

Immigrant Workers in the New England Labor Market: Implications for Workforce Development Policy

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Introduction

The decade of the 1990s witnessed a massive, historically unprecedented new wave of foreign immigration into the U.S. and the New England region. Between 1990 and 2000, more than 13.6 million new foreign immigrants arrived in the U.S., accounting for nearly 42 percent of the nation's entire population growth, the largest share in the past 100 years.¹ Here in New England, more than 600,000 new foreign immigrants arrived during the decade of the 1990s, and they accounted for a much higher share (84%) of the region's population growth over the past decade.

Given the high share of new immigrants in New England that were of working age (16 and older), the relatively young ages of these working-age immigrants, and their strong attachment to the labor market, especially among men, they contributed substantially to regional labor force growth over the 1990s. As revealed in an earlier chapter in this volume, new immigrants were responsible for all of the net growth in the region's civilian labor force between 1990 and 2001.² For the nation as a whole, one-half of labor force growth over the same eleven year period was generated by new foreign immigrants, the highest national share for any decade since the end of World War II.³

This chapter of The Workforce Development Report for New England will provide a more detailed description and analysis of the changing role of foreign immigrants in New England labor markets and the implications of these developments for future workforce development policymaking and program operations in our region. We will begin our analysis with a review of key demographic developments in New England during the decade of the 1990s, identifying the flows of new immigrants into our region, their age distribution, and their contributions to overall population growth throughout the region as a whole and for key geographic subdivisions. The demographic analysis will be followed by an examination of the

¹ See: Andrew Sum, Ishwar Khatiwada, Nathan Pond, and Jacqui Motroni, The New Great Wave: Foreign Immigration in Massachusetts and the U.S. During the Decade of the 1990s, Center for Labor Market Studies, Northeastern University, Boston, Prepared for the Teresa and H. John Heinz III Foundation, Washington, D.C., June 2002.

² See: Andrew Sum, Ishwar Khatiwada, Nathan Pond, et.al., Labor Force Growth in New England: Past, Current, and Future Trends and Their Implications for Workforce Development Policy, Report Prepared for the U.S. Department of Labor, Employment and Training Administration, New England Regional Office, Boston, June 2002.

³ See: Andrew Sum, Neeta Fogg, Paul Harrington, et.al., Immigrant Workers and the Great American Job Machine: The Contributions of New Foreign Immigration to National and Regional Labor Force Growth in the 1990s, Report Prepared for the National Business Roundtable, Washington, D.C., August 2002.

growth of the new immigrant civilian labor force in the region between 1990 and 2001 and its contributions to the overall growth of the region's civilian labor force and that of individual New England states.⁴ Findings for New England will be compared to those for the U.S. and each of the other eight geographic divisions.

The analysis of aggregate immigrant labor force developments in New England will be followed by an examination of the size of the new immigrant labor force by gender and the contributions of male and female immigrants to regional labor force growth over the 1990 to 2001 period. The demographic characteristics of these new immigrant labor force participants then will be examined, including their gender, age, and educational attainment characteristics. The educational backgrounds of new immigrant labor force participants in New England will be compared to those of their U.S. counterparts. The labor force participation rates, unemployment rates, and employment/population ratios of working-age residents of New England in 2001 by nativity status will be examined, including comparisons of the labor force status of native born adults with that of new foreign immigrants.

The remaining sections of this chapter will be devoted to an analysis of the employment patterns of new immigrant workers in New England and individual New England states by major industrial sector and major occupational group and within specific industry/occupation clusters. These job clusters will include craft workers in construction, production workers in manufacturing, janitors and private household workers, and service workers within selected service industries that have been high growth areas in our region. The increasing dependence of the region's manufacturing industries on immigrant workers for many blue collar jobs will be highlighted. The final section of this chapter will discuss the implications of the findings on immigrant labor force growth for future workforce development policies and programs in the region.

⁴ New immigrant civilian labor force participants are defined as those who came to the U.S. between 1990 and 2001. The residences of these new foreign immigrants are those as of the time of the 2001 CPS surveys. Based on our interviews with immigrant workers, many immigrants in New England came here after a first residence elsewhere in the country.

The Growth of the New Immigrant Population in New England

Findings of the 2000 Census of Population and Housing with respect to the size of the resident population in New England and each of the six New England states are displayed in Table One. At the time of the 2000 Census, there were 13.92 million residents of New England, representing an increase of 716,000, or nearly 5.4 percent over the decade. During the 1990s, somewhat over 600,000 new foreign immigrants moved into the New England region, accounting for 84 percent of the region's population growth, the highest share in the twentieth century, including the era of the Great Immigration Wave between 1890 and 1910.⁵ The only other geographic region that was more dependent on foreign immigration for its population growth was the Mid-Atlantic region. The overwhelming share of these new immigrants (93%) located in the three southern New England states where they generated all of the net increase in each of these three states' populations. The three northern New England states (Maine, New Hampshire, and Vermont) attracted 40,000 new foreign immigrants, accounting for just 18 percent of their population growth over the decade.

⁵ See: (i) Andrew Sum, Ishwar Khatiwada, Nathan Pond and Jacqui Motroni, The New Great Wave: Foreign Immigration in Massachusetts and the U.S. During the Decade of the 1990s, Prepared for the Teresa and H. John Heinz III Foundation, Washington, D.C., June 2002; (ii) Andrew Sum, Ishwar Khatiwada, Jacqui Motroni, and Nathan Pond, Moving Out and Moving In: Out-Migration and Foreign Immigration in the Northeast Region and New England During the 1990s, Prepared for the Teresa and H. John Heinz III Foundation, Washington, D.C., June 2002.

Table 1:
Trends in the Resident Population and the New Immigrant Population⁽¹⁾ in the
New England Region and Each New England State, 1990 – 2000
(Numbers in 1000s)

	(A)	(B)	(C)	(D)	(E)
State	1990 Population	2000 Population	Change in Population, 1990 – 2000	New Immigrant Population 1990 - 2000	New Immigrant Share of Population Increase
<u>Southern New England</u>	10,306	10,803	496	565	114
• Connecticut	3,287	3,406	118	177	150
• Massachusetts	6,016	6,349	333	337	101
• Rhode Island	1,003	1,048	45	51	113
<u>Northern New England</u>	2,900	3,120	220	40	18
• Maine	1,228	1,275	47	10	21
• New Hampshire	1,109	1,236	127	21	16
• Vermont	563	609	46	9	20
All New England	13,206	13,922	716	605	84

Source: 1990 and 2000 Census of Population and Housing, tabulations by authors.

Notes: ⁽¹⁾ New immigrants are those who arrived in the U.S. between 1990 and April 2000.

New immigrants include persons born in Puerto Rico, the U.S. Virgin Islands, Guam, and the other outlying island territories of the U.S.

The impact of this new influx of foreign immigrants on the civilian labor force of New England is dependent on their age characteristics and the degree of their labor force attachment. Findings in Table 2 present information on the share of the civilian non-institutional population in New England during calendar year 2000 that was of working-age; i.e. 16 and older. Seventy-six percent of the native-born population of the region was of working-age in 2001 versus nearly 92 percent of the region's entire foreign-born population and slightly over 81 percent of the new foreign immigrant population; i.e., those that arrived from 1990 onward. There were 505,000 new foreign immigrants of working-age in the region during calendar year 2001, representing more than 100 percent of the growth in the working-age population of the region over the 1990s.⁶ In the absence of new foreign immigration, the working-age population of the region

⁶ The total working-age population of the region, including inmates of institutions, increased by only 466,000 between 1990 and 2000. See: Andrew Sum, Ishwar Khatiwada, and Nathan Pond, Labor Force Growth in New England....

would have not experienced any growth in the past decade and would have declined in the southern part of New England, especially in Connecticut and Rhode Island.

Table 2:
The Size of the New England Working-Age Population and Its Share of the
Total Civilian Noninstitutional Population by Nativity Status, 2001
(Numbers in 1000s)

	(A)	(B)	(C)	(D)
Population Variable	All	Native Born	Foreign Born	New Immigrants
Civilian, Noninstitutional Population	13,611	12,133	1,478	620
Working-Age Population	10,571	9,220	1,351	505
Percent of Population of Working-Age	77.7	76.0	91.6	81.4

Source: 2001 monthly CPS surveys, public use files, tabulations by authors.

The Growth of the New Immigrant Civilian Labor Force, 1990 – 2001

During the decade of the 1990s, the New England region was characterized by very modest growth in its resident labor force. According to the findings of the 2000 Census, the resident civilian labor force increased by only 179,000 or 2.5% between 1990 and 2000, a growth rate that was well below the national labor force growth rate of 11.5% over the same time period and the lowest in the past 50 years for our region.⁷

To identify the impacts of new foreign immigration on regional labor force growth since 1990, we analyzed the findings of the 12 monthly CPS household surveys for calendar year 2001.⁸ Between 1990 and 2001, according to findings of the CPS surveys, resident civilian labor force of New England is estimated to have increased by only 103,000 or slightly less than 1.5%.⁹ In comparison, the resident civilian labor force of the nation is estimated to have grown by 16.8 million or 13.3% over the same 11 year period. New England captured less than one percent of national labor force growth over the 1990-2001 period despite the fact that the region accounted for nearly six percent of the nation's labor force at the outset of this time period.

⁷ The civilian labor force growth estimates for the region based on the 1990 and 2000 censuses were presented in the previous chapter on civilian labor force developments in New England.

⁸ Reliance on the monthly CPS household surveys for 2001 to estimate the size and growth of the new immigrant labor force is necessary since the U.S. Census Bureau has not yet released the public use files containing the micro-records from the long-form questionnaires that contain the labor force data.

