



RESEARCH REPORT

Upskilling the Immigrant Workforce to Meet Employer Demand for Skilled Workers

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Executive Summary

In communities across the country, many employers are having trouble finding enough skilled workers. They may be overlooking an untapped resource. A large share of immigrant workers are in lower-skilled jobs, however, with the right access to education and training they need to advance their careers, many have the potential to meet these labor force needs. Workforce development services could help them develop their skills, earn higher wages to support themselves and their families, and meet employer demand.

Immigrants make up one out of six workers in the United States. They are an often overlooked but vital part of local economies and, therefore, should be a part of local workforce development strategies. Middle-skilled jobs are an avenue for many of these workers to get good jobs without needing a four-year degree. And employers have expressed a need for workers with bilingual and cultural skills to serve an increasingly diverse public. Many cities and organizations are engaged in upskilling their immigrant workforce, though it is challenging to serve this population effectively, and there is not much systematic knowledge about the most effective way to address barriers and design training for this group.

In this report, we examine the size and characteristics of the potentially untapped immigrant workforce and the barriers to and opportunities for education, training, and workforce services. We provide national and metropolitan-level statistics to inform decisionmakers. We also explore strategies that organizations in three cities—Dallas, Miami, and Seattle—are using to support immigrant training and advancement and offer practice and policy recommendations for others.

Here, we focus on immigrants currently employed in lower- and middle-skilled occupations and who are authorized to work in the US. Many of the issues discussed in this report also apply to undocumented workers, who could benefit from upskilling efforts, but they are not eligible for certain federal employment programs.

Characteristics of the Immigrant Workforce

Understanding the characteristics of the potential immigrant middle-skilled workforce can inform strategies to support education and training efforts. We looked at the educational attainment, occupations, wages, and English proficiency of immigrant workers.

Educational Attainment

As a whole, immigrant workers have lower educational attainment than native-born workers, although a similar share in both groups has a college or advanced degree.

- 26 percent of immigrant workers have less than a high school diploma or equivalent, compared with 5 percent of native-born workers
- 21 percent of immigrant workers have a high school degree, compared with 26 percent of native-born workers
- 21 percent have some postsecondary education but less than a bachelor's degree, compared with 36 percent of native-born workers
- 31 percent have a college degree or above, compared with 33 percent of native-born workers

Occupation

Despite having lower educational attainment, foreign-born workers are just as likely as native-born workers to hold middle-skilled jobs. This suggests that immigrant workers may be gaining some middle-skilled jobs through job experience and on-the-job training rather than entering with specific credentials required for entry into a specific job. About 25 percent of both groups have middle-skilled jobs, though immigrant workers are more likely than native-born workers to have lower-skilled jobs (50 percent compared with 44 percent) and less likely to have high-skilled jobs (25 percent compared with 31 percent).

Among foreign-born workers, the most common lower-skilled occupations are maids and housekeeping cleaners, janitors, construction laborers, cashiers, grounds maintenance workers, retail salespersons, agricultural workers, and waiters. The most common middle-skilled occupations are cooks; drivers; nursing, psychiatric, and home health aides; and first-line supervisors of retail workers. Though native-born workers also hold many of these same lower- and middle-skilled occupations, they are more likely to have secretary and customer service representative positions and much less likely to work as maids, grounds maintenance workers, and agricultural workers.

Wages

Immigrant workers in lower- and middle-skilled jobs earn less than their native-born counterparts. They have a median wage of \$21,266 compared with \$24,421 among the native born with lower-skilled jobs.

And among those with middle-skilled jobs, immigrants have a median wage of \$28,905 compared with \$36,041 for native-born workers.

Limited English Proficiency

Limited English proficiency is common among immigrant workers, though it is more common for those with lower-skilled jobs (60 percent) compared with those in middle-skilled jobs (52 percent) or in high-skilled jobs (19 percent). Limited English proficiency is correlated with lower wages; in general, the lower-paid occupations are more likely to have workers who are limited English proficient (LEP), and the higher-paid occupations have fewer LEP workers. But there is not a direct relationship between wage and LEP rate. Some higher-paying occupations in construction and related fields have a large majority of LEP workers. There are also LEP workers in some first-line supervisor positions, which tend to be better paid. There are some other well-paying jobs (for the native born) that immigrants are not attaining at comparable rates, which could offer paths to better wages and could be reached with some upskilling in English, career readiness, or technical training.

The results suggest that certain types of training and education are needed to support immigrant upskilling and leverage their unique assets and needs across sectors and occupations. Limited English proficiency is a common issue among immigrants employed in lower- and middle-skilled jobs, suggesting the importance of English language training as part of workforce development strategies for this population.

Barriers to Education and Training and Better Jobs

We talked with service providers and stakeholders in Dallas, Miami, and Seattle to better understand the challenges that immigrants face in pursuing education and training. Many described the following barriers.

- **Limited English proficiency.** Many service providers said that limited English proficiency is a significant barrier to promotion and higher wages and can make workers vulnerable to abuse in the workplace. In the cities we visited, the demand for English language training is greater than the supply. Service providers said that English as a Second Language (ESL) instruction should be customized for different needs, but existing classes are rarely able to support the wide range of immigrant backgrounds and skill levels. They also noted that employers and policymakers

sometimes have unrealistic expectations about how quickly students can advance in their English proficiency.

- **Difficulty transferring foreign credentials and overseas job experience to the US job market.** Immigrants who have credentials and job experience in their home countries have trouble finding employment in their previous professions. Service providers said that they try to offer alternative training or career paths to immigrants with particular skill sets or try to place them in lower- or middle-skilled jobs where they can get a foot in the door rather than trying to match them with jobs similar to the ones they held in their home countries.
- **Low digital literacy and low basic skills.** Many service providers described how some of their immigrant clients need training in basic computer skills, which matter for a wide range of jobs and for accessing workforce services and tools. Workers with low digital literacy might also have more fundamental basic skills gaps and low literacy in their native languages.
- **High housing costs and lack of transportation and child care.** These three barriers are perhaps the greatest challenges immigrant workers—and native-born workers—face for participating in education and training. Low wages and high housing costs drive many immigrants to work multiple jobs, leaving little time for upskilling. Transportation challenges, such as inadequate public transportation and long commute times, can keep workers from pursuing education and training. And finding affordable quality child care is a major hurdle for many low-wage workers, including immigrant workers.
- **Financial pressures.** Service providers said that many immigrants work in “survival jobs,” which allow them to support themselves but are not likely to lead to advancement. The financial pressure of providing for themselves and their families on low wages is a major barrier to investing time and money in education and training.

In addition, service providers grapple with their own challenges to supporting education, training, and workforce services and supports. These include raising funds to develop and maintain programs, managing complex and sometimes contradictory performance reporting requirements from different funding sources, and working with the federal workforce system structure implemented through the Workforce Innovation and Opportunity Act (WIOA).

Strategies to Support Immigrant Workers and Develop a Strong Middle-Skilled Workforce

Despite these challenges, many organizations are designing workforce development services for immigrant workers and helping them address their barriers to participation. The following strategies include approaches to training that consider workers' needs and solutions to increase immigrant access to education and training.

- **English language skill-building.** Many service providers said that vocational English training that integrates workforce content or combines ESL with technical training is more effective and efficient than classic ESL. Offering instruction at the workplace can make training more accessible and can help workers avoid additional transportation and child care costs.
- **Training supports.** Supportive services, such as help with transportation or child care, can make it easier for workers to enroll and participate in education and training programs.
- **Inclusive staffing.** To make immigrants feel welcome and to provide the support they need to succeed in training, organizational staff should be multilingual, culturally competent, and available to help participants navigate systems.
- **Community outreach.** Many service providers said that community outreach is essential for engaging immigrant communities. This may mean advertising on language-specific media, providing recruitment materials in multiple languages, or tapping into community networks.
- **Trusted providers.** The service providers we interviewed said that a common strategy for outreach is leveraging community organizations and providing services at trusted places, like on location at immigrant-serving community-based organizations.
- **Collaboration with other service organizations.** Collaboration across sectors allows service providers to leverage resources and make training and supports more accessible to students and their families.

Local Workforce Development Strategy Should Include Immigrant Workers

Immigrant workers play essential roles in local economies but are often not able to access the training that would benefit themselves, their employers, and their communities. Their role in local labor markets

and their needs should be considered in broader decisionmaking and in every community's workforce development goals.

Like native-born workers, many foreign-born workers in lower- and middle-skilled jobs are working hard to support their families, handling high costs of living, and struggling to make ends meet with low-paid work. Given the challenges of balancing life and work on a low income, they have limited opportunity to invest in their own training and enhance their prospects for better-paid work and career advancement.

It is important that communities acknowledge and address the often-overlooked immigrant workforce that sustains their local economies and make sure that immigrants and LEP workers are a part of local economic development and workforce development strategies and conversations. There is still too much division between immigrant-serving organizations and ESL providers, the workforce development board and community colleges, and employers who are relying on immigrant talent. All actors would benefit from bridging that gap and coming together to engage immigrants and employers in workforce development strategies and foster immigrant upskilling

Investing in immigrant workers and their upskilling is important for a range of decisionmakers across sectors, who may or may not have immigrant and LEP issues on their radar.

- **State and local policymakers** making policy and funding decisions can be aware of and sensitive to the key role that immigrant workers are playing in their communities, pushing forward workforce and education issues. Recognizing the contributions of the immigrant community is critical, especially at this time of restrictive immigration policies and toxic national rhetoric. Policymakers can put more resources into English language learning and encourage organizations to serve immigrants and LEP individuals, track information about programs to assess gaps in services, and actively engage immigrant-serving organizations to ensure policy is grounded in community needs.
- **Organizations providing workforce development services and education and training** can work to improve program accessibility and design to serve immigrant community members. Local workforce development boards, community colleges, and school districts, whose mission is to serve the community, can assess the extent to which they are funding immigrant-serving organizations or serving immigrant and LEP communities. They can work to improve the linguistic and cultural competence and accessibility of programs by hiring multilingual staff and partnering with immigrant-serving organizations to fill in gaps in visibility, language access, and cultural knowledge. Organizations should connect with immigrant-serving organizations to

leverage WIOA's opportunity for pressing forward the needs of LEP individuals as a priority of service population, as well as youth in immigrant families.

- **Funders** interested in supporting equity and economic mobility can consider incorporating immigrant populations and English language learning into their funding priorities. They can work to ensure that these issues are reflected in their awarding of grants—that local grantees are reaching this population through direct services or incorporating an immigrant-inclusive lens in systems-level work. This might mean encouraging collaboration across sectors like connecting immigrant-serving ESL providers to local workforce development or economic development organizations or employers, or conducting needs assessments to inform future investment.
- **Employers** who want to recruit and retain workers can invest in improving job quality by recognizing barriers like child care and transportation and providing supports or services to help current employees. They can also invest in upskilling their employees through onsite training to foster English language learning and promote advancement. And they can collaborate with immigrant-serving organizations and other training providers to ensure that training programs are informed by current industry need.

This issue is even more important in our current political climate, when immigrant communities are subject to harsh political rhetoric and are suffering the consequences of heightened immigration enforcement and volatile immigrant policy developments. In the face of this painful debate and as many are suffering uncertainty and family separation, each day immigrant workers continue to work to support their families, employers, and communities. States and local areas that are working to support their immigrant residents need to keep training and education on their agenda as they develop proactive policies and continue to support workers.

Upskilling the Immigrant Workforce to Meet Employer Demand for Skilled Workers

Immigrants make up one out of six workers in the US, and they support the vitality of local economies across the country. The foreign born are employed at high rates, but a large share have low educational attainment and are limited in their English proficiency. Most immigrant workers with low-paying jobs have limited opportunities to pursue education and training and expand their English and technical skills, steps that might unlock better wages and support career advancement. At the same time, with low rates of unemployment, employers are voicing demand for workers, especially to fill middle-skilled positions that require some postsecondary training but not a four-year college degree. Many employers need skilled workers with bilingual and cultural skills to serve an increasingly diverse public and work in a globalized economy. It has been challenging for many local workforce systems to serve immigrant workers effectively, but many organizations and cities are engaged in upskilling their immigrant workforce to meet this employer demand. “Local workforce systems” here is used broadly to include not just the federally funded public workforce system but the range of organizations across sectors that serve and support individuals and employers,¹ including education and training providers, immigrant-serving organizations, and other organizations. This report examines the size and characteristics of the immigrant workforce at the national and metropolitan levels, and explores key strategies that organizations in three cities are using to support training this population for better jobs.

We explore barriers to and opportunities for education, training, and workforce services, focusing specifically on employed immigrants who could help fill employer demand and should be a target of middle-skill workforce development strategies. Our discussion of education and training considers a range of programming that could foster mobility of working immigrants and limited English proficient (LEP) individuals; this includes English as a second language (ESL), general career readiness and workforce training, and technical training for specific occupations. We use recent census data to provide a demographic profile of the immigrant workforce with national- and metropolitan-level statistics for the largest 100 metropolitan regions. We share insights collected through interviews with service providers and stakeholders in Dallas, Miami, and Seattle to better understand the barriers to training for this population and the experiences of organizations serving immigrant communities. The results point to the ways that local communities focused on the issue of middle-skill workforce

development can account for the important role that immigrants have to play and design appropriate strategies to foster their upskilling. Strategies should address barriers that are preventing many immigrants from advancing out of low-wage jobs, as many immigrant workers are struggling to make ends meet with low-paid lower-skilled or middle-skilled jobs. Limited English proficiency is a major challenge for this group, and English language training must be a component of workforce training for this population. It is also, however, crucial to recognize the linguistic and cultural assets that immigrants can and do contribute, especially in key occupations and sectors that require bilingual skills whether to serve a diverse public or work with a diverse employee base.

We begin with a description of the policy and research context and describe our research design, which draws on quantitative and qualitative data sources. We provide basic statistics on the immigrant workforce and then share perspectives from the field collected through interviews with staff from service provider and stakeholder organizations. We conclude with practice and policy recommendations to inform future decisionmaking to leverage the key role immigrant workers can play for middle-skill workforce strategies.

BOX 1

New Skills at Work

The Urban Institute is collaborating with JPMorgan Chase over five years to inform and assess JPMorgan Chase’s philanthropic investments in key initiatives. One of these is New Skills at Work, a \$250 million multiyear workforce development initiative that aims to expand and replicate effective approaches for linking education and training efforts with the skills and competencies employers need. The goals of the collaboration include using data and evidence to inform JPMorgan Chase’s philanthropic investments, assessing whether its programs are achieving desired outcomes, and informing the larger fields of policy, philanthropy, and practice. As one of several resources Urban is developing for the field, this report focuses on immigrant workers and effective strategies for upskilling this key segment of many local workforces.

Need for This Study

There is a broad conversation in the workforce development field and among employers about the “middle-skills gap:” the idea is that employers are in need of skilled workers with specific postsecondary credentials but less than a four-year college degree (Holzer 2015; Kochan, Finegold, and Osterman 2012; Modestino 2016).² Though not all middle-skilled jobs offer high wages, there is a growing focus

on job quality and the importance of prioritizing workforce and training services to prepare and place individuals in “good jobs.” In-demand positions can offer higher wages and desirable work conditions without a lengthy and expensive investment in a four-year degree that may not be in tune with employer demand (Carnevale et al. 2017). The link between the middle-skills gap and the immigrant workforce is rarely voiced explicitly. However, employers in many sectors, such as health care, sales, and customer services, where skilled workers are needed to serve a diverse multilingual public, are articulating the need for a trained immigrant workforce (Callahan and Gándara 2014; Hohn et al. 2016; New American Economy 2017). Immigrant workers offer valuable assets like linguistic and cultural knowledge that are a good match for these needs, but a large share is employed in low-paid lower-skilled work. Alongside the financial and logistical challenges faced by all low-income workers seeking training or employment services, immigrants face additional barriers of limited English language proficiency, lack of knowledge of training and employment options, and challenges in having foreign credentials and experience recognized in the US labor market.

