over the first half of the decade (Table 14). This 63 percent immigrant share was the highest for our nation over any five year period in the post-WWII era. Massachusetts, however, was more than four times as dependent as the nation on new immigrants for its labor force growth over the past five years (276% vs. 63%).

The contributions of new foreign immigration to labor force growth over the 2000-2005 period varied substantially across the 50 states.<sup>34</sup> The immigrant share of labor force growth ranged from lows of 5 and 7 percent in Montana and Wyoming, respectively, to highs of over 200 percent in Oregon and Massachusetts. Our state ranked highest by far on this measure. In Table 15, we list the five states that were least dependent and the five states that were most dependent on immigration for their labor force growth over the 2000-2005 period. The five least dependent states, with immigrant shares of 13 percent or lower, included three Rocky Mountain states, one southern state, and one New England state (Maine). The five states most dependent on new immigrants for their labor force growth included three states in the Northeast region (Massachusetts, New York, and New Jersey), one southern state (Mississippi) and one Pacific coast state (Oregon).<sup>35</sup> While Mississippi attracted only 21,400 new immigrants into its labor force, the state's entire resident labor force only grew by 15,000 or less than 1 percent over this five year period, with some adverse post-Katrina effects on its labor force.

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<sup>34</sup> Three states (West Virginia, Illinois, and Michigan) and the District of Columbia are estimated to have experienced a decline in their resident labor force between 2000 and 2005 according to the CPS surveys for those two years.

<sup>35</sup> The LAUS labor force data for Oregon show somewhat more labor force growth in the state over this period than the CPS survey (49,000 vs. 13,00) use of the LAUS data to estimate labor force growth would reduce the immigrant share below 60%.

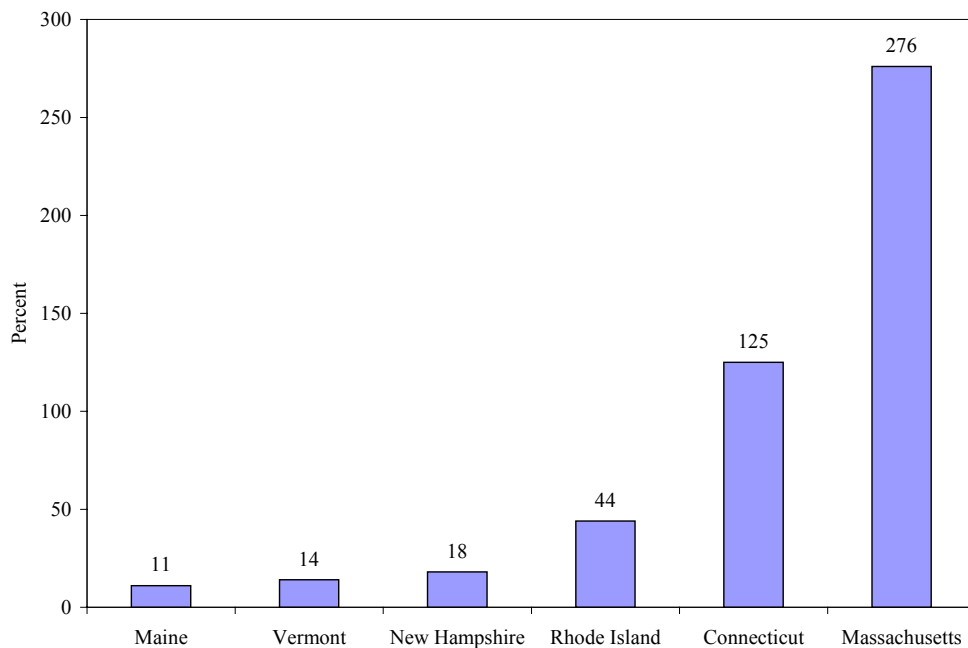
Table 15:  
The Five States Most Dependent and Least Dependent  
On New Immigration for Their Resident Labor Force Growth Between 2000 and 2005