⁹ The CPS labor force estimates for 2001 are based on estimates of the region's working-age population prior to the 2000 Census and yield lower estimates of growth in the resident labor force than those based on the censuses. We

According to the findings of the 2001 monthly CPS surveys, there were 374,000 new foreign immigrants in the region's labor force during that year. (Table 3). These individuals had arrived in the U.S. at some time since 1990. New immigrants, thus, accounted for all of the net growth in the region's civilian labor force between 1990 and 2001. In fact, the native born labor force in New England is estimated to have declined by 271,000 over this time period.¹⁰ Findings for Massachusetts also reveal extraordinary growth in the number of new immigrant workers (249,000) in the state over the decade. All of the state's resident labor force growth was attributable to new foreign immigrants. While the nation also experienced a record setting level of new foreign immigration and the number of new foreign immigrants in the nation's labor force increased by 8.031 million, the influx of new immigrants contributed only 48 percent of the growth in the nation's labor force. The native born work force in the U.S. also increased over the decade although an overwhelming share of the increase in the male labor force (80%) was attributable to new foreign immigration.¹¹

expect the 2001 civilian labor force estimates for New England to be revised upward by 60-70,000 when the 2000 population benchmarks are introduced.

¹⁰ Actually, this decline of 271,000 labor force participants also includes some foreign born individuals who had arrived in the U.S. prior to 1990, a group we refer to as "established immigrants". We cannot separately identify the size of this group.

¹¹ See: Andrew Sum, Neeta Fogg, Paul Harrington, et.al., Immigrant Workers and the Great American Job Machine....

Table 3:
Civilian Labor Force Growth in the U.S., New England, and Massachusetts Between 1990 and 2001 and the Amount Attributable to New Foreign Immigration
 (Numbers in 1000s)

	(A)	(B)	(C)	(D)	(E)
	1990 CLF	2001 CLF	Change in CLF, 1990 – 2001	New Immigrants in CLF	Percent of CLF Growth Due to Immigrants
U.S.	125,840	142,642	16,802	8,031	48
New England	7,145	7,248	103	374	363
Massachusetts	3,227	3,307	80	249	311

Sources: (i) U.S. Bureau of Labor Statistics, Employment and Earnings, January 2002;

(ii) U.S. Bureau of Labor Statistics, Geographic Profiles of Employment and Unemployment;

(iii) 2001 Monthly CPS surveys, tabulations by Center for Labor Market Studies.

Note: (1) The 2001 CLF estimates for each area are based on the monthly CPS public use files, tabulations by authors.

The role of new foreign immigration in contributing to regional labor force growth in the 1990s represented a radical departure from developments in the prior two decades. During the 1980s, approximately one-fourth of the region’s labor force growth came from new foreign immigration, a share quite similar to that for the entire nation (27%) (Table 4). During the 1970s, when the tail-end of the baby boom generation was being absorbed in the labor market, only 11% of New England’s labor force growth was generated by new foreign immigration. Immigrants accounted for an even lower share of regional labor force growth in the 1960s. The degree of the region’s reliance on foreign immigration for its labor force growth in the 1990s was historically unprecedented.¹²

¹² For a more detailed historical overview of immigration developments in Massachusetts and New England over the past few decades, 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 and Citizens Bank, Boston, November 1999.

Table 4:
Foreign Immigration's Contributions to Civilian Labor Force Growth in the U.S. and
New England, 1970 –80, 1980 – 1990, and 1990 – 2001
 (Numbers in Percent)

	(A)	(B)
Time Period	U.S.	New England
1970 – 80 ⁽¹⁾	10	11
1980 – 90	27	24
1990 - 2001	48	363

Sources: (i) 1970, 1980, and 1990 Censuses of Population and Housing, tabulations by authors.

(ii) Monthly CPS surveys 2001, public use files

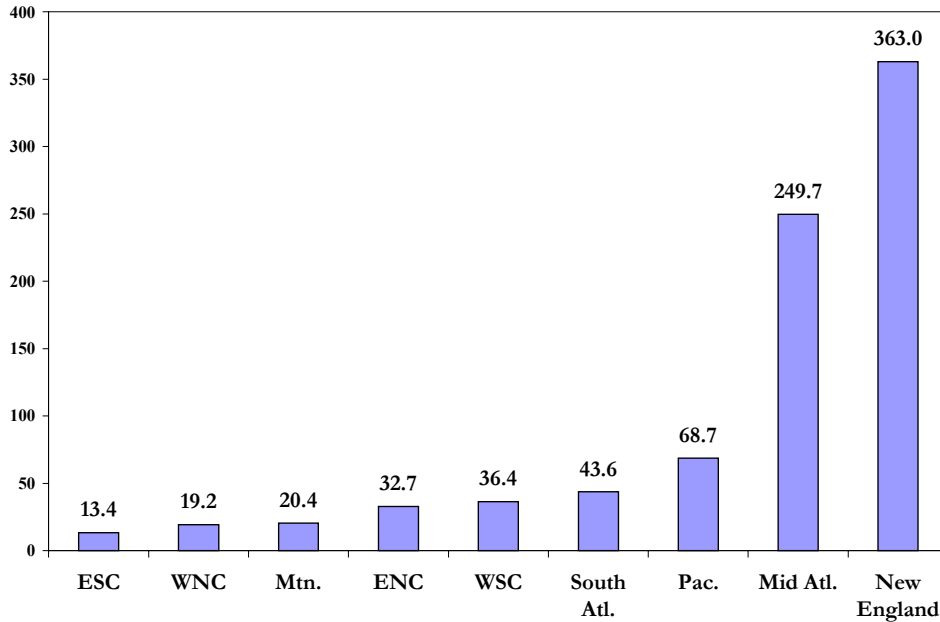
(iii) U.S. Bureau of Labor Statistics, Employment and Earnings, January 2002.

Note: ⁽¹⁾ Data for 1970 and 1980 exclude persons immigrating from Puerto Rico and outlying possessions of the U.S.

How did New England's immigrant labor force experiences during the 1990s compare to those of the nation's other eight geographic divisions?¹³ To place the findings for New England in perspective, we also estimated the share of civilian labor force growth due to new foreign immigration between 1990-2001 for each of the other eight geographic divisions. The new immigrant shares of civilian labor force growth varied considerably across the nine geographic divisions, ranging from lows of 13% in the East South Central region (Alabama, Kentucky, Mississippi, Tennessee) and 19% in the West North Central division of the Midwest to highs of 250% in the Mid-Atlantic region (New Jersey, New York and Pennsylvania) and 363% in New England. The Mid-Atlantic and New England divisions were the only two geographic divisions that were completely dependent on foreign immigrants for the growth of their work force over the 1990 – 2001 period.

¹³ The definitions of these nine geographic divisions are those of the U.S. Census Bureau. Other federal government agencies, including the U.S. Bureau of Economic Analysis, use slightly different boundaries for some divisions.

Chart 1:
Share of Civilian Labor Force Growth Between 1990 and 2001
Due to New Foreign Immigration, by Geographic Division



Both rates of labor force growth and the contributions of foreign immigration to labor force growth varied quite considerably across the six New England states over the 1990 – 2001 period. Foreign immigration flows were largest in both an absolute and relative sense in the three southern New England states (Table 5). The estimated numbers of new foreign immigrants in the labor force of the six New England states in 2001 ranged from lows of three to four thousand in Vermont and Maine to highs of 81,000 in Connecticut and 249,000 in Massachusetts. In both Connecticut and Rhode Island, the 2001 civilian labor force was estimated to be lower than that of 1990 despite these new waves of foreign immigrants, and all of Massachusetts’ civilian labor force growth over this eleven year period was attributable to new foreign immigration. In contrast, less than 10 percent of the labor force growth in Maine and Vermont was due to new foreign immigration while close to one-fifth of New Hampshire’s labor force growth between 1990 and 2001 was generated by new foreign immigrants.

Table 5:
Growth in the Total Civilian Labor Force and in the Number of New Foreign Immigrants in the Labor Force of Each New England State, 1990 – 2001

	(A)	(B)	(C)	(D)	(E)
	1990 CLF	2001 CLF	Change in CLF, 1990 – 2001	New Immigrants in CLF	Percent of CLF Growth Due to Immigrants
Connecticut	1,833	1,701	-132	81	-- ⁽¹⁾
Maine	636	699	63	4	7
Massachusetts	3,227	3,307	80	249	312
New Hampshire	627	694	67	13	19
Rhode Island	519	510	-9	24	--
Vermont	303	337	34	3	9

Sources: (i) U.S. Bureau of Labor Statistics, Geographic Profiles of Employment and Unemployment;

(ii) 2001 CPS public use files, tabulation by authors.

Notes: (1) A – implies that a ratio cannot be calculated due to negative growth in the civilian labor force.

(2) New immigrants are those who arrived in the U.S. between 1990 and 2001.

Foreign immigrants' contributions to labor force growth over the past eleven years also varied widely across all 50 states. We ranked each state from highest to lowest on the share of their 1990 – 2001 work force growth due to new foreign immigration. The ten states most dependent on new immigrants for their labor force growth between 1990 and 2001 are displayed in Table 6. All of the top five states were located in the Northeast region, including the three southern New England states. All five of these states were totally dependent on new foreign immigration for their labor force growth over the past eleven years and would have experienced substantive declines in their resident labor force if new foreign immigration had not occurred. California, Hawaii, and Illinois also were heavily dependent on foreign immigration, with 80 to 90 percent of their labor force growth generated by new foreign immigration. No major geographic region of the country, however, was so overwhelmingly dependent on foreign immigration for its labor force growth as the Northeast region. The absence of any growth in the native-born labor force of the region during the 1990s should be viewed as the most critical workforce development challenge for the New England region.

