



## ***New Working Paper: 18-001***

### ***Foreign-born, non-citizen workers in the Greater Washington Region***

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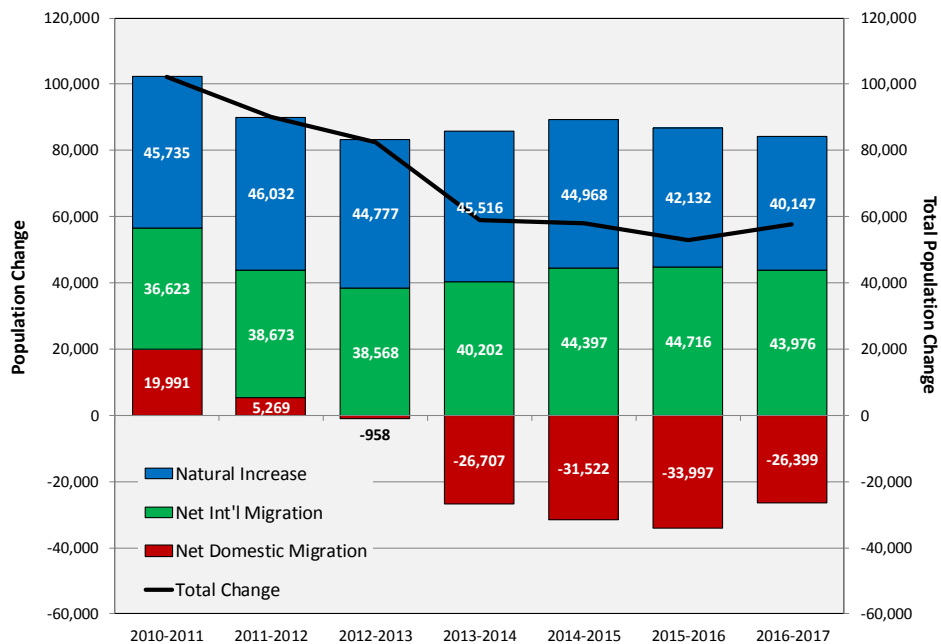
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## Foreign-born, non-citizen workers in the Greater Washington Region

Roughly 1.4 million (26 percent) of the 5.4 million people living in the jurisdictions served by the Metro Washington Council of Governments (hereafter, referred to as the Greater Washington region<sup>1</sup>) were born outside of the United States, according to the US Census Bureau’s 2016 American Community Survey. Figure 1 shows that since 2010, the region has added an average of 41,000 net new international immigrants annually.<sup>2</sup> This immigration has been especially important over the past half-decade, as more domestic residents have left the region than moved into the region. Without international immigration, the region would have experienced only marginal population gains. Approximately 46 percent (638,000 residents) of the region’s foreign-born population have become naturalized citizens and make the United States their permanent home.

**Figure 1: Components of Population Change in the Greater Washington Region**



Source: US Census Bureau, Population Estimates Program, V2017

In addition to supporting population growth, both naturalized citizens and non-citizen immigrants make vital contributions to the regional workforce. This paper looks specifically at a key subset of the region’s immigrant population—**foreign-born, non-citizen workers**. These workers account for 462,000—or almost 15 percent—of the approximately 3.1 million workers in the Greater Washington regional

<sup>1</sup> Throughout this paper, we define the Greater Washington Region as the area served by the Metropolitan Washington Council of Governments (MWCOG). This region consists of: the District of Columbia; the Maryland counties of Charles, Frederick, Montgomery, and Prince George’s; and the Virginia counties of Arlington, Fairfax, Loudoun, and Prince William and Virginia Cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park.

<sup>2</sup> These data are drawn from the US Census Bureau’s Population Estimates Program. They measure population change by jurisdiction between July 1 and June 30.