There is not much systematic evidence-based knowledge about the most effective ways to address these barriers and design workforce services and training for low-income immigrant populations, although there are many cases of individual successful projects and best practices in programming and funding (Bergson-Shilcock 2016; Connell 2008; Gershwin et al. 2009; Spence 2010). In fact, much of the discussion on immigrant workforce issues has focused on high-skilled immigrants who have college and advanced degrees and the barriers they face getting recognition of their educational credentials earned abroad and reaching employment aligned with their skills (Batalova, Fix, and Bachmeier 2016; Bergson-Shilcock and Witte 2015; Hall et al. 2011; McHugh and Morawski 2017). Although there has been some research on the middle-skilled part of the labor market and how immigrants fit in (Capps, Fix, and Yi-Ying Lin 2010; National Skills Coalition, n.d. a, n.d. b) and study of key roles that immigrant workers fill in the labor market (Dramski 2017; Espinoza 2017; Paral 2018), there is still a gap in knowledge about effective strategies for upskilling immigrants to reach better jobs.

The division between the immigrant services field and the workforce development field in the US has long been a challenge to developing effective workforce services and systems for this population (Montes and Choitz 2016a, 2016b).³ In the context of a broader conversation around immigrant integration, there has been a shift in the last few years toward better coordination in some communities and more attention paid to refugees’ and other immigrants’ access to workforce development resources (Kallenbach and Nash 2016; US Department of Health and Human Services 2014). But there are significant challenges around immigrants’ and LEP individuals’ access to the federal workforce development system, and many have highlighted the mismatch between immigrants’ needs and federal,

state, and local practices (Hamaji and González-Rivera 2016; McHugh and Morawski 2015). Passage of the Workforce Innovation and Opportunity Act (WIOA) in 2014 has created risks and offered opportunities to help address this gap.⁴ WIOA updated the structure of the publicly funded workforce system and included requirements that all core programs, including adult basic education and English language literacy programs, track a common set of outcomes. When WIOA was passed, some immigrant advocates and researchers were concerned about the potential negative impacts for serving the immigrant community,⁵ fearing that the increased focus on employment outcomes in programs designed to improve basic skills would reduce their access to WIOA-funded adult education services. Others highlighted opportunities such as the potential for the involvement of immigrant-serving organizations in local planning and a focus in the legislation on barriers to service and basic skills deficient individuals, which would include LEP individuals (National Skills Coalition 2016).

As WIOA is implemented and communities continue to address skills gaps, cities and organizations across the country are handling immigrant workforce issues in different ways, so it is important that research be grounded in specific local settings. This report was motivated by the need for practitioners and policymakers to have a better understanding of where immigrants are accessing training, the barriers they face, and what funding streams and resources are supporting this population. We analyze the challenges and opportunities around training immigrant workers that might allow them to attain higher-paying, higher-quality jobs, focusing on a specific target population for policymakers: currently employed immigrant workers who hold lower- and middle-skilled jobs.

Research Approach

In this report we explore the following key research questions:

1. How big is the immigrant workforce and what are its key characteristics? How much does educational attainment align with occupational skill requirements? How do immigrant workers differ from native-born workers?
2. What are the key barriers to education, training, and advancement for immigrant workers?
3. How are local workforce systems and stakeholders coping with these barriers? What sources of training and workforce development services are immigrants accessing? What funding sources and strategies are local workforce actors using to support immigrant workers?

4. How can local workforce systems better support immigrant workers to reach better-paid and middle-skilled employment? Have recent changes to WIOA had an impact on strategies on the ground?

To inform middle-skill workforce policy and efforts to train workers for good jobs, we focus on the experiences of immigrants employed in lower- and middle-skilled occupations; this is the potential target population for upskilling efforts to fill employer needs for skilled workers. We use the terms “immigrant” and “foreign born” interchangeably throughout the report. The main focus of this report is on how workforce systems support education and training for immigrant workers and thus it focuses primarily on the experiences of work-authorized immigrants rather than undocumented immigrants. Undocumented immigrants may participate in training and education. Many of the issues we discuss in this report apply to undocumented workers, who could benefit from upskilling efforts, although issues around legal status were not a focus of our work. Other research described above directly addresses the conditions faced by undocumented immigrants, who are ineligible for certain federal employment programs and face barriers to accessing public services for which they are eligible. In the current immigration policy climate, heightened immigration enforcement and political rhetoric have raised the vulnerability and fear across immigrant communities across the US (Cervantes, Ulrich, and Matthews 2018; McHugh 2018). While the immigration policy debates rage on and individuals and communities suffer the consequences of uncertainty and family separation, immigrant workers continue to clock in to support their families, employers, and communities. This report turns a spotlight on the immigrant workers who underlie many local economies in lower- and middle-skilled jobs who should be factored into local workforce development strategies.

Census Analysis

We provide a demographic profile of the immigrant workforce using recent Census bureau data: the five-year American Community Survey (ACS) sample for 2011–15. (See appendix for further details.) We apply Bureau of Labor Statistics (BLS) classifications of skills requirements to occupations as follows:⁶

- Occupations with limited skills requirements or “lower-skilled jobs:” Require no specific education or work experience and only short- or moderate-term on-the-job training
- Occupations with middle skills requirements or “middle-skilled jobs:” Require a postsecondary nondegree award or associate’s degree, some work experience in a related occupation, or long-term on-the-job training or an apprenticeship

- Occupations with high skills requirements or “high-skilled jobs:” Require a bachelor’s, master’s, doctoral, or professional degree

Each of these broad categories includes a wide range of jobs and occupations that vary greatly in terms of wage level, job quality, and prospects for advancement. Not all middle-skilled jobs are necessarily “good jobs” with high wages, so we focus on both the lower- and middle-skilled occupations and the challenges that workers face to participating in training that would help them advance. Although we use the term “lower-skilled jobs” in this report, we acknowledge that all jobs require certain skills and experience and do not want to diminish the talent and skills involved in all work, including jobs often derided as “low skilled” (Hagan et al. 2015). Though there are limitations with these terms, we use these categories to be able to describe large patterns and to speak to ongoing policy conversations around issues like the middle-skills gap.

One major limitation of the ACS data, similar to the decennial census, is that certain populations, including undocumented immigrants, are difficult to reach and are thus undercounted. The US Office of Immigration Statistics assumes a 10 percent undercount of the undocumented population in the ACS (Baker 2017). This limitation of the ACS data affects the findings of our study since many undocumented immigrants are in occupations with lower- and middle-skills requirements.⁷

Interviews with Organizations

To complement our quantitative findings that reveal broad patterns in educational attainment and employment, we conducted site visits to three cities, Dallas, Miami, and Seattle, to better understand how local workforce systems and organizations are supporting this population. These cities capture a range of economic and social contexts and are all growing economies with low unemployment rates where immigrants are and will continue to be important for middle-skills workforce strategies. We drew on existing research, consultations with experts, and ACS data to identify cities that had large and diverse immigrant workforces, would be likely to have innovative practices, and had not previously been studied in this context. We looked for variation in terms of geography, mix of industries, local context of immigrant reception, and workforce demographics like skill distribution, English language proficiency, and the ethnic and national background of immigrant workers. See appendix table a.1 for an overview of basic demographic statistics for each metropolitan area.

For each of the cities, we identified organizations and individuals to interview through consultation with experts and internet research, looking for promising practices and evidence of outreach to

immigrant or LEP populations. We identified a range of organizations that are involved in workforce development issues and immigrant services:

- **education and training providers** including community colleges, school districts, and other English as a second language, GED, and technical training providers
- **immigrant-serving organizations** and community-based organizations
- **stakeholders** from local government, the local workforce development board, chambers of commerce or other economic development organizations, and philanthropy

This produced 30 semistructured interviews, through which we gathered perspectives on the strategies and programs in place to reach immigrant workers, assets immigrants offer and barriers they face, challenges the service organizations face, sources of funding, local economic and policy context, including the impact of the WIOA, and other issues. We intentionally engaged a wide range of stakeholders and service providers across sectors that normally remain siloed. We were thus able to capture a rarely seen multisector view across immigrant services, adult basic education, higher education, workforce development, and economic development organizations. We believe that the insights are relevant to other cities and metros in the US. Table 1 lists the organizations we interviewed in each city.

TABLE 1

Organizations Interviewed

| | Dallas | Miami | Seattle |
|---------------------------------|---|---|--|
| Training providers | Dallas County Community College District, El Centro College | Miami Dade College, Wolfson Campus | Port Jobs |
| | Fort Worth Independent School District, Office of Adult Education | Miami Dade College, REVEST Program | Seattle Central College, Basic & Transitional Studies |
| | | Miami-Dade County Public Schools, Division of Adult and Workforce Education | |
| Immigrant-serving organizations | Park Cities Presbyterian Church, Northwest Bible Church, For the Nations, New City Fellowship | ConnectFamilias | El Centro de la Raza |
| | International Rescue Committee in Dallas | Family Action Network Movement (FANM) | Literacy Source |
| | Literacy Instruction for Texas (LIFT) | Hispanic Unity of Florida | Neighborhood House |
| | Transformance USA | Sant La Haitian Neighborhood Center | OneAmerica |
| | | Youth Co-Op, Inc. | Seattle Jobs Initiative |
| Stakeholders | City of Dallas, Office of Welcoming Communities and Immigrant Affairs | Miami-Dade Beacon Council | City of Seattle, Office of Immigrant and Refugee Affairs |
| | United Way of Metropolitan Dallas | South Florida Hispanic Chamber of Commerce | Seattle Metropolitan Chamber of Commerce |
| | Workforce Solutions Greater Dallas | United Way of Miami-Dade | Workforce Development Council of Seattle-King County |

Basic Demographics of the Immigrant Workforce

Immigrants make up 17 percent of the workforce nationally, with much higher shares in some major metropolitan regions, such as Miami or San Jose (48 percent) or New York (37 percent) (see appendix table a.4). To provide background on what the potential immigrant middle-skilled workforce looks like, we developed a basic statistical profile of the immigrant workforce including information on educational attainment, occupation, wages, and limited English proficiency. We highlight differences and similarities between foreign-born and native-born workers, focusing our analysis on foreign-born individuals ages 16 to 64 who are employed in the civilian labor force:

- Immigrant workers have lower educational attainment than native-born workers, although a similar share in both groups has a college or advanced degree.

- Despite lower educational attainment, immigrant workers are as likely as the native born to work in middle-skilled occupations.
- Immigrant workers in lower- and middle-skilled jobs earn less than their native-born counterparts.
- The majority of immigrant workers are LEP, which is correlated with lower wages.

The results suggest that certain types of training and education are needed to support immigrant upskilling and leverage their unique assets and needs across different sectors and occupations. Limited English proficiency is a common issue among immigrants employed in lower- and middle-skilled jobs, suggesting the importance of English language training as part of workforce development strategies for this population.

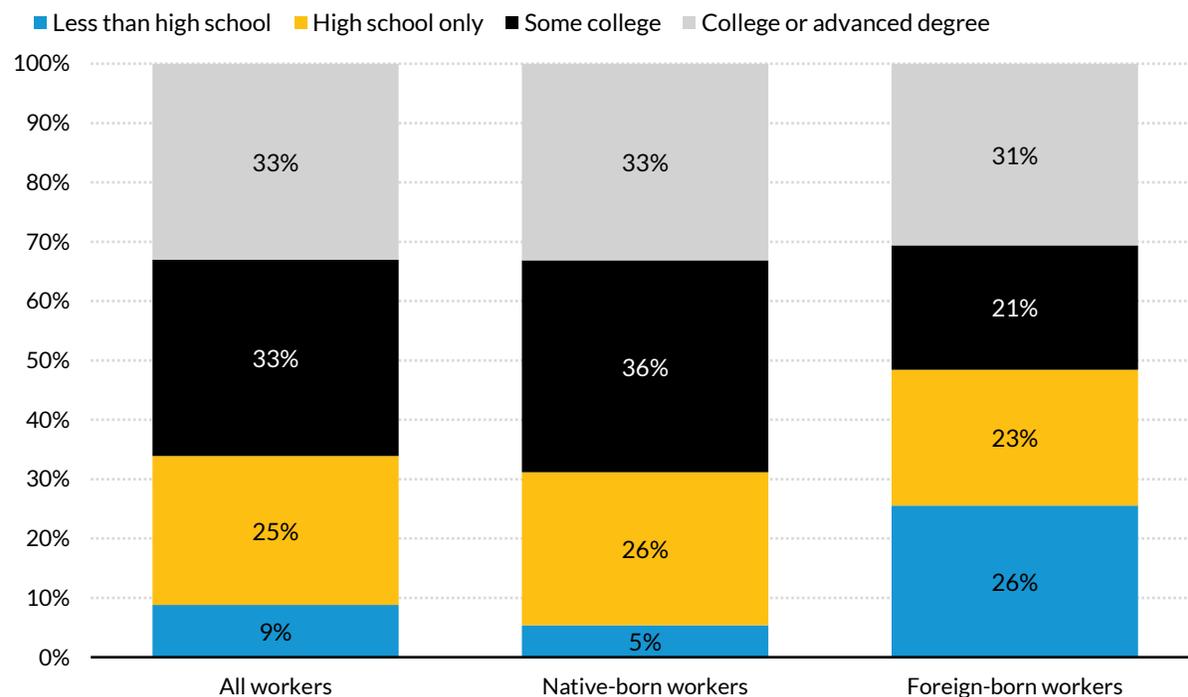
Characteristics of Immigrant Workers

As a whole, foreign-born workers have lower educational attainment than native-born workers (figure 1): about a quarter have less than a high school diploma or equivalent, compared with 5 percent among the native born. On the other hand, about one-third of foreign-born workers have a college or advanced degree, similar to the share among the native born. This diversity within the immigrant workforce—with high numbers at both ends of the educational spectrum—is important context for our focus in this report on opportunities for immigrants employed in lower- and middle-skilled jobs.

To provide some basic information on who we are talking about, most immigrant workers have been in the US for many years (table 2), with a median of 17 years of residence and a median age of 41. Just under half are LEP; this is most prevalent among workers with lower educational attainment and it is relatively low for those with college or advanced degrees. Their median annual wages are low, \$29,407 for all immigrant workers and lowest for those with lower educational attainment. These broad trends suggest the importance of investment in education and training for immigrant workers, who could potentially raise their wages and ability to support their families with greater training and investment in their upskilling.

FIGURE 1

Educational Attainment



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Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Note: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration.