Table 6:
Ten States Most Dependent on New Foreign Immigration
for Their Labor Force Growth Between 1990 and 2001

State	% of Growth Due to New Foreign Immigration
Rhode Island	_(1)
Connecticut	_(1)
New York	1,110
Massachusetts	312
New Jersey	257
Hawaii	86
California	84
Illinois	81
Florida	66
Maryland	66

Note: (1) - implies that percentage share cannot be calculated due to negative growth in resident civilian labor force.

**The Growth of the New England Labor Force by
Gender and Nativity Status, 1990 – 2001**

During the 1990s, the number of males in the labor force of New England actually declined, primarily as a result of reduced labor force attachment by men over the decade.¹⁴ to track changes in the gender characteristics of the entire labor force and the new immigrant labor force over the 1990 – 2001 period, we analyzed the findings of the 1990 and 2001 CPS surveys for New England. While the total number of male labor force participants fell by 30,000 between 1990 and 2001, the number of new male immigrants increased by 219,000 (Table 7). These findings together imply that the number of native-born workers in New England must have declined by close to 250,000 over this eleven year period (Chart 2). This steep decline in the native, male labor force needs to be more carefully analyzed by regional and state economic policymakers, and workforce development strategies to boost the growth of the native, male labor force in the coming decade need to be implemented. No serious attention has been paid to this critical workforce development issue in our region.

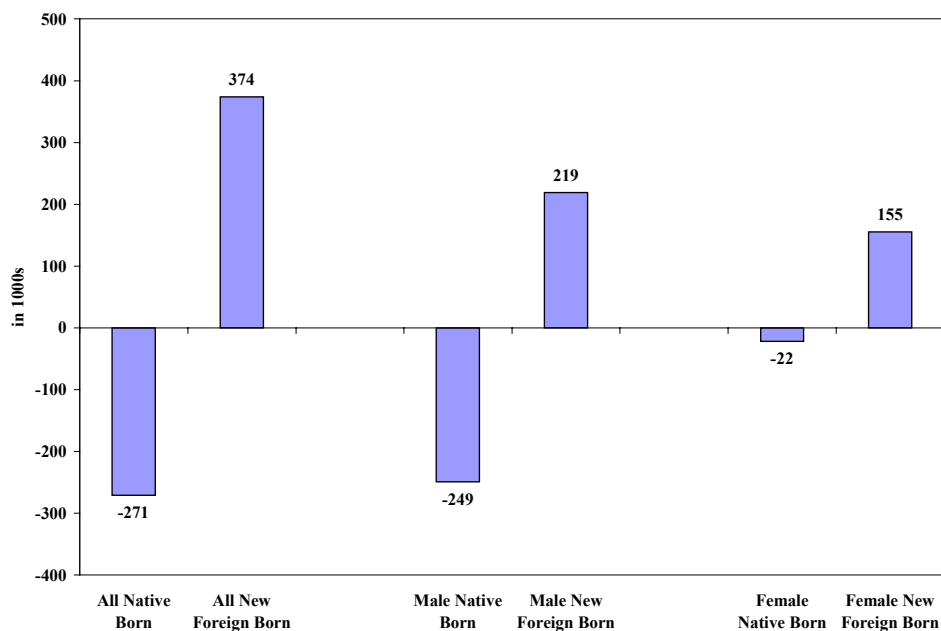
¹⁴ For a more detailed analysis of the forces underlying the decline in the male labor force in New England, see the previous chapter titled The Absent Male Worker and the Limited Growth in New England’s Labor Force in the 1990s....

Table 7:
Civilian Labor Force Growth in New England Between 1990 and 2001 by Gender and
the Amount Attributable to New Foreign Immigration
 (Numbers in 1000s)

	(A)	(B)	(C)	(D)	(E)
Gender Group	1990 CLF	2001 CLF	Change in CLF, 1990 – 2001	New Immigrants in CLF	Percent of CLF Growth Due to Immigrants
Men	3,846	3,816	-30	219	-- ⁽¹⁾
Women	3,299	3,432	133	155	116

Note: ⁽¹⁾ A – implies that a ratio cannot be calculated due to a negative value for the denominator.

Chart 2:
Growth of the Civilian Labor Force in New England 1990 – 2001 by Gender and Nativity Status



The female labor force within New England increased by 133,000 between 1990 and 2001, a growth rate of approximately four percent. Female immigrants accounted for all of the net growth in the region’s female labor force over this period. During 2001, we estimate that there were 155,000 female immigrants in the region’s labor force who had migrated to the U.S. between 1990 and 2001. All of the growth (116%) in the region’s female labor force was attributable to foreign immigration. The number of native-born, female workers declined by 22,000 over the decade, primarily as a consequence of high levels of out-migration from the

region during the past decade. For the U.S. as a whole, new immigrants generated about one-third of the growth in the nation's female labor force between 1990 and 2001.¹⁵ Only the New England and Mid-Atlantic divisions were completely dependent on foreign immigration for the growth in their female labor force over the past decade. High rates of out-migration of native-born women from the Northeast region during the 1990s were a key factor in reducing the number of native-born women in the labor force of the Northeast region.¹⁶

The Demographic and Socioeconomic Characteristics of the New Immigrant Workforce

Given the substantial growth of the immigrant workforce in New England during the past decade, it would be highly desirable to obtain information on their demographic and socioeconomic characteristics and their industrial and occupational attachment. Findings on the gender and age characteristics of New England's labor force in 2000 – 2001 classified by their nativity status and the timing of their arrival in the U.S. among the foreign-born are displayed in Table 8.

¹⁵ See: Andrew Sum, Neeta Fogg, and Paul Harrington, Foreign Immigration and the Great American Job Machine.

¹⁶ During the 1990s, we estimate that nearly 3 million more persons left the Northeast region than came into the region from other parts of the U.S. For a review of the sources of population growth and decline in the Northeast region during the decade of the 1990s including domestic out-migration, See: Andrew Sum, Ishwar Khatiwada, and Nathan Pond, Moving Out and Moving In: Domestic Migration and Foreign Immigration in the Northeast and New England During the 1990s, Report Prepared for the Teresa and H. John Heinz III Foundation, Washington, D.C., June 2002.

Table 8:
Comparisons of the Gender and Age Characteristics of the Civilian Labor Force in
New England by Nativity Status, 2000-2001 Averages
 (Numbers in Percent)

	(A)	(B)	(C)	(D)
Gender/Age Characteristics	All	Native Born	Foreign Born	New Foreign Immigrants
Gender				
• Men	52.5	52.1	55.5	58.1
• Women	47.5	47.9	44.5	41.9
Age				
• Under 25	14.5	14.9	11.6	19.5
• 25 – 29	7.2	7.0	9.0	16.0
• 30 – 34	13.7	13.3	16.4	23.1
• 35 – 44	27.3	27.1	29.3	25.7
• 45 – 54	22.5	22.7	20.9	12.2
• 55 – 64	11.2	11.4	10.1	2.9
• 65+	3.6	3.7	2.7	.5
• Under 35	35.4	35.2	37.0	58.6

Source: Monthly CPS surveys, 2000 – 2001, public use files, tabulations by authors.

On average, during the 2000 – 2001 period, slightly over 52 percent of the labor force participants in New England were men (Table 8). Foreign-born participants were more likely to be male than their native-born counterparts (55 vs. 52 percent), and the male share was even higher (58 percent) among those immigrant members of the labor force who arrived in the U.S. after 1990. Not surprisingly, the newer immigrants were much younger than both their native-born counterparts and their more established immigrant counterparts. Nearly one of five young immigrants in the region’s labor force were under the age of 25 versus only 15 percent of the native-born, and close to 60 percent of these young immigrant labor force members were under 35 years of age versus only 35% of the region’s native-born labor force participants. In the absence of new foreign immigration, the region’s young adult labor force (under 35) would have declined considerably due to a combination of the coming to age of the much smaller baby bust generation (those born between 1965 and the late 1970s) and the out-migration of young adults from the region during the 1990s, including many well-educated young adults. At the upper end of the age distribution, native-born workers comprised 15 percent of those 55 and older versus

only 3 percent of new foreign immigrants. Clearly, the New England labor force would have aged more considerably in the absence of the influx of new immigrant workers during the past decade.

Nationally, many of the new immigrant workers have been poorly educated, frequently lacking a high school education from their home countries. Our comparative analysis of the educational backgrounds of native-born and recent immigrant workers in New England reveals that new foreign immigrants were much more likely than native-born workers to lack a high school diploma, but they were nearly as likely as the native born to hold a bachelor’s or more advanced degree. (Table 9). One of every four new immigrant workers in New England lacked a high school diploma/GED certificate versus only 9 percent of the native-born workers in the region.¹⁷ Native-born workers were much more likely than immigrant workers to have completed some post-secondary schooling (60 percent vs. 46 percent), but recent immigrants were nearly as likely as native-born workers to have obtained a bachelor’s or higher degree (31% vs. 34%).

Table 9:
Comparisons of the Educational Characteristics of the Civilian Labor Force in
New England by Nativity Status, 2000 – 2001 Averages
(Numbers in Percent)

	(A)	(B)	(C)	(D)
Educational Characteristics	All	Native Born	Foreign Born	New Foreign Immigrants
No high school diploma/ GED	11.0	9.1	24.3	24.9
High School graduate or GED/no college	30.3	30.5	29.2	28.5
1-3 years of college	25.5	26.6	18.2	15.3
Bachelor’s degree or higher	33.1	33.8	28.4	31.2

Source: Monthly CPS surveys, 2000 – 2001, tabulations by authors.