State	(A) Change in Resident Labor Force	(B) Number of New Immigrants in Labor Force	(C) New Immigrant Share of Labor Force Growth
<b>Five Highest</b>			
Massachusetts	43,700	120,800	276
Oregon	13,500	28,500	211
New York	224,600	332,500	148
New Jersey	145,000	211,600	146
Mississippi	15,000	21,400	138
<b>Five Lowest</b>			
Arkansas	121,200	15,900	13
Maine	26,600	2,800	11
Idaho	80,700	8,500	10
Wyoming	16,300	1,200	7
Montana	21,100	1,100	5

Source: 2000 and 2005 CPS monthly surveys, public use files, tabulations by authors.

In Chart 8, we present our estimates of the share of labor force growth between 2000-2005 due to new immigrants in each of the six New England states. As was the case for population growth, the northern New England states were only marginally dependent on immigrants for their labor force growth, with none of the three states having an immigrant share above 18%. In contrast, the southern tier of states was much more dependent on immigrants, with Connecticut and Massachusetts relying on new immigrants to generate all of their labor force growth over the past five years. If we use the LAUS-based estimates of labor force growth in each New England state rather than the CPS estimates as the true measure of labor force growth, then new immigrants would have generated all (109%) of the region's combined labor force growth over the 2000-2005 period.

Chart 8:  
Share of Resident Labor Force Growth Due to New Foreign  
Immigration in Each New England State, 2000 – 2005



Findings of the 2000 and 2005 monthly CPS surveys also were used to generate estimates of labor force growth by gender group and nativity status in Massachusetts. During the 1990s, women generated the bulk of labor force growth (over 90%) in the state, with steep declines taking place in the number of labor force participants among native born males. Between 2000 and 2005, the male resident labor force is estimated to have increased by only 6,445 versus a gain of 37,306 labor force participants among women (Table 16). Women, thus, generated 85 percent of the growth in the state’s resident labor force.

Among males, the number of new immigrants in the resident labor force was estimated to have been slightly over 68,500 in 2005 (Table 16). Since the entire male labor force only increased by 6,445, this implies that the number of native born and established immigrant males must have declined by 62,000 between 2000 and 2005. Among women, the number of new immigrants who were active participants in the labor force in 2005 was nearly 52,300. Given growth of only 37,300 in the entire female labor force between 2000 and 2005, this finding implies that the combined native born and established immigrant female labor force must have declined by nearly 15,000 (Table 16). Thus, among both men and women, more than all of the

modest labor force growth in the state over the past five years was generated by new immigrants arrivals. Similar to developments in the 1990s, there were steep declines in the number of native born men in the labor force of the state, some of whom migrated out of the state and others were displaced by new immigrant workers.

Table 16:  
Share of Growth in the Massachusetts Labor Force Due to  
New Foreign Immigration by Gender, 2000 – 2005

	(A)	(B)	(C)	(D)
Gender Group	Change in Labor Force	Number of New Immigrants in Labor Force	Change in Number of Native Born and Established Immigrants in Labor Force	Percent of Change Due to New Immigrants
Men	6,445	68,526	-62,081	1,063
Women	37,306	52,279	-14,973	140

Source: 2000 and 2005 monthly CPS public use files, tabulations by authors.

Between 2000 and 2005, a rise in the rate of unemployment in the state due to severe job losses was sufficiently large to reduce the number of employed persons. According to the CPS estimates, the number of employed residents fell by nearly 30,000 over this time period.<sup>36</sup> Yet, in 2005, the number of new immigrants working in the state was 107,000 (Table 17). Given a net decline of 29,000 employed residents in the state since 2000, this indicates that the number of employed native born workers and established immigrants fell by at least 136,000 or between 4 and 5 percent over this period. Teenagers and young adults in their 20s without Bachelor degrees were the biggest job losers in the state over the past five years. Very similar developments took place across the entire country over the same five year period.

<sup>36</sup> Findings of the LAUS program reveal that the decline in the number of employed residents between 2000 and 2005 was greater than that from the CPS. The LAUS resident employment estimate for 2005 was closer to 60,000 below the 2000 employment estimate.

