



# THE FOREIGN-BORN POPULATION OF WORCESTER, MASSACHUSETTS



*Assessing the Challenges and  
Contributions of a Diverse Community*

COMMISSIONED BY

 **Seven Hills**  
Foundation

PREPARED BY

**Public Policy Center**  
UMass Dartmouth



 **UMASS**  
**DONAHUE**  
**INSTITUTE**



## ACKNOWLEDGEMENTS

There is perhaps no topic more polarizing in America today than that of immigration and the perception of foreign born populations who reside in the towns and cities across our nation. For some, immigrants are considered the DNA upon which our nation was built and became, over time, the great melting pot. For others, foreign born populations are demonized as illegals who take American jobs, clog up our emergency rooms and schools, and negatively impact our national criminal justice system.

Having such extreme viewpoints about an issue as important as immigration clouds our ability to develop sound policy and workable strategies that support families and communities. With this in mind, the Seven Hills Foundation chose to take a more dispassionate and scholarly look at both the challenges and contributions of the diverse community here in Worcester, Massachusetts. This report, commissioned by Seven Hills Foundation and authored by the Public Policy Center at UMass Dartmouth and the UMass Donahue Institute, is a summary of the research conducted over a 7 month period beginning in January, 2015. It is our hope that the findings may contribute to a more balanced perspective of what individuals born outside of America bring to this Central Massachusetts community. Additionally, it is our earnest hope that this report will contribute to the community dialogue on immigration broadly and instigate enlightened local public policy.

The genesis of this report began with a discussion I had with Mayor Joseph M. Petty and City Manager Edward Augustus, Jr following the 2014 national debate concerning the potential relocation of foreign born children to Massachusetts from federal holding facilities in Texas and elsewhere. The vitriolic rhetoric which was expressed by some Massachusetts elected officials was stunning in its hyperbole, which in turn led both the City Manager and Mayor of Worcester to express the need for a more sober understanding of the dynamics surrounding Worcester's foreign born populations. I want to thank both Mayor Petty and City Manager Augustus for their earnest interest in supporting all citizens of Worcester and for their interest and support in producing this report.

The work contained herein could not have been possible without the generous financial support of the Trustees of the George F. & Sybil H. Fuller Foundation; the Trustees of the Stoddard Charitable Trust; and the Trustees of the Fletcher Foundation. Their individual and collective concern and dedication to the citizens of Worcester and Central Massachusetts is without comparison.

It is my sincere desire that public officials, students, advocacy and service organizations, the general public, and others interested in better understanding the dynamics surrounding our foreign-born populations in Worcester may use this document as a source of information and reflection.



Dr. David A. Jordan  
President, Seven Hills Foundation & Affiliates  
July 2015

## **ABOUT THE PUBLIC POLICY CENTER AT UMASS DARTMOUTH**

The Public Policy Center (PPC) at UMass Dartmouth is the University's applied social science research, technical assistance, and public service unit based in the College of Arts and Sciences. An interdisciplinary applied public policy research and technical assistance provider, the Center seeks to inform evidence-based policymaking at the state, regional, and local level through collaborative engagements with public, private, and non-profit partners.

The Center is supported by a highly experienced team of professionals who leverage the skills and expertise of UMass faculty, staff, and students to meet the needs of our clients and partners. Services provided by the PPC include survey research, program evaluation (summative and formative), economic and workforce analysis, demographic and socioeconomic analysis, technical assistance, and needs assessment. These services are offered in the areas of economic development, community development, education, public health, transportation, housing, and environment.

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UMass Donahue Institute delivers client-focused solutions in the areas of applied research, program evaluation, organizational development, management support, educational programming, international exchange programming, training & technical assistance and workforce development services.

This is accomplished by bringing the intellectual resources of our staff and the University of Massachusetts system, along with the abilities of a broad range of consultants and organizations, to bear on the needs of its clients. The Institute serves clients in the public, non-profit, and private sectors located here in the Commonwealth and throughout the nation and the world.

## **ABOUT THE SEVEN HILLS FOUNDATION**

Seven Hills Foundation is a network of affiliated organizations providing comprehensive, integrated healthcare and human service supports for people with significant life challenges. The basic principal of serving others is the cornerstone upon which Seven Hills has built its Mission and Vision for over 60 years. With over 190 locations in Massachusetts, Rhode Island and eight countries abroad, Seven Hills Foundation is the premier provider of clinical and related supports for over 25,000 individuals.

## REPORT AUTHORS



Dr. Michael D. Goodman, *Executive Director*

David R. Borges, *Director of Research and Administration*

Michael P. McCarthy, *Graduate Research Assistant*

Jason D. Wright, *Graduate Research Assistant*

Trevor V. Mattos, *Graduate Research Assistant*

Jawanza Foster, *Research Assistant*



Christina Citino, *Senior Research Manager*

Molly Fenton, *Senior Research Analyst*

*The findings in this report are based on analysis by the Public Policy Center at UMass Dartmouth and the UMass Donahue Institute. Data was sourced from the U.S. Census Bureau's 5-year 2009-2013 American Community Survey (ACS) and Public Use Microdata Samples (PUMS). In order to provide context for this data, the UMass Donahue Institute conducted a qualitative study through interviews with service providers and immigrant advocates in Worcester.*



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## EXECUTIVE SUMMARY

The City of Worcester, Massachusetts has long been a center for innovation, industry, and education. Since its incorporation in 1848, these features have made the city a destination for immigrants from a variety of national, cultural, and socioeconomic backgrounds. As with most New England mill towns, Worcester's immigration history begins with successive waves of Europeans. In the mid-twentieth century, Worcester began receiving a large number of Latin American immigrants, peaking in the 1970s. Worcester has seen a surge in African and Asian immigrants since the 1990s, though Asian immigration has outpaced African arrivals since 2010. Most African immigrants emigrate from Ghana and Kenya, and Asian immigrants from Vietnam, China, and India. Currently, Worcester has more foreign-born residents than any other Massachusetts Gateway City.

This report provides a profile of the foreign-born population in Worcester that highlights their unique challenges and contributions. The analysis also focuses on the impact the children of the foreign-born have on the public education system, and provides a detailed comparison of Worcester's largest foreign-born subpopulations. Qualitative interviews with immigration service providers detail the challenges of supporting communities of refugees and other immigrants endeavoring to make a life for themselves and their families in Worcester.

### **Worcester's Foreign-born Population: Size and Country of Origin**

The continual flow of immigrants into Worcester from different parts of the world lends a level of diversity in the foreign-born population that makes Worcester unique when compared with the state or other Gateway Cities.

- Worcester is home to an estimated 37,970 immigrants from 85 countries, which make up 21 percent of the city's total population. This compares to 15 percent statewide.
- The majority of Worcester's current foreign-born residents entered the country after 1990.
- The largest concentrations of foreign-born residents hail from Ghana (10 percent of all foreign born), the Dominican Republic (10 percent), Vietnam (9 percent), Brazil (6 percent), and Albania (5 percent).
- Over half (51 percent) of Worcester's foreign born are not US citizens while 49 percent are naturalized US citizens. Most naturalized citizens gained citizenship between 2000 and 2010.
- Among noncitizens in Worcester, there are an estimated 5,500 unauthorized immigrants.
- The Department of State reported 2,196 refugee arrivals in Worcester between 2007 and 2012.

- An estimated 70 percent of all Asians and 46 percent of all Africans in Worcester are foreign-born. Comparatively, 24 percent of all Hispanics, and 12 percent of all white residents are foreign-born.

### **Demographic and Socioeconomic Characteristics of the Foreign born**

Many of the foreign born, especially noncitizens, are of prime working age (25-44 years old) and actively participate in the workforce. Economically, naturalized immigrants as a group fare better than both natives and noncitizens, while noncitizens are more likely to be economically disadvantaged than natives or naturalized immigrants.

- Worcester's foreign born are almost two times more likely than natives to be ages 25 to 44, with this age cohort accounting for 42 percent of immigrants. This compares to 24 percent of natives.
- Naturalized foreign-born residents have the highest median household income (\$50,865) of all groups—measured against native households (\$46,263) and noncitizen households (\$37,944)
- Overall, the foreign born, particularly naturalized citizens are slightly less likely than natives to live in poverty.
- Naturalized foreign-born residents have the highest rates of home ownership (53 percent) in Worcester as compared to natives (46 percent) and noncitizens (19 percent).
- Approximately half of all foreign-born persons spend 30 percent or more of their income on housing costs, compared to one-third of all natives.
- Despite having the highest average number of workers per household, noncitizen households earn considerably less than native and other foreign-born households, and are most likely to live in poverty.
- More than half of immigrants in Worcester have low English proficiency. English proficiency correlates with earnings – on average, those with high proficiency earn \$15,000 more per year than those with low proficiency.
- Analysis of public benefit usage rates reveals that the foreign born access public benefits at rates equal to or below those of the native born.
- Health insurance enrollment is high for all groups; 96 percent of natives and 91 percent of foreign-born residents have health insurance. Use of publicly supported health insurance (Medicaid/MassHealth) is slightly higher for native residents. Noncitizens have the highest concentration of uninsured individuals.

## **Comparative Analysis of Major Foreign-born Subpopulations**

Many new immigrants face similar challenges, such as securing access to healthcare, finding affordable housing, and entering the workforce or education systems. However, a comparative analysis of Worcester’s major foreign-born subpopulations revealed that regional groups differ significantly with respect to various social and economic indicators.

- Labor force participation is extremely high among foreign-born African (88 percent) and Latin American (77 percent) groups, compared with Asians (65 percent), Europeans (61 percent) and Worcester overall (64 percent).
- Educational attainment is higher for foreign-born residents of European origin (44 percent) than for Worcester overall (38 percent) and lower for residents of Latin American origin (21 percent).
- English proficiency is higher among foreign-born residents from Africa (89 percent) and Europe (81 percent) than for Asian (63 percent) and Latin American (61 percent) immigrants; citywide proficiency is 79 percent
- Medicaid/MassHealth enrollment is lower for foreign born Africans (26 percent) and Europeans (21 percent) than for Asians (37 percent) and Latin Americans (50 percent); citywide enrollment is 34 percent
- Median annual individual income is highest for Africans (\$28,222) and lowest for Latin Americans (\$20,454), whereas the citywide annual median is \$23,202.
- Poverty rates are lower among the foreign born than citywide, except for Latin Americans (23 percent) who match the citywide poverty rate and have a slight majority (53 percent) at or below 200 percent of poverty.

## **Economic Impact of the Foreign Born**

Worcester’s foreign born contribute to the economy in various ways, with significant impacts resulting from their role as producers (i.e. workers and business owners) and as consumers of local goods and services. Foreign-born business owners and consumers make disproportionately large contributions to the local economy.

- Foreign-born entrepreneurs account for 37 percent of all business owners in Worcester, double the statewide rate. Historically, immigrant entrepreneurs are more likely to own neighborhood-based businesses such as restaurants, groceries, and retail stores.
- Foreign-born adults are more likely than natives to have earned a degree in science, technology, engineering, mathematics, or healthcare fields.

- Employers in the Worcester Metro area make over 1,000 visa requests annually for foreign-born workers (through the H1B visa program), representing 9.5 percent of all New England requests outside of metropolitan Boston.
- Foreign-born workers collectively earn \$947 million annually, which represents 26 percent of the nearly \$3.7 billion in total earnings citywide.
- Worcester's foreign born spent an estimated \$472 million in the local economy in 2015. These consumer expenditures resulted in an estimated \$715 million in local economic output (sales), \$256 million in new labor income, all of which supported an estimated 5,695 jobs in the Greater Worcester economy (defined as Worcester proper and contiguous communities).

### English Language Learner (ELL) Education

The size of the ELL student population in Worcester has increased dramatically in recent years. The vast majority English language learners in Worcester were born in the US and have varying levels of English proficiency. Worcester Public Schools offers a variety of ELL programs in order to address the unique challenges of this student population.

- ELL students in Worcester Public Schools increased from 13.5 percent to 35.1 percent of all Worcester public school students between 2004 and 2015. Statewide, the ELL student population grew from 5.0 percent to 8.5 percent of all students during the same period.
- In FY16, ELL students will cost the Worcester Public Schools an average of \$9,303 per pupil as compared to non-ELL students which are expected to cost between \$6,942 and \$8,657 per student.
- Overall, one third of all children in Worcester have at least one foreign-born parent. Most children of the foreign born are U.S.-born, and 17 percent of Worcester's children have at least one parent who was born outside of the U.S.
- The vast majority (95 percent) of English Language Learners were born in the U.S.; Ghana is the second most common country of origin, but it accounts for only 1.8 percent of all ELL students.
- Of the 85 different languages spoken by ELL students in Worcester, Spanish is the most common followed by Vietnamese. Other major languages include Albanian, Twi, Arabic, Portuguese, Patios, and Nepali.
- Worcester has an ELL student-to-teacher ratio of 62:1, compared with the statewide ratio of 40:1.

## 1.0 OVERVIEW

Immigration in modern America is one of today's most widely deliberated topics. Public debates rage on about immigration policy and how to address issues related to the presence of undocumented immigrants in the United States. Central to — though often missing from — the discussion of immigration is a fact-based understanding of the overall “immigrant population,” including the size and cultural identities of the population, their socioeconomic and other demographic characteristics, access to and utilization of publicly provided services and benefits, and the role they play in the cultural and economic life of cities and towns.

Like many cities and towns across America, Worcester is grappling with the widespread and complex impact of its sizable immigrant population. In order to support a rational and productive discussion about this critical topic, key stakeholders throughout Worcester recognized the need for objective, quantitative information to support public discourse and policy development. This research report is designed to bring facts to bear on a number of relevant and important issues in an effort to assist Worcester's leaders in addressing community concerns and developing evidence-based policies going forward.

### WORCESTER: A CITY OF IMMIGRANTS

Worcester, Massachusetts is situated at the crossroads of New England, located approximately 45 miles from Boston, 40 miles from Providence, and 60 miles from Hartford. Worcester's current population of 182,544 makes it the second largest city in New England behind Boston (645,966) and larger than the populations of Providence (177,994), Springfield (153,703), and Bridgeport (147,216).<sup>1</sup>

Worcester is comprised of over forty distinct neighborhoods, which are home to residents from nearly all corners of the globe who contribute to a culturally rich and diverse environment through distinct languages, customs, and traditions. Adding to this environment are Worcester's nine colleges and universities that enroll over 33,000 students, including an estimated 2,700 international students.

Like many of the Commonwealth's “Gateway Cities,” Worcester was once a prominent industrial center that attracted immigrants from around the globe. The city's central location made it a major hub in the mid-1800s for stagecoach and railroad companies, and the opening of the Blackstone Canal in 1826 brought increased opportunities for manufacturing, trade, and commerce along with a population boom. Between 1828 and 1850, the city's population more than quadrupled, with much of this growth fueled by

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<sup>1</sup> U.S. Census Population Estimates Program, July 1, 2013.

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Irish, French, and Polish immigrants.<sup>2</sup> Swedish immigrants also arrived in great numbers during this period, making it one of the major destinations for Swedes on the East Coast.<sup>3</sup>

A wave of Turkish, Armenian, and Syrian immigration followed in the late 1800s. At the beginning of the 20th century, Worcester became home to increasing numbers of immigrants from southern and western Europe and the Middle East. By the time of the 1920 Census, 70 percent of Worcester's population had been born abroad or had at least one head of household who was foreign born.<sup>4</sup>

Recent shifts in country of origin among Worcester's immigrants include a sharp increase in Latin American and Asian populations beginning in the 1970s and more recently from Africa (primarily from Ghana and Kenya). Currently, the city's population includes an estimated 37,970 foreign-born residents primarily from Ghana, Vietnam, the Dominican Republic, Brazil, Albania, El Salvador, China, Kenya, India, Poland, and Colombia.

### **WHAT DOES IT MEAN TO BE FOREIGN BORN?**

Much has been written about the American immigrant experience. The term alone evokes images of the huddled masses coming to the shores of the United States in search of new opportunities. However, today's immigrant experience is very different from the days when massive waves of immigrants settled the country. In fact, the generic label immigrant no longer fully describes the various groups of foreign-born individuals residing in the culturally diverse communities of Worcester.

Although often used interchangeably, the term "immigrant" does not accurately describe all of the nearly 38,000 foreign-born residents living in Worcester today. Foreign-born persons include anyone who was not a United States citizen at birth, including those who have become naturalized American citizens. Persons born abroad of American parents or those born in the U.S. territories of Puerto Rico, Guam, or the U.S. Virgin Islands are not considered foreign born, as they are eligible for U.S. citizenship through birthright. By contrast, the native-born population includes those with birthright citizenship, meaning their acquisition of United States citizenship was by virtue of the circumstances of birth. Although children born in the U.S. to foreign-born parents are native-born citizens, it is important to consider their common preservation or partial preservation of foreign-born cultural customs and languages. In this sense, the native-born children of the foreign-born parents are in many ways part of and/or connected to the foreign-born community and any associated challenges and opportunities.

The foreign-born population in Worcester includes a variety of individuals with different forms of legal, residency, and employment statuses. Persons typically conceived of as

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<sup>2</sup> "Worcester in the 19th Century: Immigration." Worcester Historical Museum, 2009.

<sup>3</sup> "Swedish Immigration to North America." Augusta College: Swenson Swedish Immigration Research Center, 2015.

<sup>4</sup> "Worcester in the 19<sup>th</sup> Century"

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immigrants—those who emigrate from their home country to establish a new life, often in pursuit of greater social and economic freedom and opportunity—represent one subgroup within this foreign-born population. Legally admitted immigrants with “green cards” are considered permanent resident aliens; they are able to permanently live and work in the United States, and they may become naturalized citizens after a period of time if they so choose.