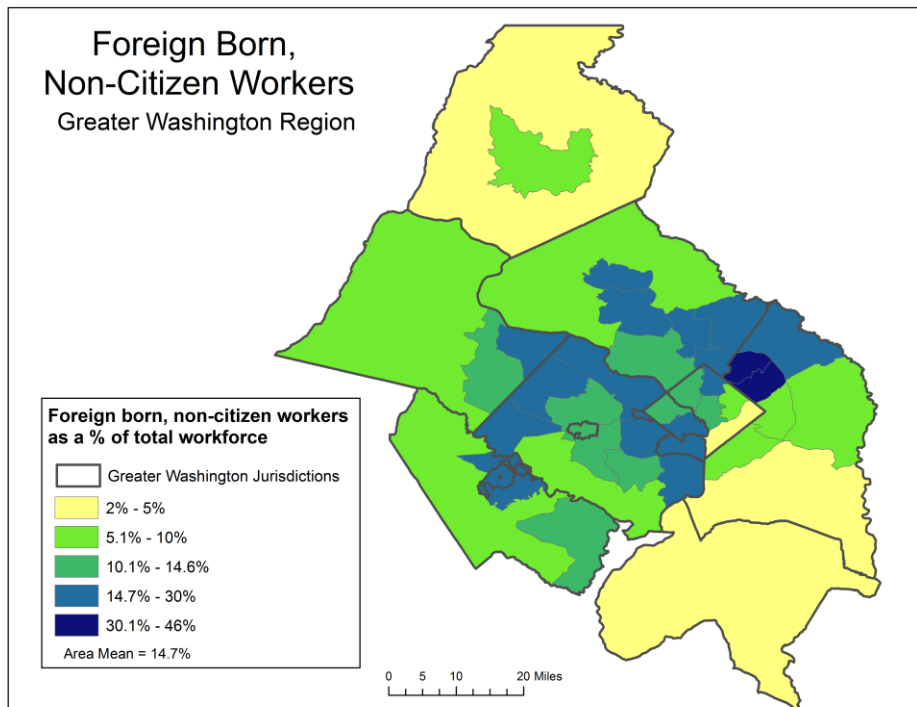
workforce. They help regional employers meet their demand for labor and talent, particularly in industries such as construction, hospitality and information technology.

Using the Public Use Microdata Sample (PUMS) files from the 2016 American Community Survey, this paper paints a more detailed portrait of this key workforce demographic.<sup>3</sup> We look specifically at where foreign-born, non-citizen workers live within the region, when they arrived, where they are from, and their level of educational attainment.<sup>4</sup> We also examine what these workers do and the types of jobs they fill. Combined, this information illustrates the contributions that foreign-born, non-citizen workers make to the Greater Washington economy.

### Characteristics of the region's foreign-born, non-citizen workforce

Foreign-born, non-citizen workers are most concentrated within the Greater Washington region's more urbanized areas. Figure 2 highlights where foreign-born, non-citizen workers live within the region. The

**Figure 2: Foreign-born, non-citizen workers in the Greater Washington Region**



Source: 2016 American Community Survey, Public Use Microdata Sample (PUMS) files

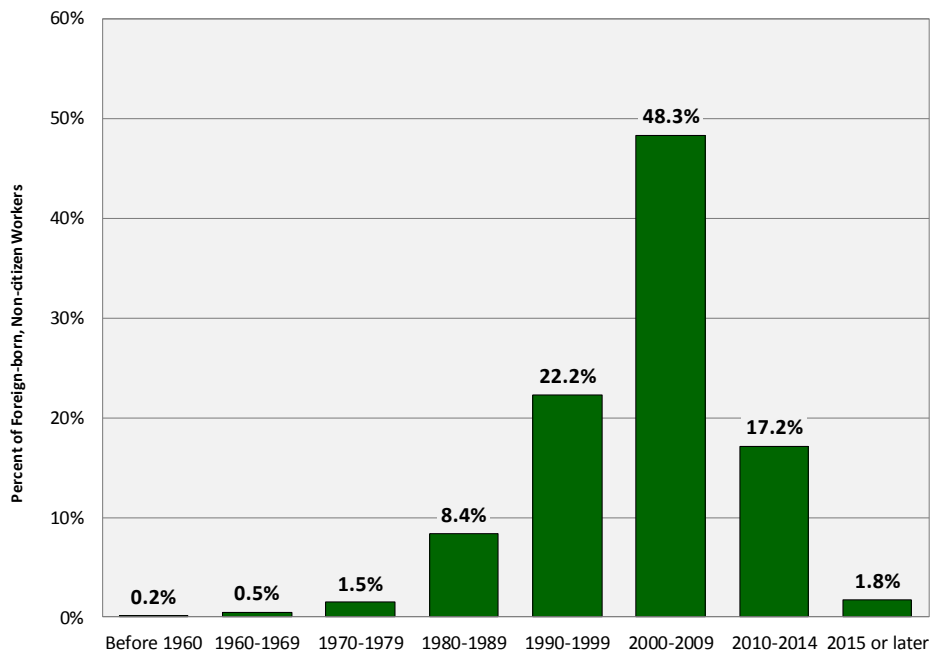
<sup>3</sup> Answering the questions put forward by this paper required use of the American Community Survey Public Use Microdata Sample (PUMS) Files. The PUMS files can be utilized to tabulate statistics not supported by standard, published Census tables. As a result, we were able to access information not only about specific demographic groups (e.g. foreign-born, non-citizen workers), but also getting that information for our focused geography. The PUMS data corresponds with Public Use Microdata Areas (PUMAs) which are units of geography used by the US Census with populations of around 100,000. In urban areas a single county will be comprised of multiple PUMAs. Likewise, in less populous areas a single PUMA may be comprised of multiple counties.