TABLE 2

Basic Demographics of Foreign-Born Workers by Educational Attainment

| | All | Less than high school | High school only | Some college | College or advanced degree |
|-------------------------|----------|-----------------------|------------------|--------------|----------------------------|
| Median years in country | 17 | 17 | 17 | 19 | 17 |
| Median age | 41 | 42 | 41 | 40 | 41 |
| Share LEP | 48% | 81% | 56% | 35% | 23% |
| Median annual wage | \$29,407 | \$20,351 | \$24,028 | \$29,033 | \$60,000 |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

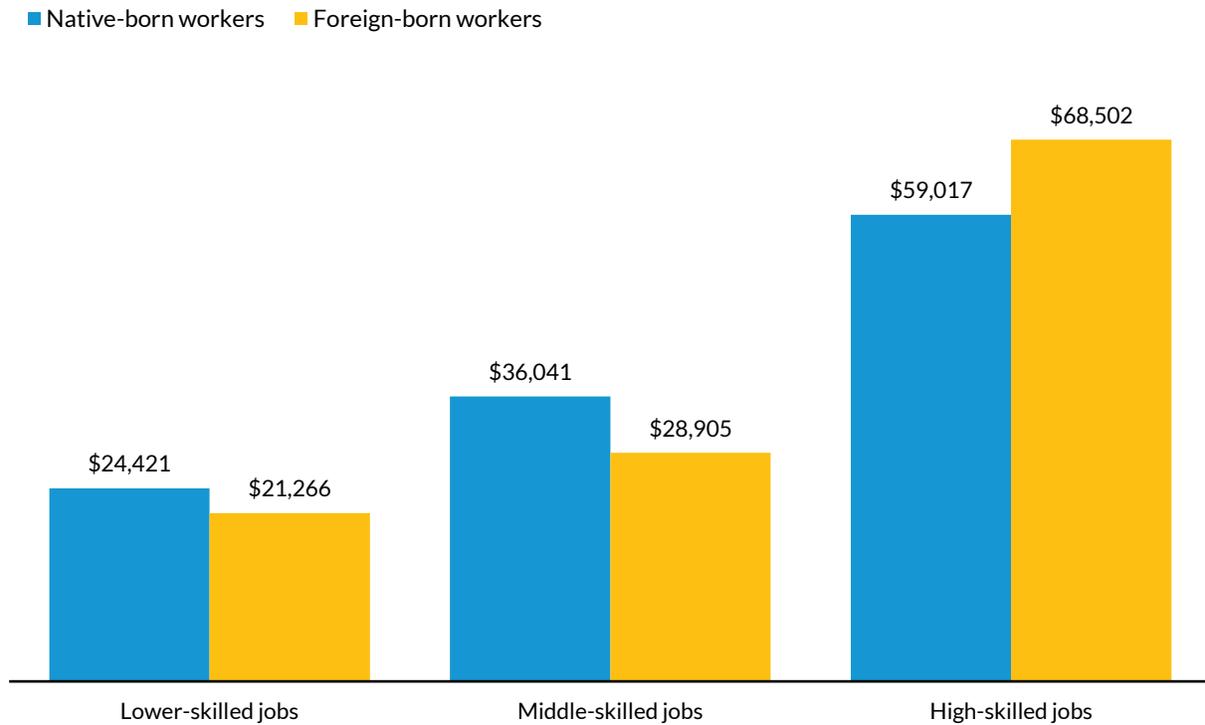
Notes: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration. Median annual wage data are further restricted to those individuals who reported positive wage and salary income during the year before the survey. Individuals are considered limited English proficient if they report not speaking English, speaking English but not well, or speaking English well. LEP = limited English proficient.

Characteristics of the Jobs Immigrant Workers Hold

As mentioned above, we divide jobs into three groups based on the entry-level requirements of occupations. Jobs with higher-skill requirements come with higher median wages for both the foreign-

born and the native-born (figure 2). However, foreign-born workers in lower- and middle-skilled jobs earn less than their native-born counterparts. This wage differential is not true for workers in high-skilled jobs.

FIGURE 2
Median Annual Wages by Occupation Skill-Level Requirement



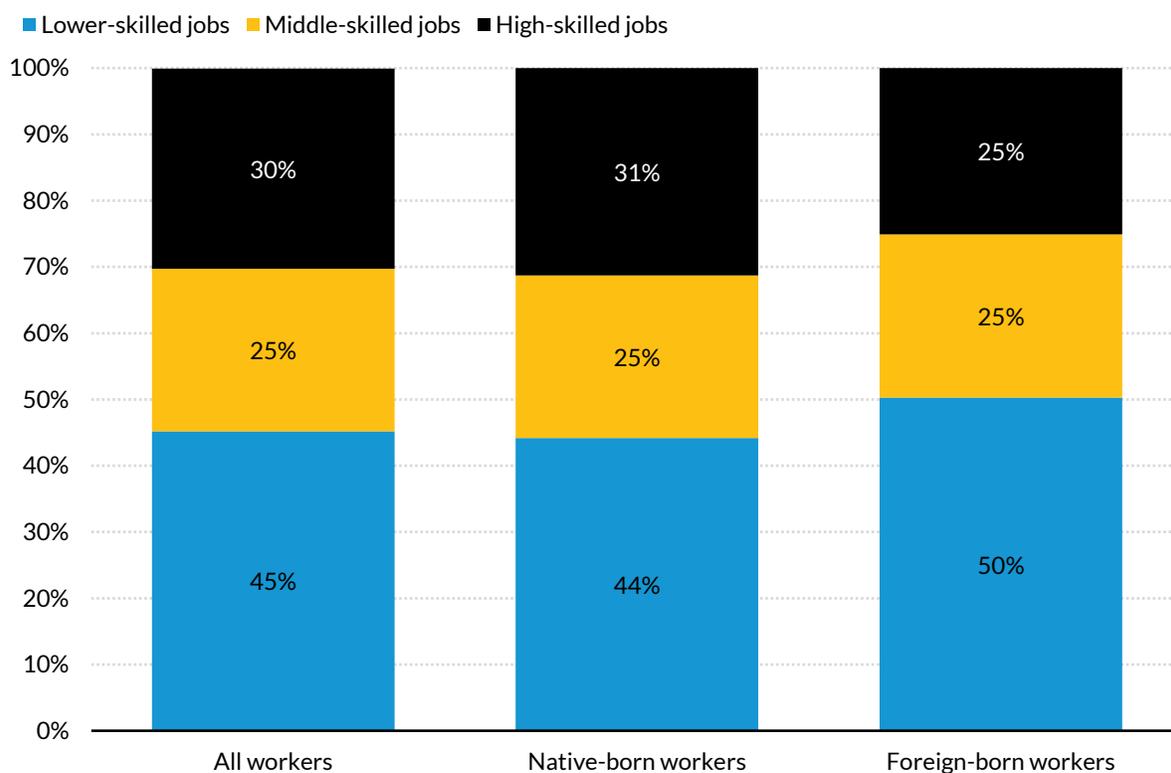
URBAN INSTITUTE

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Note: Data refer to individuals ages 18–64, in the civilian labor force, employed during the week before the survey administration, and reporting positive wage and salary income for the previous year.

Across the entire workforce, slightly less than half of all workers hold lower-skilled jobs, one quarter hold middle-skilled jobs, and the remainder hold high-skilled jobs (figure 3). Despite lower educational attainment, foreign-born workers are just as likely to hold middle-skilled jobs as native-born workers. Immigrant workers are more likely than native-born workers to have lower-skilled jobs (50 percent compared with 44 percent for the native born) and less likely than the native born to have high-skilled jobs (25 percent compared with 31 percent).

FIGURE 3
Occupation Skill-Level Requirements



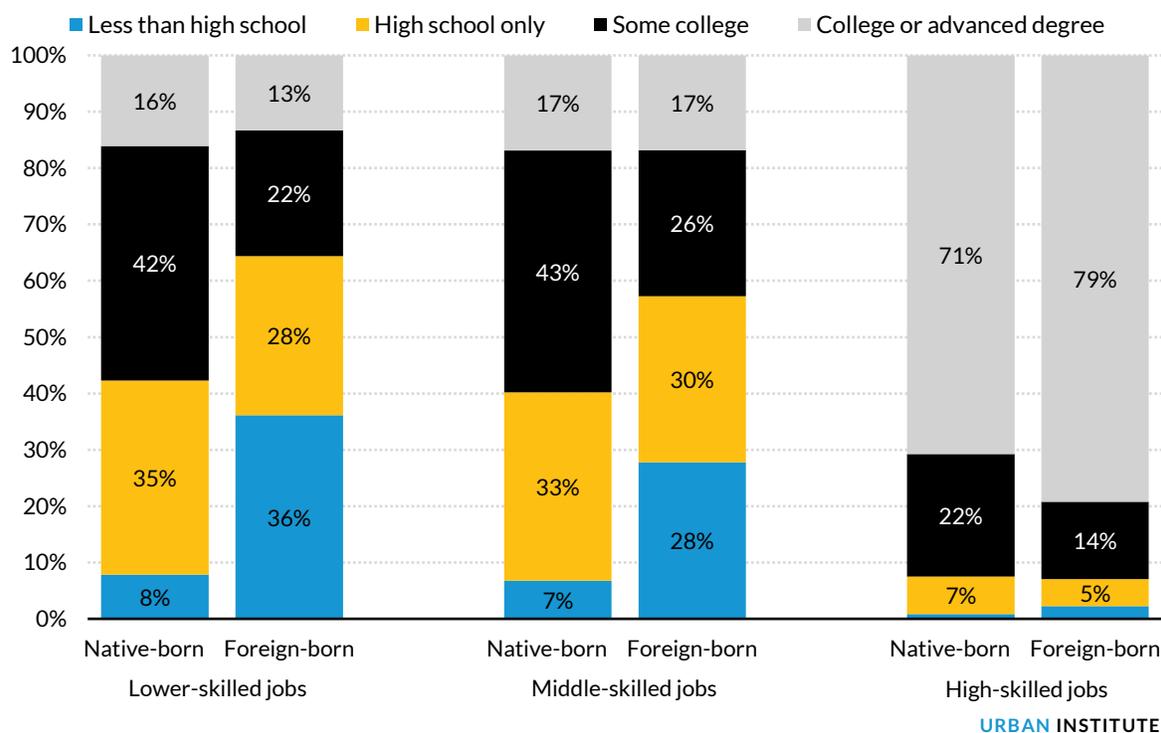
URBAN INSTITUTE

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Note: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration.

Figure 4 reinforces what figures 2 and 3 demonstrate—that foreign-born workers are able to attain middle-skilled jobs despite lower educational attainment. Over a quarter (28 percent) of immigrants with middle-skilled jobs have less than a high school credential, compared with only 7 percent among native-born workers with middle-skilled jobs. Secondly, a much smaller share of immigrants in middle-skilled jobs have had some college (26 percent) compared with the native-born (43 percent). There are many possible reasons for these patterns. These figures do not take into account the length of experience a worker has in the occupation, and it may be that workers are moving into some middle-skilled jobs through job experience and on-the-job training rather than entering with specific credentials required for entry into a specific job. This suggests the possibility that immigrant workers with lower educational attainment may be gaining some middle-skilled jobs through additional years of experience.⁸ Another issue is that these are large categories, which combine many occupations and jobs within an occupation. The average requirements of an occupation used in this analysis can mask substantial variation among jobs in a skill-level category.

FIGURE 4
Educational Attainment by Occupation Skill-Level Requirement



Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Note: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration.

The fact is that within lower- and middle-skilled jobs immigrants are in different occupations than native-born workers (table 3). We combine in these tables workers with lower- and middle-skilled jobs, color coding each group. (For a focus on individuals with only middle-skilled jobs, see appendix table a.2). The top 25 occupations we list here make up around half of workers in lower- and middle-skilled jobs (55 percent of foreign born and 48 percent of native born). We also note occupations that appear in the top 25 for one group but not the other.

Among foreign-born workers, the most common lower-skilled occupations (share above 2 percent) are maids and housekeeping cleaners (with the single largest share at 4.3 percent), janitors, construction laborers, cashiers, grounds maintenance workers, retail salespersons, agricultural workers, and waiters. The most common middle-skilled occupations are cooks; drivers and truck drivers; nursing, psychiatric, and home health aides; and first-line supervisors of retail workers. The native born are likely to hold many of these same lower- and middle-skilled occupations, but there are some major differences. The native born are more likely to have secretary and customer service

representative positions and are much less likely to work as maids, grounds maintenance workers, and agricultural workers.

The share of LEP workers varies a lot across occupations, as might be expected depending on the skills required. Limited English proficiency is common among immigrant workers, though it is more common for those with lower-skilled jobs (60 percent) compared with those in middle-skilled jobs (52 percent), or in high-skilled jobs (19 percent). Limited-English speakers fill a number of jobs, indicating that one can still get ahead with limited English proficiency in some jobs. To get a sense of the patterns, we look at the rate of limited English proficiency within occupations. (See appendix table a.3 for immigrant-held occupations listed in order of share who are LEP.)

Limited English proficiency is correlated with lower wages. In general, the lower-paid occupations are more likely to have more LEP workers, and the higher-paid occupations are less likely to have many LEP workers. For example, occupations with the very highest LEP rates, which the native born are not likely to hold (e.g., agricultural workers, grounds maintenance workers, and maids and housekeeping cleaners), where 80 percent or more of immigrant workers with that position are LEP, all have low median annual wages (below \$20,000). However, there is not a direct relationship between wage and LEP rate:

- First, the very lowest-paying jobs immigrants hold, in customer service, do *not* have the highest LEP rates. Child care workers, cashiers, and personal care aides, with median annual wages between \$13,215 and \$15,263, have more moderate LEP rates (between 50 and 60 percent); this makes some sense, since in some places such client-facing jobs would require English and in other cases they would require a foreign language to serve a diverse public. These jobs may also be more likely to be part time, which this analysis does not account for.
- Secondly, there are several higher-paying occupations, in construction and related fields, where a large majority of workers are LEP (over 70 percent). Immigrant construction laborers; painters, construction, and maintenance workers; other production workers; carpenters; and miscellaneous assemblers and fabricators are occupations for which communication in English is likely less central to job function and where LEP workers are earning somewhat higher annual wages (with median annual wages between \$23,185 and \$25,438).
- There are also many LEP workers in some first-line supervisor positions, which tend to be better paid. Median annual wages are between \$42,155 and \$49,056 for first-line supervisors of production and operating workers, office and administrative support workers, and nonretail sales positions (see table a.2). Though these positions are less common among the foreign born

than among the native born, they may offer an opportunity for immigrants' linguistic and cultural skills to be an asset in a multilingual and diverse work setting where other employees speak a foreign language.

There are some additional well-paying jobs (for the native born) that immigrants are not attaining at comparable rates, which seem like they could offer paths to better wages. Positions like first-line supervisors of construction (where native-born workers earn a median annual wage of \$55,063) or electricians (native-born median annual wage of \$46,553) are potential jobs for immigrant workers engaged in construction and maintenance fields who could attain supervisory positions with some upskilling in English, career readiness, or technical training.

These statistics describe the immigrant workforce at the national scale. For information on the immigrant workforce at the metropolitan level for the 100 largest metropolitan areas, see appendix tables a.4 and a.5. Table a.4 provides statistics on the foreign-born workforce at all skill levels, and table a.5 provides more detailed information on only those who are currently in lower- and middle-skilled jobs. These statistics provide a quick overview of the local immigrant workforce to inform local decisionmakers.

This demographic profile simply describes where immigrants are currently employed. We do not explore the reasons for these outcomes, although we offer some potential explanations that require further research. Many issues influence these occupation and wage features of the immigrant workforce, including employer hiring, employment practices, and institutional and policy conditions in addition to worker characteristics and experiences. Employers' hiring and training practices, occupational licensing rules and foreign credential recognition, workers' social networks and access to jobs, patterns of educational attainment, and rates of limited English proficiency all shape these outcomes. These inputs, immigrants' barriers to entry into occupations, as well as immigrants' assets in certain sectors and occupations should be taken into account and inform strategies to develop a stronger immigrant middle-skill workforce.