An additional important subgroup within Worcester’s foreign-born population are those who have refugee or asylee status. Under U.S. law, a refugee is “someone who has fled his or her country of origin because of past persecution or a fear of future persecution based upon race, religion, nationality, political opinion, or membership in a particular social group. If the person is not in the U.S., he or she may apply for inclusion in the refugee program. If the person is already in the U.S., he or she may apply for the U.S. asylum program.”<sup>5</sup>

In many ways, refugees are similar to the broader immigrant population living in Worcester. However, there is one important difference: By virtue of being refugees, these foreign-born individuals receive direct resettlement services and financial assistance not available to the larger immigrant population. Through the Department of State’s Reception and Placement program, resettlement agencies receive a one-time payment per refugee to assist with the expenses associated with the refugee’s first few months in the United States. Funds are used for refugees’ rent, furnishings, food, and clothing, as well as to pay the costs of agency staff salaries, office space, and other resettlement-related expenses that are not donated or provided by volunteers. Refugees receive authorization to work in the U.S. upon arrival. After one year in the United States, refugees are required to apply for permanent residence, and after five years, they are eligible to apply for citizenship.

In addition to immigrants and refugees, the foreign-born population in Worcester also includes individuals who are in the country on a temporary basis, primarily for educational or employment related reasons. Regardless of whether a foreign-born individual enters the United States as an immigrant, refugee, foreign worker, or international student, they must adhere to the processes instituted by the U.S. Department of Homeland Security. In those cases where a foreign-born individual does not adhere to the required processes for entering the United States, they are considered undocumented and out of compliance with federal immigration laws. In some cases, an individual may enter the U.S. legally with a temporary visa, but become an undocumented individual if he or she does not leave when the visa expires.

Worcester’s foreign born come from all corners of the world, and include white, English-speaking groups, as well as African, Asian, Middle Eastern, and Latin American groups. As such, communities of foreign-born residents are extraordinarily diverse and do not always

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<sup>5</sup> <http://www.uscis.gov/humanitarian/refugees-asylum/refugees/questions-answers-refugees>.

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neatly conform to social or political designations. Furthermore, Worcester's rich cultural diversity cannot solely be attributed to the foreign-born population residing in the city. In fact, Worcester has a sizable Puerto Rican population, including many individuals who speak Spanish and may be perceived by some to be part of the city's foreign-born population. However, as noted above, Puerto Ricans are U.S. citizens by birthright and are not foreign-born.

### **WORCESTER: A WELCOMING CITY**

For well over a century Worcester has been home to organizations with a mission to support foreign-born residents including support societies that were founded to aid immigrants in establishing a foothold in Worcester. The Mission Chapel, the oldest of Worcester's immigrant-focused charitable groups, was founded in the 1850s to improve the lives of Worcester's poor and immigrant factory workers through religion, education, and social support.

During the following decade, civic and business leaders founded Worcester Polytechnic Institute as a place to train skilled laborers and develop new industrial technology. The Institute's founding is an example of Worcester's long history as a center not only for manufacturing but also for innovation and creativity. Thus, while many of New England's older industrial communities have struggled with the structural shocks associated with deindustrialization, Worcester to a great extent transitioned more smoothly into a post-industrial economy that is now anchored by advanced manufacturing, biotechnology, information technology, and healthcare. As the research findings discussed in the pages to follow document, immigrants continue to play an important role in maintaining an innovative and competitive workforce supporting of these industries.

Presently, agencies and coalitions continue to welcome and support newly arriving foreign-born residents. Ascentria Care Alliance, formerly Lutheran Social Services of New England, is a Worcester-based multi-service agency founded in 1872 with a robust program called Services for New Americans. Catholic Charities of Worcester County also offers extensive refugee, citizenship, and immigration services. Notably, Ascentria and Catholic Charities are designated refugee resettlement agencies and work with the U.S. State Department and the Massachusetts Office of Refugees and Immigrants to resettle refugees in the greater Worcester area. In addition to the two designated refugee resettlement agencies, Worcester has a variety of organizations that work with the various communities of foreign-born individuals residing in Worcester. These agencies include, but are not limited to, African Community Education, Centro Las Americas, and Southeast Asian Coalition. In addition to providing services to the foreign-born population, these organizations serve to provide an important bridge between newcomers and long-time Worcester residents.



## **2.0 PURPOSE OF THE REPORT**

To date, the discussion of issues related to the foreign-born community both locally and statewide has generated much heat but precious little light. This study is designed to bring evidence and objective information to bear on this critical conversation. It is also designed to provide Worcester's leaders with the information and data they require to make informed decisions about how best to seize the opportunities and address the challenges associated with immigration and increasing community diversity.

The research is designed to answer the following critical questions:

- What is the size and origin of Worcester's foreign-born population?
- What are the demographic characteristics of the foreign-born population?
- In what ways are Worcester's major foreign-born groups different from one another?
- What is the economic footprint of Worcester's foreign born?
- What is the estimated impact of foreign-born spending?
- Do Worcester's foreign born utilize public benefits at a higher level than natives?
- What are the impacts of foreign-born children on the Worcester Public Schools?
- Do Worcester's foreign born fill mostly entry-level, low-paying jobs?
- What are the service needs of Worcester's immigrant and refugee populations?

### **A NOTE ABOUT LANGUAGE**

As noted in the overview, not all foreign-born residents are immigrants or refugees; some foreign-born residents are international students or individuals with temporary work visas, and some are undocumented and in the country illegally. The Department of Homeland Security defines international students and temporary workers as "nonimmigrants" along with many other group such as visitors, foreign government officials, representatives of foreign media, exchange visitors, and religious workers.<sup>6</sup> However, all foreign-born residents enter into the discussion of immigration. For this reason, the terms 'foreign born' and 'immigrant' are used interchangeably throughout this report.

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<sup>6</sup> See definition of nonimmigrant here: <http://www.dhs.gov/definition-terms#0>.

#### MARGIN OF ERROR AND SAMPLE WEIGHTS

Both the pretabulated American Community Survey (ACS) data and the Public Use Microdata Sample (PUMS) data utilized extensively throughout this report at times rely on relatively small samples and weighting formulas to generate accurate population and subpopulation estimates. As with any analysis based on a sample, sampling error is unavoidable. Consequently, in the interest of transparency and scientific rigor, margins of error are reported in figures and tables when those margins add value and important context to the analysis. All reported margins of error are based on 95 percent confidence intervals. Margins of error are available for all data upon request.

#### SUBGROUP ANALYSES

The ACS includes a key variable for citizenship status that this study relies on throughout this report. The ACS defines the native-born population as including individuals born in the U.S., Puerto Rico, Guam, the U.S. Virgin Islands, or the Northern Marianas. The ‘foreign born’—the official U.S. Census Bureau term—includes U.S. citizens by naturalization as well as noncitizens (both documented and undocumented).

In some cases, analyses compare foreign born to native born, while in other cases analyses distinguish naturalized foreign born from noncitizens. Research conducted at the state level in Massachusetts has focused on differences between established and more recent immigrants. A preliminary analysis of the foreign-born population in Worcester revealed few distinctions between established and new immigrants. However, comparison of naturalized and noncitizen foreign-born groups revealed significant differences across a number of important socioeconomic indicators. For this reason, this report draws attention to the unique characteristics of naturalized and noncitizen foreign-born groups in Worcester.

Notably, available data do not permit a detailed analysis of the subgroups that make up the noncitizen population of Worcester. However, a number of noncitizens in the sample are understood to be ‘undocumented.’ It should be noted that the ACS sample likely contains some nonresponse error associated with the undocumented population. Accordingly, the estimate of the size of the undocumented population may be underestimating the size of this subgroup.

#### SERVICE PROVIDER INTERVIEWS

In an effort to understand the broader context surrounding Worcester’s foreign-born population, interviews were conducted with four Worcester-based service providers: Ascentria Care Alliance, Catholic Charities of Worcester County, African Community Education, and Centros Las Americas. During these interviews, agency representatives were asked a series of questions about the foreign-born populations they serve, including those related to: demographic composition and trends; service needs and gaps; public service utilization and barriers; agency strategies to accommodate diversity; population myths and contributions; and funding and policy implications.

### 3.0 WHAT IS THE SIZE AND ORIGIN OF WORCESTER’S FOREIGN-BORN POPULATION?

Worcester’s total population is 181,901 and foreign-born residents account for 20.9 percent (37,970 people) of this total.<sup>7</sup> This compares with 15.1 percent statewide.<sup>8</sup> Consistent with national patterns, immigrants are more concentrated in the Commonwealth’s urban centers, but are especially so in Worcester. Table 1 presents the percentage of foreign-born residents for 11 of the state’s 26 Gateway Cities, with Worcester having the highest absolute number of foreign-born residents and one of the highest percentages of foreign born among these communities.<sup>9</sup>

*Table 1  
Foreign Born among Gateway Cities*

City	Percent Foreign Born	Number Foreign Born
Worcester	21%	37,970
Lawrence	38%	28,900
Lowell	25%	26,699
Brockton	25%	23,214
New Bedford	20%	18,860
Fall River	19%	16,918
Springfield	11%	16,844
Fitchburg	11%	4,630
Haverhill	10%	6,048
Holyoke	6%	2,324
Pittsfield	5%	2,399

*Source: ACS five-year 2009-2013 estimates*

*Worcester has the highest number of foreign-born residents among Massachusetts’ Gateway Cities.*

The majority of Worcester’s foreign-born residents were born in Latin America and Asia, although immigrants arrive in Worcester from all corners of the globe (see Figure 1). African immigrants make up a considerably higher share of the total immigrant population in Worcester compared with the state as a whole (21 percent versus 8 percent of African immigrants statewide) and account for approximately 10 percent of foreign-born residents of African origin in Massachusetts. In fact, Worcester’s immigrants from Ghana, Kenya, and Liberia account for 40 percent of the state total from these three countries.<sup>10</sup>

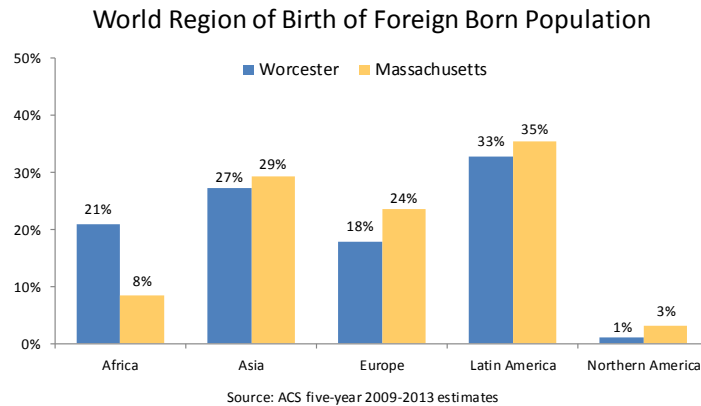
<sup>7</sup> All data in this section are derived from the American Community Survey five-year estimates (2009–2013), unless noted otherwise. Note that population data included in Section 1.0 include one-year estimates and are not directly comparable to these data.

<sup>8</sup> All statewide data reported throughout this study include Worcester.

<sup>9</sup> Massachusetts “Gateway Cities” are midsized urban centers that are the economic anchors of their regions.

<sup>10</sup> These data are derived from ACS PUMS five-year estimates, 2009–2013

Figure 1



### From the Field

Consistent with patterns noted in the quantitative data, service agency representatives describe evolving waves of immigration and resettlement from different parts of the world. In recent decades, this appears to reflect a pattern of flight from areas in global conflict, followed by immigration in more gradual waves (perhaps fostered by the desire to join family/acquaintances recently settled). One agency described the evolution of resettlement from the following areas: Southeast Asia (Vietnam, Cambodia, Laos, Malaysia) in the post-1975 era, followed by Bosnia and Burma/Myanmar, and now various parts of Africa with continued but slowed movement from countries like Vietnam. Another leader in the African community specified that his agency is currently “focusing on the Central African Republic” and seeing considerable movement from East African countries such as Somalia, Kenya, and Ethiopia. These and other leaders also added that they are now working with many Iraqis and Bhutanese. A representative from a Latino/a organization described working with several of the above groups, as well as persons from Central America, South America, the Dominican Republic, and Albania. He noted particular recent growth in population from Central America and Iraq.

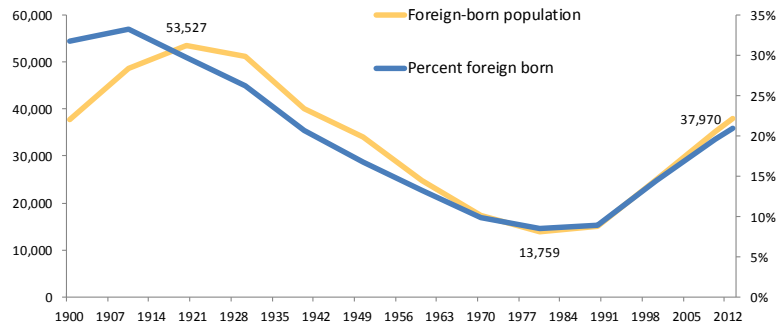
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**IMMIGRATION PATTERNS**

The number of immigrants in Worcester reached its peak in 1920, when 53,527 of its residents were foreign-born, representing 30 percent of the city’s total population. Immigration levels steadily declined after this period until the passage of The Immigration Act of 1990, which increased the cap on immigration and included other policy changes that made legal immigration to the U.S. easier for some groups. Since 1990, the number of immigrants in Worcester has risen by 152 percent (see Figure 2).

*Figure 2*

**Foreign Born Population By Decade**

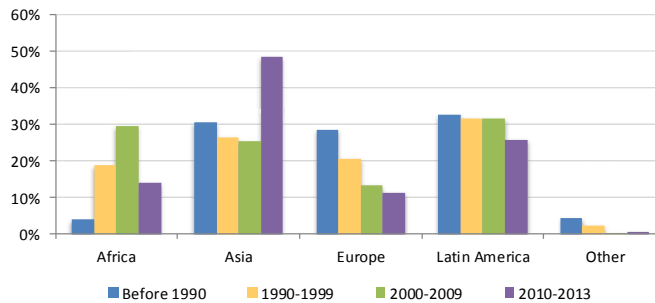


Source: U.S. Decennial Censuses 1900-2000; ACS five-year 2009-2013 estimates

Like many American cities, Worcester has experienced several waves of immigration over the past 200 years. European immigration in the 19th and early 20th centuries was followed by a wave of Latin American immigration that accelerated in the 1970s. African and Asian immigration increased sharply during the early 2000s, with Asian immigration continuing its growth since 2010 (see Figure 3).

*Figure 3*

**Current Foreign Born By Decade of Entry**



Source: ACS five-year 2009-2013 PUMS analysis

*The Foreign-Born Population of Worcester, Massachusetts:  
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Worcester’s current foreign-born residents originated from 85 different countries, with the largest concentrations emigrating from Ghana (10.1 percent),<sup>11</sup> Dominican Republic (9.9 percent), and Vietnam (9.3 percent). Immigrants from the 11 countries in Table 2 represent 55.5 percent of Worcester’s total foreign-born population, while the remaining 74 countries (included in the “Other” category) each represent less than 2 percent of the total foreign-born population.

*Table 2  
Top Countries of Origin*

<b>Country</b>	<b>Population</b>	<b>MOE</b>	<b>Share of Total</b>
<b>Ghana</b>	3,822	+/-650	10.1%
<b>Dominican Republic</b>	3,741	+/-758	9.9%
<b>Vietnam</b>	3,526	+/-525	9.3%
<b>Brazil</b>	2,260	+/-494	6.0%
<b>Albania</b>	1,699	+/-402	4.5%
<b>El Salvador</b>	1,287	+/-345	3.4%
<b>China</b>	1,085	+/-342	2.9%
<b>Kenya</b>	1,018	+/-333	2.7%
<b>Poland</b>	955	+/-334	2.5%
<b>India</b>	789	+/-239	2.1%
<b>Colombia</b>	787	+/-320	2.1%
<b>Other</b>	17,000		45.5%

*Source: ACS five-year 2009-2013 estimates*

*Worcester’s current foreign-born residents originated in 85 different countries.*

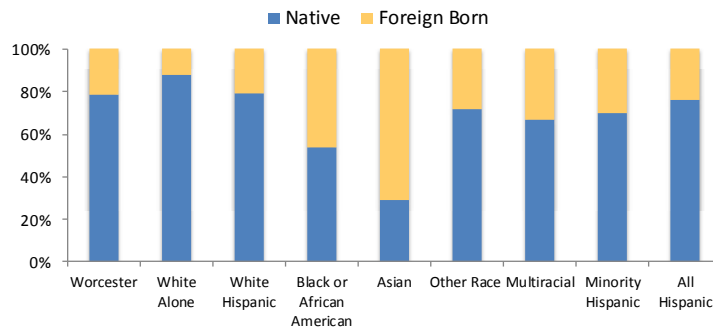
<sup>11</sup> Pew Research Center reports that there four times as many black immigrants living in the United States than in 1980, and this rapid growth is expected to continue. The Census Bureau projects that by 2060, 16.5 percent of the U.S. black population will be immigrants. See [http://www.pewsocialtrends.org/files/2015/04/2015-04-09\\_black-immigrants\\_FINAL.pdf](http://www.pewsocialtrends.org/files/2015/04/2015-04-09_black-immigrants_FINAL.pdf).