A comparison of the educational backgrounds of New England’s recent immigrant workers with those of their U.S. counterparts reveals that New England’s workers are more

¹⁷ Our analysis of the labor force participation behavior of male immigrants and native-born workers in the U.S. reveals that immigrant school dropouts are much more likely to be in the labor force than their native-born counterparts, especially among younger males. See: Andrew Sum, Mykhaylo Trub’sky, and Sheila Palma, The Nation’s Young Adult Immigrant Population: A Profile of Their Demographic and Educational Characteristics and

highly educated (Table 10). A third of new immigrant workers in the U.S. lacked a high school diploma/GED certificate versus only 25 percent of those in the region. New England's immigrant workers were more likely than their national peers to have completed some post-secondary schooling (47% vs. 42%) and to have obtained a bachelor's degree (31% vs. 27%). Formal educational attainment has a major impact on the annual earnings of immigrant workers in our region as does their English language skills.¹⁸ Poorly educated immigrants with limited English-speaking proficiencies face limited earnings prospects and are at high risk of being members of the working poor.

Table 10:
Comparisons of the Educational Characteristics of the
New Foreign Immigrant Labor Force in the U.S. and New England, 2000 – 2001 Averages
(Numbers in Percent)

	(A)	(B)	(C)
	U.S.	New England	New England – U.S.
No high school diploma or GED	33.2	24.9	-8.3
High school graduate or GED/ no college	25.0	28.5	+3.5
1-3 years of college	15.0	15.3	+.3
Bachelor's degree or higher	26.9	31.2	+4.3

Recent Labor Market Experiences, Report Prepared for the National League of Cities, Institute on Youth Education, and Families, Washington, D.C., September 2002.

¹⁸ See: (i) Julia Kroshko, Human Capital and the Annual Earnings of Immigrant Women in the Northeast Region of the United States, M.A. Writing Workshop, Department of Economics, Northeastern University, Boston, 2000; (ii) Andrew M. Sum, W. Neal Fogg, et.al., The Changing Workforce: Immigration and the New Economy in Massachusetts...

The Labor Force Participation Behavior and Unemployment Problems of Recent Immigrants in New England

How strongly attached to the labor market are recent immigrants in New England? How successful are they in obtaining employment when they do seek work? Are there any substantial gender differences in the labor force behavior of immigrant men and women? To answer these key questions, we analyzed all of the monthly CPS surveys for New England for calendar years 2000 and 2001. Findings on the labor force behavior of recent immigrants are compared to those of both the native-born and more established immigrants; i.e., those who arrived in the U.S. prior to 1990.

During calendar years 2000 – 2001, slightly over 70 percent of new foreign immigrants of working age in New England were actively participating in the labor force; i.e., either working or actively looking for work (Table 11). The participation rate of these newer foreign immigrants was nearly three percentage points higher than that of their native-born counterparts and close to four percentage points above that of their more established immigrant peers. These newer foreign immigrants also were quite successful in finding jobs when they did participate in the labor force. Their overall unemployment rate was estimated to be 4.8%, which was 1.6 percentage points higher than that of their native-born peers but only .6 percentage points above their more established immigrant counterparts. Given their typically younger ages and higher incidence of school dropout problems, more recent immigrants would have been expected to experience a higher rate of unemployment. Our earlier chapter on unemployment problems in New England revealed that unemployment rates in recent years varied quite considerably by years of schooling completed, with high school dropouts being far more likely to be unemployed and underemployed than their better educated counterparts. Taking into account both their labor force participation rate and their unemployment rate, the employment/population ratio of new immigrants in New England was estimated to be just under 67 percent or 1.4 percentage points above that of the native-born (Table 11).¹⁹

¹⁹ The employment-population ratio for any demographic group is jointly determined by its participation rate and its unemployment rate. Algebraically, $E/P = (L/P) * (E/L)$ where L/P = labor force participation rate and E/L is the fraction of the labor force that is employed. The value of E/L is equal to $1 - U/L$ where U/L equals the unemployment rate of the group.

Table 11:
Civilian Labor Force Participation Rates, Unemployment Rates, and
Employment/Population Ratios of the Native born, Foreign Born, and
New Foreign Born Population in New England, by Gender,
2000 – 2001 Averages
(Numbers in %)

Labor Force Measure/Gender Group	(A) Native Born	(B) All Foreign Born	(C) New Foreign Immigrants	(D) New Foreign Born – Native Born
Civilian Labor Force Participation Rate				
• All	67.6	66.7	70.3	+2.7
• Men	73.5	76.5	81.6	+8.1
• Women	62.3	57.5	58.9	-3.4
Unemployment Rate				
• All	3.2	4.2	4.8	+1.6
• Men	3.3	4.2	4.4	+1.1
• Women	3.0	4.1	5.4	+2.4
Employment/Population Ratio				
• All	65.5	63.9	66.9	+1.4
• Men	71.0	73.3	78.1	+7.1
• Women	60.4	55.1	55.7	-4.7

Source: 2000 – 2001 monthly CPS public use files, tabulations by authors.

A breakout of the labor force data for all nativity groups by gender reveals very large gender differences among new immigrants.²⁰ For example, nearly 82 percent of new male immigrants were active in the civilian labor force during 2000 – 2001 versus only 59 percent of new female immigrants, a difference of nearly 23 percentage points. In comparison, the gender gap in labor force participation rates was only 11 percentage points among the native-born. While new male immigrants enjoyed an 8 percentage point participation rate advantage over their native-born counterparts, new female immigrants were somewhat less likely to be engaged in the labor market than their native-born counterparts (59 vs. 62 percent). New male

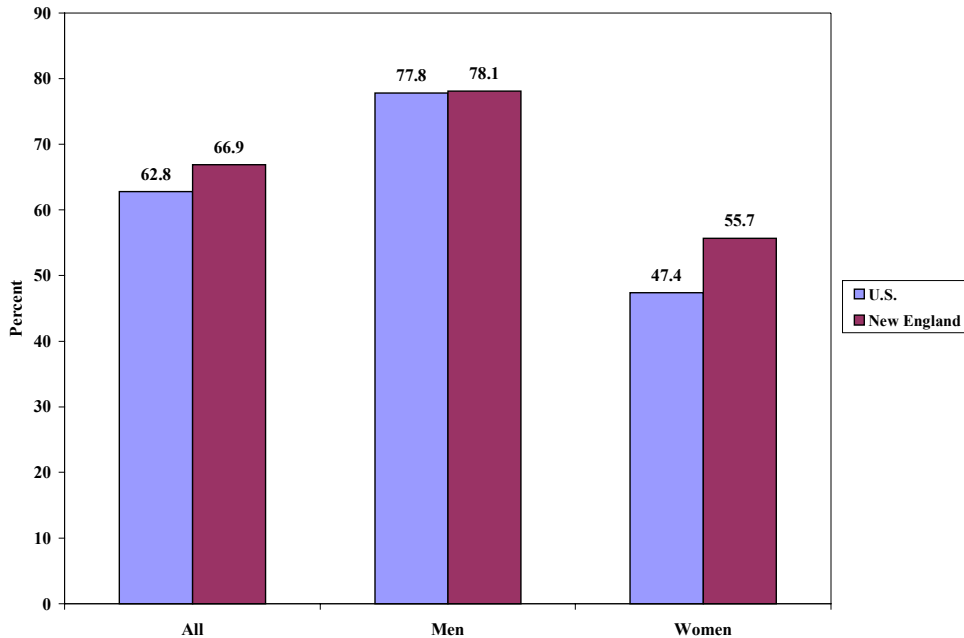
²⁰ Very large gender differences in participation rates and employment rates also prevailed among immigrants in Massachusetts during the mid to late 1990s. See: Andrew M. Sum and W. Neal Fogg, The Changing Workforce: Immigrants and the New Economy in Massachusetts, especially pp. 47-61.

immigrants were modestly less likely to be unemployed than their female counterparts while native-born women were slightly less likely to be unemployed than native-born men (3.0 vs. 3.3 percent). As a consequence of their considerably higher labor force participation rate and their modestly lower unemployment rate, new immigrant males were much more likely to be employed in New England than their female counterparts. The gap between the employment rates of these two immigrant groups was nearly 23 percentage points versus a gap of only 11 percentage points between native-born men and women. Future labor market research based on the forthcoming public use records from the 2000 Census should examine in more detail the demographic and human capital factors influencing the considerably lower employment rates among immigrant women in our region. Previous research on immigrant women's labor force behavior in Massachusetts and New England revealed that formal schooling and English-speaking abilities were critical determinants of the likelihood of immigrant women being employed.

To identify whether there were any substantive differences in labor market outcomes for new immigrants in the U.S. and New England, we estimated the employment rates of new immigrants in the U.S. and New England during calendar years 2000 – 2001, using data from the CPS monthly surveys. Estimates of employment/population ratios are presented for all new immigrants and for men and women separately (Chart 3). Newer immigrants in New England were more likely to be employed than their national counterparts (67% vs. 63%); however, nearly all of the employment advantage of New England immigrants was due to the higher rate of employment among immigrant women in New England than across the country (56 percent versus 47 percent). The high employment rate of immigrant males in New England (78%) was essentially matched by that of their counterparts across the nation. Both groups worked at very high rates often exceeding the employment rates of native-born males, especially those with no formal schooling beyond high school.²¹

²¹ Even among younger adults, the higher employment rates of immigrant men are concentrated among those with no formal schooling beyond high school. Immigrant males with bachelor degrees are somewhat less likely to be employed than their native-born counterparts. See: Andrew Sum and Mykhaylo Trub'skyy, et.al, The Nation's Young Adult Immigrant Population...