Table 17:  
Trends in Civilian Employment (16+) in Massachusetts, 2000 to 2005,  
All and by Nativity Status  
 (Annual Averages, in 1000s)

Variable	Value
Number of employed persons, 2000	3,238
Number of employed persons, 2005	3,209
Change in employment	-29
Number of employed new foreign immigrants	107
Change in employed native born and established immigrants	-136

### **The Characteristics of the Jobs Held by New Immigrant, Established Immigrant and Native-Born Workers, 2003-2004**

Where do new immigrants fit into the state's and nation's labor markets? Are they substantially confined to certain sectors or occupational clusters or are they widely distributed across most job segments? To answer these questions, we will examine key characteristics of the jobs held by new immigrant workers in Massachusetts in 2003-2004 and compare them to the characteristics of jobs held by established immigrants and native-born workers in the state during the 2003-2004 period. To identify the types of jobs held by the aforementioned groups, we analyzed 2003 and 2004 American Community Survey data on three sets of job characteristics: class of workers status, the industrial sectors of the jobs held by the employed at the time of the surveys, and the major occupational categories of those jobs. We also compared Massachusetts' findings with those for the nation to see if any substantial differences occur in the characteristics of the jobs held by new foreign immigrants in these two geographic areas. The results are summarized below.

The jobs held by the employed can be classified into one of the following five class of worker categories:

- Private sector, wage and salary worker
- Public sector, wage and salary worker
- Self-employed, incorporated
- Self-employed, unincorporated
- Unpaid workers in family owned business who worked 15 or more hours during the week.

Findings of our analysis of the class of worker status of the employed in Massachusetts revealed that the overwhelming share of the jobs held by new immigrants were private sector,

wage and salary positions, with new immigrant workers under-represented in government jobs and among the self-employed (Table 18). Slightly more than 90% of all of the new immigrants who were employed in Massachusetts in 2003-2004 were working in the private sector versus 84% of established immigrants and 75% of the native-born. Not all of the wage and salary jobs held by new immigrants will appear on the official payrolls of non-farm employers as reported to the Massachusetts Division of Unemployment Assistance or the U.S. Bureau of Labor Statistics. Anecdotal evidence and field research has revealed that a number of these new immigrant workers appear to be employed as contract workers or work in the informal labor market, frequently paid in cash on a daily or weekly basis. The likelihood of an immigrant worker being self-employed, i.e., becoming an entrepreneur, a business owner, or a self-employed professional, technical or craft worker, is believed to be positively linked with the length of stay of the immigrant in the U.S. Findings from the ACS survey support this hypothesis- only 4.7% of new immigrants in Massachusetts were self-employed during 2003/2004 versus nearly 9% established immigrants and nearly 11% of native-born workers during the same time period. For the entire nation, the findings on the class-of-worker status of new immigrants were largely similar to those for Massachusetts, except that new immigrants in the nation were somewhat more likely to be employed by the government or to be self-employed.

Table 18:  
Distribution of Employed Native-Born, Established Immigrant, and  
New Immigrant Workers by Class of Worker Status, Massachusetts and the U.S.  
(2003-2004 Average)

Class of Workers	Massachusetts			U.S.		
	Native Born	Established Immigrant	New Immigrant	Native Born	Established Immigrant	New Immigrant
Private Sector, Wage and Salary Workers	74.8	83.4	90.4	73.1	78.5	87.5
Government, Wage and Salary	14.4	7.8	4.8	16.1	9.5	6.4
Self-Employed, Incorporated	7.5	5.9	3.4	7.1	7.8	4.4
Self-Employed, Unincorporated	3.2	2.7	1.3	3.5	3.9	1.5
Family Worker Without Pay	0.2	0.2	0.0	0.3	0.3	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: 2003 and 2004 American Community Surveys (ACS), U.S. Census Bureau, tabulations by authors.