TABLE 3
Top Lower- and Middle-Skilled Occupations for Foreign-Born and Native-Born Workers

| Rank | Foreign-Born Workers | | | | Native-Born Workers | | |
|------|--|-------------|--------------------|---------------|--|--------------------|---------------|
| | Occupation | LEP (%) | Median annual wage | Share | Occupation | Median annual wage | Share |
| 1 | Maids and housekeeping cleaners ^a | 79.5 | \$16,018 | 4.3% | Secretaries and administrative assistants | \$30,562 | 3.7% |
| 2 | Cooks | 76.3 | \$18,000 | 4.0% | Retail salespersons | \$17,807 | 3.5% |
| 3 | Janitors and building cleaners | 73.3 | \$20,000 | 3.7% | Driver/sales workers and truck drivers | \$36,131 | 3.3% |
| 4 | Construction laborers | 76.5 | \$24,028 | 3.4% | Cashiers | \$10,175 | 3.2% |
| 5 | Driver/sales workers and truck drivers | 59.2 | \$31,616 | 3.1% | First-line supervisors of retail sales workers | \$36,000 | 3.2% |
| 6 | Cashiers | 52.5 | \$14,333 | 3.0% | Customer service representatives | \$25,029 | 2.8% |
| 7 | Nursing, psychiatric, and home health aides | 42.8 | \$22,900 | 2.7% | Waiters and waitresses | \$12,210 | 2.2% |
| 8 | Grounds maintenance workers ^a | 80.8 | \$19,098 | 2.7% | Laborers and freight, stock, and material movers, hand | \$21,266 | 2.2% |
| 9 | Retail salespersons | 38.7 | \$20,000 | 2.4% | Nursing, psychiatric, and home health aides | \$20,023 | 2.1% |
| 10 | Miscellaneous agricultural workers ^a | 87.9 | \$17,298 | 2.3% | Janitors and building cleaners | \$20,351 | 2.1% |
| 11 | First-line supervisors of retail sales workers | 35.7 | \$35,614 | 2.2% | Cooks | \$12,904 | 1.8% |
| 12 | Waiters and waitresses | 52.4 | \$16,517 | 2.1% | Stock clerks and order fillers | \$18,112 | 1.6% |
| 13 | Carpenters | 71.7 | \$25,438 | 1.9% | Sales representatives, wholesale and manufacturing ^a | \$60,000 | 1.5% |
| 14 | Laborers and freight, stock, and material movers, hand | 67.5 | \$21,525 | 1.9% | First-line supervisors of office and admin. support workers ^a | \$44,390 | 1.5% |
| 15 | Personal care aides | 56.2 | \$15,263 | 1.6% | Bookkeeping, accounting, and auditing clerks ^a | \$32,037 | 1.3% |
| 16 | Customer service representatives | 31.9 | \$25,029 | 1.6% | Office clerks, general ^a | \$26,347 | 1.3% |
| 17 | Other production workers | 71.9 | \$24,982 | 1.5% | Construction laborers | \$28,491 | 1.3% |
| 18 | Secretaries and administrative assistants | 25.1 | \$30,969 | 1.5% | Receptionists and information clerks ^a | \$20,824 | 1.3% |
| 19 | Child care workers | 57.0 | \$13,215 | 1.4% | Child care workers | \$11,193 | 1.2% |
| 20 | Painters, construction and maintenance ^a | 75.9 | \$23,185 | 1.4% | First-line supervisors of nonretail sales ^a | \$60,000 | 1.2% |
| 21 | Food preparation workers ^a | 72.8 | \$15,365 | 1.3% | Other production workers | \$30,526 | 1.1% |
| 22 | Stock clerks and order fillers | 57.9 | \$20,646 | 1.2% | Personal care aides | \$15,000 | 1.1% |
| 23 | Miscellaneous assemblers and fabricators ^a | 71.0 | \$24,000 | 1.2% | Teacher assistants ^a | \$15,808 | 1.1% |
| 24 | Food service managers ^a | 44.7 | \$35,614 | 1.2% | Security guards and gaming surveillance officers ^a | \$25,029 | 1.0% |
| 25 | Miscellaneous personal appearance workers ^a | 75.1 | \$15,808 | 1.1% | Carpenters | \$31,747 | 1.0% |
| | All occupations | 57.3 | \$24,000 | 100.0% | All occupations | \$28,032 | 100.0% |
| | Lower-skilled occupations | | | | | | |
| | Middle-skilled occupations | | | | | | |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Notes: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration. The total weighted foreign-born population meeting these conditions and employed in a lower- or middle-skilled occupation is 17,597,817; the total weighted native-born population meeting these conditions and employed in a lower- or middle-skilled occupation is 78,031,181. Median annual wage data are further restricted to those individuals who reported positive wage and salary income during the year before the survey. Individuals are considered limited English proficient if they report not speaking English, speaking English but not well, or speaking English well. LEP = limited English proficient.

^a These occupations appear in the top 25 for one group but not the other.

Perspectives from Three Local Workforce Systems

Many immigrants are working in lower-skilled jobs or in middle-skilled jobs that are low paying, and low educational attainment and limited English proficiency limit job and wage opportunities for many individuals. Education, training, and workforce development supports can help workers develop their skills, advance in their jobs, and potentially earn higher wages to support themselves and their families. To address employer demand for skilled workers, local workforce systems and immigrant-serving and training and education providers can help address this skill gap by supporting immigrant upskilling while recognizing the jobs that immigrant workers are filling and the barriers they face to better jobs and higher wages. To better understand strategies to address some of these challenges, we conducted qualitative data collection during site visits to Dallas, Miami, and Seattle. Although the three cities differ in local development trends and experiences of the immigrant workforce, they share many challenges immigrant workers in lower- and middle-skilled jobs face and have organizations that have led similar efforts to facilitate immigrant training and advancement.

Our conversations touched on issues that affect a range of working immigrant populations, from the recently arrived to long-term residents, with a focus on those with lower- or middle-skilled jobs with low wages and limited mobility. This includes the foreign born in general and in some cases specific subpopulations with unique circumstances, like resettled refugees, who are provided government assistance at the time of their arrival in the US to support them in quickly finding employment and transitioning to host communities.

Barriers to Education and Training and Better Jobs

We begin with the perspectives service providers and stakeholders shared on the challenges that immigrants face preventing them from pursuing education or training or succeeding in those efforts. The barriers we discuss also stand in the way of better-paid lower- or middle-skilled jobs.

LIMITED ENGLISH PROFICIENCY AND LANGUAGE LEARNING

The statistics in table 3 suggest, service providers shared that limited English proficiency is a critical barrier that many immigrants face to higher-paid work and career advancement. Although finding initial employment in lower-skilled jobs is often not a challenge for their clients—these are all places with high labor demand—their jobs are limited in wage and quality and often do not provide opportunities for

advancement. Limited English also makes workers vulnerable to abuse in the workplace. One service provider explained,

Even though they can get jobs without speaking English, they still come back to me and say, “My employer makes me work 80 hours a week,” or “they don’t let me take lunch breaks,” or “if my kid is sick they threaten to fire me and I can’t take off.” Just that inability to speak English means that they have no other options and just take all this abuse.

Immigrants in lower- and middle-skilled positions who have limited English proficiency may not be able to access better paying positions or they make lower wages than their native-born counterparts. Workers with limited English proficiency may be less likely to be promoted out of lower-skilled jobs; several service providers described clients who had worked as janitors or in grocery stores, worked steadily and loyally, but found that their language ability made it unlikely that they would advance to managerial roles.

Though English language training is key for addressing this barrier, demand for ESL is larger than the supply and resources available in the cities we visited.⁹ We heard from service providers that there were ESL courses available in a range of settings, from community-based organizations (CBOs) to faith-based organizations to community colleges and public schools, but that further work is needed to scale up and improve access to meet the huge ESL need. Discussing the findings of a recent needs assessment that her organization conducted, a service provider said, “A lot [of survey respondents] expressed language as a huge barrier, time and again saying we want more ESL classes in the community available and accessible.”

Making progress in English language learning may take a lot of time and need to be customized for different individuals’ backgrounds. Service providers shared that a one-size-fits-all approach will not work and that available ESL instruction can rarely effectively support the wide range of experiences and skill sets that immigrants arrive with and accommodate how those backgrounds affect their language-learning experience. One service provider reflected on this common trap, saying,

I think oftentimes programs lump [immigrants] together. That looks very different depending on your background. There are immigrants who don’t have English as their first language but have a master’s degree and skilled background in their profession, and there are those who attended zero or two years of school and were a farmer. So, it’s not the same sort of issue with different people, and they’re often lumped together as “it’s all immigrants” or “it’s all English language” instead of addressing language and literacy separately.

Several service providers observed that organizations outside of the ESL field—employers as well as policymakers—may have an unrealistic sense of how quickly English language training and improvement can be accomplished. Service providers noted that one well-known program in Seattle

assumed that individuals at basic levels of English could learn English, incorporate work-related content, and leave fully equipped for employment after only one academic quarter of instruction; the service providers expressed that this ambitious timeline does not align with the realities of ESL instruction and the pace at which individuals make progress in English language acquisition.¹⁰ Another expressed the importance of setting reasonable expectations for training timelines, especially with the immigrant population:

I think personally allowing time, understanding that it's not just take a class and [they're] ready to go....For those [who] don't have a long history of education or any education, or other barriers that are in the way, it's not that simple of just "take this class and you're ready," so I think just acknowledging multiple pathways and different lengths of time [is important].

RECOGNITION OF FOREIGN CREDENTIALS AND HOME-COUNTRY JOB EXPERIENCE

Immigrants who arrive in the US with job experience and foreign-earned educational credentials face barriers in finding employment in their previous profession. Although most mentions of credentials barriers focused on high-skilled jobs, this is also a relevant issue for middle-skilled positions, where work experience or certificates earned in immigrants' home countries are not likely to be transferred smoothly into the US labor market or education system. We heard from service providers that immigrant workers face confusing credentialing systems, high fees for credential recognition or requirements for additional courses, and other barriers to accessing the education or training they may need to supplement or adapt their previously earned education to the US context. Rather than trying to replicate the position they occupied in their home country, service providers explained that they often offer alternative training and employment paths to immigrants who arrive with particular skill sets and try to place them in lower- or middle-skilled jobs that are more attainable despite the mismatch with their earlier employment and skills. That means that clients with foreign credentials often turn to finding entry-level work in industries that may not align with their background but where they find lower barriers to entry. Several service providers described clients with backgrounds in nursing and marketing, for example, taking service-sector jobs to support their families with hopes of eventually seeking training and returning to their areas of expertise sometime in the future. One service provider shared the story of an immigrant arriving with an agricultural sciences research background who was placed in a lower-skilled position selling tickets at the local arboretum, where she was able to "get her foot in the door" in hopes of eventually moving up into more skilled opportunities. These challenges around transferring skills and credentials to the US job market are major barriers for immigrant workers across a wide range of occupations.

In addition to barriers specific to the immigrant population, we also learned in the site visits about fundamental challenges that affect all low-income workers (including immigrants), which we discuss in the next sections. These challenges may be accentuated by immigrant-specific barriers, but they are common barriers for all low-income working individuals who might be part of middle-skill workforce strategies.

LOW DIGITAL LITERACY AND BASIC SKILLS

Many service providers emphasized a commonly overlooked area that is critical to education and training: low digital literacy and low basic skills, including native language literacy. Many service providers described how many of their immigrant clients require assistance using the computer and training in general computer fundamentals. This is important both for designing training and for understanding barriers to job opportunities or advancement. Difficulty using computers limits workers' access to an increasingly wide array of jobs. As one service provider told us, many occupations that were previously tech-free, like janitorial work, now require the use of technology for such basic tasks as checking room assignments and filling out timecards. The same interviewee described seeing many employers, especially hospitals, introducing new digital systems to wider groups of employees without realizing that a large segment of their workforce might not be digitally literate. The need for digital literacy is growing, but employers may not be prepared to help or hire employees who require assistance. Even when digital literacy problems are recognized, employers may not realize that underlying them are more fundamental basic skills gaps and low native language literacy, which must also be considered in developing effective training. This service provider, who has worked with local hospitals to design curricula to address literacy issues, explained,

There's the assumption that you just need to teach digital skills and not understanding that the reason they don't have them or can't learn them easily is because they lack basic literacy skills. They can't just plug in, log on, and read the directions—it's not just about the computer but about other skills building up to that.

Outside of the workplace, low digital literacy can also keep individuals from being able to benefit from workforce services and tools developed to assist them. Service providers observed that new online tools, like cost of living calculators, online American Job Center (formerly One-Stop Center) accounts, and online applications for training and jobs, can unintentionally exclude immigrant and other populations who are not well-equipped to handle online activities. One provider explained that on top of this challenge for the target populations, the tools can create significant burden on staff to support individuals who are struggling to interact with online tools and websites. She told us about a new website that requires clients to set up an online profile to determine their eligibility and complete

paperwork for receiving WIOA-funded services, sharing, “It might be easy if you speak English and are computer savvy. If not, it can take a long time, and if you don’t use email or use logins it can take a long time and take up a whole lot of staff time.”

THE BIG THREE: HIGH HOUSING COSTS, TRANSPORTATION, AND CHILD CARE

As discussed, many immigrant workers are earning low wages. In our site visits, service providers shared that many immigrants are working long hours to support themselves and their families in expensive local contexts. We heard about how low wages and high housing costs drive many immigrants to work multiple jobs, leaving little to no available time to invest in raising their future wages through participation in education and training. When we asked what the greatest challenges were to participation, similar to challenges native-born workers face, we heard that workers have difficulty accessing convenient and affordable housing, transportation, and child care. Service providers and stakeholders consistently cited these three areas as fundamental challenges, reflecting on local trends in economic development and gaps in public transportation that have made life even more expensive and inconvenient for many immigrant workers. Interviewees emphasized Seattle’s unprecedented development boom through which rising housing costs have displaced immigrant workers into adjacent suburban communities. Though the tech economy and high-skilled jobs are more visible there, the immigrant lower- and middle-skilled workforce is also top of mind for local organizations. We heard in Miami’s deeply immigrant-defined community and local economy, where Spanish is ubiquitous and immigrants make up half of all residents, that there are challenges in supporting the evolving immigrant population there; this “gateway city” receives many new arrivals to the US, whose flows vary, and is also home to diverse longer-term residents. Interviewees shared that rising housing costs have imposed additional pressures recently. In Dallas, rapid growth led to increased demand for construction and service jobs, but even in this relatively low-cost housing market, service providers said wages are not keeping up with housing prices.

Transportation was a common barrier discussed; interviewees spoke of inadequate public transportation systems in their cities, and long travel times and walking distances for potential training participants trying to combine work and training. In Seattle, several providers and stakeholders reported that as rising housing prices have pushed low-income residents out of the city, public transportation has become an even greater challenge for residents who face hours-long commutes. Many immigrant workers do not have access to a car, and though some programs offer refurbished cars to low-income individuals, one service provider described a long waiting list for this service. Even with a car, in spread-out cities like Dallas, commutes take a long time, especially to workplaces in the high-demand trade and logistics industry where companies are often located outside of downtown or far

from affordable housing. These challenges make working more time-consuming and leave less time available to pursue training.

Last, finding child care is a hurdle for many, as it is for all working parents who may want to invest in their own upskilling but face the challenge of balancing work and training with family commitments (Adams, Spaulding, and Heller 2015). We heard some examples of how some community organizations, training programs, and even employers are introducing their own child care programs to meet this need, but service providers emphasized that this continues to be a major barrier.

FINANCIAL IMPERATIVE

Because of these financial pressures, service providers shared that many immigrants are working in “survival jobs,” which allow them to financially support themselves and their families but are not likely to lead to advancement and leave little time to invest in further training. The challenge of keeping food on the table is a massive barrier to taking time away from work to invest in training. One service provider described the issue as such:

The reality is that people are fighting to put food on the table, pay their rent, and they're in survival mode, and I think most of the service organizations are responding to that, rightfully so, but it's keeping the community and a lot of these families in a cyclical dynamic instead of an opportunity to actually move up and build skills with an investment.

The limitations are both finding time to get to and participate in training, and the costs of training itself. One service provider described the financial pressure and trade-offs that push immigrants with different backgrounds into the job market and discourage them from investing in training and education:

An immigrant, an asylee, a refugee—they come to this country and they have to support themselves. There are bills to pay; Miami rents are really high. They need to learn English, because if they do, they'll get better jobs. But on the other side, they need to work. Sometimes there's a contradiction between their jobs and their studies, so they have to make a priority, one or the other.

Even when workers choose to begin training courses, they may not complete programs because of the pressure to work or because other barriers get in the way. Most organizations do not have the resources to provide funded courses so that students do not have to pay training costs, nor can they compensate students for their time, which would ease some of the financial burden. Service providers shared that it is often a financial decision for students, who need to decide whether the opportunity cost of time spent in training is worth it. Although students could potentially benefit from additional study, only a minority of immigrant workers find ways to combine work with training and education opportunities that align with their work schedules and other constraints. The pressure to stop training efforts poses a challenge to the type of sustained engagement that is needed to succeed in formal

English language programs and the work required to learn and advance through multiple ESL levels. One service provider explained that she sometimes sees students dropping out around the second-to-last level of ESL, at which point they have improved their English skills considerably and may expect to be able to find a better job. Continued investment might unlock even better job opportunities or possibilities for promotion, but workers must balance the competing demands of work and their upskilling efforts.