Chart 3:
Employment/Population Ratios of New Foreign Immigrants in the U.S. and
New England, Total and by Gender, 2000 – 2001 Monthly Averages
(in Percent)



The Distribution of Employed New England Immigrants by Class of Worker, Major Industry, Occupational Group, and Specific Job Clusters

The preceding sections of this paper have analyzed the overall labor force behavior and employment status of immigrants in New England without any references to the sectors in which they were employed, types of firms that employed them or the occupational characteristics of the jobs they held. In this section, we will examine the distributions of employed immigrant workers in our region across class of worker categories, major industrial sectors, occupational groups, and combinations of industry/occupational job clusters. All of the findings are based on the monthly CPS surveys for calendar years 2000 and/or 2001 and pertain to the total foreign-born employed, with separate breakouts at times for both more established and recent immigrants.

During calendar year 2001, approximately one of every eight employed persons in New England was foreign-born (Table 12 and Chart 4). This ratio was nearly identical to the 13% immigrant share of the employed across the entire country in calendar years 2000 and 2001. Within our region, the immigrant shares of the employed ranged from lows of 2 to 3 percent in Maine and Vermont to a high of just under 17 percent in Massachusetts. The three southern New

England states ranked 9th, 11th, and 12th highest among the fifty states in the country on this immigrant employment measure.

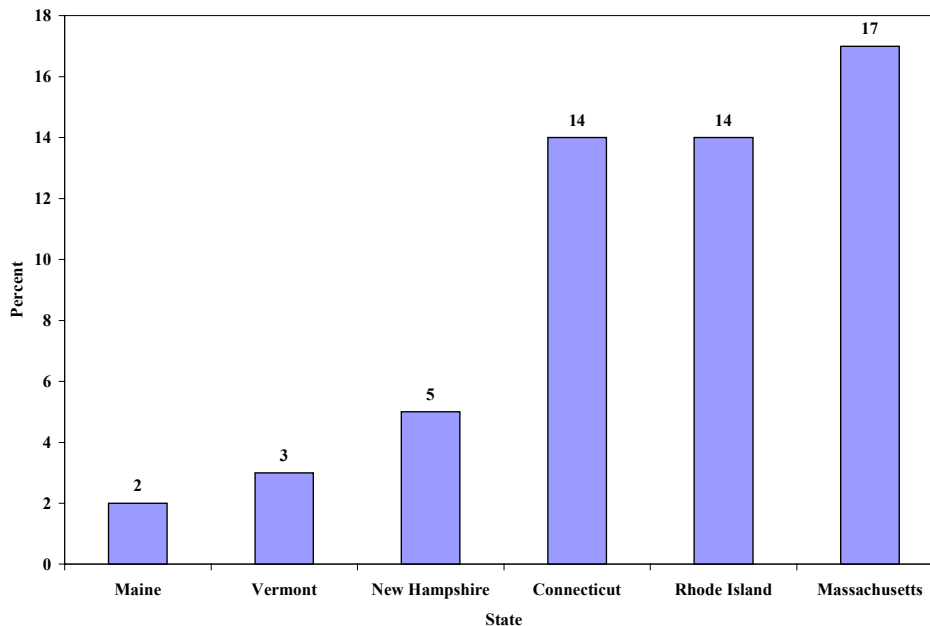
Table 12:
The Distribution of the Employed in New England⁽¹⁾ and
Each New England State by Nativity Status, 2001
(in %)

State	(A) Native Born	(B) Foreign Born
Connecticut	86.5	13.5
Maine	98.0	2.0
Massachusetts	83.3	16.7
New Hampshire	95.1	4.9
Rhode Island	86.5	13.5
Vermont	96.9	3.1
New England, Total	87.6	12.4

Source: 2001 monthly CPS surveys, tabulations by authors.

Notes: ⁽¹⁾ The New England estimate is based on all 24 months of data from the monthly CPS surveys during 2000 and 2001 while the data for individual states are based on the 2001 data only.

Chart 4:
The Foreign-Born Share of the Resident Employed in Each
New England State, Calendar Year 2001
(in %)



The Distribution of New England's Employed Immigrant and Native-Born Workers by Class of Worker

In classifying individual workers into various job categories with the CPS survey data, the U.S. Bureau of Labor Statistics assigns each worker into one of eight “class of worker” categories. We have combined these eight categories to form the following four broader class of worker groups:²²

- Private sector wage and salary workers, who include those persons who are employed by for-profit and non-profit firms in the private sector
- Public sector wage and salary workers, who include all persons employed by local, state, and federal government agencies
- The self-employed, including those who incorporated their business and those who own businesses, professional enterprises, partnerships, and farms that are unincorporated.²³
- Those persons who work without pay for 15 or more hours in a family owned business. This group of workers is often referred to as unpaid family workers.

The distribution of the employed in New England during calendar years 2000 and 2001 by class of worker and nativity status is displayed in Table 13.²⁴ For the entire group of employed residents, 77% held private sector wage and salary jobs, another 12 percent were employed by the government, and just under 11% were self employed, with slightly over 7% of this last group owning businesses that were not yet incorporated. Only .1% of New England's workers were classified as unpaid family workers, a ratio identical to that for the U.S. over the same two-year period.²⁵ Comparisons of the findings for the region's native-born workers with those for all foreign-born workers reveal that foreign-born workers were more likely than their

²² For a recent review of the national distribution of employed native-born and foreign-born workers by class of worker in recent years, See: Andrew Sum, Neeta Fogg, Paul Harrington, et.al., Immigrant Workers and the Great American Job Machine...

²³ In reporting findings from the Current Population Survey, the U.S. Bureau of Labor Statistics tends to treat the incorporated self-employed as wage and salary workers. We find it more useful to combine both self-employed groups into one overall self-employed category and then present the estimates for each subgroup.

²⁴ For persons holding more than one job at the time of the CPS survey, their class of worker status is determined by the job accounting for the greatest number of work hours, i.e., the so-called “primary job”. Nearly one-fourth of the second jobs held by multiple jobholders in the U.S. involve self-employment. See: John F. Stinson, Jr. “New Data on Multiple Jobholding Available from the CPS,” Monthly Labor Review, March 1997, pp. 3-7.

²⁵ As a result of the redesign of the monthly CPS questionnaire in 1994, the interviewer probes more deeply for the existence of family-owned businesses and the degree to which family members employed by such establishments

native-born counterparts to be employed as private sector wage and salary workers (85 vs. 76 percent), less likely to be working in the public sector (7 percent vs. 13 percent) and modestly less likely to be self-employed (8 percent versus 11 percent).

Table 13:
Distribution of the Employed in New England by Class of Worker and
Nativity Status 2000 – 2001 Averages
(Numbers in Percent)

Class of Worker	(A) All	(B) Native Born	(C) Foreign Born	(D) Established Immigrants	(E) Newer Immigrants
Private sector, wage and salary	77.0	76.0	84.7	81.8	89.6
Public sector	12.2	12.9	7.5	8.5	5.7
Self-employed	10.6	11.0	7.8	9.7	4.6
• Incorporated	3.2	3.3	2.3	3.1	1.0
• Not incorporated	7.4	7.7	5.5	6.6	3.6
Unpaid family worker	.1	.1	.1	.1	.1

Source: Monthly CPS surveys, 2000 – 2001, public use files, tabulations by authors.

Newer immigrants were most likely to be holding wage and salary positions in the private sector (90%) and far less likely than native born workers to be employed by government or to be self-employed. Given the younger ages of new immigrant workers and the relatively high fraction lacking a high school diploma, it is not surprising to discover that they were less likely to be self-employed than their native-born counterparts.²⁶ The higher incidence of non-citizenship among recent immigrants also reduces their ability to compete for many public sector jobs.²⁷ Overall, the findings on the class of worker status for New England workers reveal that the high growth of the new immigrant work force in New England primarily fueled the private

receive some type of compensation. The use of the new questionnaire reduced the estimated number of unpaid family workers.

²⁶ Some critics of immigration policy have argued that the role of immigrants as entrepreneurs in the U.S. has diminished over time. See: Steven A. Camarata, Reconsidering Immigrant Entrepreneurship: An Examination of Self-Employment Among Natives and the Foreign Born, Center for Immigration Studies, Washington, D.C., January 2000.

²⁷ For a review of the effects of naturalization on the labor market status of young male immigrants in the U.S., See: Berndt Bratsberg, James F. Ragan, and Zafar Nasir, “The Effect of Naturalization on Wage Growth: A Panel Study of Young Male Immigrants,” Journal of Labor Economics, Vol. 20, No. 3, pp. 568-597.

sector job boom from 1992-2000. Private sector firms in the private, for profit sector were the dominant source of jobs for new immigrant workers in the past decade.²⁸

The monthly CPS surveys also collect data on the types of businesses in which respondents are employed and the U.S. Census Bureau uses this information to assign their jobs to various industries. We have collapsed all individual industries into ten major industrial sectors and assigned each employed worker to one of these ten sectors. The percentage distribution of the employed across these ten industrial sectors in New England during calendar years 2000 – 2001 are displayed for all workers and by nativity status in Table 14. For the region as a whole, the service industries (including private firms and public agencies providing services) employed the largest share of workers (40%). Both wholesale and retail trade (20%) and construction and manufacturing industries (21%) employed another fifth of the region’s workers. The region’s farm, forestry, fishing, and mining industries combined only employed 1.6% of the area’s workers in the past two years.