The American Community Survey (ACS) questionnaire also collected data on the industries of the employers of all persons who were working at the time of the survey. Using the NAICS industry codes of the U.S. Census Bureau, we have classified all jobs held by employed new immigrants, established immigrants, and native-born workers into 22 major industrial sectors. While new immigrant workers were employed in every one of these industrial sectors, their share was markedly higher than that of the native-born workers in four sectors: accommodation and food services (16.3%), retail trade (12.5%), construction (9.7%), and administrative support and waste management (8.6%), including temporary help industries. These four industrial sectors in Massachusetts accounted for nearly one-half of all employed new immigrants in the state. In the same four sectors, the employed shares among established immigrant was only 26% and among the native-born only 25%. Approximately 10% of new immigrants were working in manufacturing industries in the state. New immigrants found jobs in the state's manufacturing sector at a time when manufacturing jobs losses in the state were quite substantial amounting to 76,000 between 2001 and 2004. Established immigrants were even more heavily over-represented in the state's manufacturing sector. In Massachusetts as was true for the nation, new immigrants were over-represented in the state's construction sector. In the state, approximately 10 out of 100 employed immigrants were working in the construction sector compared to 5% of established immigrants and 6% of native-born workers. New immigrant workers were substantially under-represented in finance and insurance, real estate, and public administration.

Table 19:  
Distribution of the Employed in Massachusetts and the  
U.S. by Major Industry and by Nativity Status  
(2003-2004 Averages)

Industry	Massachusetts			U.S.		
	Native Born	Established Immigrant	New Immigrant	Native Born	Established Immigrant	New Immigrant
Agriculture, Forestry, Fishing, and Hunting	0.4	0.8	0.0	1.3	1.8	2.9
Mining	0.0	0.0	0.0	0.4	0.2	0.3
Utilities	0.8	0.3	0.0	0.9	0.4	0.3
Construction	6.4	5.0	9.7	6.9	9.2	14.5
Manufacturing	10.0	17.4	9.4	11.8	14.7	13.0
Non-Durable Manufacturing	3.2	6.7	3.5	4.1	5.9	5.4
Durable Manufacturing	6.8	10.7	5.9	7.7	8.8	7.6
Wholesale Trade	3.5	2.5	3.2	3.7	3.9	3.1
Retail Trade	10.9	8.5	12.5	12.0	10.0	9.6
Transportation and Warehousing	3.4	3.0	1.5	4.2	4.3	2.5
Information	3.0	1.8	2.0	2.7	2.0	1.6
Finance and Insurance	7.0	5.7	2.2	5.4	3.9	2.1
Real Estate, Rental and Leasing	2.0	1.7	0.0	2.1	2.1	0.9
Professional, Scientific and Technical	8.9	6.2	7.7	6.0	5.2	5.0
Management	0.2	0.1	0.0	0.1	0.0	0.0
Administrative Support and Waste Management	2.9	4.0	8.6	3.4	5.3	7.8
Educational	10.8	7.8	9.9	9.1	5.3	5.9
Healthcare and Social	14.3	17.8	9.7	12.1	11.7	7.6
Arts, Entertainment and Recreation	1.8	0.7	1.8	2.0	1.6	1.4
Accommodation and Food Services	4.7	9.1	16.3	5.9	9.4	14.8
Other Services	4.4	5.4	5.1	4.7	6.3	5.4
Public Services	4.5	2.4	0.3	5.4	2.6	1.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: 2003 and 2004 American Community Surveys (ACS), U.S. Census Bureau, tabulations by authors.

We also examined the occupational characteristics of the jobs held by employed new immigrants in Massachusetts and the U.S. during 2003-2004. We combined more than 900 individual SOC based occupations into 22 major occupational groups (Table 20).<sup>37</sup> Findings clearly revealed that new immigrants are employed in every major occupational group, defying

<sup>37</sup> The Standard Occupational Classification (SOC) system is used by the U.S. Census Bureau to code the titles of the jobs held by the employed.