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Worcester residents as a whole are more racially and ethnically diverse than the state overall, although a majority of the city’s population identifies solely as white. Perhaps most noteworthy with regard to immigration trends is that foreign-born individuals within the Asian community far outnumber native-born Asian residents, with over 70 percent of Asian residents having been born abroad. The African American community has the second largest share of foreign-born individuals, with just under half being foreign born (see Figure 4).<sup>12</sup>

*Worcester residents as a whole are more racially and ethnically diverse than the state overall.*

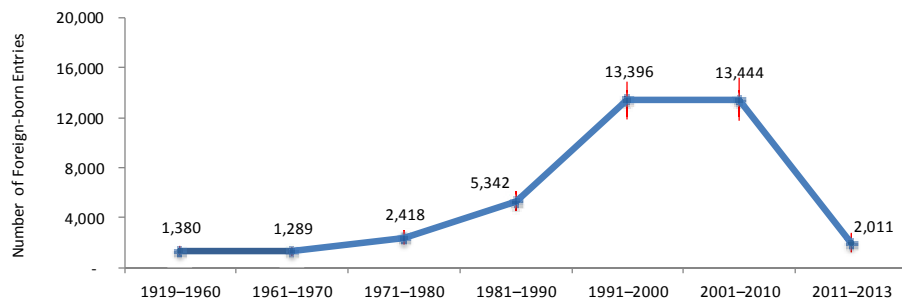
*Figure 4*  
**Nativity By Race or Ethnicity**



Source: ACS five-year 2009-2013 PUMS analysis

Among Worcester’s current foreign-born population, the majority arrived in the U.S. between 1990 and 2010, with 65 percent arriving since 2001(see Figure 5).

*Figure 5*  
**Foreign Born Decade of Entry**



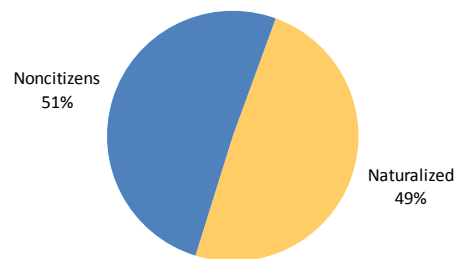
Source: ACS five-year 2009-2013 PUMS analysis

<sup>12</sup> Minority Hispanics are Hispanic individuals who identify themselves as other than white.

## CITIZENSHIP STATUS

The citizenship status of Worcester’s foreign-born population is described in Figure 6. Naturalized citizens are immigrants who earned their citizenship after entering the country<sup>13</sup> and they represent approximately half (49 percent) of Worcester’s foreign-born population (and 10 percent of Worcester’s total population overall). Noncitizens are lawful permanent residents, temporary migrants (e.g. students), humanitarian migrants (e.g. refugees/asylees), and unauthorized migrants. Noncitizens represent 51 percent of Worcester’s foreign born (and 11 percent of Worcester’s total population).<sup>14</sup>

*Figure 6*  
Citizenship Status Among  
Worcester's Foreign Born  
Source: ACS five-year 2009-2013 estimates



## NATURALIZED CITIZENS

A majority of Worcester’s naturalized citizens gained their citizenship between 2000 and 2010 (55.6 percent), which reflects trends in foreign born arrivals during that period (45.7 percent arrived in the United States in 2000 or later<sup>15</sup> (see Figure 7). High naturalization rates during this decade may also be related to the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA)<sup>16</sup> in 1996 that substantially redesigned the welfare system and made it increasingly difficult for recent arrivals to qualify for government programs without first becoming citizens. Consequently, in some cases immigrants may have elected to become citizens to become eligible for these and other citizenship benefits in the years following the Act’s passage independent of their

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<sup>13</sup> Under current regulations, a person is required to be a lawful permanent resident for five years or longer in order to work towards citizenship. This generally refers to green card holders who have been endorsed by family, employers, or a spouse to become a permanent resident. Refugees and asylees are also granted green card status. There are other special provisions through which immigrants can become lawful permanent residents, which are outlined in the Immigration and Nationality Act (See <http://www.uscis.gov/laws/immigration-and-nationality-act>). Once they have been naturalized, these immigrants are legal U.S. citizens.

<sup>14</sup> American Community Survey and Puerto Rican Community Survey subject definitions.

<sup>15</sup> A more detailed analysis of ACS data reveals that 31 percent of all foreign-born, naturalized citizens in Worcester earned their citizenship between 2005 and 2009. B-0501: Period of Naturalization, 2009–2013 American Community Survey, Worcester.

<sup>16</sup> This Act is often referred to as the “Welfare Reform Act.”



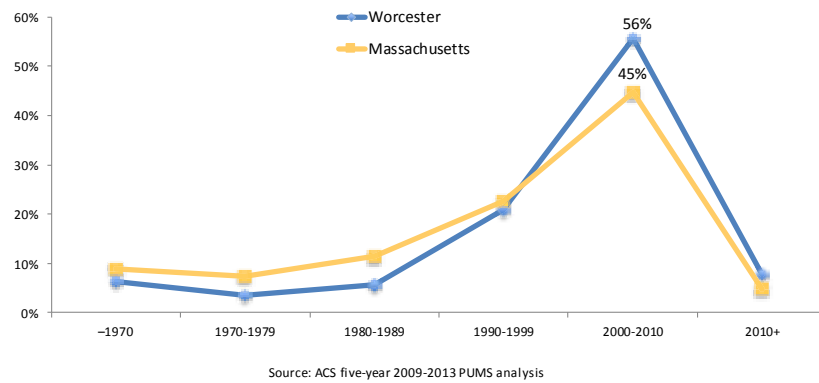
*The Foreign-Born Population of Worcester, Massachusetts:  
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decade of arrival. High naturalization rates during this decade may also be related to an increase in Latino and African arrivals in the 1990s, who were required to wait the five year period to become naturalized.

Naturalization is important to a community like Worcester because naturalized immigrants are more likely to remain in the region and contribute positively to the local culture and economy.<sup>17</sup> As we shall see, like the foreign-born residents nationwide, Worcester’s foreign-born residents who are naturalized generally have higher incomes, are more likely to be homeowners, and have higher levels of educational attainment than the foreign-born population as whole. In some cases, naturalized citizens have higher economic and educational outcomes than native-born residents as well.<sup>18</sup>

*Worcester’s foreign-born residents who are naturalized generally have higher incomes, are more likely to be homeowners, and have higher levels of educational attainment than the foreign-born population as whole.*

Figure 7  
Naturalization by Decade



<sup>17</sup> Pastor, M., and Scoggins, J. 2012. "Citizen Gain: The Economic Benefits of Naturalization for Immigrants and the Economy." Center for the Study of Immigrant Integration.

<sup>18</sup> Auclair, G., and Batalova, J. 2013. "Naturalization Trends in the United States." The Migration Policy Institute.

<http://www.migrationpolicy.org/article/naturalization-trends-united-states#13>.

#### UNAUTHORIZED IMMIGRANTS

Unauthorized immigrants include individuals who have entered the country illegally or those who came to the country legally with a tourist or other temporary visa and then failed to leave the country upon the expiration of their visa. Measuring the impact of unauthorized immigrants is difficult because there is little existing data on their number and background. Indeed, the very nature of the term “unauthorized immigrant” implies that little official data can be collected on the lives and whereabouts of these individuals.

A common and accepted methodology to measure the number of unauthorized immigrants is to use the residual method. This method is used by the Department of Homeland Security in their annual estimate of the unauthorized population.<sup>19</sup> The Pew Research Center<sup>20</sup> and policy analysts in California have also employed the residual method to estimate the size of the unauthorized immigrant population.<sup>21</sup> This method arrives at an estimate of unauthorized immigrants by taking the American Community Survey estimate of foreign-born residents (which includes unauthorized immigrants) and subtracting the estimated legal population. The difference (or residual) is the estimate of the size of the undocumented population. The Department of Homeland Security develops its estimates using data on immigrant arrivals, naturalizations, and departures as well as information about the number of immigrants deported.

In 2012, Massachusetts was home to 971,465 immigrants of whom an estimated 150,000 were unauthorized, representing 15 percent of the total number of foreign-born residents of the Commonwealth. By applying the state ratio of unauthorized immigrants to Worcester’s foreign-born population (37,498 people in 2012), we can estimate that Worcester is home to an unauthorized immigrant population of approximately 5,790 people.

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<sup>19</sup> “Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2012” (Baker & Rytina, 2013).

<sup>20</sup> “Unauthorized Immigration to the United States: Annual Estimates and Components of Change, by State, 1990 to 2010.” Warren & Warren, 2013; “Unauthorized Immigrant Totals Rise in 7 States, Fall in 14.” Passel & Cohn, 2014.

<sup>21</sup> “Unauthorized Immigrants in California: Estimates for Counties.” Hill & Johnson, 2011.

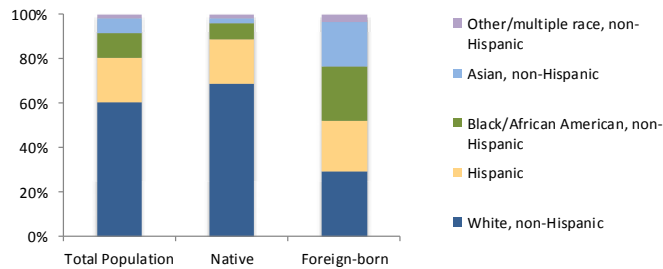
#### 4.0 WHAT ARE THE DEMOGRAPHIC CHARACTERISTICS OF WORCESTER’S FOREIGN BORN?

##### RACE/ETHNICITY

As a whole, Worcester residents are more racially and ethnically diverse than the state. In Worcester, 60 percent of the population identifies as white, non-Hispanic, as compared to 76 percent of residents statewide (see Figure 8).<sup>22</sup> The remainder of the population identifies as one of the following minority groups: black / African American, non-Hispanic; Asian, non-Hispanic; other/multiple races, non-Hispanic; or Hispanic (of any race).

Figure 8

Worcester Race & Ethnicity



Source: ACS five-year 2009-2013 PUMS analysis

*Worcester’s foreign born are more diverse than Massachusetts’ foreign born statewide.*

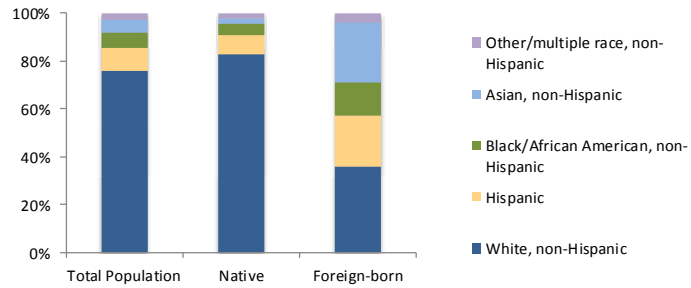
Worcester’s foreign born are more racially and ethnically diverse than the native population, with only 29 percent of the foreign-born population identifying as white, non-Hispanic, compared with 69 percent of the native population. The foreign born account for a higher percentage of the population in minority ethnic and racial categories, although people of Hispanic origin compose nearly an equal share of the native and foreign-born populations.<sup>23</sup> While racial and ethnic diversity is highly concentrated among the foreign born both statewide and in Worcester, it is noteworthy that Worcester’s foreign born are more diverse than Massachusetts’ foreign born statewide (see Figure 9). Nevertheless, white, non-Hispanic foreign-born residents make up a plurality of the foreign born in Worcester (29 percent white, non-Hispanic) and Massachusetts (36 percent white, non-Hispanic).

<sup>22</sup> All data in this section are derived from the American Community Survey PUMS five-year estimates (2009–2013) unless noted otherwise.

<sup>23</sup> Race groups identified in this study include the following U.S. Census Bureau categories: White, non-Hispanic; Black or African American, non-Hispanic; Asian, non-Hispanic; multiracial or other, non-Hispanic. The Other category includes indigenous Americans, Alaskan and Hawaiians as well as Pacific Islanders and other groups that represent less than one percent of the total population. Ethnically Hispanic residents include residents of all races with Spanish-speaking origins.

Figure 9

Massachusetts Race & Ethnicity



Source: ACS five-year 2009-2013 PUMS analysis

One unique characteristic of Worcester’s foreign-born population is the size of the black / African American, non-Hispanic foreign-born community, which is almost as large as the white, non-Hispanic foreign-born group (24 percent) and is proportionately larger than the black, non-Hispanic foreign-born group statewide (14 percent).

There are also differences between Asian, non-Hispanic foreign born populations at the city and state levels. Unlike any other group, members of the non-Hispanic Asian group in Worcester and throughout Massachusetts are overwhelmingly foreign born. Only 2 percent of city and statewide native-born populations are Asian, non-Hispanic. The non-Hispanic Asian foreign born account for 20 percent of Worcester’s and 25 percent of the state’s foreign-born population.

Foreign-born Hispanic residents represent similar portions of Worcester (23 percent) and Massachusetts foreign born population (21 percent). However, native-born Hispanic residents represent a much larger share of native Worcester residents (20 percent) than of native Massachusetts residents (7.9 percent). The Puerto Rican community presents an especially interesting case in Worcester, as all Puerto Ricans are by definition native-born U.S. citizens, whether born on the island or the mainland U.S. Of an estimated 37,092 Hispanic residents in Worcester, 20,832 or 56 percent are of Puerto Rican descent.<sup>24</sup>

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<sup>24</sup> Section 6.1 presents a detailed analysis of the socioeconomic status of Puerto Ricans in Worcester

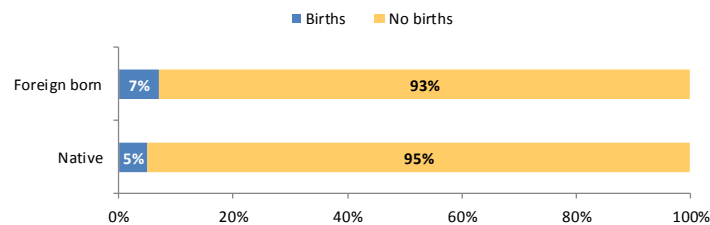
## GENDER

Both the foreign-born and native populations of Worcester are slightly more likely to be female than male. The native-born population is 47.4 percent male and 52.6 percent female. Immigrants are 51.6 percent female and 48.4 percent male, and there is little variation in gender distribution between naturalized and noncitizen immigrants.

## BIRTH RATES

The percentages of women between the ages of 15 and 50 who reported a birth within a year of their ACS interview are similar between native-born and foreign-born women (see Figure 10). However, babies born to foreign-born mothers in Worcester account for 43 percent of all births, which is more than double foreign-born women's share of the total female population (21 percent). Historically, immigrant women have given birth at higher rates than natives. However, with birth rates declining in the U.S. recently the drop has been more dramatic among immigrants.<sup>25</sup> In Worcester, birth rates for natives and immigrants have remained stable since 2005.<sup>26</sup>

*Figure 10*  
Birth Rates



Source: ACS five-year 2009-2013 estimates

## MARITAL STATUS

Native born Worcester residents are less likely to live in a household defined as a “married couple family” than foreign-born residents; 40.9 percent of Worcester’s native households are defined as a “married couple family” compared with 50.2 percent of foreign-born households. Among the foreign born, naturalized citizens are more likely to be in married couple households than noncitizens (55.4 and 45.1 percent, respectively).

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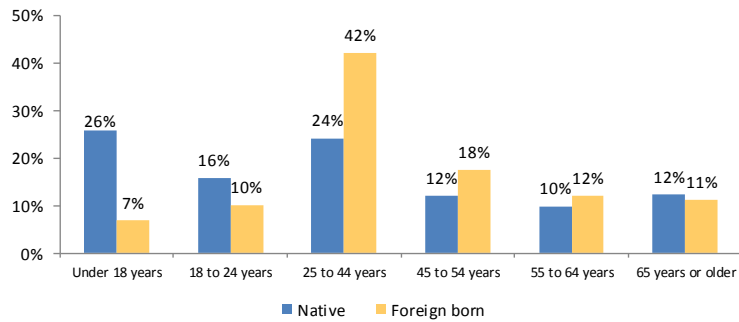
<sup>25</sup> “U.S. Birth Rate Falls to a Record Low; Decline Is Greatest Among Immigrants” (Livingston and Cohn, 2012). <http://www.pewsocialtrends.org/2012/11/29/u-s-birth-rate-falls-to-a-record-low-decline-is-greatest-among-immigrants/>.

<sup>26</sup> 2005–2009 ACS.

**AGE**

Foreign-born and native residents differ greatly in two age categories (see Figure 11). First, the foreign born are almost two times more likely than natives to be between 25 and 44 years of age. Noncitizens are more likely than naturalized citizens to be in this age cohort. Since two in five immigrants are between 25 and 44 years of age, the foreign-born workforce is much younger than the native workforce. This is consistent with studies of Massachusetts’s immigrants conducted by the Immigrant Learning Center and scholars at UMass Boston. These studies highlight the economic benefits of having a younger foreign-born workforce in light of the aging of the comparatively older native-born population.<sup>27</sup>

*Figure 11*  
**Age Cohorts by Nativity**



Source: ACS five-year 2009-2013 estimates

Notably, there are considerably smaller shares of children in the immigrant population when compared with natives. However, it would be incorrect to assume that foreign-born households do not contain children. Indeed, the earlier discussion on birth rates revealed that foreign-born women in Worcester are giving birth at a higher rate than natives. But, the children born to immigrant mothers in the United States are American citizens, regardless of the citizenship or nativity of the parents, and therefore would not be considered to be foreign born in the data. However, due to the nativity of their parents, these children in many ways are living the immigrant experience.