<sup>4</sup> It should be noted that while these data provide information about whether foreign-born workers are citizens or non-citizens, but they do not provide any information about the legal status of non-citizens.

area with the greatest concentration is in northwest Prince George’s County, where anywhere from 30 to 45 percent of workers living in those areas are foreign-born, non-citizens. The populations in these areas have significant Hispanic populations. For instance, the population of Langley Park, Maryland is 82 percent Hispanic; Chillum and Hyattsville are 46 and 37 percent Hispanic, respectively.<sup>5</sup> Other areas with greater than average proportions of foreign-born, non-citizen workers include Montgomery County’s Rockville and Gaithersburg areas, Northeast DC, South Arlington, Alexandria, Manassas and Manassas Park, and areas such as Fairfax County’s Annandale, Herndon, Centerville, and the Mt. Vernon areas.

Figure 3 shows that less than 20 percent of foreign-born, non-citizen workers immigrated since 2010. About one-third of all foreign-born, non-citizen workers arrived before 2000, and around 80 percent have been here at least 10 years.

**Figure 3: Year of Entry for foreign-born, non-citizen workers in the Greater Washington Region**



Source: US Census Bureau ACS 2016, GMU Center for Regional Analysis

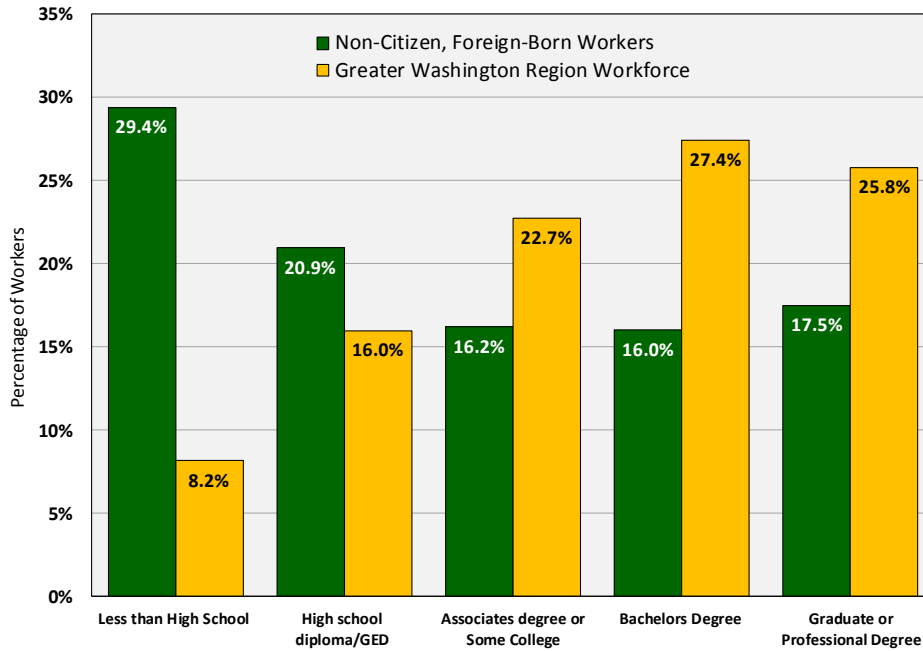
Relative to the regional workforce overall, foreign-born, non-citizen workers tend to have lower levels of educational attainment. Figure 4 shows that approximately half of these workers have a high school degree or less, compared to 24 percent for the regional workforce overall. However, as will be shown below these workers nevertheless make critical contributions to construction and service occupations that often do not require extensive post-secondary education.<sup>6</sup>