Strategies to Support Immigrant Workers

Our site visits explored what types of services immigrant workers are accessing to further their training, including services funded through public workforce system funds and other sources. Here, we describe perspectives and lessons shared on how organizations are designing programming to suit immigrants' needs for training and education, and strategies they are using to better reach and support immigrant workers.

APPROACHES TO TRAINING

Varying Approaches to ESL. Given how key limited English proficiency is in shaping job opportunities, learning English is an important component of workforce training for many immigrants. English training that integrates workforce content can help immigrants be more successful in their current workplace, avoid mistreatment on the job, attain a better job or move into a different sector, or prepare to enter other academic or vocational training. We heard about different approaches to ESL provision to benefit workers, ranging from the integration of some work or career content into standard ESL classes to fully integrated courses that combine ESL with technical training to the provision of ESL courses onsite at workplaces.

Vocational English incorporates workforce topics into ESL curricula, including job-specific vocabulary, employability skills, and job search and job readiness skills like preparing applications, writing résumés, and participating in mock job interviews. Workforce-oriented English courses can be sector specific, or they can be more general and provide conversational English and workplace “dos and don’ts” to help students leave more prepared for the workplace environment. Many service providers said that this is more effective and efficient than classic ESL training since students can apply what they learn to their workplace immediately and it is more relevant to their lives than English content divorced from their experience. Many service providers also suggested that it is impractical to focus on ESL alone before any workforce content is presented. One interviewee noted that this is a major gap for services targeted for immigrants, explaining,

The idea of assuming that immigrants have to learn the language before they get into vocational skills program is crazy, it'd take years to master the language then to enroll in a program. By then, you're in debt, you have so many issues....And I make that comment because I know there are best practices across the nation but not enough for the clients we serve in programs that integrate communication and vocational skills. In our community, I don't know any.

Integrated Education and Training approaches combine vocational training with integrated basic skills training. We learned about successful examples of this approach used through an Integrated Basic Education Skills Training (I-BEST) model in a community college setting, where immigrants with higher level English (ESL level 4 or more) could participate in integrated programs. One community college system offers an array of I-BEST courses in different occupations and sectors, which targets both immigrants needing ESL support and native-born individuals with basic skills gaps. Topics include early childhood education, business technology management, accounting, phlebotomy, automotive maintenance and repair, and welding fabrication. The I-BEST model allows students to start a college professional technical program and still work on basic skills like ESL. Students take a classic vocational course along with native speakers, and the course is co-taught by a content and a basic skills instructor, so that LEP students receive content instruction and English support at the same time.

Offering training at workplaces is another promising strategy for making training more accessible to immigrant workers (Burt and Mathews-Aydinli 2007; Enchautegui 2015). We heard about several examples of vocational ESL classes provided onsite at a workplace, which may help workers avoid some of the scheduling, transportation, and cost barriers described above. Some employers further aid workers by arranging shift schedules to be compatible with course times, providing workers with paid release time to attend training, or creating hybrid (online and in-person) offerings. We heard about several examples of worksite ESL offered through partnerships across organizations. One community college is growing its effort to partner with employers to provide ESL onsite at the workplace; it has customized curriculum to provide ESL for employees of a grocery store chain, a hospital, and other local employers. Another college is providing a worksite-based ESL program with a local grocery store chain, which is part of a larger national effort. Another multisite national program offers an onsite English model with partner employers that integrates digital literacy and community organizing principles.

In addition to ESL, we learned about some workplaces experimenting with technical training courses customized for their immigrant employees: these classes develop job skills in a classroom environment that might have smaller enrollment, move more slowly, or be otherwise tailored to fit the needs of immigrant workers with limited English proficiency. One service provider described partnering with a local hospital to provide support around a cleaning skills certification test for its LEP employees. Hospital employees who complete the training receive a pay raise, but, without assistance, some

immigrant workers might not pass the test because of gaps in English, literacy, or digital skills. Her organization is providing hospital staff with a “train the trainers” course to raise their capacity to help immigrant employees succeed. We also learned about a large programming effort based at an airport that provides courses to airport employees, many of whom are immigrants; courses are taught by community college faculty onsite to provide easy access to training for current employees. Implementation of such efforts is complex in the 24-hour work environment. Classes are scheduled during shift changes and altered seasonally to allow maximum access for a wide range of airport employees.

Small Business Training. Business ownership offers an employment path for many immigrants, allowing them an opportunity to apply their skills and, in some cases, leverage their linguistic and cultural knowledge to serve a diverse public. Immigrants are more likely than native-born individuals to own businesses, and immigrant-run small businesses animate many neighborhoods and contribute to local development and economic activity (Dyssegaard Kallick 2015). We heard this story loud and clear in Miami, where stakeholders told us that immigrant entrepreneurs are “the backbone of the local economy,” playing a critical role in creating and running local businesses. As one stakeholder described it, many immigrants will at least supplement their incomes through small business, initially in an informal capacity. But over time, training programs that equip entrepreneurs with business knowledge can support small business strategies by helping immigrants formalize and take fuller advantage of their entrepreneurial activities and advance their careers. One Seattle service provider has developed a business opportunity center, which provides aspiring entrepreneurs with retail space, carts, tables, access to a commissary kitchen, business education, and one-on-one technical assistance. Although small business ownership can offer a particularly important path for immigrant workers given trends in entrepreneurship, entrepreneurship training is rarely well integrated into workforce development services, which focus on filling the needs of existing employers.

SOLUTIONS TO INCREASE IMMIGRANT ACCESS

Training Supports. Many service providers talked about how supportive services that address some of the challenges described above can increase program participants’ likelihood of success. By alleviating some of the challenges with support for transportation, child care, or other services, wraparound services help encourage participants to enroll and begin training programs, as well as persist and complete training programs as they balance competing demands (Hamaji and González-Rivera 2016). One challenge around providing supportive services is the wide range of needs and assistance that an individual may need. This means that clients often need to find and go to multiple service providers to fill different needs that are standing in the way of their participation. In the cities we visited, we heard

about a number of “one-stop” approaches where organizations have grouped supportive services together so that they are readily accessible in one physical space and can address the range of supportive services that may be required for a given client. Examples included a community organization that, in addition to workforce supports, addresses the needs of the whole family through parenting classes, counseling and mental health services, and domestic violence and survivor intervention; foreign-language-specific job clubs that facilitate access to medical services; and a service provider that offers employment services alongside a food pantry, family violence services, mental health services, and children’s services. Providing services in one place has the benefit of convenience—participants do not have to wade through multiple organizations’ processes or travel from organization to organization to access different services. We also heard about organizations partnering with other organizations but not necessarily providing a “one-stop” approach where all services are offered in the same place. One example is a workforce and financial training provider partnering with a veteran’s organization for bus passes, a food pantry for food assistance, and a refugee resettlement affiliate organization for translation services. Another service provider described partnering with a local nonprofit organization to support their ESL students on financial and legal assistance; the service provider suggested that, in their case, they had decided that adding those support services to their ESL program was inefficient and that it made more sense to partner with an outside organization to address students’ support needs. She described how her organization had realized that collaboration with other organizations was a better strategy than pivoting toward providing additional services:

A few years ago, [we considered supplementing our ESL services with other programs], but it wasn’t our area of expertise. It watered down our three primary programs and kept pulling our attention from those. So finally, as an organization, we decided not to do all these areas since other organizations are already doing it. [We decided it was best to] let [other organizations] do it well and we can partner.

Inclusive Staffing. To make immigrants feel welcome and provide the support they need to succeed in training, we heard again and again that organizational staff should be multilingual, culturally competent, and available to work one-on-one with participants. Having multilingual staff allows organizations to be accessible to clients with a variety of language backgrounds. As clients advance on their training path, multilingual staff can support and retain clients by offering courses and trainings in multiple languages (like Spanish-language GED), or provide services in more than one language (like job circles in different languages). One service provider explained the advantage of bilingual staff:

Having bilingual staff ability allows us more flexibility in being able to work with people where they’re at. We have a range of language capability that makes us able to work with more people right then and there, if they need to make progress on their English proficiency before their next step in their career plans.

Service providers also emphasized that organizational staff needs to be culturally competent to effectively serve immigrants. This means being sensitive to specific preferences communities may have around food and religious observance, child care, and other issues. To provide this cultural competence and encourage immigrant participation, several service providers talked about how important it is to have immigrants themselves in service roles. One service provider said how valuable it is for immigrant students to see other immigrants in staff roles who can be role models for their peers. Stakeholders emphasized their multilingual staff and expressed the importance of having staff reflect the demographics of clients, so that “people...see themselves when they come in our centers.”

In addition to linguistic capacity and cultural competence, staff said it is important to take time to help clients navigate complex systems like the community college enrollment process. One service provider described the positive impact of having staff walk students through bureaucratic details like entrance requirements, applications, orientations, schedules, course levels, and credit-bearing versus noncredit-bearing classes and explain to students the potential impact of different training options on their future job opportunities. She described how challenging the setting of the community college can be for a new student, with even higher barriers for immigrants who may have even less familiarity with such educational providers:

Anybody—native speaker or immigrant—walks in, and you often get sent to five different places. It can be very frustrating. To be an immigrant on top of that when you already don’t understand the system, language might be a barrier—it just becomes easier to walk back out the door instead of continuing on.

Community Outreach. Many service providers said that community outreach is essential for reaching immigrant communities. This may mean advertising on language-specific media, like Telemundo, and putting out recruitment materials in multiple languages or with simpler English. One service provider advertises technical training programs at school youth fairs, in bus advertisements, on Facebook, TV, and radio, including interviews on Haitian Creole and Spanish stations. Even with all these efforts, this provider still found that their best source of referrals is word of mouth. These outreach strategies may be particularly important for immigrants. One service provider explained how challenging it can be to get newly arrived immigrants to come to unfamiliar places and the crucial issue of accessibility in immigrant-dense neighborhoods:

Especially with this population it’s important to go out to community members, not rely on them coming....Especially the immigrant population that may have recently arrived, they don’t know what’s available to them when they first get here, so really going out there and doing that specific outreach, letting them know what’s available to them is important.

This speaks to the importance of another form of community outreach—personally tapping into community networks. Training providers described forming partnerships with other community-based organizations and conducting outreach about new programs to community stakeholders, like church leaders and community elders in immigrant communities. One service provider explained that “with any population, especially an underserved one, there’s a trust issue,” and securing support through trusted organizations is an effective strategy. Another service provider shared the same insight and described how outreach efforts to create one-on-one relationships between the program provider and leaders in the immigrant community were important for building trust and building some buy-in; their efforts to attend a monthly “chat and chew” and engage with “churches and elders in the community” were beginning to pay off for their recruitment. We also heard how important it is to engage intentionally with different communities and customize efforts to align with the vast cultural and linguistic diversity across immigrant groups. One service provider explained how challenging it is for organizations to handle this diversity within the immigrant community:

The communities are so insular; it is so hard to have a generic approach to get into any community. What works great for Somali, Ethiopian, Eritrean [individuals] actually doesn’t even necessarily work between those three, and forget about trying to treat [other national] populations the same....I see very few efforts that are actually able to create that universal umbrella with differentiated approach to gather that all together and create something that could cut across [immigrant communities].

Trusted Providers. Given the importance of outreach to specific communities and the inability of service providers to always be located in immigrant-dense neighborhoods, a common strategy is leveraging community organizations and providing services at trusted places, such as at immigrant-serving CBOs. Service providers shared that though environments like community colleges or American Job Centers can be intimidating, CBOs, religious organizations, or local public schools are more familiar to immigrant communities. We heard about one example of a workforce development board implementing a “connection site” model, which provides basic workforce services through staff on site at locations, such as CBOs, community colleges, housing authorities, public libraries, and other community sites, that are more accessible or approachable than American Job Centers. This approach responded to changing demographics and feedback from their own staff. Describing the program, one stakeholder discussed this change coming from the client-facing staff, who saw a gap between who they were serving and the demographics of the communities they served:

I think for a long time the public workforce system hasn’t thought about outreach....The staff came up with community outreach, because they were the ones in the offices realizing there are some folks that aren’t going to walk through the door.

One service provider discussed a creative partnership that built on the trust that they had developed with their immigrant clients; they worked with a community college, which provided technical training and was “willing to let [clients] start here [onsite at the CBO] for the first class or two to gain confidence and then transition [to the campus]....At least it helps them to start where they feel at home.” Another immigrant service provider made the same point about the importance of trusted providers having better access to the target community and the importance of providing workforce development services through these trusted channels, saying, “[workforce services should] use the CBOs as a point of reference. [Immigrants] come here anyway.”

Collaboration with Other Service Organizations. Service providers shared that coordination between organizations across sectors is important for leveraging resources and making training accessible. They described how coordination helps service providers focus on providing specific services well, avoid overextending staff, and avoid duplication across multiple organizations. One service provider also made the point that a focus on coordination is a common theme in national funding conversations as well as within local provider communities: “They’re all talking about collaboration and avoiding overlapping of services.” Across our three site visits, we saw a variety of collaborations between different types of organizations, with services going both directions to share expertise and add value. We learned, on the one hand, about CBOs staffing community college basic education programs with career navigators and benefits counselors. On the other hand, we learned of community colleges lending CBOs technical advice for new trainings or, as mentioned above, providing their technical and basic skills training on site at CBOs. Service providers and stakeholders also described efforts to share resources, lessons, and best practices between organizations. One service provider described collaboration between agencies with a common funder that has encouraged a small group of related grantees to meet regularly, receive trainings, and share best practices and tools.

KEY ISSUES FOR SERVICE PROVIDER ORGANIZATIONS

Service organizations face a number of key issues that limit and enable their efforts to support immigrant education, training, and workforce supports. Many of the issues they discussed are true for all organizations, immigrant specific or not, but here we highlight the perspectives we heard in our interviews.

Funding. Funding is a huge challenge for organizations working to develop and maintain training programs for immigrant workers. We heard a lot from organizations about the pressures of fundraising and appealing to the changing priorities of funders. One service provider said that she had seen a shift toward middle-skill strategies from funders. She noted that in the past her organization had been

funded to provide basic employment assistance services for entry-level jobs, but recently they were being encouraged to provide sector-specific programs focused on jobs that require some technical training. Another service provider also observed a shift in local funding priorities from basic skills to employment outcomes and articulated that they are now needing to pitch their ESL services in terms of workforce outcomes. Many organizations shared the perspective that in their experience, immigrant-serving organizations are less likely to receive funds from the local workforce development board; they suggested that adult basic education funds tend to go to community colleges rather than immigrant-serving CBOs in their communities. One shared this point on funding:

The biggest challenge is just ongoing funding; so much is coming from workforce development councils to the community colleges....It's hard to get a foothold in the adult basic [education] English language world when so much of the funding and airspace is dominated by community colleges.

Similar to other organizations, many of the larger service providers that do receive public workforce system funds described combining or “braiding” multiple sources of funding, which they said allows them to keep their programs stable and more flexibly serve participants. A service provider explained that more sources of funding allow more flexibility, both for the programs and for participants. However, managing braided funds is taxing. The same service provider handles 12 different grants just for the workforce development branch of their services, which requires a great deal of time and energy to manage and budget.

Performance Reporting. Braiding funding sources can exacerbate another common challenge that service providers emphasized—the difficulty of handling complex and contradictory performance reporting requirements around client eligibility, timing of services, and completion. Performance metrics can vary slightly or significantly from grant to grant, making it challenging to effectively combine funding sources. One service provider explained that many funding sources impose rigid program structure and eligibility requirements that limit the participants a program can accept and how they can be served. Though some degree of selectivity makes sense for a program, a service provider suggested that slightly broader eligibility criteria could help them support clients more effectively:

If you have to drive a client through a tiny hole of eligibility, the amount of energy it takes to do that, versus if we had just a little bit more flexibility—some funding sources actually give that....But for some sources, they're very rigid about the requirements.