In Worcester, nearly 14,000 children live in immigrant households and communities. Children with at least one foreign-born parent, or who are foreign-born themselves, account for 38 percent of all children in Worcester (see Table 3). This is higher than the national percentages reported in 2010, when one in four children had at least one foreign-born parent.<sup>28</sup> It is also a higher share than in the Commonwealth as a whole, where 22 percent of all native children have a foreign-born parent.<sup>29</sup>

<sup>27</sup> “Immigrants by the Numbers: Second Edition.” Clayton-Matthews & Watanabe, 2012.

<sup>28</sup> “The Foreign-born Population in the United States.” U.S. Census Bureau, 2010.

<sup>29</sup> Based on totals from: “Age and Nativity of Own Children under 18 years in Massachusetts,” 2013 five-year ACS.

Table 3

*Native Children with One or More Foreign-Born Parents*

Total children	37,815	100.0%
Foreign-born children	2,444	6.5%
Native children	35,371	93.5%
<i>At least one parent foreign born</i>	<i>11,849</i>	<i>31.3%</i>
<i>Both parents foreign born</i>	<i>5,447</i>	<i>14.4%</i>
<i>One parent foreign born</i>	<i>6,402</i>	<i>16.9%</i>

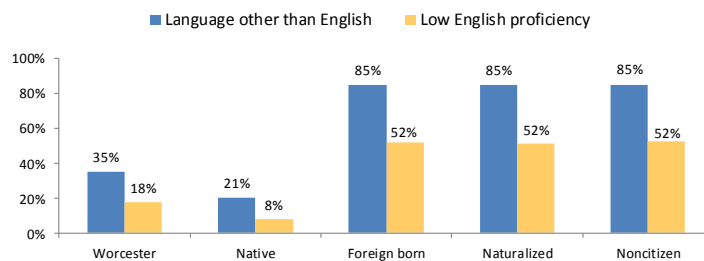
Source: ACS five-year 2009-2013 estimates

**ENGLISH PROFICIENCY**

*Immigrants with good English speaking skills can dramatically improve their economic success and overall well-being.*

Thirty-five percent of Worcester’s residents primarily speak a language other than English and 18 percent have low levels of English proficiency.<sup>30</sup> Twenty-one percent of Worcester’s native residents speak a language other than English, although only 8 percent of natives do not speak English well. Among the foreign born, 85 percent speak a language other than English and 52 percent have low levels of English proficiency (see Figure 12).

Figure 12  
English Proficiency



Source: ACS five-year 2009-2013 estimates

Immigrants with good English speaking skills can dramatically improve their economic success and overall well-being. According to a 2014 report by the Brookings Institute, adults with limited English proficiency “earn 25 to 40 percent less than their English proficient counterparts.”<sup>31</sup> This pattern is evident in Worcester and statewide, where foreign-born individuals who speak English “very well” earn more on average than those who do not speak English as well (see Figure 13 ).<sup>32</sup>

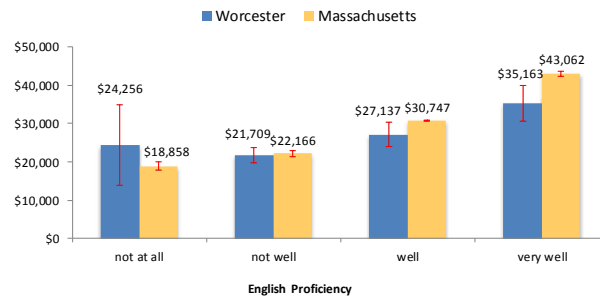
<sup>30</sup> English proficiency is defined by the U.S. Census Bureau as individuals who report being able to speak English “well” or “very well.”

<sup>31</sup> “Investing in English Skills: The Limited English Proficient Workforce in U.S. Metropolitan Areas.” Wilson, 2014. [http://www.brookings.edu/~media/Research/Files/Reports/2014/09/english-skills/Srvy\\_EnglishSkills\\_Sep22.pdf?la=en](http://www.brookings.edu/~media/Research/Files/Reports/2014/09/english-skills/Srvy_EnglishSkills_Sep22.pdf?la=en)

<sup>32</sup> The result that individuals who speak English “not at all” is higher than those who speak “not well” is likely a factor of the small sample size and subsequent high margin of error.

Figure 13<sup>33</sup>

Foreign Born Median Earnings by English Proficiency



Source: ACS five-year 2009-2013 PUMS analysis

## From the Field

The importance of English language proficiency was identified as a critical area of focus among service providers. All of the agencies interviewed provide instruction in English to speakers of other languages (ESOL) or facilitate access to such services.

While this is an important aspect of services for the foreign-born community, one interviewee expressed concern about two misconceptions related to English language learning: 1) foreign-born individuals don't want to learn English, and 2) foreign-born individuals have to learn English in order to be successful. Regarding the first misconception, the interviewee noted that it simply wasn't true. He felt that many people view English as an important route to access and opportunity, and expressed his belief that there is far greater demand for services than capacity to improve language skills. The interviewee also expressed his belief that it is a misconception that success is predicated upon English proficiency. He felt that this notion disregards the capacities of a "nation of immigrants" who have succeeded both with and without English language proficiency.

<sup>33</sup> Error bars indicate 95 percent confidence intervals for estimates.

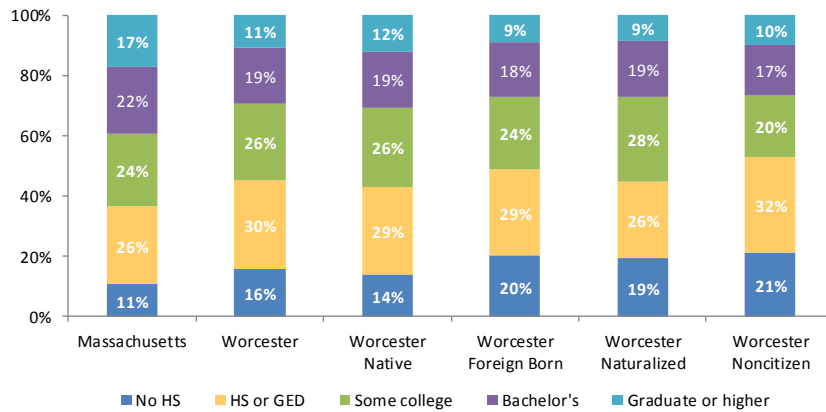


**EDUCATIONAL ATTAINMENT**

Simply put, higher levels of educational attainment open up opportunities for immigrants and natives alike. Nationally, the foreign born have similar rates of high school graduation and advanced-degree attainment as natives and the Northeast has a higher degree attainment rate for foreign-born residents than any other region of the nation.<sup>34</sup>

In Worcester, educational attainment rates for the population 25 years of age and older are fairly similar between natives and foreign born, although a higher percentage of the foreign born have not completed high school (20 percent versus 14 percent native population) and are slightly less likely to have attained a graduate degree (9 percent versus 12 percent native). However, natives and the foreign born have similar bachelor’s degree attainment rates with native rates being slightly higher (19 percent native versus 18 percent foreign born) (see Figure 14).<sup>35</sup>

*Figure 14*  
**Educational Attainment**



Source: ACS five-year 2009-2013 estimates

<sup>34</sup> “Statistical Portrait of the Foreign-Born Population in the United States, 2012.” Brown & Patten, 2014; “Educational Attainment in the United States: 2009.” Ryan & Siebens, 2012.

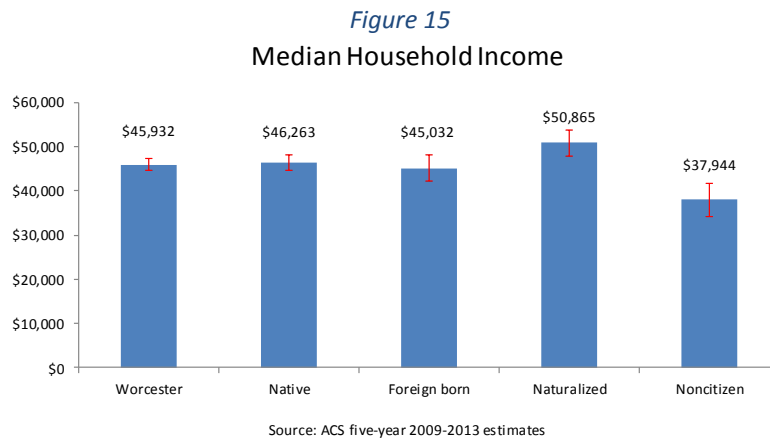
<sup>35</sup> Educational attainment data is based on population 25 years and older.

## 5.0 WHAT IS THE ECONOMIC PROFILE OF WORCESTER’S FOREIGN BORN?

Worcester’s foreign born are similar to natives in terms of income and poverty rates, although noncitizens do not fare as well economically as their neighbors who are naturalized citizens. And while naturalized immigrants have a higher rate of homeownership than natives, they are much more likely to be financially burdened by their housing costs.

### MEDIAN HOUSEHOLD INCOME

The citywide median annual household income is \$45,932, with naturalized foreign-born residents reporting slightly higher median earnings than any other group. Noncitizens have the lowest median household income (see Figure 15).<sup>36</sup>



While noncitizens have the lowest median household income, they have the most workers per household (see Table 4).

*Table 4*  
Average Number of  
Workers per Household

Worcester Total	1.14
Native	1.06
Foreign Born	1.39
Naturalized	1.37
Noncitizen	1.42

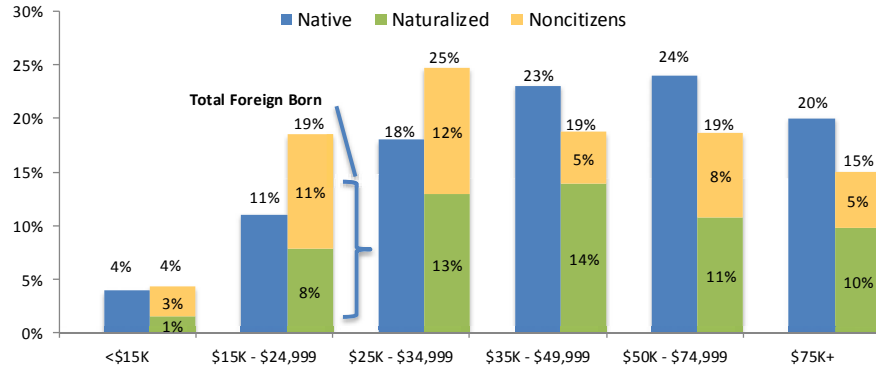
Source: ACS five-year  
2009-2013 estimates

<sup>36</sup> Percentages are based on the population 16 years and over who reported earnings

Native households are more concentrated among the higher income brackets in comparison with the foreign born. Among the foreign born, naturalized citizens have higher incomes than noncitizens. Naturalized foreign born are concentrated in the middle of the income distribution, with the majority of households earning between \$25,000 and \$50,000 annually (see Figure 16).

Figure 16

Median Household Income By Group



Source: ACS five-year 2009-2013 estimates

*Across all groups, English proficiency and educational attainment are correlated with income levels.*

Across all groups, English proficiency and educational attainment are correlated with income levels. As shown earlier, noncitizens on average have lower rates of educational attainment and speak English less well, which in turn consigns many noncitizens to low-skill/low-pay jobs.

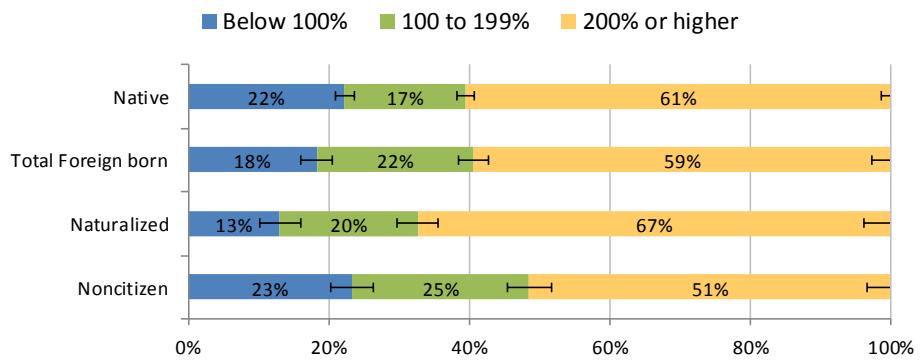
These factors also correlate with higher unemployment rates among noncitizens, which may explain some of the income disparity between noncitizens and the remainder of the population. American Community Survey unemployment rate data show a noncitizen unemployment rate of 7.3 percent, which compares with 5.9 percent for all foreign born and 4.5 percent for naturalized citizens (2009-2013 estimates). However, given the size of the noncitizen sample, the margin of error makes it difficult to draw a conclusive number. Overall, there is little difference between unemployment rates for Worcester natives and the foreign-born population. Recently, there has been marked improvement in local labor market conditions. In May of 2015, using a different dataset (the Current Population Survey), the Bureau of Labor Statistics estimated that the overall unemployment rate in Worcester was 5.4 percent.

**POVERTY**

Census data for the nation shows that the foreign born are more likely to be living below the poverty level in comparison with native-born Americans. For reasons discussed above, this disparity is smaller for foreign-born residents with more English language proficiency and higher levels of educational attainment.

Conversely, Worcester’s foreign born are less likely than natives to live below the federal poverty level (18 percent and 22 percent respectively), and only 13 percent of the city’s naturalized foreign born are living in poverty. Noncitizens are more likely to live below the poverty level (23 percent). Noncitizens are also most likely to live just above the poverty level and thus they do not qualify for many of the social assistance programs that are available for those living below the federal poverty line (see Figure 17). Section 8.0 examines the availability of and utilization of social assistance programs by the foreign born in detail.

*Figure 17*  
**Poverty Level**



Source: ACS five-year 2009-2013 estimates

## HOUSING

Nationally, the U.S. Census Bureau estimates that naturalized citizens and natives are equally likely to be homeowners.<sup>37</sup> In Worcester, the foreign born have homeownership rates that are below that of natives (39 percent versus 46 percent), although the naturalized foreign born have the highest homeownership among all four groups (53 percent) (see Table 5). This is consistent with the income data and may also indicate that homeownership is a byproduct of citizenship attainment, as it is a step towards securing a permanent place in American society and considered a key component of achieving the American Dream.<sup>38</sup>

### From the Field

Consistent with the quantitative data, service providers expressed concerns about the availability of affordable housing for the foreign-born population in Worcester. Providers working with refugees cited this as a primary concern, noting that even when limited funds are available to secure housing, there is insufficient availability of safe, secure, affordable housing in Worcester.

*Table 5  
Owner and Renter Occupancy Rates*

	Owner	Renter
Worcester	44%	56%
Native	46%	54%
Foreign Born	39%	62%
Naturalized	53%	47%
Noncitizen	19%	81%

*Source: ACS five-year 2009-2013 estimates*

## HOUSING AFFORDABILITY

Housing affordability is usually defined by policymakers as the percent of income spent on housing, with a threshold that exceeds 30 percent of household income being an indicator of a housing cost burden. Thirty-five percent of Worcester's homeowners and 50 percent of its renters spend more than 30 percent of their income on housing.

Though naturalized immigrants have a higher rate of homeownership than natives, by this definition, they are much more likely to be burdened by their housing costs (50 percent versus 32 percent (see Table 6)).

<sup>37</sup> "Homeownership among the Foreign-Born Population: 2011." Trevelyan, Acosta, & De La Cruz, 2013.

<sup>38</sup> Research and analysis conducted by the Brookings Institute supports the claim that as naturalized immigrants gain stability they more likely to become homeowners. In the paper, the authors conclude "immigrant homeownership rates for all cohorts triple or quadruple, but the levels remain lower for more recent immigrants." This suggests that homeownership rates for immigrants in Worcester can be expected to increase will increase in coming years.

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*Table 6  
Housing Burden Rates  
(30%+ Income Spent On Housing)*

	<b>Owner</b>	<b>Renter</b>
Worcester	35%	50%
Native	32%	49%
Foreign Born	50%	50%
Naturalized	50%	50%
Noncitizen	51%	51%

*Source: ACS five-year 2009-2013 estimates*

These differences are in line with a national analysis by the Department of Housing and Urban Development, which found that the differences in housing cost burdens are most pronounced between native and foreign-born homeowners, rather than among renters.<sup>39</sup> In a 2011 analysis for Fannie Mae, economist Michael Cevarr confirmed that these trends continued throughout and beyond the “Great Recession”. After the 2009 housing crisis, “51.7 percent of foreign-born mortgagors spent 30 percent or more of their household income on housing costs, compared with 34.8 percent for native-born mortgagors.”<sup>40</sup> This same disparity exists in Worcester today.

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<sup>39</sup> “When They Came: Housing of Citizens and Noncitizens.” HUD, 2002.

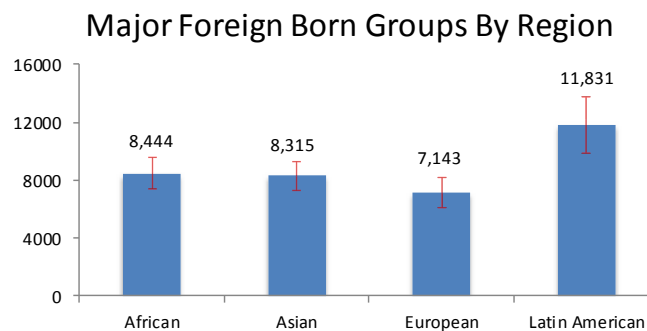
<sup>40</sup> “Immigrant Homeowners Hit Hard During the Housing Collapse, but Experience Varies by Country of Birth.” Cevarr, 2013.