<sup>5</sup> These data are drawn from the American Community Survey’s 2012-2016 survey. The 5-year surveys are required to provide detailed data for populations with less than 65,000 residents because they provide a sample size large enough to provide accurate data.

<sup>6</sup> Given the fluidity of education levels for people under the age of 25, educational attainment data are commonly only given for all people age 25 and older, but in this paper we were unable to follow this convention for several reasons. The nature of our source data would not all us to examine these data by age cohort without creating unacceptably high margins of error. As a result, these data show the educational attainment levels of all foreign-born, non-citizen workers, regardless of age.

Many foreign-born, non-citizen workers also represent an important source of skilled and educated workers, as many of these workers come with—or come for—post-secondary degrees. Roughly one-third (33.5 percent) of foreign-born, non-citizen workers have post-secondary degrees. This figure trails the regional average of 53 percent, but nationally only 29 percent of workers aged 18 and older have post-secondary degrees.<sup>7</sup> As a result, the Greater Washington region’s foreign-born, non-citizen workers are about as likely to have a post-secondary degree as all workers nationwide.<sup>8</sup>

**Figure 4: Educational Attainment of foreign-born, non-citizen workers in the Greater Washington Region**



Source: US Census Bureau ACS 2016, GMU Center for Regional Analysis

<sup>7</sup> 2016 American Community Survey.

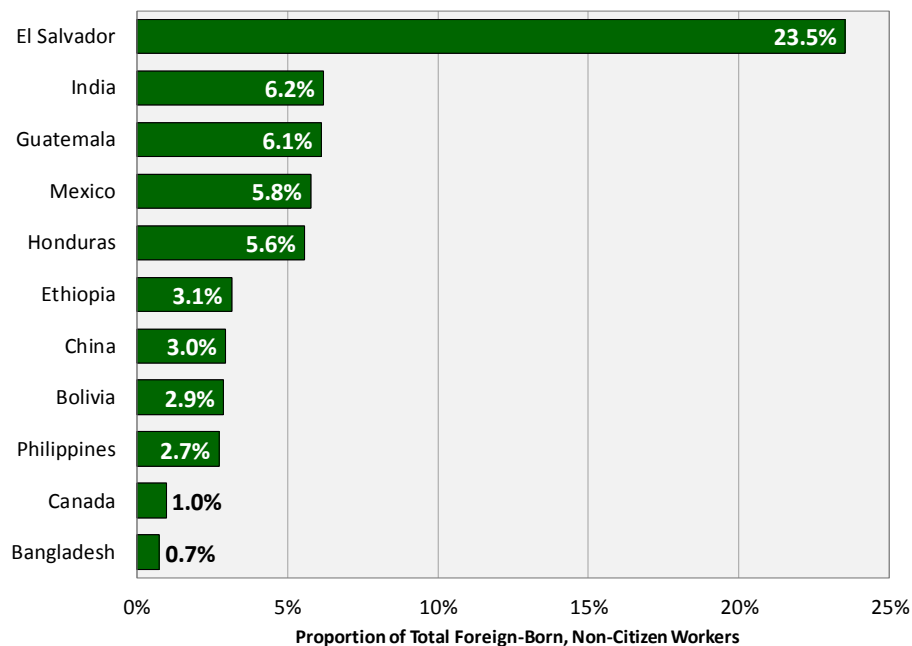
<sup>8</sup> It should be noted that within the region the educational attainment of foreign-born, naturalized citizen workers is very much consistent with the overall workforce. For instance, 53 percent of the regional workforce overall and 52 percent of foreign-born, naturalized citizen workers has at least a bachelor’s degree. As a result, within the Greater Washington region foreign-born, naturalized citizen workers tend to have much higher overall levels of educational attainment than foreign-born, non-citizen workers.