Table 14:
The Distribution of the Employed in New England by Major Industry of Employer and
Nativity Status, 2000 – 2001 Monthly Averages
(in %)

Major Industry	(A) All	(B) Native Born	(C) Foreign Born	(D) New Foreign Immigrants
Agriculture, forestry, fishing, mining	1.6	1.7	.9	1.5
Construction	6.5	6.8	4.9	4.3
Manufacturing	14.8	13.7	23.0	21.8
Transportation/Communication/ Utilities	5.6	5.8	4.3	3.9
Wholesale and retail trade	20.0	20.2	18.9	21.7
Finance, insurance, real estate	7.2	7.5	5.4	3.4
Business and repair services	7.3	7.0	9.4	12.5
Personal and entertainment services	4.6	4.4	6.0	8.4
Professional services	28.4	28.8	25.4	23.2
Public administration	4.0	4.3	1.9	1.2

Source: 2000 – 2001 Monthly CPS household surveys, tabulations by authors.

²⁸ A below average proportion (5%) of new immigrant workers were employed in the private non-profit sector of the regional economy.

There were a number of substantive differences between the industrial employment patterns of native-born and new immigrant workers in New England. While both groups of workers were heavily concentrated in the region's service industries, new immigrant workers were nearly twice as likely as native-born workers to be employed in business and repair and personal/entertainment service industries (21% vs. 11%). New immigrants also were heavily over-represented in the region's manufacturing industries (22% vs. 14%) especially in southern New England. In comparison, native-born workers were much more likely than their new immigrant peers to be employed in the finance/insurance/and real estate sector, professional service industries, and public administration.²⁹

For each New England state in calendar year 2001, we estimated the share of workers in five industrial sectors that were foreign-born (Table 15). By comparing these findings with the immigrant shares of all workers in each state in Table 12, we can identify whether immigrants were under or over-represented in these sectors. Within each of the six New England states, foreign-born workers were employed in manufacturing industries at above average rates. This was especially true for each of the three southern New England states. Foreign immigrants accounted for slightly more than one-fifth of all manufacturing workers in Connecticut, one-fourth of those in Massachusetts, and over 30% of those in Rhode Island. In each New England state, except New Hampshire, foreign immigrants also were over-represented in personal and household services (barbers, chauffeurs, cosmetologists, maids, live-in babysitters, personal cooks). Region wide, immigrant workers, especially new immigrants, were under-represented in the finance/insurance/real estate sector, but the degree of this under-representation varied across individual states, being most severe in Massachusetts, New Hampshire, and Rhode Island. Immigrant workers, especially new immigrants, were sharply under-represented in the public administration sector. Similar findings hold true nationally and are influenced by the citizenship status of immigrants. Those immigrants who become naturalized citizens are much more likely than their non-naturalized counterparts to work in the government sector while recent immigrants who are not citizens are overwhelmingly concentrated in private sector wage and salary jobs.³⁰

²⁹ The public administration sector includes only those government activities that are unique to the public sector, such as national defense, police and fire protection, courts, legislatures, etc. Persons employed by public high schools and colleges would be assigned to the professional services industry.

³⁰ See: (i) Berndt Bratsberg, James F. Ragan, and Zafar Nasir, "The Effect of Naturalization on Wage Growth: A Panel Study of Young Male Immigrants," *Journal of Labor Economics*, Vol. 20, Number 3, pp. 568-597; (ii) Andrew M. Sum, Neeta Fogg, and Paul Harrington, *Immigrant Workers and the Great American Job Machine..*

Newer immigrants clearly fueled the private sector job boom in New England from the mid-1990s through the end of calendar year 2000.

Table 15:
Foreign Born Workers' Share of the Employed in Selected
Industries within Each New England State, 2001

	(A)	(B)	(C)	(D)	(E)
	Manufacturing	Business and Repair Services	Personal and Household Services	FIRE	Public Administration
Connecticut	21.2	13.9	25.7	13.1	6.3
Maine	3.3	2.7	3.6	1.9	.1
Massachusetts	25.0	21.4	30.9	10.5	7.6
New Hampshire	8.3	7.8	4.7	2.1	4.5
Rhode Island	30.5	14.8	18.0	5.6	4.9
Vermont	4.0	3.4	8.1	3.5	1.5

Source: 2001 Monthly CPS surveys, public use files, tabulations by authors.

The CPS survey interviewers also collect information from employed respondents on the occupational titles of their jobs and their most important job duties. This information is then used by U.S. Census Bureau occupational analysts to assign occupational codes to the jobs held by the employed. We have combined the 100s of individual occupations into ten major occupational clusters. The percentage distribution of the employed by major occupational group in New England during calendar years 2000 – 2001 is displayed in Table 16 for all workers and for selected nativity groups.

Table 16:
The Distribution of the Employed in New England by Major
Occupational Group and Nativity Status, 2000 – 2001 Monthly Averages
(in %)

Major Occupation	(A)	(B)	(C)	(D)
	All	Native Born	Foreign Born	New Foreign Immigrants
Professional	18.7	19.1	15.9	18.5
Executives, managers	16.3	17.2	10.6	7.5
Technical	3.3	3.3	3.4	3.7
High level sales	6.9	7.3	4.0	2.2
Low level sales	4.7	4.8	4.4	5.3
Administrative support	13.7	14.4	9.1	6.6
Services	13.3	12.3	20.4	23.8
Farm, forestry, fishing	1.5	1.6	1.1	1.4
Skilled blue collar	10.5	10.5	10.6	8.3
Semi-skilled and unskilled blue collar	11.1	9.7	20.4	22.7
All blue collar	21.6	20.2	31.0	31.0
Managers, high level sales, administrative support	36.9	38.9	23.7	16.3

During the 2000 – 2001 period, 45 percent of all employed workers in New England held professional/managerial/technical and high level sales positions, another 22 percent worked in blue-collar occupations ranging from skilled craftsmen to laborers and helpers, 18 percent worked in lower level sales and administrative support/office jobs, and 13 percent worked in service occupations (cooks, domestics, nursing assistants, janitors, security guards, police and fire). There were a number of large differences between the occupational distributions of native-born workers and new immigrants. Native-born workers were considerably more likely than new foreign immigrants to be employed as managers, high-level sales workers, and administrative support/clerical workers (39% versus only 16%).³¹ Both groups, however, were employed at nearly identical rates in professional occupations, reflecting the high representation of immigrants among engineers and physical scientists, computer programmers and systems

³¹ These high level sales workers include proprietors, security brokers, commodity brokers, real estate agents, account managers, financial service representatives, and wholesale trade representatives. Lower level sales workers include cashiers and retail sales clerks.

analysts, and college teachers.³² New immigrants tended to be substantially over-represented in several occupational groups, including blue-collar occupations, especially production, machine operatives, assemblers, fabricators, and laborer positions, and service occupations. (Table 16). Thirty-one percent of new immigrants were employed in blue-collar occupations versus only 20 percent of the native-born, and new immigrants were twice as likely as the native-born to be employed in service-related occupations (24% vs. 12%).

Findings on the immigrant workers' share of employment in selected occupational groups in each New England state during calendar year 2001 are displayed in Table 17. For the region as a whole, foreign-born workers were substantially less likely to be employed as managers/executives/administrators (10% vs. 16%). This pattern held true in most of the individual New England states. With the exception of Connecticut and Rhode Island, immigrants were well represented in professional occupations. In every state, immigrants were substantially under-represented in administrative support/clerical occupations, likely reflecting a combination of the below average employment rates of immigrant women and their more limited educational attainment and English-speaking proficiencies, which are barriers to employment in these white-collar occupations. Immigrants were heavily over-represented in service occupations in each New England state with the exception of Vermont. For example, nearly 20 percent of all of the employed service workers in Connecticut were foreign-born versus their 13% share of all workers. In Massachusetts, foreign-born workers represented 27 percent of all workers in service occupations, but only 17 percent of total employment in the state. The occupational area in which immigrant workers were most substantially over-represented is that of semi-skilled blue-collar workers (assemblers, fabricators, machine operators, packagers, production operatives). In each New England state, with the exception of Vermont, foreign immigrants were employed in these occupations at rates two to three times their share of total employment. In Connecticut, Massachusetts, and Rhode Island, foreign-born workers held 40 to 50 percent of all blue-collar production and operative positions in calendar year 2001. (Chart 5). Immigrants were the backbone of production workers in manufacturing in southern New England.

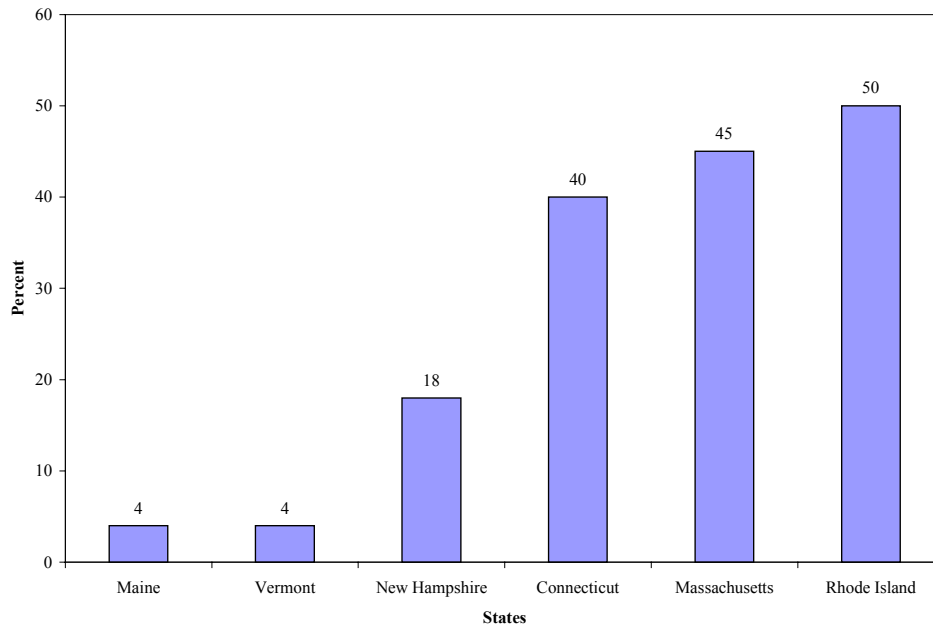
³² For a review of the occupational niches of immigrant workers in Massachusetts in 1990s, See: Andrew M. Sum and W. Neal Fogg, The Changing Workforce: Immigrants and the New Economy in Massachusetts, especially pages 67-72.