We heard that short time limits are a major challenge. Funding sources often stipulate short windows during which a client can be served or build in incentives to exit clients from training programs quickly. The result is that programs have to keep their caseloads small and cannot provide meaningful services to people no longer on their active caseload. Service providers expressed that this short

window of service limits participants' possibilities for meaningful upskilling or movement into better jobs. As one provider explained, funding that gives programs multiple years to work with people opens the doors to "huge, lifetime transformations" like becoming a registered nurse; more common, short-term programs do not make that possible. Service providers said that this affects immigrant students differently because of challenges of limited English proficiency and some students' difficulty completing courses on very rapid timelines; although nearly all workforce development efforts face these challenges of showing results on short timelines, and this is not specific to immigrant students. We were told by several service providers, however, that some funding sources incentivize programs not to serve immigrants. One described the link with performance metrics explicitly, pointing out the mismatch between the rapid progress some funding sources demand and the realities of the timeline for English language training:

Because of the absolute requirements on metrics...that motivates high-volume, light-touch work; ESL with immigrant populations is slow, it takes a long time, and so that's who's not going to get attention, based on the sheer weight of having small numbers, [but the pressure to show] high-volume results.

WIOA and Local Implementation. When we raised the issue of WIOA, the federal workforce funds legislation, and its impact for serving immigrant clients, interviewees focused on its increased emphasis on employment-related outcomes for basic skills training programs, namely ESL. Integrated models that bring a workforce focus into basic skills training models are not new to many organizations, but the new requirements have encouraged many to adjust their programming. We heard many references to the direct and indirect effects of these changes on community-based literacy providers, community colleges and school districts, and funders of literacy services. In addition to CBOs, we heard many examples of community colleges and K-12 literacy providers experiencing this shift to a workforce focus. One service provider described a technical college that used to have family- and citizenship-oriented "English for the sake of English" offerings but had moved to a model with a focus on job training. Her view was that this was leaving behind immigrants in need:

I think contextualized language learning is important, but there's a whole community of folks who aren't being served as a result. I know that previously there was a lot more funding for ESL for citizenship; now a lot of the priority is only to workforce and job placement.

Echoing the changes in funder priorities mentioned above, we heard that the move toward a workforce focus in public-sector funding has had some spillover into private philanthropy; one funder, for example, reframed its adult literacy grantmaking to fall under its "income" grantmaking rather than where it sat previously under its "education" portfolio. A stakeholder confirmed this trend and described their effort

to encourage and support workforce outcomes from their ESL provider grantees, who in some cases do not agree with the new focus:

We're trying to figure out how to encourage [literacy provider] grantees to think more in terms of employment outcomes, but some feel that their bread and butter is helping people learn English; they don't feel that their mission should be limited to equipping clients for good jobs.

We also heard about other impacts of WIOA on coordination around training for immigrant communities. One stakeholder observed that WIOA's focus on community partnerships can be used to foster community outreach and partnership, which can benefit immigrants if such partnerships include immigrant-serving CBOs and literacy and basic-skills providers. Several interviewees described seeing more partnership in the workforce development community as a result of these aspects of WIOA. This push for partnership was highlighted by one service provider as positive in fostering better coordination between adult basic-skills organizations and workforce development organizations, which for too long have been disconnected:

I think the workforce development system and basic skills system are only really very recently talking to each other. Nationally that's been a gap. Clearly those two entities should be talking to each other, more of that is happening, probably because of WIOA: it's required now and there are mandates around that.

We also discussed with service providers how effectively their local workforce development boards and job centers were filling the needs of local LEP and immigrant workers. Service providers and stakeholders shared that though there were some positive measures and, in some cases, organizations with experience serving immigrant populations were receiving local workforce funds, there were still major service gaps in effectively reaching immigrant communities. One stakeholder described struggling to find materials put out by the local workforce board that would be appropriate for the immigrant community. As one service provider put it, her immigrant clients do not have the language or technical skills or the ability to navigate the local job centers and the job opportunities they point clients to:

The [workforce development board] model, based on my understanding at this point, is a model created for individuals who are transitioning from a place of work and will need to know what to do...[where they can learn] which industries are growing and in-demand. The model is not for my typical client who comes in and doesn't understand a thing and could not navigate the process by themselves....If we had a client [who] could walk into a [workforce development board] center and navigate that process by themselves, that's perfect, but I haven't seen that. It's language, it's understanding what's being offered and being able to assess where they fit in.

Other Policy Issues. A range of other policy areas affect the work of organizations engaged in training for immigrants. We learned of a recent example where one state's implementation of new occupational

license standards for early childhood educators affected immigrant women who provide early childhood education in their homes. Although this initially disrupted many child care providers, advocacy organizations were able to add some flexibility to new requirements, convincing the state legislature to accept a certificate in lieu of a high school diploma as the requirement for early child care workers. This policy change and the work to support child care providers catalyzed new coordination between organizations. In fact, the requirement for the new certificate led to the development of relevant programming to fill in this gap at the community colleges. One service provider noted, “This is a place where we’ve seen really positive partnership with the community colleges—some have started I-BEST programs or different integrated programs specific to this [and have offered some in Somali and Spanish].”

City- and county-level policies, both general and targeted for immigrants, also play a role in shaping immigrant workers’ prospects for training and advancement. Many cities have established local offices devoted to supporting welcoming activities and supporting immigrant communities. Although it was a new development in Dallas, where the Mayor’s Office of Welcoming Communities and Immigrant Affairs had been recently established at the time of our visit, many stakeholders suggested that this type of institution could have a positive impact. Seattle’s parallel office of Immigrant and Refugee Affairs has engaged in research and programming on immigrant workforce topics, alongside other initiatives to promote immigrant integration and well-being in the city. In Seattle, we also heard about the salience of local legislation targeted at the entire low-income population as it applied to immigrant workers. Several stakeholders cited as relevant to the immigrant workforce the recent changes to local labor rights regulations, including the establishment of a \$15 minimum wage and investment in local resources to implement new labor rights requirements. This example highlighted the importance of practices and policies that affect the entire workforce and public and how they need to be considered in addition to immigrant-specific measures. Examples gleaned from the site visits suggested that a wide range of different policy levers can affect the immigrant workforce and be used as part of a larger local workforce development strategy.

Lessons for Developing Strong Middle-Skill Workforce Strategies

Immigrants are an important source of local talent who can meet the demands of employers in need of skilled workers. This report suggests that strategies to develop a middle-skilled workforce should consider how to best support immigrants and leverage their unique assets to fill jobs across different

sectors and occupations. Like native-born workers, many foreign-born workers in lower- and middle-skilled jobs are working hard to support their families, handling high costs of living, and struggling to make ends meet with low-paid work. Given the challenges of balancing life and work on a low income, they have limited opportunity to invest in their own training and enhance their prospects for better paid work and career advancement. At the same time, employers are demanding skilled workers to fill their evolving needs, and in many areas the assets that immigrant workers offer are important for keeping up with demographic change, serving a diverse public, and working in a globalized economy. The demographic profile above showed that a large share of immigrant workers are in lower-skilled jobs and a quarter have middle-skilled jobs, similar to the native-born workers, despite lower educational attainment and limited English proficiency. Immigrants work in different occupations than native-born individuals. Immigrants with limited English proficiency work in many occupations, but their wages and job quality may be lower than for native-born workers, they can be easily exploited, and they have fewer prospects for advancement in many jobs.

Given these challenges, service providers and stakeholders emphasized the role that English learning can play in supporting immigrants' mobility. They shared that even small improvements and gaining very basic English skills can lead to better experiences on the job and protect workers from workplace abuses. This reinforces the importance of English language training for supporting immigrant training and advancement. Our findings suggest a couple of key features for providing effective English language training to maximize the likelihood of students' participation and retention, as well as translation to better jobs:

- Customized content: English language training should integrate workforce and career content and avoid a “one size fits all” approach, so that instruction effectively supports students with different educational backgrounds and employment experiences
- Accessible setting: Programs should be as accessible as possible for individuals who have limited time outside of their working hours. Classes can be provided at the worksite through engagement with employers and coordination with education providers or in trusted spaces, like CBOs that are frequented by immigrant communities and by organizations with inclusive staffing that has linguistic and cultural competence relevant to specific immigrant communities
- Coordination across sectors: Coordination between employers, education providers, and community-serving organizations will help ensure that training is accessible and successful for students and addresses any specific barriers that individuals might face and the range of supports needed to complement training coursework and help students be successful

Local workforce development and training efforts should include programming like ESL to address limited English proficiency among some immigrant workers and be sensitive to the variety of experiences across the immigrant community. It is, however, also important that immigrant workers and their key role in local labor markets be recognized in broader decisionmaking and strategy on local workforce development. There is some tension between the idea of developing customized immigrant-specific initiatives and “mainstreaming” immigrants or LEP individuals into services and conversations about public services and well-being.¹¹ The experiences of immigrant-serving organizations and the context that immigrants face are naturally similar to the experiences of organizations serving the general public, and native-born workers. Immigrants contend with all the same barriers other workers face, like challenges of access, affordability, and balance with life demands. In addition, they face issues like limited English proficiency, recognition of their previous experience and educational background earned in their home countries, and social networks that limit their knowledge of or access to certain job or education opportunities. Local systems and organizations need to balance the specific needs of different immigrant groups with the universal needs of low-income groups as well as other key populations of concern.

It is important that communities acknowledge and address the often-overlooked immigrant workforce that sustains their local economies and make sure that immigrants and LEP workers are a part of local economic development and workforce development strategies and conversations. There is still too much division between immigrant-serving organizations and ESL providers, the workforce development board and community colleges, and employers who are relying on immigrant talent. All actors would benefit from bridging that gap and coming together to engage immigrants and their employers in workforce development strategies and foster immigrant upskilling. Awareness of how services can be modified or made more accessible to immigrant workers is an area that requires further attention and investment and should engage the employers who are relying on immigrants in a wide range of positions. Immigrant-serving organizations need to be at the table with other key organizations in the workforce and economic development field, helping to inform and make relevant to their communities the range of policy developments in workforce, education, and other fields that affect their constituents, both good and bad.

Investing in immigrant workers and their upskilling is important for a range of decisionmakers across sectors, who may or may not have immigrant and LEP issues on their radar.

- **State and local policymakers** making policy and funding decisions can be aware of and sensitive to the key role that immigrant workers are playing in their communities, pushing forward workforce and education issues. Recognizing the contributions of the immigrant community is

critical, especially at this time of restrictive immigration policies and toxic national rhetoric. Policymakers can put more resources into English language learning and encourage organizations to serve immigrants and LEP individuals, track information about programs to assess gaps in services, and actively engage immigrant-serving organizations to ensure policy is grounded in community needs.

- **Organizations providing workforce development services and education and training** can work to improve program accessibility and design to serve immigrant community members. Local workforce development boards, community colleges, and school districts, whose mission is to serve the community, can assess the extent to which they are funding immigrant-serving organizations or serving immigrant and LEP communities. They can work to improve the linguistic and cultural competence and accessibility of programs by hiring multilingual staff and partnering with immigrant-serving organizations to fill in gaps in visibility, language access, and cultural knowledge. Organizations should connect with immigrant-serving organizations to leverage WIOA's opportunity for pressing forward the needs of LEP individuals as a priority of service population, as well as youth in immigrant families.
- **Funders** interested in supporting equity and economic mobility can consider incorporating immigrant populations and English language learning into their funding priorities. They can work to ensure that these issues are reflected in their awarding of grants—that local grantees are reaching this population through direct services or incorporating an immigrant-inclusive lens in systems-level work. This might mean encouraging collaboration across sectors like connecting immigrant-serving ESL providers to local workforce development or economic development organizations or employers, or conducting needs assessments to inform future investment.
- **Employers** who want to recruit and retain workers can invest in improving job quality by recognizing barriers like child care and transportation and providing supports or services to help current employees. They can also invest in upskilling their employees through onsite training to foster English language learning and promote advancement. And they can collaborate with immigrant-serving organizations and other training providers to ensure that training programs are informed by current industry need.

This issue is even more important in our current political climate, when immigrant communities are subject to harsh political rhetoric and communities are suffering the consequences of heightened immigration enforcement and slowed immigration and citizenship processing. Uncertainty around Deferred Action for Childhood Arrivals (also known as DACA), temporary protected status, interior and

border enforcement, the immigration court system, and disincentives to receive essential public assistance because of public charge regulation developments are among the gamut of immigration policies that are causing uncertainty and hardship for communities across the US. With this onslaught of federal policy change, policies and practices at the state and local level are becoming even more crucial to protecting and supporting the immigrant workers and families who are part of neighborhoods, work places, schools, and communities across the country. States and local areas that are taking action to support their immigrant residents need to keep training and education on their agenda as they develop proactive policies and continue to support workers who are playing essential roles in our economy but are often not able to access the training that would benefit both them and employers.

Appendix. Assigning Skill Requirements to American Community Survey Occupation Codes

As described above, we used Bureau of Labor Statistics (BLS) occupation skill information to assign lower-, middle-, and high-skilled categories to each of the occupation codes in the American Community Survey (ACS). We chose to use BLS occupation skill information over comparable ONET data because of the closer alignment of ACS codes to BLS codes and following the precedent set by Capps, Fix, and Yi-Ying Lin (2010).

Following Capps, Fix, and Yi-Ying Lin (2010), we categorized each Standard Occupational Classification (SOC) code in the BLS data with a skill requirement level (either lower-, middle-, or high-skilled). First, occupations were labeled lower skilled if short- or moderate-term on-the-job training is typically needed to attain competency in that occupation. Occupations were then labeled middle skilled if they typically require long-term on-the-job training or an apprenticeship to achieve competency, if they require any work experience in a related occupation (“less than five years” or “five years or more,” but not “none”), or if they typically require a postsecondary nondegree award or associate’s degree for entry. Next, occupations were labeled high skilled if they require a bachelor’s, master’s, doctoral, or professional degree. Finally, jobs that were not captured by any of these criteria (i.e., were not associated with any of the listed training, experience, or education requirements) were labeled lower skilled.

Having assigned a skill level to each SOC code in the BLS data, we then used an ACS/BLS crosswalk to match each ACS code with an SOC code and corresponding skill level assignment.¹² Because the SOC occupation codes are finer grained and more numerous than the ACS occupation codes, some ACS codes matched with multiple SOC codes. In these “1 to many” merge cases, we took the average of the skill levels assigned to each matched SOC code, weighted by the number of individuals employed in each SOC code, and rounded the result. We then assigned the resulting skill level to the ACS occupation code in question.

TABLE A.1

Workforce Statistics of Metropolitan Areas Chosen for Site Visits

| | Dallas-Fort Worth- Arlington | Miami-Fort Lauderdale- West Palm Beach | Seattle-Tacoma- Bellevue |
|---|---------------------------------|---|-----------------------------|
| Unemployment rate | 3.2% | 4.0% | 4.3% |
| Population in the civilian labor force | 3,333,906 | 2,813,144 | 1,857,302 |
| Foreign-born workers | 26.4% | 51.7% | 20.5% |
| Foreign-born individuals | | | |
| <i>Region of birth</i> | | | |
| Latin America | 62.1% | 86.3% | 20.0% |
| Asia | 25.7% | 5.3% | 50.7% |
| Europe | 4.4% | 5.8% | 16.1% |
| Africa | 6.2% | 0.9% | 7.2% |
| North America | 1.2% | 1.6% | 4.1% |
| Oceania | 0.3% | 0.1% | 1.8% |
| Foreign-born employed | 744,558 | 1,211,939 | 360,931 |
| <i>Educational attainment</i> | | | |
| College or advanced degree | 25.3% | 28.4% | 41.1% |
| Some college | 16.9% | 27.3% | 24.7% |
| High school only | 20.7% | 29.6% | 18.7% |
| Less than high school | 37.2% | 14.7% | 15.5% |
| <i>Occupation</i> | | | |
| High-skilled | 21.5% | 22.0% | 34.1% |
| Middle-skilled | 26.7% | 27.3% | 22.1% |
| Lower-skilled | 51.9% | 50.7% | 43.8% |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS. Unemployment rates in November 2017 from Bureau of Labor Statistics; national average of 4.1 percent.