## Sources of foreign-born, non-citizen workers

The region's immigrant workers are from all over the world, with the majority (approximately 55 percent) coming from Latin America. These workers account for 8.2 percent of the region's total workforce. Another 24 percent are from Asia, 13 percent from Africa, and over 6 percent from Europe. Figure 5 shows the proportion of immigrant workers by their country of origin.

- The foreign-born, non-citizen workers from Latin America are primarily from Central America. Salvadorans comprise the single largest group of immigrant workers, as almost 1 in 4 immigrant workers are from El Salvador. Guatemala (6.1 percent) and Honduras (5.6 percent) were also notable sources of Central American immigrant workers. Mexican immigrants represented 5.8 percent of the region's foreign-born, non-citizen workers.
- Indian workers represent 6 percent of the region's foreign-born, non-citizen workers making them the most common source from Asia, followed by Chinese (3.0 percent) and Filipino (2.7 percent) workers.
- Ethiopians were the most common African source of foreign-born, non-citizen workers, comprising 3 percent of the total.

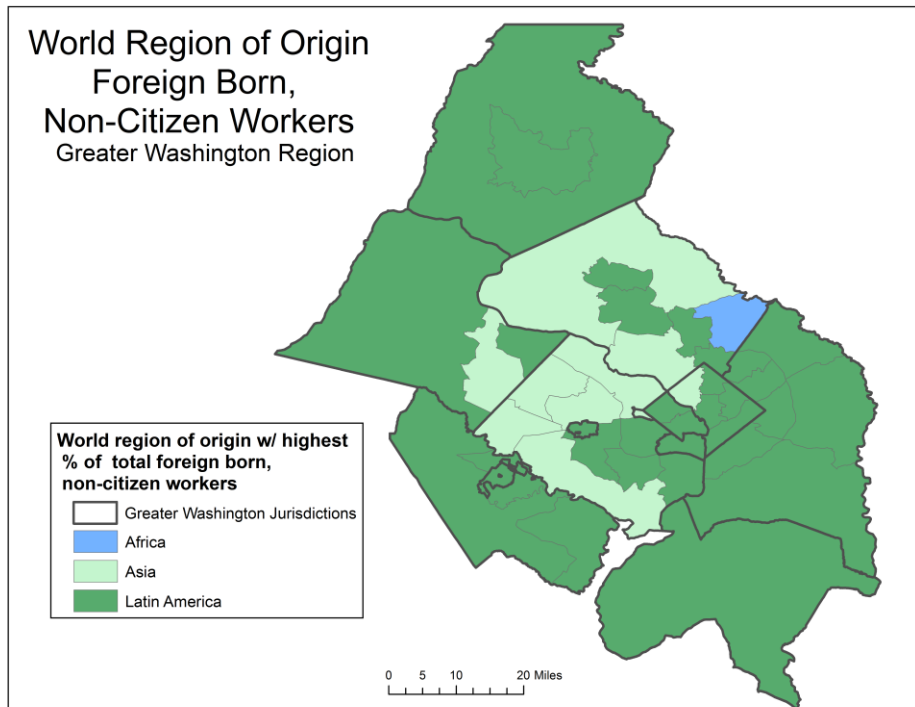
Figure 5: Foreign-born, non-citizen workers in the Greater Washington region by country of origin



Source: US Census Bureau ACS 2016, GMU Center for Regional Analysis

Figure 6 shows the most common world region of origin for foreign-born, non-citizen workers in different parts of the Greater Washington region. Not surprisingly, Latin American workers comprise the greatest share throughout most of the region. Asian foreign-born, non-citizen workers are most prevalent in rural Montgomery County, Northwest DC, and Northern and Southwest Fairfax County. African immigrant workers represent the greatest share of foreign-born, non-citizen workers in Eastern Montgomery County around areas such as Fairland and White Oak, Maryland.