Table 17:
Foreign-Born Workers' Share of the Employed in Selected Occupational
Groups Within Each New England State, 2001

State	(A) Managers and Executives	(B) Administrative Support	(C) Professionals	(D) Service Occupations	(E) Semi-Skilled Blue-Collar Production
Connecticut	10.7	9.1	8.2	19.6	39.7
Maine	2.6	1.2	2.6	2.6	4.1
Massachusetts	9.5	10.4	14.1	26.9	45.0
New Hampshire	3.3	2.5	6.0	5.8	17.9
Rhode Island	5.6	7.5	9.0	17.1	50.5
Vermont	4.6	2.1	3.1	2.9	4.2

Source: Monthly CPS surveys 2001, public use files, tabulations by authors.

Chart 5:
Foreign-Born Workers as a Share of Blue-Collar Assemblers, Fabricators, and
Machine Operatives in Each New England State 2001
(in%)



The above findings have revealed that the region's immigrant workers are clearly over-represented in a number of industries and occupations. The findings on the industries and occupations of workers can be combined to estimate occupational staffing patterns within major industries. We have analyzed the findings of the monthly CPS surveys for calendar years 2000

and 2001 the estimate the occupational distribution of native-born and foreign-born workers in construction, manufacturing, trade, and non-professional service industries.³³ Within the region's construction industries, native-born workers were considerably more likely than immigrant workers to be employed as managers, professionals, and technical workers (16% vs. less than 2%) while the overwhelming majority of immigrants (97%) were employed as blue-collar crafts and laborer/helper positions. (Table 18). Within the region's manufacturing industries, 42 percent of native-born workers were employed as professionals/managers/technical workers versus only 18 percent of immigrant workers. In contrast, 77 percent of the immigrants in manufacturing held blue-collar occupations versus only 44 percent of the native-born.

Table 18:
Occupational Staffing Patterns Within Selected Industries of New England for
2000 – 2001 for Native Born Workers and New Foreign Immigrants
(Numbers in %)

Industrial Sector	(A) Prof./Man./Tech/ High Level Sales	(B) Services	(C) Blue-Collar
Construction			
• Native born	15.9	.4	79.4
• New immigrants	1.6	.0	96.8
Manufacturing			
• Native born	42.2	1.1	43.6
• New immigrants	18.3	.3	77.1
Trade			
• Native born	34.4	17.4	17.8
• New immigrants	15.0	37.4	20.3
Nonprofessional Services			
• Native born	46.3	22.9	14.6
• New immigrants	34.1	40.7	18.5

Source: Monthly 2000 – 2001 CPS surveys, public use files, tabulations by authors.

In the region's trade industries, native-born workers were more than twice as likely as new immigrants to be employed as professionals, managers, and high level sales workers while immigrants were twice as likely as native-born workers (37% vs. 17%) to hold service-related jobs. Within the region's non-professional service industries, native-born workers were more

³³ These non-professional service industries include business and repair services, personal, and entertainment services.

likely than immigrant workers to be employed as professionals, managers, and high level sales workers while immigrants were considerably more likely than the native-born to be employed as service or blue-collar workers in these same industries. (Table 18). Immigrants clearly comprise a growing share of the traditional working-class in New England, a group whose relative economic position has deteriorated over the past two decades both here and across the entire country.

To identify the role of immigrants in filling jobs in key occupational and industrial job clusters in individual New England states, we analyzed the findings of the monthly CPS surveys for calendar year 2001. The five job clusters were the following:

- Craft workers in construction industries
- Blue-collar operative and fabricator positions in manufacturing
- Janitors
- Private household workers
- Service occupations in professional service/social service industries

The share of immigrant workers in each of the above job clusters should be compared to their share of total employment in each state economy to determine their degree of under-representation or over-representation in each cluster. (Table 19). For the region as a whole, immigrants were modestly under-represented in the construction industry during 2000 – 2001, with their job share in this industry only three-fourths as high as their overall job share. Immigrants also were somewhat under represented among craft workers in the construction industry in most New England states during 2001 although the immigrant share of construction craft workers in Connecticut and New Hampshire came close to their statewide average. Despite the high incidence of immigrant workers lacking high school diplomas, a typical entry requirement for most craft-related jobs in the construction industry, 13 percent of the craft workers in construction industries in Connecticut and Massachusetts were foreign-born. The carpenters' union in the Greater Boston area was making concerted efforts to recruit immigrants for membership. Given the substantial growth in construction industry employment during the economic boom in our region, a number of employers were facing skill shortages in the construction crafts occupations at the end of the decade and were relying on immigrants to fill these shortages.

Table 19:
Foreign-Born Workers' Share of the Employed in Selected Job Clusters in
Individual New England States, 2001
 (Numbers in Percent)

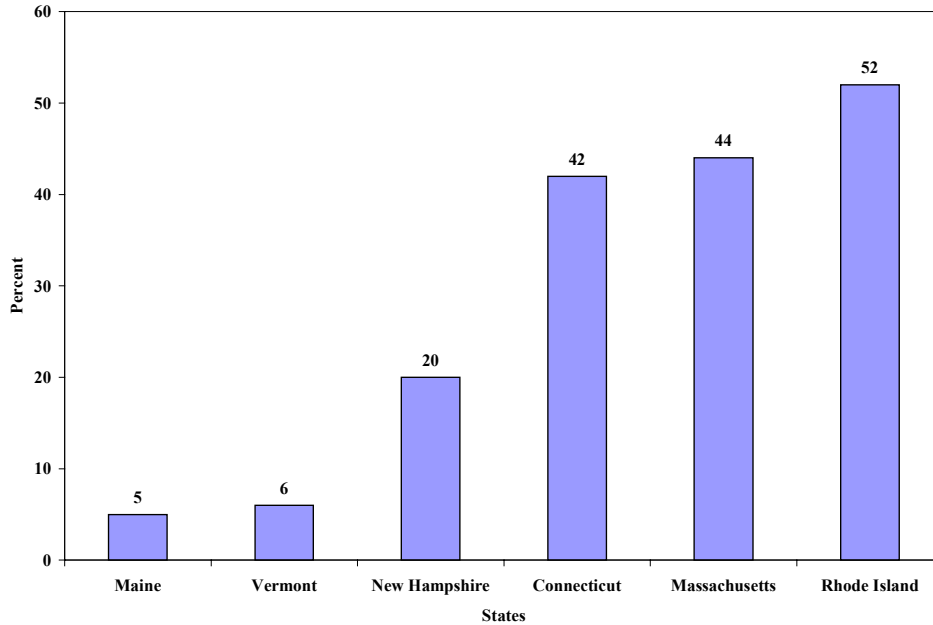
State	(A) Craft Workers in Construction	(B) Semi-Skilled Production in Manufacturing	(C) Janitors	(D) Household Workers	(E) Service Occupations Professional/ Social Services
Connecticut	13.0	41.7	23.0	54.1	33.1
Maine	.4	4.8	2.0	7.7	1.6
Massachusetts	13.1	44.1	43.1	40.0	30.0
New Hampshire	4.2	20.0	12.0	4.0	5.8
Rhode Island	9.8	52.1	24.8	25.7	23.6
Vermont	1.3	5.5	6.3	8.2	3.8

Source: Monthly CPS surveys 2001, public use files, tabulations by authors.

Foreign immigrants had become a major new source of labor supply in many blue-collar operative, fabricator, assembler, and machine operative positions in the region's manufacturing industries during the 1990s.³⁴ In every New England state, the foreign-born share of production workers in manufacturing industries was well above their share of total statewide employment. Their shares of such production jobs did, however, vary widely across the six New England states, ranging from lows of five percent in Maine and Vermont to highs of 42 to 52 percent in the three southern New England states (Chart 6). The substantial presence of immigrant workers in front-line positions in manufacturing industries has created a growing need for literacy, English-as-a-second language, and occupational skills upgrading in many of these firms to boost the productivity of production workers.