the claims of some labor market and media analysts that new immigrants are only taking jobs that American workers will not perform. In Massachusetts, 23% of these new immigrants were employed in blue-collar occupations, such as construction, extraction, installation, maintenance, repair, production, transportation and material moving. The share of native-born workers in these some occupations in Massachusetts was only 17%. New immigrants also were over-represented in building and ground cleaning, food preparation, and serving occupations. Nearly one quarter of new immigrants were employed in these service-related occupations compared to only 6% of native-born workers. At the end of the high skills distribution, new immigrants were substantially under-represented in management-related and business and financial operation occupations. The share of the native-born who were employed in these two sets of occupations was nearly 4 times as high as that of new immigrants (17% versus 4.6%), and new immigrants held clerical/office support positions at a rate only one-third as high as that of the native-born (5% versus 15%), reflecting their more limited formal schooling and limited English-speaking skills and the lower share of women in the ranks of new immigrant workers. Slightly more than 19% of new immigrants were employed in professional-related occupations versus nearly one-fourth of the native-born. While new immigrants in the aggregate were somewhat under-represented in professional occupations, they tended to obtain an above average share of jobs in a few professional specialties, including computer and mathematical science occupations and life/physical/social science occupations.

Table 20:  
Distribution of Employed Persons 16 and Older in Massachusetts and the  
U.S. by Major Occupation and by Nativity Status  
(2003-2004 Averages)

Occupation	Massachusetts			U.S.		
	Native Born	Established Immigrant	New Immigrant	Native Born	Established Immigrant	New Immigrant
Management Occupations	11.4	6.5	3.8	10.0	7.2	4.4
Business and Financial Operations Occupations	5.9	3.7	0.8	4.5	3.2	1.9
Computer and Mathematical Occupations	3.1	5.8	6.0	2.2	3.1	3.4
Architecture and Engineering Occupations	2.3	2.3	2.1	2.0	2.2	1.8
Life, Physical, and Social Science Occupations	1.7	2.3	6.7	0.9	1.1	1.8
Community and Social Services Occupations	1.7	2.2	0.2	1.7	1.0	0.5
Legal Occupations	1.8	0.5	0.4	1.3	0.5	0.2
Education, Training, and Library Occupations	7.0	4.6	6.8	6.0	3.4	4.0
Arts, Design, Entertainment, Sports, and Media Occupations	2.3	1.4	1.9	1.9	1.5	1.3
Healthcare Practitioner and Technical Occupations	5.9	5.7	2.2	5.0	4.6	2.7
Healthcare Support Occupations	2.0	4.4	3.0	2.1	2.7	1.7
Protective Service Occupations	2.3	1.3	0.0	2.3	1.1	0.5
Food Preparation and Serving Occupations	3.7	7.2	12.5	4.7	6.9	11.7
Building and Grounds Cleaning Occupations	2.7	6.6	12.0	3.0	7.3	10.3
Personal Care and Service Occupations	3.1	3.4	3.6	2.9	3.5	3.0
Sales and Related Occupations	11.4	7.0	9.5	11.9	9.3	7.6
Office and Administrative Support Occupations	14.8	10.3	5.3	15.6	10.4	7.2
Farming, Fishing, and Forestry Occupations	0.2	0.9	0.4	0.5	1.6	2.9
Construction and Extraction Occupations	5.0	4.8	9.2	5.5	8.5	14.6
Installations, Maintenance, and Repair Occupations	3.2	2.1	1.2	3.7	3.1	2.1
Production Occupations	4.4	12.3	6.4	6.5	10.7	9.8
Transportation and Material Moving Occupations	4.2	4.8	6.0	6.0	6.9	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: 2003 and 2004 American Community Surveys (ACS), U.S. Census Bureau, tabulations by authors.

## **Summary of Key Findings and Their Workforce Development Implications**

This research report has identified the size of the flows and characteristics of new immigrants into the state's resident population and labor force over the past five years (2000-2005) and compared demographic and labor force developments in Massachusetts with those for other states and the nation as a whole. A summary of key findings and a brief discussion of their workforce development implications are presented below.