**Figure 6: Most common world region of origin for foreign-born, non-citizen workers**



Source: 2016 American Community Survey, Public Use Microdata Sample (PUMS) files

## The role of foreign-born, non-citizen workers in the regional workforce

In order to better understand the role that they play in the Greater Washington regional economy, we examined the extent to which foreign-born, non-citizens fill jobs in a number of broad occupational groups. We focused on occupational data because it gives us a firmer understanding of what workers actually do (e.g., the number of actual construction workers), as opposed to industry data which provides more information about the scale of company activities (e.g., workers involved in the construction industry which might include secretaries, accountants, and engineers in addition to construction laborers). Figure 7 shows the proportion of foreign-born, non-citizen workers in different occupational groups within the Greater Washington region. These figures make clear that there are several occupational groups that rely heavily on foreign-born, non-citizen workers.

**Figure 7: Proportion of foreign-born, non-citizen workers in different occupational groups**

Occupation Group	Foreign-Born, Non-Citizen Workers	% of Total Occupation Workforce
Construction & extraction	65,940	52.4%
Cleaning & maintenance	52,750	48.6%
Farming, fishing, & forestry	1,150	38.0%
Food preparation & serving	43,770	32.6%
Production	14,220	28.0%
Healthcare support	10,300	21.6%
Personal care & service	21,160	21.3%
Transportation & material moving	22,870	20.7%
Life, physical, & social science	10,890	18.1%
Installation, maintenance, & repair	9,190	16.6%
Sales	33,990	14.1%
Computer & mathematical	21,520	10.1%
Healthcare practitioners	11,420	8.7%
Financial specialists	8,070	8.6%
Office & administrative support	27,980	8.6%
Architecture & engineering	5,130	8.3%
Education, training & library	14,170	7.9%
Management	30,770	7.4%
Arts, design, entertainment, sports, & media	6,350	7.3%
Community & social service	3,200	6.8%
Business operations specialists	9,280	6.3%
Protective service	3,680	4.7%
Legal	2,580	2.9%
Military	390	2.3%

Source: US Census Bureau, 2016 American Community Survey



- Construction occupations:** Foreign-born, non-citizens represent a majority of workers (52 percent) filling the region’s construction occupations. In total, almost 66,000 foreign-born, non-citizen workers fill regional construction and extraction occupations within the Greater Washington region. More foreign-born, non-citizen workers are in construction occupations and are a greater proportion of workers than in any other occupational group. Roughly 95 percent of these workers are from Latin America. Over 28,300 construction workers, or 43 percent of the region’s foreign-born, non-citizen construction workers, are from El Salvador. These workers are not only vital to the region’s construction industry, but these construction occupations are also important for the workers. Many foreign-born, non-citizen workers fill relatively low wage jobs, but the median annual wage for the region’s construction workers is \$46,114, which is roughly 87 percent of the overall median average wage of \$53,310.<sup>9</sup>
- Cleaning and maintenance occupations:** Foreign-born, non-citizens fill just under half (49 percent) of workers in the region’s cleaning and maintenance occupations. As a result, they are important sources of labor not only for home cleaning services, but also for the region’s hotel and hospitality industries. Unlike construction which is a male-dominated industry, women make up a greater proportion of workers in cleaning occupations. The median annual wages are also significantly lower at approximately \$28,000, or just over half of the regional median wage. More than 90 percent of the foreign-born, non-citizen workers in cleaning and maintenance occupations are from Latin America, predominantly El Salvador, as well as Guatemala and Honduras.
- Food preparation and serving:** There are almost 44,000 foreign-born, non-citizens working in the region’s food preparation and serving occupations. These workers represent a third of all regional workers in this occupational group. There are many part-time, low-wage jobs within this occupational group, and the average annual wage is approximately \$24,300. Roughly 72 percent of the foreign-born, non-citizen workers in this occupational group are from Latin America.
- Sales:** Almost 34,000 foreign-born, non-citizens work in sales occupations, making it the fourth largest occupational group for these workers. Retail salespersons and cashiers are some of the most common occupations within this occupational group, many of which are part-time and relatively low-paying jobs. Approximately 40 percent of the foreign-born, non-citizens in this occupational group are from Latin America, 34 percent from Asia, and 19 percent from Africa.
- Transportation and material moving:** Almost 23,000 foreign-born, non-citizen workers fill transportation and material moving occupations such as taxi drivers, truck drivers, and