## 6.0 HOW ARE WORCESTER'S MAJOR FOREIGN-BORN GROUPS UNIQUE?

The foreign-born community in Worcester is composed of groups from all regions of the world. The largest individual immigrant groups arrived from Ghana, the Dominican Republic, Vietnam, Brazil, Albania, El Salvador, and Poland. The following comparative analysis combines national groups from the same world region, which strengthens the statistical power of our estimates and increases our ability to draw meaningful conclusions about the differences between subgroups of Worcester's foreign-born population.<sup>41</sup>

Among these comparative groups, Europeans are smallest (7,143) and Latin Americans are the largest (11,831) (see Figure 18).<sup>42</sup>

Figure 18



Source: ACS five-year 2009-2013 PUMS analysis

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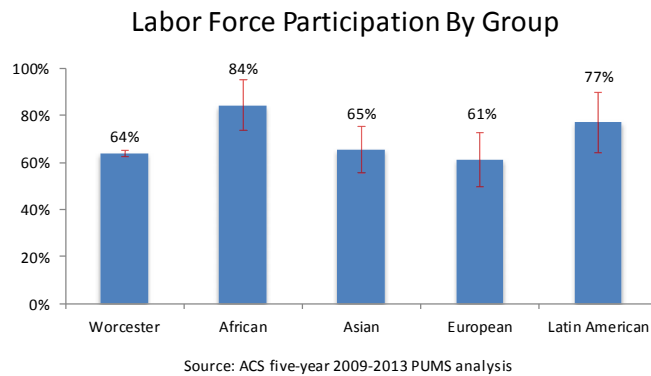
<sup>41</sup> All data in this section is derived from American Community Survey Public Use Microdata Samples (PUMS), 2009-2013. Joining individual groups assumes some similarity of cultural and socioeconomic characteristics. For the purpose of the subpopulation analysis, African denotes individuals from all nations on the continent of Africa and Cape Verde. Latin American includes individuals from South and Central America, as well as groups from Spanish-speaking nations in the Caribbean region. Asian refers to foreign-born individuals from nations as far West as Pakistan and India, and those of Northeast and Southeast Asia. Arab and Middle Eastern nations are not included in this subgroup analysis due to a very small sample size. The European foreign-born group includes those of Western and Eastern European nations, including Slavic and Baltic nations. More about these groups can be found in Appendix A

<sup>42</sup> Error bars indicate 95 percent confidence intervals for estimates

#### LABOR FORCE PARTICIPATION

Labor force participation appears to vary significantly among foreign-born groups, with working-age Africans participating at a rate of 84 percent and Europeans participating at a rate of 61 percent, although many of the differences among the groups are within the margins of error.<sup>43</sup> Overall, residents of Worcester have an estimated labor force participation rate of 64 percent (see Figure 19).

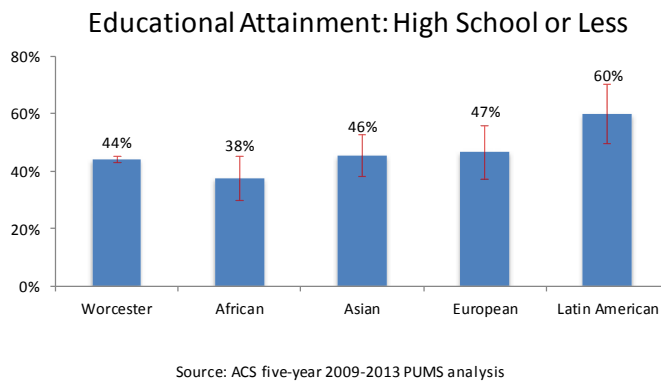
*Figure 19*



#### EDUCATIONAL ATTAINMENT

Educational attainment also differs by group and region. In Worcester overall, 44 percent of residents have earned only a high school diploma/GED or below, with the Latin American group possessing much lower levels of formal educational attainment (see Figure 20).

*Figure 20*

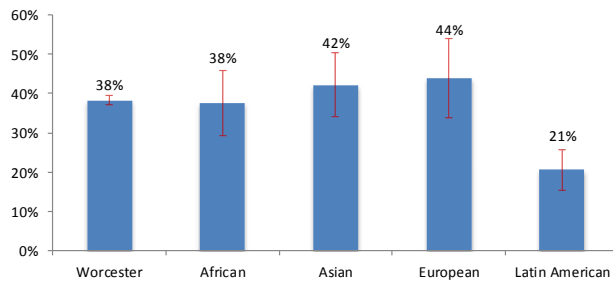


<sup>43</sup> Labor force participation measures the percentage of working age individuals who are working or unemployed but actively seeking employment.



Similar trends are evident with respect to college degree attainment. Overall, 38 percent of residents in Worcester are degree holders (associate’s degrees, bachelor’s degrees, and graduate or professional degrees), with the lowest levels of degree attainment among foreign-born residents originating from Latin America (see Figure 21).

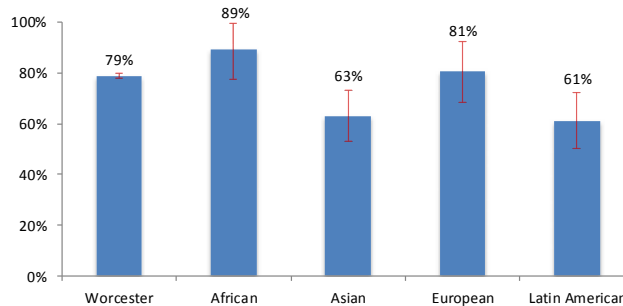
*Figure 21*  
Degree Attainment: Associate's to Doctoral



Source: ACS five-year 2009-2013 PUMS analysis

While the variation in rates of English proficiency is less pronounced, there are some noteworthy differences.<sup>44</sup> In Worcester overall, 79 percent of the population is proficient in English and two subgroups are at least as proficient –Africans at 89 percent, and Europeans at 81 percent (see Figure 22).<sup>45</sup> As noted earlier in Section 4, English proficiency is associated with higher incomes and better economic outcomes.

*Figure 22*  
English Proficiency By Group



Source: ACS five-year 2009-2013 PUMS analysis

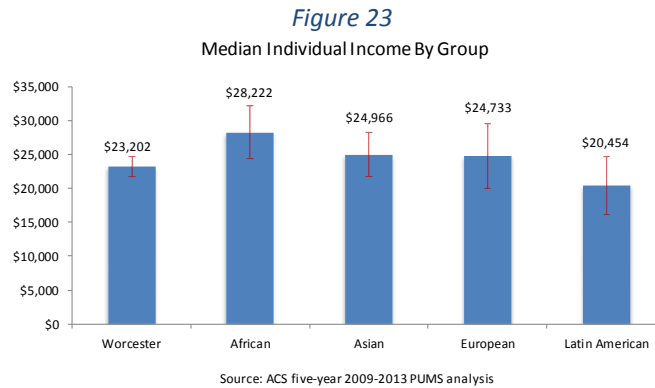
<sup>44</sup> English proficiency is defined as individuals who reported they spoke English ‘well’ or ‘very well’ on the American Community Survey.

<sup>45</sup> Pew concludes that Puerto Ricans (83 percent) are more likely than other U.S. mainland Hispanics (66 percent) to be proficient in English, which is primarily a result of high English proficiency among U.S. born Puerto Ricans. See, <http://www.pewhispanic.org/2014/08/11/chapter-1-puerto-ricans-on-the-u-s-mainland/>

#### MEDIAN INDIVIDUAL INCOME<sup>46</sup>

In terms of individual income, African, Asian, and European groups each have median incomes above the overall Worcester median, ranging from \$24,733 (European) to \$28,222 (African) (2013 constant dollars). The Latin American group has a lower median individual income, estimated at \$20,454. These data suggest that in most cases foreign-born groups are no worse off, and may in fact be slightly better off economically than the typical Worcester resident (regardless of their nativity).

*Data suggest that in most cases foreign-born groups are no worse off, and may in fact be slightly better off economically than the typical Worcester resident.*



#### POVERTY RATES

Poverty rates are a strong indicator of economic well-being among foreign-born and native groups alike. Figure 24 displays poverty rates for groups at 100 percent and 200 percent of the federal poverty line. In Worcester, 23 percent of the population lives at or below 100 percent of the poverty line, and 41 percent lives at or below 200 percent of poverty.

All of the city's major foreign-born groups have similar or lower rates of poverty in comparison to residents overall. Foreign-born individuals from European countries are the least likely of all groups to be at or below 100 percent of the poverty level (9 percent) followed by individuals from African countries (15 percent) and Asian countries (19 percent). A similar pattern is evident at the 200 percent of poverty level.

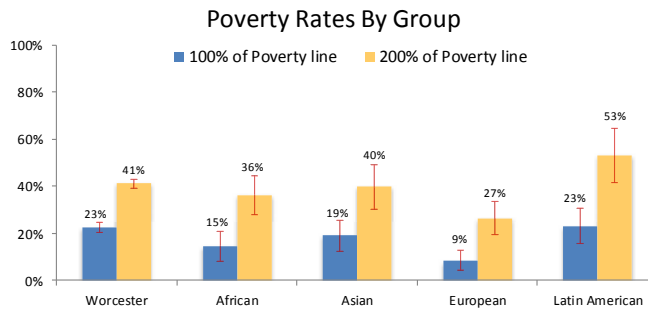
In terms of the percentage living at or below the poverty line, the Latin American group is similar to Worcester overall. However, this group has a higher concentration of individuals (53 percent) at or below 200 percent of poverty than Worcester as a whole. For both of these categories, the European foreign-born group is much less likely to be in poverty than Worcester overall, suggesting that the European group has achieved

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<sup>46</sup> Median Individual income is a measure of the sum of earned income, investment income, social security and supplemental security income, public assistance, pensions, unemployment and other income received regularly for the population 16 years and over with positive annual income.

significant economic stability and well-being (see Figure 24). Some immigration studies relate length of time in the U.S. to economic stability. Accordingly, economic well-being among long-term established European foreign born is not surprising. However, it is worth noting that a comparison of English proficiency rates, degree attainment, and median incomes between residents who arrived before and after 2004 – at both state and city levels – revealed few meaningful differences and no consistent trends.

*Figure 24*



Source: ACS five-year 2009-2013 PUMS analysis

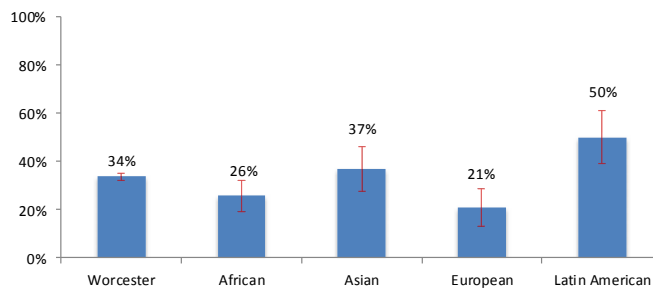
#### **MEDICAID ENROLLMENT**

Overall, one in three (34 percent) Worcester residents are enrolled in publicly provided health insurance (MassHealth/Medicaid). Africans and Europeans have the lowest rates of Medicaid enrollment, at 26 percent and 21 percent respectively. The Asian group differs little from Worcester overall, with 37 percent enrolled in Medicaid (see Figure 25). The Latin American group differs substantially, with 50 percent enrolled.

Though now expanded under MassHealth, federal eligibility requirements for Medicaid depend on immigration status. Permanent residents may qualify, and some vulnerable groups of noncitizens are also extended access, but not all foreign-born individuals qualify for MassHealth.

*Figure 25*

**Medicaid/MassHealth Enrollment By Group**



Source: ACS five-year 2009-2013 PUMS analysis

**6.1 SPECIAL CASE: THE PUERTO RICAN COMMUNITY IN WORCESTER**

During the exploratory phase of this analysis, it became apparent that Worcester is home to a relatively large Puerto Rican population with several unique characteristics. Puerto Ricans born on the mainland United States and on the island of Puerto Rico are born citizens of the United States and are not immigrants in the traditional sense. However, Puerto Ricans born on the island do not have the same rights as other native-born U.S. citizens and in many cases face challenges similar to foreign-born groups due to cultural differences and varying economic characteristics.<sup>47</sup> There are important differences in the social and economic characteristics of Puerto Rican-born (island-born) and mainland-born Puerto Ricans who reside in Worcester.

Puerto Ricans account for 20,832 (11 percent) of Worcester’s total population. Those born on the mainland outnumber island-born Puerto Ricans 12,673 to 8,159 (see Table 7). Puerto Ricans make up 56 percent of the 37,092 Worcester residents who identify as Hispanic.

*Table 7  
Size of the Puerto Rican Community*

	<b>Population Size</b>	<b>95% Margin of Error</b>
Puerto Rican-born	8,159	+/- 1,277
Mainland Puerto Rican	12,673	+/- 1,689
Worcester	182,988	+/- 2,430

*Source: ACS five-year 2009-2013 estimates*

Median individual income among Puerto Ricans is well below the citywide median. Notably, median income for Puerto Rican-born Worcester residents (\$10,765.40) is much lower than that of mainland-born Puerto Ricans (\$17,423.08) (see Table 8).

*Table 8  
Median Individual Income*

	<b>Median Income</b>	<b>95% Margin of Error</b>
Puerto Rican-born	\$10,765	+/- \$1,067.77
Mainland Puerto Rican	\$17,423	+/- \$3,775.57
Worcester	\$23,202	+/- \$1,489.24

*Source: ACS five-year 2009-2013 estimates*

<sup>47</sup> Cohn, D., Patten, E., and Lopez, M. H. 2014. Puerto Rican Population Declines on Island, Grows on U.S. Mainland. Pew Research Center: Hispanic Trends. <http://www.pewhispanic.org/2014/08/11/puerto-rican-population-declines-on-island-grows-on-u-s-mainland/>

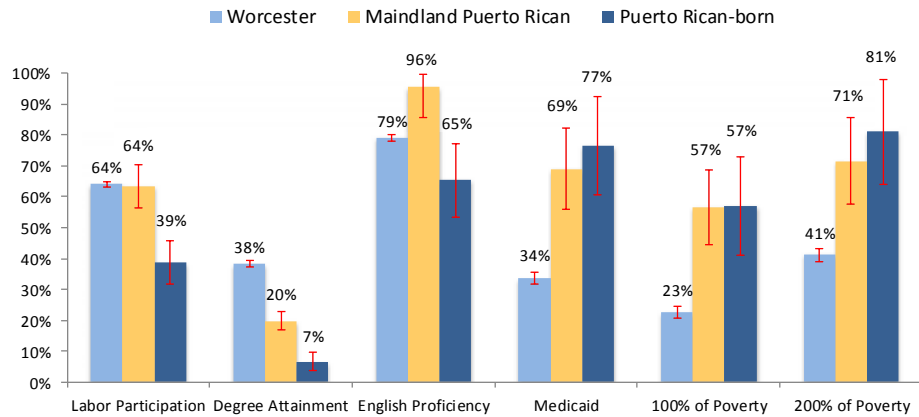
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On some social and economic indicators, data on Worcester’s mainland-born Puerto Rican residents are not very different from citywide averages. However, most measures show the Puerto Rican community, especially those born in Puerto Rico face serious socioeconomic challenges.

Labor force participation varies significantly within the Puerto Rican community, with 39 percent of the working age Puerto-Rico born population working or actively seeking employment. Labor force participation among Puerto Ricans born on the mainland is identical to the citywide average (64 percent).

Educational attainment is comparatively low among Puerto Rican residents of Worcester. Citywide, 38 percent of Worcester residents possess an Associate’s degree or better. In contrast, within the Puerto Rican community, 20 percent for mainland-born Puerto Ricans, and just 7 percent of those born in Puerto Rico have earned a college degree (see Figure 26).

*Figure 26*  
Socioeconomic Characteristics of the Puerto Rican Community



Source: ACS five-year 2009-2013 PUMS analysis

With respect to English proficiency, mainland-born Puerto Rican residents outperform the city of Worcester, 96 percent to 79 percent. Proficiency among Puerto Rican-born individuals, however, is significantly lower than their mainland-born counterparts (65 percent), though it is consistent with some of the foreign-born subpopulations evaluated in section 7.1 (particularly the Latin American and Asian foreign born). These data are consistent with national trends.<sup>48</sup>

<sup>48</sup> Pew Research Center finds that overall Puerto Ricans in the U.S. are more likely than other U.S. mainland Hispanic individuals to be proficient in English, which is primarily a result of high English proficiency among U.S.–born Puerto Ricans. Island-born Puerto Ricans, though, have lower English proficiency than other U.S. Hispanics. See <http://www.pewhispanic.org/2014/08/11/chapter-1-puerto-ricans-on-the-u-s-mainland/>.

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Medicaid or MassHealth enrollment is higher among Puerto Rican residents than for the city of Worcester as a whole. Overall, 34 percent of Worcester’s residents are enrolled in Medicaid/MassHealth. In contrast, consistent with the income data discussed above, 69 percent of mainland-born Puerto Ricans and 77 percent of Puerto Rican-born are enrolled.

Poverty rates are also much higher for Worcester’s Puerto Rican residents. While 23 percent of Worcester residents are at or below 100 percent of the federal poverty line, 57 percent of Puerto Rican residents are living in poverty. The data show a similar pattern for those at or below 200 percent of the poverty line. For Puerto Ricans, 71 percent of those mainland-born and 81 percent of the island-born live at or below 200 percent of poverty. Citywide, 41 percent of residents live at or below 200 percent of poverty.