Notes: Data refer to individuals ages 18–64 and in the civilian labor force. “Employed” individuals are those employed during the week before the survey administration. Median annual wage data are further restricted to those individuals who reported positive wage and salary income during the year before the survey.

TABLE A.2

Top Middle-Skilled Occupations for Foreign-Born and Native-Born Workers

| Foreign-Born Workers | | | | | Native-Born Workers | | |
|------------------------|--|-------------|--------------------|---------------|--|--------------------|---------------|
| Rank | Occupation | LEP (%) | Median annual wage | Share | Occupation | Median annual wage | Share |
| 1 | Cooks | 76.3 | \$18,000 | 12.1% | Driver/sales workers and truck drivers | \$36,131 | 9.1% |
| 2 | Driver/sales workers and truck drivers | 59.2 | \$31,616 | 9.4% | First-line supervisors of retail sales workers | \$36,000 | 8.9% |
| 3 | Nursing, psychiatric, and home health aides | 42.8 | \$22,900 | 8.3% | Nursing, psychiatric, and home health aides | \$20,023 | 5.9% |
| 4 | First-line supervisors of retail sales workers | 35.7 | \$35,614 | 6.8% | Cooks | \$12,904 | 5.1% |
| 5 | Carpenters | 71.7 | \$25,438 | 5.7% | First-line supervisors of office and administrative support workers | \$44,390 | 4.1% |
| 6 | Food service managers | 44.7 | \$35,614 | 3.6% | First-line supervisors of nonretail sales workers | \$60,000 | 3.3% |
| 7 | Miscellaneous personal appearance workers ^a | 75.1 | \$15,808 | 3.2% | Carpenters | \$31,747 | 2.8% |
| 8 | Automotive service technicians and mechanics | 59.5 | \$29,508 | 2.9% | First-line supervisors of production and operating workers | \$51,640 | 2.6% |
| 9 | First-line supervisors of non-retail sales workers | 35.7 | \$49,056 | 2.8% | Food service managers | \$31,616 | 2.5% |
| 10 | Chefs and head cooks ^a | 65.9 | \$25,000 | 2.4% | Hairdressers, hairstylists, and cosmetologists | \$18,316 | 2.4% |
| 11 | First-line supervisors of office and administrative support workers | 25.2 | \$42,736 | 2.3% | Automotive service technicians and mechanics | \$35,000 | 2.3% |
| 12 | Hairdressers, hairstylists, and cosmetologists | 54.1 | \$17,343 | 2.3% | First-line supervisors of construction trades and extraction workers | \$55,063 | 2.3% |
| 13 | First-line supervisors of production and operating workers | 50.8 | \$42,155 | 2.1% | Electricians | \$46,553 | 2.2% |
| 14 | First-line supervisors of construction trades and extraction workers | 49.6 | \$47,054 | 1.7% | Licensed practical and licensed vocational nurses | \$34,039 | 2.2% |
| 15 | Licensed practical and licensed vocational nurses | 27.2 | \$38,000 | 1.7% | Preschool and kindergarten teachers ^a | \$19,820 | 1.8% |
| 16 | Electricians | 51.8 | \$36,131 | 1.6% | Farmers, ranchers, and other agricultural managers ^a | \$36,631 | 1.7% |
| 17 | Pipelayers, plumbers, pipefitters, and steamfitters | 63.3 | \$31,616 | 1.5% | First-line supervisors of food preparation and serving workers | \$20,023 | 1.6% |
| 18 | First-line supervisors of food preparation and serving workers | 44.7 | \$24,428 | 1.4% | Property, real estate, and community association managers ^a | \$45,052 | 1.5% |
| 19 | Maintenance and repair workers, general | 58.3 | \$34,066 | 1.4% | Maintenance and repair workers, general | \$40,047 | 1.5% |
| 20 | Bakers ^a | 72.5 | \$20,023 | 1.2% | Pipelayers, plumbers, pipefitters, and steamfitters | \$42,155 | 1.5% |
| All occupations | | 52.3 | \$28,905 | 100.0% | All occupations | \$36,041 | 100.0% |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Notes: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration. The total weighted foreign-born population meeting these conditions and employed in a middle-skilled occupation is 5,783,853; the total weighted native-born population meeting these conditions and employed in a middle-skilled occupation is 27,860,273. Median wage data are further restricted to those individuals who reported positive wage and salary income during the year before the survey. Individuals are considered limited English proficient if they report not speaking English, speaking English but not well, or speaking English well. LEP = limited English proficient.

^a This occupations appears in the top 20 for one group but not the other.

TABLE A.3

Top Lower- and Middle-Skilled Occupations for Foreign-Born Workers*Sorted by rate of limited English proficiency*

| Rank | Occupation | LEP (%) | Median annual wage | Share |
|----------------------------|--|-------------|--------------------|---------------|
| 10 | Miscellaneous agricultural workers ^a | 87.9 | \$17,298 | 2.3% |
| 8 | Grounds maintenance workers ^a | 80.8 | \$19,098 | 2.7% |
| 1 | Maids and housekeeping cleaners ^a | 79.5 | \$16,018 | 4.3% |
| 4 | Construction laborers | 76.5 | \$24,028 | 3.4% |
| 2 | Cooks | 76.3 | \$18,000 | 4.0% |
| 20 | Painters, construction, and maintenance ^a | 75.9 | \$23,185 | 1.4% |
| 25 | Miscellaneous personal appearance workers ^a | 75.1 | \$15,808 | 1.1% |
| 3 | Janitors and building cleaners | 73.3 | \$20,000 | 3.7% |
| 21 | Food preparation workers ^a | 72.8 | \$15,365 | 1.3% |
| 17 | Other production workers | 71.9 | \$24,982 | 1.5% |
| 13 | Carpenters | 71.7 | \$25,438 | 1.9% |
| 23 | Miscellaneous assemblers and fabricators ^a | 71.0 | \$24,000 | 1.2% |
| 14 | Laborers and freight, stock, and material movers, hand | 67.5 | \$21,525 | 1.9% |
| 5 | Driver/sales workers and truck drivers | 59.2 | \$31,616 | 3.1% |
| 22 | Stock clerks and order fillers | 57.9 | \$20,646 | 1.2% |
| 19 | Childcare workers | 57.0 | \$13,215 | 1.4% |
| 15 | Personal care aides | 56.2 | \$15,263 | 1.6% |
| 6 | Cashiers | 52.5 | \$14,333 | 3.0% |
| 12 | Waiters and waitresses | 52.4 | \$16,517 | 2.1% |
| 24 | Food service managers ^a | 44.7 | \$35,614 | 1.2% |
| 7 | Nursing, psychiatric, and home health aides | 42.8 | \$22,900 | 2.7% |
| 9 | Retail Salespersons | 38.7 | \$20,000 | 2.4% |
| 11 | First-line supervisors of retail sales workers | 35.7 | \$35,614 | 2.2% |
| 16 | Customer service representatives | 31.9 | \$25,029 | 1.6% |
| 18 | Secretaries and administrative assistants | 25.1 | \$30,969 | 1.5% |
| All occupations | | 57.3 | \$24,000 | 100.0% |
| Lower-skilled occupations | | | | |
| Middle-skilled occupations | | | | |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Notes: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration. Median wage data are further restricted to those individuals who reported positive wage and salary income during the year before the survey. Individuals are considered limited English proficient if they report not speaking English, speaking English but not well, or speaking English well. LEP = limited English proficient.

^a This occupations appears in the top 25 for one group but not the other.

TABLE A.4

Characteristics of All Employed Foreign-Born Workers by Metropolitan Area

| Metropolitan statistical area | N of all workers | Foreign-born | Occupation Skill-Level Requirements | | | Educational Attainment | | | |
|---------------------------------------|--------------------|--------------|-------------------------------------|----------------|--------------|------------------------|---------|--------------|----------------------------|
| | | | Lower-skilled | Middle-skilled | High-skilled | Less than HS | HS only | Some college | College or advanced degree |
| National | 137,074,610 | 17% | 50% | 25% | 25% | 26% | 23% | 21% | 31% |
| Akron, OH | 317,769 | 5% | 39% | 19% | 41% | 11% | 18% | 18% | 53% |
| Albany-Schenectady-Troy, NY | 397,710 | 8% | 38% | 23% | 40% | 12% | 18% | 22% | 48% |
| Albuquerque, NM | 369,721 | 13% | 49% | 31% | 20% | 33% | 27% | 19% | 22% |
| Allentown-Bethlehem-Easton, PA-NJ | 371,433 | 10% | 52% | 22% | 26% | 19% | 25% | 24% | 32% |
| Atlanta-Sandy Springs-Roswell, GA | 2,460,430 | 18% | 47% | 25% | 28% | 24% | 22% | 20% | 34% |
| Austin-Round Rock, TX | 947,700 | 18% | 48% | 24% | 27% | 29% | 22% | 17% | 32% |
| Bakersfield, CA | 314,354 | 30% | 65% | 25% | 10% | 49% | 24% | 16% | 11% |
| Baltimore-Columbia-Towson, MD | 1,263,768 | 13% | 37% | 25% | 39% | 13% | 19% | 20% | 48% |
| Baton Rouge, LA | 365,312 | 5% | 40% | 28% | 32% | 22% | 23% | 17% | 38% |
| Birmingham-Hoover, AL | 468,932 | 6% | 46% | 30% | 24% | 28% | 26% | 18% | 28% |
| Boise City, ID | 286,041 | 9% | 59% | 19% | 21% | 32% | 26% | 18% | 24% |
| Boston-Cambridge-Newton, MA-NH | 2,328,957 | 21% | 43% | 23% | 35% | 15% | 23% | 20% | 41% |
| Bridgeport-Stamford-Norwalk, CT | 428,098 | 28% | 48% | 24% | 28% | 20% | 25% | 20% | 35% |
| Buffalo-Cheektowaga-Niagara Falls, NY | 504,482 | 6% | 44% | 18% | 38% | 13% | 19% | 23% | 45% |
| Cape Coral-Fort Myers, FL | 241,097 | 22% | 59% | 26% | 15% | 29% | 30% | 23% | 18% |
| Charleston-North Charleston, SC | 319,806 | 7% | 45% | 30% | 25% | 26% | 24% | 22% | 29% |
| Charlotte-Concord-Gastonia, NC-SC | 1,055,154 | 13% | 51% | 24% | 25% | 28% | 22% | 21% | 30% |
| Chattanooga, TN-GA | 221,692 | 6% | 48% | 25% | 27% | 33% | 18% | 17% | 32% |
| Chicago-Naperville-Elgin, IL-IN-WI | 4,294,773 | 23% | 52% | 25% | 24% | 24% | 25% | 20% | 31% |
| Cincinnati, OH-KY-IN | 941,446 | 5% | 40% | 21% | 39% | 13% | 21% | 20% | 46% |
| Cleveland-Elyria, OH | 898,554 | 6% | 37% | 24% | 39% | 11% | 20% | 23% | 46% |

| Metropolitan statistical area | N of all workers | Foreign-born | Occupation Skill-Level Requirements | | | Educational Attainment | | | |
|--|------------------|--------------|-------------------------------------|----------------|--------------|------------------------|---------|--------------|----------------------------|
| | | | Lower-skilled | Middle-skilled | High-skilled | Less than HS | HS only | Some college | College or advanced degree |
| Colorado Springs, CO | 282,477 | 9% | 45% | 30% | 25% | 23% | 24% | 26% | 27% |
| Columbia, SC | 279,210 | 7% | 43% | 29% | 28% | 30% | 20% | 17% | 33% |
| Columbus, OH | 886,581 | 10% | 41% | 23% | 35% | 14% | 21% | 20% | 45% |
| Dallas-Fort Worth-Arlington, TX | 3,113,487 | 24% | 52% | 27% | 22% | 37% | 21% | 17% | 25% |
| Dayton, OH | 336,241 | 4% | 41% | 21% | 38% | 17% | 17% | 24% | 43% |
| Deltona-Daytona Beach-Ormond Beach, FL | 222,539 | 9% | 45% | 30% | 25% | 16% | 28% | 31% | 25% |
| Denver-Aurora-Lakewood, CO | 1,369,559 | 15% | 52% | 26% | 22% | 30% | 22% | 20% | 28% |
| Des Moines-West Des Moines, IA | 262,005 | 9% | 54% | 24% | 22% | 22% | 23% | 22% | 33% |
| Detroit-Warren-Dearborn, MI | 1,763,843 | 11% | 39% | 22% | 40% | 13% | 18% | 22% | 47% |
| El Paso, TX | 313,191 | 31% | 51% | 30% | 19% | 30% | 26% | 24% | 20% |
| Fresno, CA | 356,627 | 30% | 65% | 24% | 12% | 48% | 20% | 18% | 14% |
| Grand Rapids-Wyoming, MI | 418,038 | 9% | 61% | 18% | 20% | 30% | 23% | 21% | 26% |
| Greensboro-High Point, NC | 338,050 | 11% | 56% | 26% | 17% | 34% | 23% | 20% | 23% |
| Greenville-Anderson-Mauldin, SC | 386,694 | 8% | 52% | 24% | 25% | 27% | 24% | 19% | 29% |
| Harrisburg-Carlisle, PA | 257,081 | 7% | 43% | 26% | 32% | 18% | 23% | 20% | 39% |
| Hartford-West Hartford-East Hartford, CT | 566,874 | 16% | 42% | 26% | 33% | 12% | 23% | 26% | 39% |
| Houston-The Woodlands-Sugar Land, TX | 2,831,820 | 30% | 50% | 27% | 23% | 35% | 21% | 18% | 27% |
| Indianapolis-Carmel-Anderson, IN | 880,366 | 8% | 53% | 21% | 26% | 26% | 24% | 18% | 32% |
| Jackson, MS | 249,878 | 3% | 43% | 17% | 40% | 22% | 16% | 15% | 47% |
| Jacksonville, FL | 587,074 | 11% | 44% | 26% | 30% | 12% | 24% | 29% | 36% |
| Kansas City, MO-KS | 958,378 | 8% | 51% | 23% | 26% | 28% | 20% | 21% | 32% |
| Knoxville, TN | 382,210 | 5% | 49% | 24% | 27% | 26% | 23% | 19% | 33% |
| Lafayette, LA | 221,624 | 4% | 57% | 28% | 16% | 36% | 27% | 18% | 20% |
| Lakeland-Winter Haven, FL | 230,349 | 14% | 61% | 23% | 16% | 33% | 27% | 21% | 19% |