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<sup>9</sup> Occupational wage data are drawn from the US Bureau of Labor Statistics 2017 Occupational Employment Statistics. They are the average annual wages for occupational groups in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA). The MSA is a somewhat broader geographic area than what we have termed the “Greater Washington region” which we define as the service area of the Metro Washington Council of Governments.

warehousing workers. More than half of these workers come from Latin America (56 percent) and especially El Salvador. African foreign-born, non-citizens are the next most common group (23 percent) with a number of workers coming from Ethiopia and Ghana.

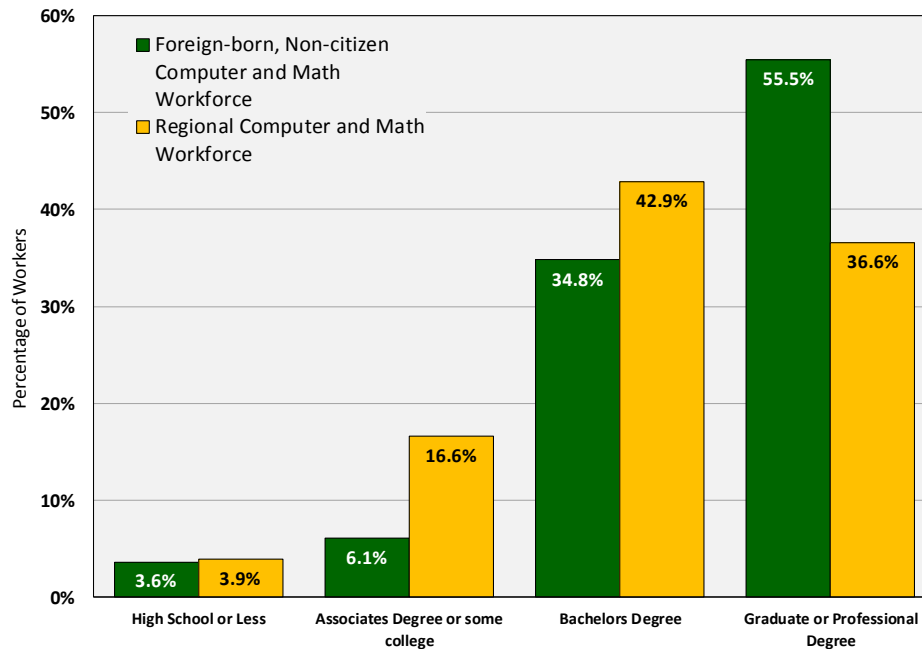
- **Personal care and service:** There are over 21,000 foreign-born, non-citizen workers working in personal care and service occupations. These workers account for over 20 percent of the region's total workforce. The occupations in this group tend to be relatively low-paying (\$26,100/year), such as childcare workers, hair dressers, recreation workers, and personal services. Foreign-born, non-citizens in these occupations come from a wide array of regions including Latin America (46 percent), Asia (27 percent), Africa (17 percent) and Europe (9 percent).
- **Production:** Foreign-born, non-citizen workers represent about 28 percent of the region's 50,000 production workers. Common production occupations within the region are somewhat different than those found in more traditional manufacturing regions. For instance, within the Greater Washington region common production occupations include assemblers, bakers, and laundry and dry-cleaning workers. Over 70 percent of these workers come from Latin America, 18 percent from Asia, and 7 percent from Africa.
- **Farming, fishing and forestry:** Within the Greater Washington region there are only about 3,000 people working in farming, fishing and forestry occupations, but foreign-born, non-citizen workers account for almost 2 out of every 5 workers in this occupational group. For industries such as vineyards or aquaculture, these laborers are an essential part of their workforce.