Although all Puerto Ricans are born U.S. citizens, the data show clear differences between mainland-born and island-born Puerto Ricans. In many cases, Puerto Ricans—especially island-born Puerto Ricans—face social and economic challenges that are very similar to foreign-born individuals.

## **7.0 ARE WORCESTER’S FOREIGN BORN PRIMARILY EMPLOYED IN ENTRY-LEVEL, LOW-PAYING JOBS?**

While some argue that that immigrants take jobs from native-born workers, there is general agreement among non-partisan think tanks and policy researchers that immigration, on average, can actually have a small *positive* effect on the labor market outcomes of native workers in certain regions, industries, and economic conditions.<sup>49</sup> Some also claim that the foreign born participate in the labor force at lower rates than natives and that those who are employed work primarily in low skill jobs. However, this perception does not fit the profile of Worcester’s foreign born, even among more recent immigrants. In fact, Worcester’s foreign born have labor participation rates on par with city residents as a whole and have significantly higher levels of entrepreneurship when compared with levels statewide.

### **From the Field**

Agency leaders reiterated the misconceptions that “immigrants and refugees will take our jobs” and “are only asking, taking resources...here to beg.” They also added qualitative support to the statistical evidence demonstrating foreign-born individuals’ and families’ considerable contributions to the Worcester economy, workforce, and tax base. This included references to the “vital” contributions of foreign-born individuals to city “workforce development and community building” and the many critical positions foreign-born individuals hold in public service occupations (e.g., as translators and as health and human service providers in such places as group homes, nursing homes, and hospitals). Notably, many of these jobs are low-paying, again calling into question to the myth that these individuals are ‘taking’ desired jobs. Agency leaders also noted the critical, largely under-recognized contributions of immigrants and refugees to small business ownership and entrepreneurship.

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<sup>49</sup> Looney, Adam, and Michael Greenstone, “What Immigration Means for U.S. Employment and Wages,” The Hamilton Project, May 2012. [http://www.hamiltonproject.org/papers/what\\_immigration\\_means\\_for\\_u.s.\\_employment\\_and\\_wages/](http://www.hamiltonproject.org/papers/what_immigration_means_for_u.s._employment_and_wages/).  
See also Peri, Giovanni. “The Impact of Immigrants in Recession and Economic Expansion.” Migration Policy Institute, June 2010. <http://www.migrationpolicy.org/research/impact-immigrants-recession-and-economic-expansion>.  
And Card, David. “Is the New Immigration Really So Bad?,” NBER Working Paper No. 11547, August 2005. <http://www.nber.org/papers/w11547>  
And Shierholz, Heidi. “Immigration and Wages: Methodological Advancements Confirm Modest Gains for Native Workers.” EPI Briefing Paper No. 255, February 4, 2010. <http://www.epi.org/publication/bp255/>.

### Immigrant Entrepreneurship

Immigrant entrepreneurship was and remains a vital component in the economic development and sustainability of the United States. Throughout its history, Worcester’s immigrants have played a major role in developing many of the city’s early industries and continue to support business development in various industry sectors.<sup>50</sup>

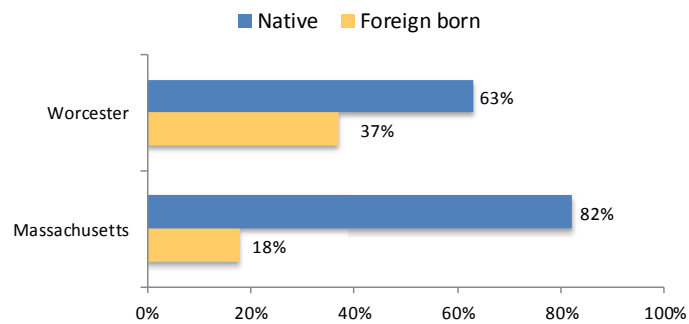
ACS PUMS data estimates suggest that there are between 1,393 and 1,879 Worcester residents who work in their own incorporated business.<sup>51</sup> These individuals are assumed to be directly involved with the daily operations of their business and do not include day laborers or similar types of workers. Natives account for 63 percent of these entrepreneurs, representing between 849 and 1,195 business owners, the midpoint of which is 1,195. Given these data, we estimate that approximately 37 percent or approximately 764 of Worcester’s incorporated business owners are foreign-born.

The foreign born represent a larger proportion of entrepreneurs in Worcester than at the state level, where approximately 18 percent of all Massachusetts entrepreneurs are foreign born (see Figure 27).<sup>52</sup> Also, the foreign born share of entrepreneurs is disproportionate when compared with their share of the Worcester’s population (37 percent versus 21 percent, respectively).

*It is estimated that approximately 37 percent or 764 of Worcester’s incorporated business owners were born outside of the United States or its territories.*

Figure 27

### Foreign Born Share of Entrepreneurs



Source: ACS five-year 2009-2013 PUMS analysis

<sup>50</sup> We define immigrant entrepreneurs as individuals identified by the American Community Survey as being both foreign-born and working mainly in an incorporated business of which they are a majority owner. This is an important distinction from the broader self-employed category available from the Census because the dataset filters out workers such as day laborers and other workers who lack a single, regular employer. This methodology was developed by the Fiscal Policy Institute for the report “Bringing Vitality to Main Street” (Kallick, 2013).

<sup>51</sup> Due to the large margin of error, the data are best presented as a range with a clear median estimate.

<sup>52</sup> Kallick, David. “Immigrant Small Business Owners: A Significant and Growing Part of the Economy.” Fiscal Policy Institute, 2012.

Estimates based on 2010 five-year ACS



### **From the Field**

As noted above, agency leaders spoke of the critical contributions of the foreign born population to small business ownership and entrepreneurship as well as to broader workforce development. One of these leaders emphasized the “potential,” or unrealized, as well as “actual” value that this brings to the larger community and suggested a need for greater inclusion of foreign-born individuals in various forums/venues that recognize and build upon this work.

National research on foreign-born business owners notes that these entrepreneurs are more likely to own a “Main Street business” than any other type of business. Main Street business refers to shops and services that are the backbone of most local/neighborhood economies – including restaurants, gas stations, dry cleaners, grocery stores, beauty salons and barber shops, liquor stores, and clothing stores.<sup>53</sup> In larger metropolitan areas, foreign-born residents are more likely than natives to own Main Street businesses. While the data for Worcester are not robust enough to support such a claim, the fact that the foreign born account for nearly one-third of all entrepreneurs in Worcester suggests that they may be more likely than natives to own Main Street businesses.

#### **H-1B Visas and Worcester’s Innovation Economy**

In order to remain competitive in the global marketplace, regional economies need to create, attract, and retain talented and highly skilled workers. As a center for higher education and a hub of innovation, Worcester is in a strong position to recruit these workers. Attracting highly skilled immigrants stimulates economic growth and is an essential component for cultivating an innovation-intensive economy.<sup>54</sup> In many cases, foreign workers bring an array of technical of skills, creativity, and patentable ideas, all of which promote innovation and improve the competitiveness of the regional economy.

A significant portion of Worcester’s foreign born are skilled and educated workers who arrived in the U.S. on H-1B visas. The H-1B visa program began in the 1990s as a way for employers to sponsor temporary workers in “specialty occupations” that require “highly

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<sup>53</sup> Ibid.

<sup>54</sup> Fitz, Marshall. “Immigration for Innovation.” *Doing What Works and Science Progress* No. 5. Center for American Progress, 2012. [https://cdn.americanprogress.org/wp-content/uploads/issues/2012/01/pdf/dwwsp\\_immigration.pdf](https://cdn.americanprogress.org/wp-content/uploads/issues/2012/01/pdf/dwwsp_immigration.pdf)  
Furchtgott-Roth, Diana. “The Economic Benefits of Immigration.” *Issue Brief* No. 18. Manhattan Institute for Policy Research, 2013. [http://www.manhattan-institute.org/pdf/ib\\_18.pdf](http://www.manhattan-institute.org/pdf/ib_18.pdf)

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specialized skills and knowledge”<sup>55</sup> and typically a bachelor’s degree or higher.<sup>56</sup> Metropolitan areas receive the bulk of all H-1B visa applications nationally. This is particularly true for Massachusetts. In 2012, the Commonwealth had a total of 14,758 H-1B visa requests, placing the state sixth nationally. The Boston and Worcester metro areas had the highest concentrations of demand in Massachusetts and the first and fifth highest number of requests in New England, respectively. In 2012, the Worcester metro area had 1,105 total requests, or 7.5 percent of the state total, while the metropolitan Boston region had over 13,000 requests.<sup>57</sup>

Proponents of the H-1B program argue that these visas allow U.S. corporations to recruit high skilled workers from abroad and to retain foreign students who have completed specialized degree programs in the U.S. Those opposed to the program contend that the visas allow companies to train highly skilled workers temporarily in the U.S. in preparation for outsourcing their new skills as part of offshoring. Research conducted by the Federal Reserve Bank of Boston shows that this does in fact occur in some labor markets nationwide, and may limit employment opportunities for qualified citizens.<sup>58</sup>

However, in Massachusetts the type of off-shoring preparations cited by visa opponents generally does not occur. For example, in the Worcester metro area, which has a larger than average demand for H-1B visa requests in comparison with other New England metro areas, less than five percent of H-1B visa requests come from potential outsourcing firms.<sup>59</sup> Comparatively, on average the metro areas of New England have approximately 13 percent of all visa requests coming from potential outsourcers, as compared to 10 percent of requests nationally.<sup>60</sup>

H-1B visa applicants are particularly important sources of talent for Worcester’s science, technology, engineering, and mathematics (STEM) employers.<sup>61</sup> These industries are crucial to the growth of the economy in Worcester and throughout Massachusetts, and the demand for visas reflects the recognized market value of skilled foreign labor. Those who have argued that retaining foreign STEM graduates and recruiting foreign STEM workers through H-1B program “crowds out” native workers may also be neglecting the

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<sup>55</sup> “Understanding H-1B Requirements.” U.S. Citizenship and Immigration Services, 2015. <http://www.uscis.gov/eir/visa-guide/h-1b-specialty-occupation/understanding-h-1b-requirements>.

<sup>56</sup> About a third of the visas are reserved for people with a master’s degree or higher.

<sup>57</sup> Clifford, Robert. “Demand for H-1B Visas in New England: Data Appendix.” Policy Report No. 14-1. New England Public Policy Center, 2014.

<sup>58</sup> Clifford, Robert. “Demand for H-1B Visas in New England.” Policy Report No. 14-1. New England Public Policy Center, 2014.

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.

<sup>61</sup> Across all STEM occupations in Worcester metro, there is a demand of 23.7 H-1B requests for every 1,000 employed in a STEM field, and in the science and engineering fields there is a demand of 23.6 requests for every 1,000 employed. The computer and mathematics fields have the largest concentration of requests. For every 1,000 employees in those fields there are 100.5 requests for H-1B visas, nearly double the national intensity of 50.7 for this sector.

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alternative; if foreign workers are not employed domestically, they will instead seek opportunities outside of the U.S., which may further incentivize American outsourcing and offshoring. Reporting to Congress and the Bureau of Economic Analysis on the effects of offshoring, the National Academy of Public Administration noted that the H-1B visa program “provides businesses a viable alternative to shifting high tech services offshore to secure similar critical skills.”<sup>62</sup> For Worcester, a city that is known for producing some of the highest numbers of STEM graduates in the state, programs that incentivize the retention of these graduates serve to sustain the local economy and increase the global competitiveness of the city.

The H-1B visa program is thus helping STEM employers in the Worcester area remain competitive in the global economy by broadening their base for recruitment of international talent. It also helps to retain highly skilled foreign STEM students after they graduate from Worcester’s colleges. As can be seen in Table 9, many of the city’s largest employers rely heavily on employees with STEM-relevant educational backgrounds and skills.

*Table 9  
Top Companies in Worcester*

<b>Company</b>	<b># Employees</b>
UMass Memorial Health Care	13,764
University of Massachusetts Medical School	5,678
City of Worcester	5,128
Saint Vincent Hospital	2,386
Hanover Insurance	1,850
Saint-Gobain	1,807
Reliant Medical Group	1,801
Polar Beverages	1,400
College of the Holy Cross	1,107
Quinsigamond Community College	900

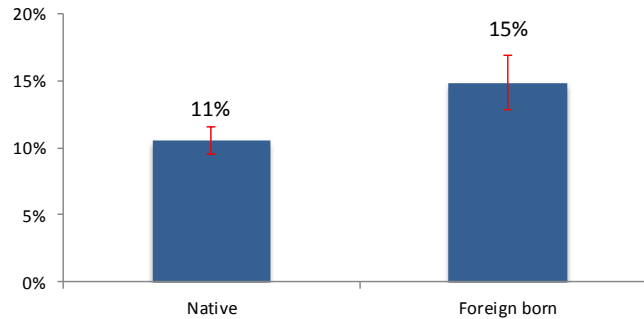
*Source: City of Worcester 2010 Comprehensive Annual Report*

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<sup>62</sup> Norwood, Janet, Carol Carson, Manuel Deese, et al. “Off-Shoring: An Elusive Phenomenon.” Report of the National Academy of Public Administration, January 2006.

The City of Worcester is home to an estimated 14,589 individuals with postsecondary training in STEM or medical professions (STEM+). Of those with STEM+ training, 9,503 are native residents, and 5,086 are foreign-born residents. These data reveal that there is a higher concentration (15 percent) of STEM+ training within the foreign-born community than the native population (11 percent) (see Figure 28).

*Figure 28*  
STEM+ Training in Worcester



Source: ACS five-year 2009-2013 PUMS analysis

### **From the Field**

Despite the high rate of H1-B visa applicants from the Worcester metro area and the comparatively high percentage of foreign-born workers with STEM training compared to native workers, agency representatives suggested that not all professionally trained foreign-born workers are able to use the professional and educational licenses/credentials from their home countries. The inability of some refugees and immigrants to apply their relevant training and skills in certain, often higher paying jobs not only has direct implications on workforce capacity, but may also perpetrate the myth that immigrants and refugees lack education and skills, furthering the idea that they lack the potential to make significant economic contributions.

## **8.0 DO WORCESTER'S FOREIGN BORN UTILIZE PUBLIC BENEFITS AT A HIGHER LEVEL THAN NATIVES?**

Concerns regarding the utilization of public benefits among the foreign-born population are frequently included in the public debate about immigration policy. Misconceptions about eligibility for and utilization of welfare programs such as the Medicaid, Children's Health Insurance Program (CHIP), Temporary Assistance for Needy Families (TANF), Supplemental Nutritional Assistance Program (SNAP), and Supplemental Security Income (SSI), serve to perpetuate the notion that the foreign born are a fiscal burden on taxpayers. In fact, eligibility limitations on permanent foreign-born noncitizens, and restrictions that deny or limit public assistance for undocumented immigrants and temporary/provisional immigrants, including students, temporary workers, and tourists limit public costs.<sup>63</sup>

To qualify for public benefits, noncitizens must meet a number of criteria. First, they must be deemed "qualified." Qualified noncitizens include lawful permanent residents and those here for humanitarian reasons (e.g., refugees/asylees or victims of human trafficking). Second, with some exceptions, most individuals deemed qualified must adhere to a five-year waiting period before they are eligible to apply for means-tested public benefits. Further, all applicants are subject to the specific eligibility requirements associated with the various public benefits programs. Individuals in the U.S. illegally are ineligible for most federal public benefits programs.<sup>64</sup> More than two-thirds of current lawful permanent residents arrived via family sponsorship and the remainder came either through employment sponsorship or refugee/asylee status.<sup>65</sup>

Following the 1996 Welfare Reform Act, Massachusetts was one of many states to extend coverage to foreign-born individuals ineligible for federal aid. However, with the exception of California, no states have extended all forms of coverage. In Massachusetts, the five-year waiting period for health coverage is waived for qualifying immigrants, including lawful permanent residents and refugees. Through the Children's Medical Security Plan (CMSP), the Commonwealth "provides primary and preventive medical and dental coverage to uninsured children who are Massachusetts residents but who do not qualify for MassHealth, including foreign-born children who do not qualify for MassHealth due to immigration status."<sup>66</sup> Since 2009, Massachusetts has also provided CHIP and

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<sup>63</sup> "Mapping Public Benefits for Immigrants in the States", Pew Charitable Trusts, 2014. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2014/09/mapping-public-benefits-for-immigrants-in-the-states>.

<sup>64</sup> A useful chart that outlines these requirements can be found at <http://www.masslegalservices.org/system/files/library/ImmigrantBenefitsChart-March%202014.pdf>.

<sup>65</sup> Monger, Randall, and James Yankay. "U.S. Lawful Permanent Residents: 2013." Department of Homeland Security, 2014. [http://www.dhs.gov/sites/default/files/publications/ois\\_lpr\\_fr\\_2013.pdf](http://www.dhs.gov/sites/default/files/publications/ois_lpr_fr_2013.pdf).

<sup>66</sup> Blazer, Jonathon. "Analysis of the Massachusetts Health Care System as a Model." National Immigration Law Center, 2009. <http://www.nilc.org/immigrantaccesstohc.html>.

Medicaid to foreign-born children and pregnant women regardless of their immigration status.

### **From the Field**

A legal representative from one of the resettlement agencies noted the general lack of knowledge of the rights of immigrants and refugees to access these types of benefits and services. She suggested that this was true even among the agency staff responsible for assessing eligibility and/or helping to facilitate access. She gave the specific example of gaps in knowledge regarding the educational and health insurance eligibility for unaccompanied minors.