(i) Net international migration accounted for all of the state's modest population growth over the past five years. Between April 2000 and July 2005, the number of new immigrants arriving in the state exceeded out-migrants to other countries by nearly 163,000. The state's entire resident population grew by only 50,000 over the same time period. In relative terms, Massachusetts was more dependent than any other state on new foreign immigration for its population growth.<sup>38</sup>

(ii) According to U.S. Census Bureau population estimates, net international migration into the state has slowed over the past few years, falling from 33,000 per year over the first two years of the decade to only 26,500 over the July 2004-July 2005 period. The combination of rising domestic out-migration to other states and a declining level of net international migration led to modest drops in the resident population of the state over the past two years. The U.S. Census Bureau has recently projected that all of the state's net population growth over the next 10 years will be produced by new immigration.

(iii) An analysis of the demographic characteristics of the new immigrant arrivals residing in the state in 2003-2004 revealed that women constituted a slight majority of all new arrivals, a substantial majority (85%) were of working-age, and Asians, Hispanics, and Whites each accounted for between 28 and 31 percent of new immigrants residing in the state in 2004. The five countries (territories) accounting for the largest number of new immigrants were Brazil, Puerto Rico, China, India, and the Dominican Republic. Very few immigrants were from Mexico, the dominant source of new immigrants across the nation over the past five years. Only one English-speaking country (Canada) and two European countries (Poland and Russia) made the top 20 list.

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<sup>38</sup> The relative measure is the ratio of new immigrants to population growth in the state between 2000 and 2005.

(iv) Approximately two-thirds of all working-age new immigrants in the state were either employed or actively looking for work during 2004. Male immigrants, however, were much more likely than their female peers to be actively participating in the civilian labor force and they were only one-half as likely to be unemployed when they did look for work. There was a very large 28 percentage point gap between the employment rates of new immigrant men and women in 2004.

(v) There were nearly 121,000 new immigrants in the state's resident labor force in 2005. They accounted for more than all of the growth in the state's resident labor force between 2000 and 2005. Of all states with some labor force growth over this time period, Massachusetts was the most dependent on immigration for its labor force growth.<sup>39</sup> The number of native born persons in the state's labor force declined by more than 80,000 over this time period, due to a combination of out-migration of working-age, native born persons and declining rates of labor force participation among those remaining in the state, especially teens and young adults (20-24).

(vi) The overall number of employed residents in the state fell between 2000 and 2005 due to steep payroll job losses from 2001 through 2003. While the number of employed native born persons fell sharply (by 130,000 or more) there were 107,000 new immigrants at work in 2005. Some of these job gains for new immigrants came at the expense of young native born workers, especially those without a Bachelor's degree. A substantial majority (90%) of the employed new immigrants were working as wage and salary workers in the private sector though not all of them were on the formal payrolls of their employers. Relatively few new immigrants worked for the government, were self-employed, or were unpaid workers in family-owned businesses during 2004.

(vii) The employment rates of all immigrants in Massachusetts in recent years were positively associated with their years of formal schooling and their English-speaking proficiencies. Efforts to improve both the formal schooling and English-speaking proficiencies of legal immigrants should be promoted to bolster future labor force and employment growth. Upgrading the English-speaking proficiencies of well-educated immigrants also should boost their access to more highly skilled professional, managerial, and technical occupations and

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<sup>39</sup> As noted earlier, three states (Illinois, Michigan, and West Virginia) did not experience any labor force growth between 2000 and 2005.

improve their long-term earnings prospects. Both joblessness and mal-employment problems are severe among college-educated immigrants.

(viii) There is an important gap in our existing knowledge base with respect to the delivery of employment and training services to immigrants and the effectiveness of one-stop care centers, WIA-funded employment and training programs, and adult basic education programs in increasing the employability and earnings of immigrant adults who participate in such programs. The Commonwealth Corporation and the Massachusetts Department of Education should conduct outcome and impact evaluations of such programs to help guide future funding and program design. A similar information gap exists at the national level as well. In fact, a number of existing workforce development information systems, including the U.S. Department of Labor's WIASRD reporting system, do not require states to report any information on the nativity status of program participants.