### Foreign-born, non-citizen workers also fill jobs that require high levels of formal education

Many of the activities mentioned above such as construction, childcare, cleaning services and others are vital for supporting the region and its growth and provide employment opportunities for people with less formal education. However, there are also many foreign-born, non-citizen workers that provide important sources of labor for many in-demand and high-skilled occupations. At a time when a large number of regional employers lament the lack of skilled workers, particularly in fields like information technology, foreign-born, non-citizen workers help fill some of those regional talent gaps.

- **Computer and mathematical occupations:** Over 21,000 foreign-born, non-citizen workers work in computer and mathematics occupations, representing 10 percent of the region's total employment within this occupational group. Roughly three-quarters of foreign-born, non-citizen workers in computer and math occupations are from Asia. Many of the region's IT employers are government contractors and therefore require US citizens, but without this segment of the workforce the challenge in finding skilled IT talent would be even more pressing than it is currently. In fact, these workers further enhance the talent pool because they are more likely to have an advanced degree. Figure 8 shows that within the region over half (55 percent) of the foreign-born, non-citizen workers in computer and math occupations have graduate or

**Figure 8: Educational Attainment of workers in Computer and Mathematical Occupations**



Source: US Census Bureau ACS 2016. GMU Center for Regional Analysis

professional degrees. By contrast, only about 37 percent of the all regional workers in computer and math occupations have graduate or professional degrees.

- Management:** There are almost 31,000 foreign-born, non-citizens working in management occupations throughout the Washington Metro region. Although they make up a relatively small proportion of the total number of workers within these occupations (7 percent), management occupations have the fifth most foreign-born, non-citizen workers. It is also an occupational group that tends to pay relatively higher wages and requires greater levels of formal education. Approximately 68 percent of foreign-born, non-citizens have at least a bachelor’s degree; 40 percent have a graduate or professional degree. Among foreign-born, non-citizen workers in management occupations within the Greater Washington region, 34 percent are from Asia (India, Korea), 33 percent from Latin America (El Salvador), 18 percent from Europe (UK, Germany), and 10 percent from Africa (Nigeria, Ethiopia).<sup>10</sup>
- Life, physical, & social science:** Roughly 18 percent of workers filling life, physical and social science occupations within the Washington region are foreign-born, non-citizens. Within the region, common science occupations include people working in hard sciences like chemistry, biology, and medicine, as well as social sciences like economics. Not surprisingly, these workers tend to be highly educated. Almost 9,600 of the 10,900 (88 percent) foreign-born, non-citizens

<sup>10</sup> These proportions vary throughout the region. Foreign-born, non-citizen workers in management occupations that live in Northern Virginia are primarily from Asia (47 percent) and Latin America (30 percent), in the District of Columbia they are primarily from Europe (37 percent) and Latin America (29 percent), and in suburban Maryland Counties they are mostly from Latin America (39 percent).

filling these occupations have graduate or professional degrees; 7,200 of which have doctoral degrees. Almost half of these workers are from Asia, and another 27 percent are from Europe. China is the single largest source of these workers, as just under 20 percent of the foreign-born, non-citizens working in these occupations.

## Concluding thoughts

Foreign-born, non-citizen workers play an important and significant role in the Greater Washington regional workforce. These workers represent almost one out of every six workers in the region, and for some occupational groups such as construction and cleaning and maintenance they comprise roughly half of the regional workforce. As a result, employers that hire significant numbers of these workers would face serious workforce challenges if they were unable to access this pool of workers.

A majority of foreign-born, non-citizen workers lack post-secondary education and therefore work primarily in relatively lower wage occupations. This can create significant challenges for these workers given the region's high cost of living, and especially housing costs. Addressing a wide array of regional challenges related to transportation, workforce housing, and access to education and training will not only benefit these workers, but all the region's lower-wage workers.

A segment of the region's foreign-born, non-citizen workers also make important contributions to meeting the demand for in-demand skills. These workers comprise 10 percent of the workers in the region's computer and mathematical occupations. Although this is a relatively smaller share than in other occupational groups, the region's employers have tens of thousands of IT jobs that are unfilled due to a lack of available talent. Attracting more skill immigrants and retaining those that graduate from area institutions (e.g., University of Maryland, George Mason University) can have a real impact in closing the talent gap.