Even with these reforms and modifications to health care coverage, there are still limits on the care options available to the foreign born, particularly for those with low incomes.<sup>67</sup> Additionally, Massachusetts does not extend other means-tested benefits to nonqualified immigrants, so, unless the waiting period is waived, even lawfully permanent noncitizens and refugees are subject to a five-year waiting period before they become eligible for SNAP (aka Food Stamps), TANF (Cash Assistance), and SSI (Disability) benefits.

Despite these limitations, there is a persistent public perception that immigrants in Massachusetts and elsewhere access and utilize public benefits at a higher than average rate. Figure 29 examines the utilization rates at which Worcester's foreign born and native populations access public assistance programs.<sup>68</sup> Across all categories, the rates for these two groups are very similar. Especially when taking margin of error into account, available data do not support the conclusion that Worcester's foreign-born residents are utilizing public benefits at rate greater than the native population.

As noted, Figure 28 shows rates of usage relative to the size of each subpopulation. Significantly, this does not mean that the same number of households per group utilize benefits. For instance, there are three native households for every foreign-born household, and so, in the case of cash public benefits, approximately 2945 native

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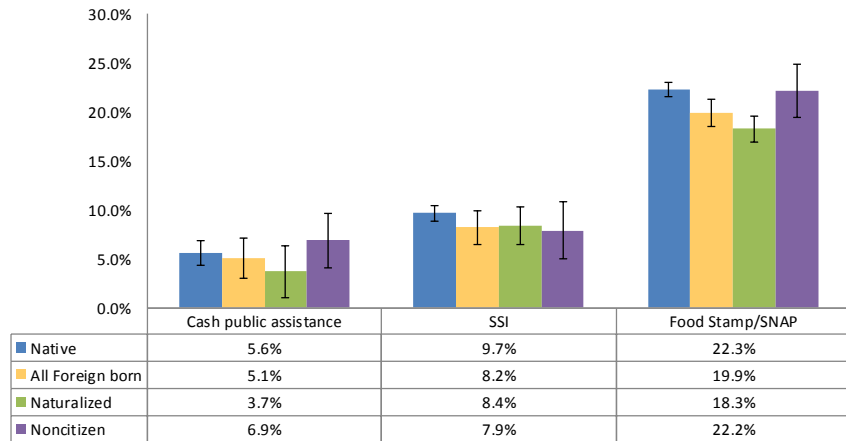
<sup>67</sup> Ibid.

<sup>68</sup> The Census makes a distinction between household and an individual. Data on households represents all persons (one or more) who occupy a housing unit, while data on individuals disaggregates the individual person from the household unit of which they are a part (noncitizen households represent 42 percent of all foreign-born households and 10 percent of all Worcester households). Furthermore, the households represented in this analysis only reflect the responses of persons 15 years or older, but native children (including those born to foreign-born parents) are eligible for some means tested benefits. Therefore these data may not capture the entire picture of means-tested benefit consumption for the segments of the population that enroll through or for their children under 15 years of age.

households (5.6 percent of all native households) receive assistance, whereas an estimated 829 eligible foreign-born households (5.1 percent of all foreign-born households) receive these benefits. Although the percentages may be similar, the total number of households utilizing benefits is always greater for the native group.

Figure 29

Public Benefits Utilization



Source: ACS five-year 2009-2013 estimates

**From the Field**

Agency leaders emphasized the general need for enhanced community education and dialogue to help deconstruct and challenge such misconceptions. They also suggested the dual importance of highlighting foreign born contributions and strengths and described some existing growth efforts in this area (e.g., agency/community forums, events, and roundtable discussions).

National, analyses of similar Census data have shown that noncitizens utilize public benefits at lower rates than natives.<sup>69</sup> The similar rates of utilization among the natives and foreign born in Worcester may mean that the city is a unique case. This uniqueness could be due, in part, to the number of refugees in the city. Worcester receives more than a quarter of all refugees coming into the state and these noncitizens are given access to some social safety net programs, which may explain part of this difference.<sup>70</sup> Also, all legally permanent residents of five years or more, disabled noncitizens, and those who

<sup>69</sup> Fix, Michael, and Ron Haskins. "Welfare Benefits for Non-Citizens." The Brookings Institute, 2002. <http://www.brookings.edu/research/papers/2002/02/02immigration-fix>.

<sup>70</sup> Based on estimates from the Bureau of Population, Refugees, and Migration reported in "Understanding Refugees in Worcester, MA" (Fábos et al.; Masokowski Institute for Public Enterprise, 2014).

have worked in the United States for 40 quarters of their work history can apply for SNAP assistance. As demonstrated in Section 3, Figure 5, more than 60 percent of Worcester’s foreign born arrived in 2000 or earlier, meaning this majority has completed the five year waiting period.

However, stigma may keep some eligible foreign-born residents from enrolling. There is concern among some about the impact of being listed as a “public charge,” which is a designation assigned to those who primarily rely on government benefits for subsistence. Researchers working with immigrants in need of public assistance have found that some foreign-born residents incorrectly perceived this designation as a potential flag in the naturalization process that could lead to deportation.<sup>71</sup> In reality, this is not a consideration for common means-tested programs like SNAP, CHIP, and other noncash benefits. Yet, these and other misconceptions persist and deter immigrants from seeking public assistance when they are in need.<sup>72</sup>

### **From the Field**

The complex policies and perceptions surrounding public benefits also speak to some of the broad-based concerns expressed by agency representatives. For instance, they highlight the particular lack of resources for foreign-born persons and agencies without refugee status or refugee resettlement designation. They further strengthen this point by emphasizing the inability or struggle to meet basic needs (e.g., rent, utilities, child care, nutrition, and transportation) even among those who do receive such benefits. Additionally, they note that the lack of support for casework to help access and navigate resources extends beyond periods of economic downturn and reflects the more general deficiencies in time and funding for refugee resettlement (let alone broader immigrant services).

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<sup>71</sup> Perreira, Krista, Robert Crosnoe, Karina Fortuny, et al. “Immigrants’ Access to Health and Human Services Programs.” Urban Institute, 2012. <http://taxpolicycenter.org/UploadedPDF/413260-Barriers-to-Immigrants-Access-to-Health-and-Human-Services-Programs.pdf>

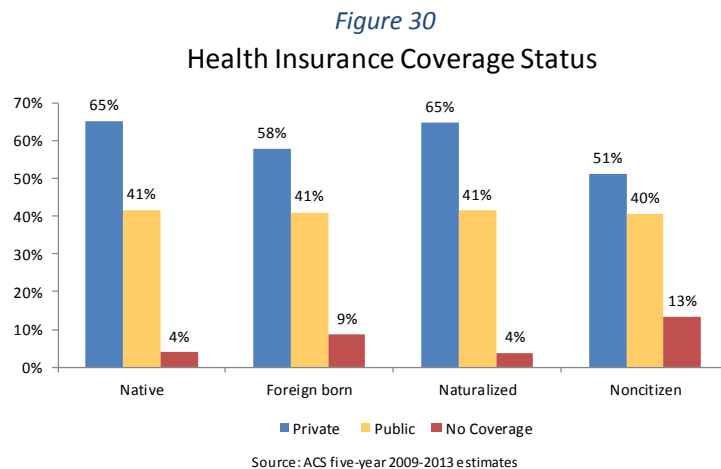
<sup>72</sup> Ibid



## 9.0 ARE WORCESTER’S FOREIGN BORN MORE LIKELY TO BE UNINSURED?

A number of studies have been conducted examining how certain groups access healthcare, particularly with regard to publicly-funded insurance. Nationally, immigrants, and particularly the undocumented population, have lower health insurance enrollment rates than the native born. Generally, undocumented immigrants and noncitizens are more likely to rely on safety-net healthcare coverage. This means that they lack the means to take the necessary steps of preventative care – without insurance to cover regular checkup, major health issues may go undiagnosed until their treatment can no longer be deferred. Therefore, for this uninsured segment of the foreign-born population, the main interactions with the healthcare system would be reserved for emergency treatments and hospitalizations.<sup>73</sup>

Using ACS data, we can examine the levels of healthcare access among the native and foreign born populations in Worcester. Figure 30 shows whether those with health insurance have public or private coverage and the percentage of each population with no coverage.



Rates of private and public coverage are fairly similar across the populations. Approximately 41 percent of Worcester residents have public health insurance. When insured, noncitizens are just as likely as other groups to be on public insurance. However, noncitizens are significantly more likely to be uninsured. This is concerning since, as earlier sections have shown, noncitizens earn less than other groups, are more likely to live in poverty, and have lower educational attainment. Without health insurance, these

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<sup>73</sup> Goldman, Dana, James Smith, & Neeraj Sood. “Legal Status And Health Insurance Among Immigrants.” *Health Affairs*, 2005.  
And Berlinger, Nancy, and Michael Gusmano. “Undocumented Patients.” *The Hastings Center*, 2014.

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at-risk noncitizens will most likely have to pay out of pocket for healthcare when there is not a safety-net program available to cover their treatment.

At the same time, medical researchers reviewing studies on emergency department volume from 1950 to 2008 found no conclusive evidence to support the claims that uninsured individuals were the cause of emergency room crowding or were disproportionately represented in a given emergency room. In fact, the researchers found that the great majority of emergency room visits over the study period can be attributed to insured patients.<sup>74</sup> This calls into question the assumptions about emergency room use and correspondingly suggests that this group may account for a relatively small proportion of ER expenses.

Furthermore, though noncitizens and the foreign born in general have a higher likelihood of being uninsured, they represent a small percentage of the total uninsured population in Worcester. Overall, there are approximately 3,270 foreign-born individuals without health insurance, and noncitizens make up the bulk of this group, with an estimated 2,570 uninsured. However, despite their lower likelihood of being uninsured, native residents account for nearly 5,560, or 63 percent, of the total uninsured population in Worcester.

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<sup>74</sup> Newton, Manya, Carla Keirns, Rebecca Cunningham, et al. "Uninsured Adults Presenting to US Emergency Departments: Assumptions vs. Data." *Journal of the American Medicine Association*, 2008.

## 10.0 WHAT IS THE ECONOMIC IMPACT OF CONSUMER SPENDING BY WORCESTER’S FOREIGN BORN?

Worcester’s foreign born contribute to the economy in various ways, including the impacts that result from their role as producers (e.g. workers and business owners) and as consumers of local goods and services. The ACS estimates that Worcester’s foreign born earn nearly a billion dollars annually from work, which represents 26 percent of all earnings among Worcester residents, even though this group accounts for only 24 percent of the city’s working age population (see Table 10).<sup>75</sup>

*Table 10  
Share of Total Earnings among Worcester Residents*

	Earnings	Share of Earnings	Share of Working Age Population
Total	\$3,688,000,000	100%	100%
U.S. Born	\$2,741,000,000	74%	76%
Foreign Born	\$947,000,000	26%	24%

*Source: ACS PUMS 2009-2013 annualized estimates. Amounts reported in 2015 dollars. Working population defined as individuals aged 16 and older.*

*It is estimated that Worcester’s foreign born earn nearly a billion dollars annually from work, which represents 26 percent of all earnings among Worcester residents, even though this group accounts for only 24 percent of the city’s working age population.*

Workers and business owners impact the local economy when they spend their earnings at local businesses on goods and services. In turn, these direct expenditures generate “spin-off” or multiplier effects on other companies and their employees, which can be quantified using an input-output model that traces the purchases of goods, services, and labor through the model.<sup>76</sup> These impacts are expressed as the numbers of direct, indirect, and induced jobs, labor income, and output of the economic activity supported by these expenditures.<sup>77</sup>

*Direct impacts* result from consumer expenditures at local businesses on items and services; from groceries, rent, and gasoline to dry cleaning, school supplies, and dinner.<sup>78</sup>

<sup>75</sup> Earnings includes wages and salaries (including commissions, bonuses, and tips) and self-employment income, including proprietorships and partnerships. Any government transfer payments received are not included.

<sup>76</sup> This report does not include an impact analysis resulting from foreign born production - that is, the jobs they work in, and the businesses they own – because industry, occupation, and proprietorship data on the local level is not sufficiently robust to make reliable estimations and assumptions.

<sup>77</sup> The economic impact of consumer expenditures on the greater Worcester economy was estimated using Implan, an econometric modeling system that combines the U.S. Bureau of Economic Analysis’ Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers.

<sup>78</sup> Consumer spending is defined as the personal disposable income that can be spent on goods and services and includes only earned income from salary, wages, and proprietorships or income from investments. Personal income does not include transfer payments (i.e. SSI, cash benefits, and

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The *indirect impacts* are the changes in sales, income, or jobs in sectors within the local economy that supply goods and services to these businesses. For example, an increase in sales of a local beverage wholesaler that supplies local restaurants is an indirect effect of consumer spending. *Induced impacts* stem from employees of these businesses spending their wages in the local economy. These expenditures further induce economic activity by increasing the demand for other businesses, generating additional rounds of induced effects.

*Worcester’s foreign born spent approximately \$472 million in the local economy in 2015.*

Table 11 presents the direct, indirect, and induced impacts of consumer expenditures by Worcester’s foreign born on the local Worcester economy (defined as the City and contiguous communities). Based on their earnings, the model estimates that Worcester’s foreign born spent \$472 million in the local economy in 2015, which in turn supported \$173 million in labor income and 3,869 jobs.<sup>79</sup> These expenditures in turn generated indirect impacts (i.e., business-to-business purchases) of \$113 million in output (or sales), \$37 million in labor income, and 786 jobs. The subsequent payroll expenditures of the initial consumer spending and resulting indirect spending induced an additional \$128 million in economic activity and output, \$46 million in labor income, and supported 1,040 jobs.

In total, consumer expenditures by Worcester’s foreign-born residents accounted for \$715 million in local economic output, \$256 million in local labor income, and 5,695 jobs.

*Table 11  
Impact of Foreign-Born Consumer Expenditures*

	<b>Output (Sales)</b>	<b>Labor Income</b>	<b>Jobs</b>
Direct	\$472 million	\$173 million	3,869
Indirect	\$113 million	\$37 million	786
Induced	\$129 million	\$46 million	1,040
<b>Total</b>	<b>\$714 million</b>	<b>\$256 million</b>	<b>5,695</b>

SNAP), personal and payroll taxes, savings, and remittances. Estimates of personal disposable income were derived from mean household income data available from the ACS that were then apportioned among Implan’s nine household income categories. These amounts were reduced to include only disposable personal income using a ratio calculated from Implan’s social account matrices for the region of study. These amounts were again reduced to eliminate transfer payments (i.e. SSI, cash benefits, and SNAP), federal and state income and other taxes, and remittances using appropriate factors for each income category. These adjusted totals—essentially discretionary personal income—were inputted into Implan’s Household Spending Patterns for each of the nine income categories.

<sup>79</sup> Jobs are full-time equivalent.

The impact of consumer expenditures is generated in 232 different industry sectors.<sup>80</sup> Table 12 lists the top ten industry sectors.

*Table 12  
Major Sector Distribution of Employment Impacts*

<b>Sector</b>	<b>Jobs</b>
Hospitals	414
Full-service restaurants	281
Offices of physicians	254
Real estate	244
Retail - Food and beverage stores	242
Limited-service restaurants	235
Individual and family services	192
Wholesale trade	190
Nursing/community care facilities	179
Retail - General merchandise stores	159

*Source: Authors' analysis of Implan data.*

#### **WHAT DO WORCESTER'S INTERNATIONAL STUDENTS CONTRIBUTE TO THE ECONOMY?**

Massachusetts ranks among the top three states in terms of economic contributions received from international students. The National Association of Foreign Student Advisors (NAFSA) estimates that during the 2013 school year, international students in the Commonwealth contributed over \$1.9 billion to the state economy. The sectors primarily impacted include those directly involved in or supporting higher education and include accommodations, retail, dining, and health care.<sup>81</sup>

While not permanent residents of Worcester, international students enrolled in the city's nine colleges and universities contribute significantly to the Worcester economy. There are approximately 2,780 international students studying at Worcester's nine colleges and universities, and this number has risen steadily since 2008 at an average of about 240 new students annually.<sup>82</sup> According to NAFSA's economic impact analysis, these international

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<sup>80</sup> While some of these impacts accrue to businesses and individuals outside of Worcester, the majority of the impacts occur within the city since it is likely that Worcester's foreign born spend the bulk of their income in the city in which they reside.

<sup>81</sup> The Nation Association of Foreign Student Advisors produces an annual report on the economic and cultural contributions that foreign students make to the U.S. by studying at our universities. Using information from the Institute of International Education, NAFSA compiles foreign student enrollment totals for participating colleges. Expenditure and tuition estimates are calculated using the U.S. Department of Education's National Center of Educational Statistics Integrated Postsecondary Education Data System. The center estimates that international students contributed over \$26 billion to the U.S. economy during the 2013 school year.

<sup>82</sup> The NAFSA data tool used to produce the information here can be found at:

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students contributed \$98.8 million to the Worcester Metro area during the 2013-14 school year. The NAFSA analysis concludes that three jobs in the Metro area are created or supported for every seven international students. This means that in the 2013 school year, the 2,779 foreign students studying in Worcester helped support approximately 1,190 jobs in and around the city.