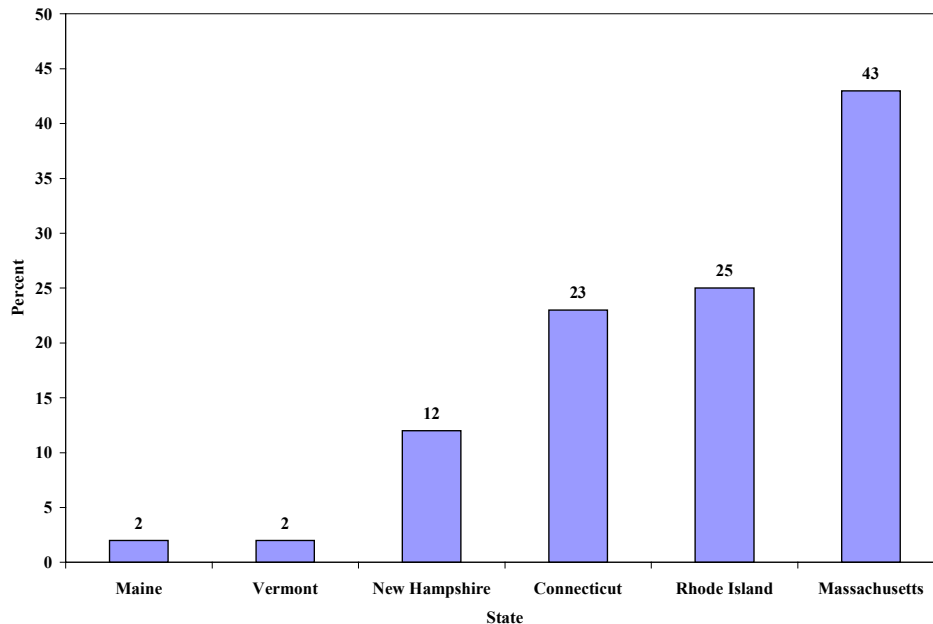
³⁴ This set of blue-collar occupations is sometimes referred to by labor market analysts as semi-skilled blue-collar occupations. This set of jobs excludes craft workers in manufacturing, such as machinists, tool and die makers, etc.

Chart 6:
Foreign-Born Workers as a Share of Blue-Collar Production Operators,
Fabricators, and Assemblers in Manufacturing Industries of Each New England State, 2001
 (in %)



Foreign immigrants were heavily over-represented in most service occupations in the region, especially lower-skilled service occupations in which formal education and English-speaking abilities are less of a requirement for adequate job performance. To identify the degree of their over-representation in less skilled service occupations, we estimated the share of all employed janitors and private household workers that were foreign immigrants in each New England state. In nearly all New England states, immigrants comprised a disproportionate share of janitors and private household workers (Table 19 and Chart 7). For example, immigrants accounted for nearly one-fourth of all employed janitors in Connecticut and Rhode Island and 43 percent of all janitors in Massachusetts. Immigrants are claimed to represent a strong majority of the workers in the Service Employees International Union in the Greater Boston area that are currently on strike for higher wages, greater full-time jobs, and health insurance benefits. A rising fraction of the region's working poor is now composed of immigrants.

Chart 7:
Foreign-Born Workers as a Share of Employed Janitors in Each New England State, 2001
(in %)



Our final job cluster consists of service workers who are employed by private firms and government agencies in professional/social service industries. Service workers in such firms hold a diverse array of jobs including cleaners, cooks, dietary aids, home health care aides, nurse aides, and security guards. With the exception of Maine and Vermont, immigrant workers were heavily over-represented in these jobs, holding nearly one-fourth of such positions in Connecticut and Rhode Island and 30 percent of such jobs in Massachusetts. In the latter three states, the immigrant share of such jobs was about twice as high as that of their share of all jobs within the state in 2001. Many of these jobs also pay relatively low wages and contribute an above average share of the pool of working poor in our region today.

Summary of Key Findings and Their Workforce Development Implications

The above research findings have revealed the existence of substantial demographic and labor market impacts of new foreign immigrants in the New England region over the past decade. Eighty-four percent of the growth in the entire resident population of New England and all of the growth in the region's working-age population between 1990 and 2000 were generated by new foreign immigration. The new immigrant population itself was characterized by

substantial race and national origin diversity. The demographic impacts of this new foreign immigration were considerably greater in the southern New England area where all of the population growth was attributable to new foreign immigration than in the three northern New England states where immigrants accounted for slightly less than one-fifth of population growth over the 1990s decade.

New immigrants' contributions to regional labor force growth were even more considerable. Between 1990 and 2001, nearly 375,000 new foreign immigrants joined the New England civilian labor force while the total resident labor force increased by only 103,000. New England was more dependent on foreign immigration for its labor force growth than any of the other eight geographic divisions. Again, Connecticut, Massachusetts, and Rhode Island were far more dependent on foreign immigration for their labor force growth than the three northern New England states. Each of these three southern New England states would have experienced declines in their labor force in the absence of immigration. Less than 10 percent of labor force growth in Maine and Vermont was generated by new foreign immigrants, and only one-fifth of New Hampshire's growth came from new immigrants. All of the net growth in the region's male and female civilian labor force was due to increased foreign immigration. The estimated number of native-born, male labor force participants in New England declined by nearly 250,000 between 1990 and 2001 due to a combination of out-migration from the region and declining rates of labor force participation among the region's remaining males. The disappearing native-born male worker in New England should be a major public policy concern among the region's economic and workforce development policymakers and program managers, but this problem has not come to the forefront of their agendas.

New immigrants played a dominate role in generating the private sector jobs boom in New England between 1992 and 2000, with new immigrants capturing all of the net new jobs in the private sector. The economic growth of the 1990s was made possible by this surge of new immigrants and they have come to play key roles in meeting the labor needs of employers in many industries, especially manufacturing, retail trade, and many private service industries. Immigrants occupy a substantial number of jobs in every major occupational cluster, but they remain heavily over-represented in blue-collar production jobs and in many service occupations, especially at the low skilled end of the spectrum (busboys, short order cooks, home health care aides, janitors, cleaners, maids, nursing home assistants, security guards).

The rapid and historically unprecedented growth of the region's immigrant workforce has a number of important current and future implications for the region's workforce development system. First, foreign immigrants now comprise a large segment of the region's labor force and especially of its unemployed, economically disadvantaged, and working poor populations. Over the 2000 – 2001 period, foreign immigrants accounted for just under 14% of the region's entire civilian labor force and 16% of its unemployed.³⁵ During calendar year 2001, families headed by a foreign-born individual accounted for one-fourth of all poor/near poor families in our region, and they accounted for one-fourth of all full-time, year-round workers with annual earnings below the four-person poverty line.³⁶ Solving the problems of the unemployed and the poor will require greater attention to the labor market needs of immigrant workers.

Second, while a high share of new immigrant workers hold a bachelor's or higher degree, new immigrants also contain a disproportionate share of working-age individuals (30%) who lacked a high school diploma (or a GED certificate) and who have limited English-speaking abilities. Limited formal schooling and English-speaking proficiencies reduce the labor force attachment and annual earnings of immigrants, especially women. Adult basic education and English-as-a-Second Language instruction services will need to be integrated more closely into public and private workforce development strategies in our region. Both systems could benefit from closer integration of their program services.

Third, immigrant workers have become a critical source of labor supply for many of the region's manufacturing industries, and they occupy a substantial share of blue-collar production jobs in all states except Maine and Vermont. To boost the competitiveness our region's manufacturers, a vital component of our export base and a key source labor productivity gains over the past decade, incumbent worker training programs will likely need to be expanded, including more intensive occupational and literacy training for many of these frontline, blue collar immigrant and native-born workers. These immigrant blue-collar production workers are at above average risk of dislocation in the current New England labor market environment and

³⁵ Somewhat surprisingly, foreign immigrants were found to represent only 10% of the total number of workers who were dislocated from their jobs in New England between 1997 and February 2000. Many service sector jobs were less susceptible to dislocation during this period.

³⁶ These are workers who were employed full-time during calendar year 2001 for 40 or more weeks during the year but ended up with earnings less than \$17,500. Incomes of other family members will have kept some of these workers out of the ranks of the poor.

could benefit from innovative dislocated worker program services to speed up their re-employment.

Fourth, existing management information systems (MIS) and evaluation data bases for many workforce development and adult education programs, including those funded under the Workforce Investment Act, need to be modified to improve our knowledge base on services to immigrant workers and the outcomes of such services. The current WIASRD reporting system of the U.S. Department of Labor does not collect information on the nativity status of program enrollees, the countries of birth of foreign immigrants, the timing of arrival in the U.S. of the foreign-born, or their citizenship status. Some of this information is collected on the MIS systems of state and local workforce development boards and one-stop centers and should be captured by all programs funded by the U.S. Department of Labor and the U.S. Department of Education. There is a critical need to improve our knowledge base on the degree of services to immigrant workers and the effectiveness of such services in improving their employability and earnings.

Fifth, the high incidence of school dropouts among recent immigrant workers has increased the supply of less educated workers in our region and pushed down the real and relative earnings position of school dropouts, including the native-born.³⁷ The deterioration in the real wages and earnings of native-born school dropouts has reduced their labor supply and increased their exposure to poverty and economic dependency among both adult men and women. Regional workforce development policies need to address the growing economic plight of less educated native-born adults in our region and strengthen their labor force attachment, employability, and earnings. The withdrawal of these adults from active participation in the labor market has reduced the size of our region's labor force and our potential output and contributed to the fiscal problems of federal, state, and local governments, given their lower tax payments and their increased reliance on both cash and in-kind transfer payments to support themselves and their families.

Finally, there is a clear need to review the nation's current immigration policies, including its H1-B visa programs, especially in light of existing labor market conditions. Our nation's existing immigration policies are not strongly based on the skill needs of the nation's

economy, and even our labor market oriented visa programs have not been carefully evaluated to determine the extent to which they are supportive of key regional and national economic and labor market goals. A comprehensive, objective, and sustained public policy debate on the current and desired future role of immigrant labor in the regional and national economy needs to be undertaken in the very near future.

³⁷ For a review of trends in the real earnings of Massachusetts' workers by years of schooling completed, See: Andrew Sum, Paul Harrington, and Neeta Fogg, [The State of the American Dream in Massachusetts, 2002...](#)