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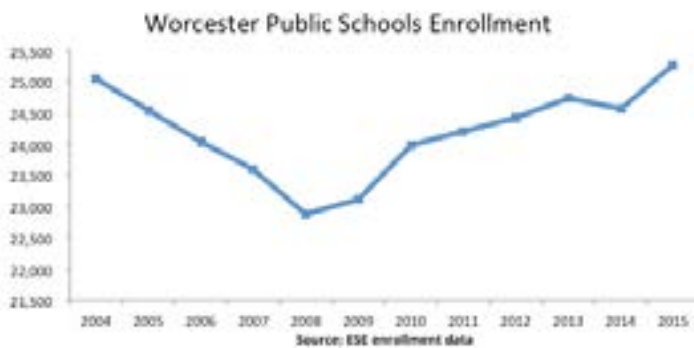
[http://www.nafsa.org/Explore\\_International\\_Education/Impact/Data\\_And\\_Statistics/The\\_International\\_Student\\_Economic\\_Value\\_Tool/](http://www.nafsa.org/Explore_International_Education/Impact/Data_And_Statistics/The_International_Student_Economic_Value_Tool/)

**11.0 WHAT ARE THE IMPACTS OF FOREIGN-BORN CHILDREN ON THE WORCESTER PUBLIC SCHOOLS?**

English language education in public schools is sometimes the target of scrutiny, with a common critique being that these programs impose additional costs to the district that require hiring specialized language instructors and staff or the expansion or construction of schools to address enrollment increases.

There were 25,254 students enrolled in the Worcester Public Schools in the 2014-15 school year and enrollment has increased steadily since 2008 (see Figure 31).

*Figure 31*



Worcester public school students are more diverse than the overall population of the city, particularly in terms of Hispanic students (38 percent vs. 20 percent) (see Table 13).

*Table 13*

	Student Race/Ethnicity		
	All Residents	Public School Students	ELL Students
Asian	6%	8%	13%
Black/African American	11%	14%	14%
Hispanic	20%	38%	56%
White	60%	36%	17%
Multiracial	2%	4%	0%

*Source: Analysis of DESE enrollment data*

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Accordingly, Worcester Public Schools are also linguistically diverse and are home to students that speak 85 languages. Spanish is the most prominent language among ELL students and Vietnamese is the second most common language spoken in the district.<sup>83</sup> Other common languages include Twi (a dialect of Akan spoken mostly in Ghana) Nepali, Arabic, Patios, Portuguese, and Albanian.<sup>84</sup>

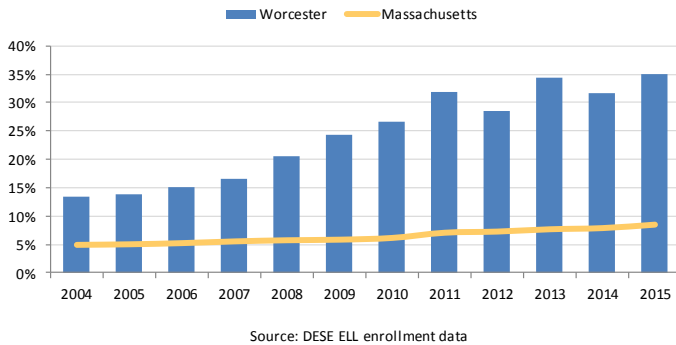
**ENGLISH LANGUAGE LEARNERS**

English language learners make up a significant portion of students enrolled in the Worcester Public Schools. ELL students are those who do not meet state requirements for English proficiency. This is typically determined through a test of a child’s reading, writing, and oral comprehension skills, as well as a home language survey.<sup>85</sup>

In Massachusetts, ELL enrollment increased by 66.0 percent between 2004 and 2015, but English language learners still make up a small percentage of the overall student population statewide. Conversely, ELL students represent 35.1 percent of Worcester’s total student population, a percentage that has more than doubled since 2004. Comparatively, the Massachusetts ELL student population is just 8.5 percent, which has risen only modestly since 2004 (see Figure 32).<sup>86</sup>

*English Language Learners represent 35.1 percent of Worcester’s total student population, a percentage that has more than doubled since 2004.*

*Figure 32*  
Share of English Language Learners



<sup>83</sup> Just four schools do not have Spanish as the most common language of ELLs: at West Tatnuck Elementary, 31.7 percent of ELLs speak Albanian, which is also spoken by 32.5 percent of ELLs at Midland Street Elementary and 25.8 of ELLs percent at Flagg Street Elementary. Portuguese is the most common first language for ELLs at Lake View Elementary, where 26.9 percent speak that language.

<sup>84</sup> Language data from the Massachusetts Department of Elementary and Secondary Education provides data only for the top two languages in a given district or school

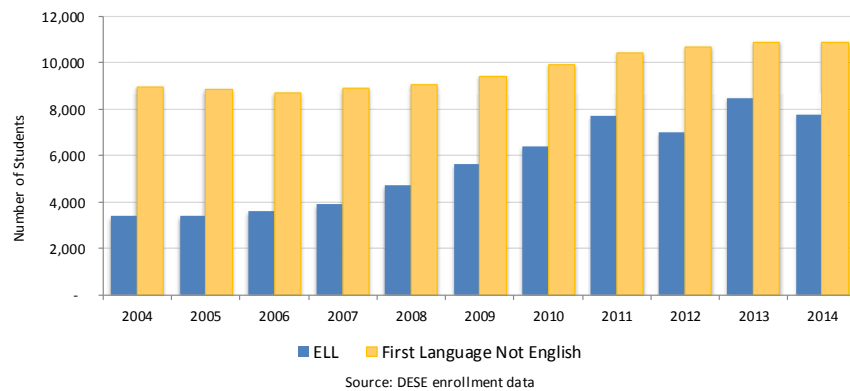
<sup>85</sup> The process for determining ELL status in Worcester can be found at [http://maldenells.wikispaces.com/file/view/ell\\_programs\\_description.pdf](http://maldenells.wikispaces.com/file/view/ell_programs_description.pdf).

<sup>86</sup> “Selected populations: Worcester.” Massachusetts Dept. of Elementary and Secondary Education, 2015 <http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=03480000&orgtypecode=5&leftNavId=305&fycode=2015>.



Not all students who speak English as a second language enter Worcester Public Schools' ELL program, but the majority do and this proportion has steadily increased over the last ten years (see Figure 33). To date, there are approximately 8,855 English language learners in the Worcester Public Schools.

*Figure 33*  
ELL and First Language Not English Students



#### **COST OF EDUCATING ENGLISH LANGUAGE LEARNERS**

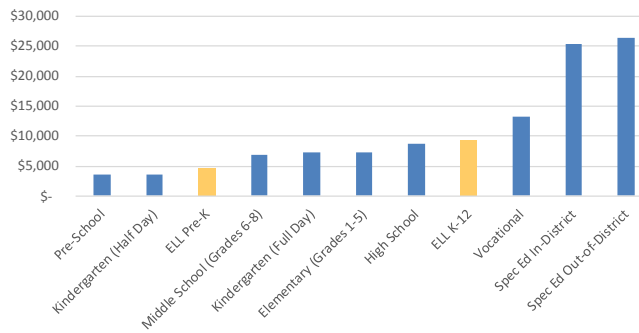
It is difficult to analyze ELL costs at the district level as the Massachusetts Department Elementary and Secondary Education (ESE) does not publish expenditure data that is detailed enough to permit a precise estimate. Nationally, spending on ELL education between 1991 and 2010 accounted for about 2 percent of all per pupil spending annually, whereas “regular education” accounted for about 40 percent of per pupil spending and administrative overhead accounted for about 26 percent.<sup>87</sup>

In Worcester, the foundation budget for FY16 spending per pupil on K–12 ELL students is \$9,303, which compares with \$7,323 per pupil for regular elementary students, \$6,942 for regular middle school students, and \$8,657 for regular high school students (see Figure 34).<sup>88</sup>

<sup>87</sup> Alonso, Juan Diego & Richard Rothstein. “Where has the money been going? A Preliminary Update. EPI Briefing Paper #281.” Economic Policy Institute., 2010)

<sup>88</sup> The Massachusetts Education Reform Act establishes a minimum level of spending for each community based on the student enrollment with differentiated levels of funding for specific enrollment categories. This establishes a “foundation budget” for each community. Foundation enrollment includes resident students attending Worcester Public Schools, charter schools, or other school districts through school choice.

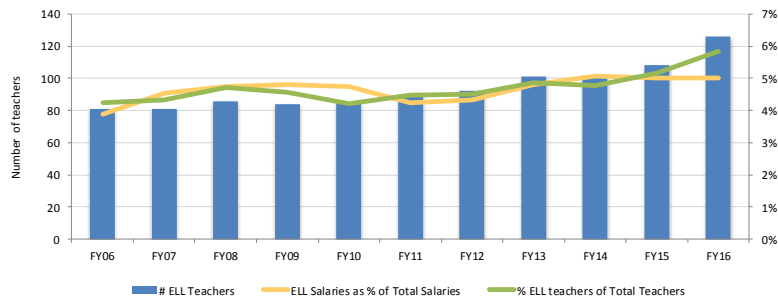
**Figure 34**  
Worcester Public Schools Per Pupil Rate



Source: Worcester Public Schools Annual Budget, FY 2016

The foundation budget also includes 126 ELL teachers for FY16, which represents 6 percent of the total teachers employed by the district. The number of Worcester’s ELL teachers has increased by 56 percent since FY06. ELL teachers in FY16 account for about 5 percent of total teacher salaries in FY16 (see Figure 35).

**Figure 35**  
ELL Teacher Data



Source: Author analysis of Worcester Public Schools Annual Budget FY06-16

*95.2 percent of all English language learners in the Worcester Public Schools were born in the United States, compared with 79.5 percent statewide*

**WHO ARE THE ENGLISH LANGUAGE LEARNERS?**

An analysis using the Massachusetts Department of Elementary and Secondary Education’s District Analysis and Review Tools reveals that 95.2 percent of all English language learners in the Worcester Public Schools were born in the United States (compared with 79.5 percent statewide). Ghana is the second most common country of origin among Worcester’s ELL students, but represents only 1.8 percent of all English language learners served by the district.

The fact is that the overwhelming majority of Worcester’s ELL students are American citizens. The Worcester Public Schools has a portfolio of programs aimed at bringing English language learners up to speed with their peers. These range from bilingual education to the New Citizens Center program, which offers classes for children who have recently arrived in the district, speak little to no English, and have missed a significant

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period of schooling. The variety of programs speaks to the diversity of the foreign-born population in Worcester, which can range from a newly arrived professional couple with well-educated children, to refugees seeking a secure home before all else.

## **12.0 CONCLUSION**

As the data presented throughout this report demonstrate, the foreign-born population living in Worcester is not a homogeneous group. Far from it, in fact; this population is highly diverse. It would be a mistake to simply define diversity in terms of country of origin or cultural background. As this report clearly shows, there is also a great deal of socioeconomic diversity both across and within groups of foreign-born residents in Worcester.

Moreover, it would be inaccurate to attribute challenges faced by the city to the presence of a large foreign-born community, or to the recent influx of certain immigrant groups. Rather, the data presented in this report demonstrate that immigrants play an integral role in Worcester's continued economic and cultural vitality. The foreign-born residents of the city contribute a disproportionately large share of economic value locally in the form of spending and reinvestment, labor participation, and business ownership. Furthermore, qualitative interviews with immigration agency leaders reaffirmed the entrepreneurial successes of foreign-born residents, many of whom have started small businesses. Many other foreign-born individuals work in health and human service occupations that contribute to workforce development and community building. Notably, the foreign-born population in Worcester is also more likely than the native population to be of working age, meaning that in the coming years their role in the local economy is likely to increase as native residents age out of the workforce.

At the same time, addressing the needs of such a diverse foreign-born community like that of Worcester is not without difficulties. For instance, policymakers and service providers in the city must adapt to the varying needs of linguistically and culturally distinct foreign-born communities. Advocates for foreign-born individuals need to be aware of shifts in immigration trends in order to adjust to the service needs of newly arrived individuals and families, while working to empower the foreign-born community overall. Similarly, city leaders should consider new mechanisms for retaining and enhancing the growing base of human capital and skills among international students graduating from Worcester's colleges and universities.

As this report demonstrates, immigrants enter Worcester with a variety of strengths and challenges. While certain needs may not be tied to any particular ethnic group or nationality, interviews with service providers revealed that newcomers with low English proficiency and educational attainment face some of the most difficult challenges. For instance, the data show a strong positive correlation between English language proficiency and individual annual income for foreign-born workers. Similar correlations have been found between low educational attainment and poverty throughout the population, not just among the foreign-born community. Such differences highlight the need to address the linguistic and educational challenges faced by immigrants, and to provide the necessary social services to support the strengths and contributions of members of the foreign-born community.

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In addition to new immigrants, international students, and foreign workers, each year Massachusetts welcomes between 2,000 and 2,500 refugees to the Commonwealth, many of whom resettle in Worcester. Much like other immigrants, refugees come to Worcester with challenges and assets. And while public opinion often focuses on the challenges facing the immigrant and refugee communities, or alleged impositions on native communities, there is much to be said for their contributions. Worcester-area service providers repeatedly addressed the many myths and misconceptions about Worcester's foreign-born residents. They pointed to the rich cultural diversity they bring to the city, as well as their contributions to Worcester's economy. These providers added support to the quantitative evidence that foreign-born individuals and families contribute considerably to the local economy, workforce, and tax base—including through entrepreneurship—and confirmed that many immigrants and refugees are highly educated and/or have desired job skills.

In Worcester, one third of all children have at least one foreign-born parent, though many are native U.S. citizens. Thus, foreign-born parents are raising a significant portion of Worcester's future citizens. One of the challenges facing children living within these immigrant communities is that they may lack the English language skills of others in their cohort. Significantly, the vast majority of children in English Language Learner programs in Worcester Public Schools were born in the US. Currently, these students learn in classrooms that have student-to-teacher ratios that are considerably higher than other ELL classrooms statewide. Although ELL education may cost more than standard public education, ensuring that all children have access to quality educational programs is in the best interest of the city and can reasonably be understood as an investment in Worcester's future.

While approximately 15 percent of Worcester's foreign-born population is in the U.S. illegally, the overwhelming majority arrives via legal processes. Some enter the U.S. through immigration services, some arrive through refugee resettlement, some are recruited by businesses looking for highly-skilled workers or workers to fill vacant positions, and others come to attend one of Worcester's colleges or universities. Also, many of the foreign-born population in Worcester are permanent residents and naturalized citizens. These varied paths further demonstrate that foreign-born residents cannot be neatly grouped into ethno-racial, social, economic, or political categories.

Nevertheless, foreign-born residents face some important common challenges, including insufficient access to quality affordable housing and adult English language educational programs. Service providers in Worcester also pointed to an overall deficiency in basic services for refugees and immigrants (e.g., very little access to means-tested entitlement programs), and resettlement agencies receive very little external funding to address these gaps. Underfunded service agencies rely overwhelmingly on volunteers, and are unable to effectively meet the needs of foreign-born residents in Worcester. For many foreign-born individuals, basic support services are key prerequisites for further progress, and the failure to provide them leaves untapped potential for social and economic contribution.

*The Foreign-Born Population of Worcester, Massachusetts:  
Assessing the Challenges and Contributions of a Diverse Community*

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The challenges facing both the foreign-born population and the providers dedicated to assisting them are not unique to Worcester. Cities and towns across the country are grappling with how to best address the challenges facing immigrant communities and maximize the contributions these groups make to the larger community. Despite some formidable challenges in the areas of language proficiency and educational attainment, this report adds to the evidence that the foreign-born community is not only enriching Worcester's social and cultural landscape but also making significant contributions to the city's economy and labor market. In fact, a thorough analysis of available secondary data and interviews with local providers reveals that Worcester's foreign-born residents contribute a disproportionately large share of economic value to the city, helping to create new businesses and new jobs. Taken together, the evidence presented in this report makes it clear that it is in the best interest of the City of Worcester to support and empower foreign-born residents. Successfully doing so will help to create greater opportunity for all residents, foreign-born and native alike.

**APPENDIX A: COUNTRIES AND REGIONS OF ORIGIN FOR COMPARATIVE ANALYSIS**

<b>Africa</b>	<b>Asia</b>	<b>Europe</b>	<b>Latin America</b>
Africa	Asia	Albania	Argentina
Cameroon	Bangladesh	Armenia	Belize
Cape Verde	Bhutan	Austria	Bolivia
Egypt	Cambodia	Azores	Brazil
Ethiopia	China	Belarus	Chile
Ghana	Hong Kong	Belgium	Colombia
Kenya	India	Bosnia Herzegovina	Costa Rica
Liberia	Indonesia	Croatia	Cuba
Morocco	Japan	Czech Republic	Dominican Republic
Nigeria	Korea	Czechoslovakia	Ecuador
Northern Africa	Laos	Denmark	El Salvador
Other Africa	Malaysia	England	Guatemala
Sierra Leone	Myanmar	Finland	Guyana
Somalia	Nepal	France	Honduras
South Africa	Pakistan	Georgia	Mexico
Sudan	Philippines	Germany	Nicaragua
Tanzania	Singapore	Greece	Panama
Togo	South Central Asia	Hungary	Peru
Uganda	Taiwan	Ireland	South America
Western Africa	Thailand	Italy	Uruguay
Zimbabwe	Vietnam	Lithuania	Venezuela
		Moldova	
		Montenegro	
		Netherlands	
		Norway	
		Poland	
		Portugal	
		Romania	
		Russia	
		Scotland	
		Serbia	
		Slovakia	
		Spain	
		Sweden	
		Ukraine	
		United Kingdom	
		USSR	
		Yugoslavia	

*\*Based on 'Place of Birth' variable on American Community Survey*