| Metropolitan statistical area | N of all workers | Foreign-born | Occupation Skill-Level Requirements | | | Educational Attainment | | | |
|--|------------------|--------------|-------------------------------------|----------------|--------------|------------------------|---------|--------------|----------------------------|
| | | | Lower-skilled | Middle-skilled | High-skilled | Less than HS | HS only | Some college | College or advanced degree |
| Lancaster, PA | 236,308 | 5% | 51% | 26% | 23% | 19% | 31% | 21% | 29% |
| Las Vegas-Henderson-Paradise, NV | 878,784 | 29% | 62% | 25% | 12% | 27% | 28% | 26% | 19% |
| Little Rock-North Little Rock-Conway, AR | 303,969 | 5% | 46% | 23% | 31% | 25% | 27% | 17% | 32% |
| Los Angeles-Long Beach-Anaheim, CA | 5,847,570 | 43% | 54% | 24% | 22% | 32% | 21% | 21% | 27% |
| Louisville/Jefferson County, KY-IN | 552,352 | 7% | 52% | 23% | 25% | 21% | 27% | 20% | 32% |
| Mcallen-Edinburg-Mission, TX | 284,422 | 38% | 55% | 32% | 13% | 48% | 21% | 16% | 15% |
| Memphis, TN-MS-AR | 533,051 | 8% | 53% | 23% | 24% | 31% | 21% | 17% | 31% |
| Miami-Fort Lauderdale-West Palm Beach, FL | 2,538,152 | 48% | 51% | 27% | 22% | 15% | 30% | 27% | 28% |
| Milwaukee-Waukesha-West Allis, WI | 726,941 | 9% | 51% | 21% | 28% | 24% | 24% | 19% | 33% |
| Minneapolis-St. Paul-Bloomington, MN-WI | 1,739,049 | 12% | 48% | 21% | 31% | 19% | 20% | 24% | 37% |
| Nashville-Davidson-Murfreesboro-Franklin, TN | 866,108 | 10% | 53% | 26% | 21% | 28% | 26% | 18% | 27% |
| New Haven-Milford, CT | 391,807 | 15% | 45% | 26% | 30% | 16% | 26% | 21% | 37% |
| New Orleans-Metairie, LA | 543,213 | 10% | 54% | 26% | 20% | 25% | 28% | 23% | 25% |
| New York-Newark-Jersey City, NY-NJ-PA | 8,952,613 | 37% | 48% | 26% | 27% | 19% | 25% | 21% | 35% |
| North Port-Sarasota-Bradenton, FL | 266,873 | 16% | 56% | 24% | 20% | 24% | 30% | 23% | 24% |
| Ogden-Clearfield, UT | 242,025 | 9% | 54% | 29% | 17% | 28% | 28% | 25% | 19% |
| Oklahoma City, OK | 613,429 | 11% | 55% | 27% | 18% | 38% | 24% | 16% | 21% |
| Omaha-Council Bluffs, NE-IA | 475,474 | 8% | 58% | 21% | 21% | 40% | 19% | 17% | 24% |
| Orlando-Kissimmee-Sanford, FL | 1,008,438 | 21% | 53% | 26% | 22% | 16% | 26% | 30% | 28% |
| Oxnard-Thousand Oaks-Ventura, CA | 377,626 | 30% | 58% | 21% | 20% | 39% | 18% | 20% | 23% |
| Philadelphia-Camden-Wilmington, PA-NJ-DE | 2,682,015 | 13% | 43% | 24% | 34% | 17% | 22% | 19% | 43% |
| Phoenix-Mesa-Scottsdale, AZ | 1,849,108 | 18% | 54% | 25% | 21% | 33% | 23% | 21% | 23% |

| Metropolitan statistical area | N of all workers | Foreign-born | Occupation Skill-Level Requirements | | | Educational Attainment | | | |
|---------------------------------------|------------------|--------------|-------------------------------------|----------------|--------------|------------------------|---------|--------------|----------------------------|
| | | | Lower-skilled | Middle-skilled | High-skilled | Less than HS | HS only | Some college | College or advanced degree |
| Pittsburgh, PA | 1,039,229 | 4% | 29% | 19% | 52% | 8% | 13% | 18% | 61% |
| Portland-South Portland, ME | 257,703 | 5% | 52% | 21% | 27% | 13% | 21% | 30% | 35% |
| Portland-Vancouver-Hillsboro, OR-WA | 1,082,365 | 16% | 51% | 24% | 25% | 24% | 22% | 25% | 30% |
| Providence-Warwick, RI-MA | 743,571 | 15% | 51% | 27% | 22% | 25% | 28% | 24% | 24% |
| Provo-Orem, UT | 229,149 | 10% | 56% | 22% | 22% | 23% | 23% | 32% | 22% |
| Raleigh, NC | 597,728 | 15% | 44% | 23% | 33% | 26% | 18% | 17% | 38% |
| Richmond, VA | 560,817 | 10% | 44% | 24% | 33% | 22% | 21% | 19% | 39% |
| Riverside-San Bernardino-Ontario, CA | 1,675,394 | 30% | 55% | 28% | 17% | 35% | 23% | 22% | 19% |
| Rochester, NY | 494,789 | 7% | 44% | 20% | 36% | 13% | 19% | 26% | 41% |
| Sacramento-Roseville-Arden-Arcade, CA | 918,995 | 23% | 50% | 24% | 26% | 21% | 22% | 28% | 30% |
| St. Louis, MO-IL | 1,269,158 | 6% | 39% | 23% | 38% | 14% | 20% | 21% | 45% |
| Salt Lake City, UT | 543,243 | 15% | 56% | 26% | 18% | 30% | 25% | 22% | 23% |
| San Antonio-New Braunfels, TX | 966,557 | 15% | 51% | 30% | 19% | 32% | 24% | 22% | 22% |
| San Diego-Carlsbad, CA | 1,393,639 | 29% | 50% | 24% | 26% | 27% | 19% | 23% | 32% |
| San Francisco-Oakland-Hayward, CA | 2,161,847 | 37% | 44% | 21% | 34% | 19% | 18% | 21% | 43% |
| San Jose-Sunnyvale-Santa Clara, CA | 877,691 | 48% | 36% | 17% | 46% | 16% | 14% | 18% | 53% |
| Santa Rosa, CA | 223,133 | 22% | 60% | 25% | 15% | 36% | 22% | 25% | 17% |
| Scranton-Wilkes-Barre-Hazleton, PA | 223,607 | 7% | 68% | 20% | 13% | 30% | 30% | 18% | 22% |
| Seattle-Tacoma-Bellevue, WA | 1,728,111 | 21% | 44% | 22% | 34% | 16% | 19% | 25% | 41% |
| Spokane-Spokane Valley, WA | 228,292 | 7% | 51% | 27% | 22% | 18% | 28% | 29% | 26% |
| Springfield, MA | 252,533 | 10% | 46% | 26% | 28% | 14% | 25% | 30% | 31% |
| Stockton-Lodi, CA | 266,331 | 33% | 58% | 27% | 15% | 35% | 24% | 23% | 18% |
| Syracuse, NY | 289,246 | 6% | 40% | 22% | 39% | 14% | 19% | 25% | 43% |
| Tampa-St. Petersburg-Clearwater, FL | 1,199,812 | 16% | 48% | 27% | 26% | 17% | 27% | 26% | 31% |

| Metropolitan statistical area | N of all workers | Foreign-born | Occupation Skill-Level Requirements | | | Educational Attainment | | | |
|--|------------------|--------------|-------------------------------------|----------------|--------------|------------------------|---------|--------------|----------------------------|
| | | | Lower-skilled | Middle-skilled | High-skilled | Less than HS | HS only | Some college | College or advanced degree |
| Toledo, OH | 277,764 | 4% | 39% | 20% | 41% | 14% | 20% | 19% | 48% |
| Tucson, AZ | 396,871 | 16% | 53% | 25% | 23% | 27% | 25% | 24% | 24% |
| Urban Honolulu, HI | 425,080 | 23% | 53% | 26% | 21% | 14% | 26% | 32% | 28% |
| Virginia Beach-Norfolk-Newport News, VA-NC | 709,368 | 8% | 44% | 28% | 28% | 13% | 23% | 29% | 36% |
| Washington-Arlington-Alexandria, DC-VA-MD | 2,919,062 | 29% | 43% | 24% | 34% | 19% | 19% | 20% | 42% |
| Wichita, KS | 266,160 | 10% | 52% | 29% | 19% | 34% | 24% | 18% | 24% |
| Winston-Salem, NC | 264,301 | 11% | 63% | 21% | 17% | 43% | 24% | 13% | 19% |
| Worcester, MA-CT | 420,167 | 13% | 42% | 25% | 33% | 12% | 27% | 24% | 38% |
| Youngstown-Warren-Boardman, OH-PA | 224,231 | 2% | 41% | 21% | 39% | 10% | 23% | 20% | 47% |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Notes: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration. HS = high school.

TABLE A.5

Characteristics of Foreign-Born Workers Employed in Lower- and Middle-Skilled Jobs by Metropolitan Area

| Metropolitan statistical area | N | LEP | Educational Attainment | | | | Median Annual Wages | |
|---------------------------------------|-------------------|-----|------------------------|---------|--------------|----------------------------|---------------------|-----------------|
| | | | Less than HS | HS only | Some college | College or advanced degree | Foreign-born | Native-born |
| National | 17,597,817 | 57% | 33% | 29% | 24% | 15% | \$24,000 | \$28,032 |
| Akron, OH | 8,400 | 47% | 18% | 30% | 26% | 26% | \$26,840 | \$26,531 |
| Albany-Schenectady-Troy, NY | 18,434 | 32% | 20% | 29% | 31% | 20% | \$26,558 | \$30,969 |
| Albuquerque, NM | 38,523 | 60% | 39% | 32% | 20% | 9% | \$20,023 | \$25,808 |
| Allentown-Bethlehem-Easton, PA-NJ | 28,147 | 48% | 25% | 32% | 27% | 15% | \$25,000 | \$30,000 |
| Atlanta-Sandy Springs-Roswell, GA | 325,351 | 54% | 32% | 29% | 23% | 17% | \$22,000 | \$29,192 |
| Austin-Round Rock, TX | 125,813 | 63% | 40% | 29% | 19% | 13% | \$22,025 | \$29,000 |
| Bakersfield, CA | 83,743 | 69% | 54% | 25% | 16% | 5% | \$20,351 | \$27,031 |
| Baltimore-Columbia-Towson, MD | 99,633 | 42% | 20% | 28% | 28% | 24% | \$26,347 | \$33,034 |
| Baton Rouge, LA | 13,096 | 59% | 31% | 33% | 21% | 15% | \$22,025 | \$28,455 |
| Birmingham-Hoover, AL | 19,770 | 61% | 35% | 33% | 19% | 13% | \$18,800 | \$27,473 |
| Boise City, ID | 19,501 | 56% | 41% | 30% | 18% | 11% | \$21,077 | \$25,438 |
| Boston-Cambridge-Newton, MA-NH | 319,314 | 53% | 22% | 34% | 26% | 18% | \$26,347 | \$33,034 |
| Bridgeport-Stamford-Norwalk, CT | 86,277 | 58% | 27% | 32% | 24% | 17% | \$26,030 | \$34,066 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 18,041 | 40% | 20% | 29% | 31% | 20% | \$21,921 | \$28,833 |
| Cape Coral-Fort Myers, FL | 45,457 | 57% | 33% | 33% | 23% | 11% | \$21,472 | \$25,808 |
| Charleston-North Charleston, SC | 15,476 | 49% | 33% | 28% | 24% | 16% | \$21,600 | \$27,873 |
| Charlotte-Concord-Gastonia, NC-SC | 100,917 | 59% | 36% | 27% | 24% | 13% | \$21,077 | \$28,032 |
| Chattanooga, TN-GA | 8,887 | 60% | 45% | 21% | 17% | 17% | \$20,351 | \$25,830 |
| Chicago-Naperville-Elgin, IL-IN-WI | 752,716 | 60% | 31% | 31% | 22% | 15% | \$25,029 | \$30,526 |

| Metropolitan statistical area | N | LEP | Educational Attainment | | | | Median Annual Wages | |
|--|---------|-----|------------------------|---------|--------------|----------------------------|---------------------|-------------|
| | | | Less than HS | HS only | Some college | College or advanced degree | Foreign-born | Native-born |
| Cincinnati, OH-KY-IN | 31,200 | 53% | 22% | 32% | 26% | 20% | \$23,185 | \$28,032 |
| Cleveland-Elyria, OH | 34,707 | 47% | 18% | 31% | 30% | 20% | \$23,185 | \$28,032 |
| Colorado Springs, CO | 18,744 | 50% | 30% | 29% | 28% | 13% | \$20,646 | \$26,347 |
| Columbia, SC | 13,278 | 55% | 41% | 27% | 18% | 14% | \$20,000 | \$25,808 |
| Columbus, OH | 54,466 | 46% | 22% | 30% | 27% | 22% | \$20,824 | \$28,982 |
| Dallas-Fort Worth-Arlington, TX | 584,821 | 66% | 46% | 25% | 18% | 11% | \$22,386 | \$30,526 |
| Dayton, OH | 9,002 | 44% | 27% | 26% | 30% | 18% | \$21,077 | \$25,029 |
| Deltona-Daytona Beach-Ormond Beach, FL | 15,490 | 42% | 19% | 34% | 34% | 13% | \$22,025 | \$25,029 |
| Denver-Aurora-Lakewood, CO | 156,780 | 58% | 38% | 27% | 22% | 14% | \$24,776 | \$31,405 |
| Des Moines-West Des Moines, IA | 18,966 | 55% | 28% | 29% | 27% | 17% | \$25,000 | \$30,969 |
| Detroit-Warren-Dearborn, MI | 118,511 | 45% | 21% | 29% | 30% | 21% | \$23,403 | \$27,473 |
| El Paso, TX | 79,218 | 67% | 37% | 30% | 25% | 9% | \$18,582 | \$21,921 |
| Fresno, CA | 95,050 | 70% | 54% | 22% | 18% | 7% | \$18,970 | \$24,421 |
| Grand Rapids-Wyoming, MI | 28,712 | 57% | 37% | 28% | 23% | 12% | \$22,025 | \$26,347 |
| Greensboro-High Point, NC | 31,312 | 53% | 41% | 27% | 21% | 12% | \$21,024 | \$26,840 |
| Greenville-Anderson-Mauldin, SC | 22,228 | 60% | 35% | 31% | 22% | 13% | \$20,023 | \$26,030 |
| Harrisburg-Carlisle, PA | 12,731 | 49% | 26% | 32% | 24% | 18% | \$25,000 | \$30,035 |
| Hartford-West Hartford-East Hartford, CT | 59,730 | 40% | 17% | 33% | 32% | 18% | \$30,035 | \$33,000 |
| Houston-The Woodlands-Sugar Land, TX | 662,968 | 66% | 44% | 26% | 19% | 11% | \$23,000 | \$30,526 |
| Indianapolis-Carmel-Anderson, IN | 53,260 | 59% | 35% | 30% | 20% | 15% | \$20,351 | \$29,000 |
| Jackson, MS | 4,572 | 58% | 35% | 27% | 19% | 19% | \$15,017 | \$25,438 |
| Jacksonville, FL | 45,688 | 44% | 16% | 32% | 33% | 19% | \$24,000 | \$27,150 |

| Metropolitan statistical area | N | LEP | Educational Attainment | | | | Median Annual Wages | |
|--|-----------|-----|------------------------|---------|--------------|----------------------------|---------------------|-------------|
| | | | Less than HS | HS only | Some college | College or advanced degree | Foreign-born | Native-born |
| | | | | | | | | |
| Kansas City, MO-KS | 58,672 | 57% | 37% | 26% | 23% | 15% | \$21,679 | \$30,035 |
| Knoxville, TN | 14,054 | 49% | 34% | 31% | 22% | 13% | \$17,916 | \$25,705 |
| Lafayette, LA | 7,869 | 70% | 42% | 31% | 18% | 9% | \$21,165 | \$26,347 |
| Lakeland-Winter Haven, FL | 26,919 | 57% | 39% | 31% | 21% | 9% | \$20,351 | \$25,808 |
| Lancaster, PA | 9,725 | 53% | 24% | 38% | 24% | 14% | \$25,029 | \$29,508 |
| Las Vegas-Henderson-Paradise, NV | 225,644 | 55% | 31% | 31% | 26% | 12% | \$26,840 | \$30,000 |
| Little Rock-North Little Rock-Conway, AR | 11,448 | 54% | 35% | 37% | 17% | 11% | \$20,351 | \$26,347 |
| Los Angeles-Long Beach-Anaheim, CA | 1,926,580 | 65% | 40% | 25% | 22% | 14% | \$22,895 | \$27,774 |
| Louisville/Jefferson County, KY-IN | 26,806 | 52% | 27% | 33% | 23% | 17% | \$23,026 | \$28,032 |
| Mcallen-Edinburg-Mission, TX | 94,679 | 71% | 54% | 22% | 16% | 8% | \$17,298 | \$20,351 |
| Memphis, TN-MS-AR | 30,590 | 58% | 40% | 26% | 20% | 14% | \$20,351 | \$26,427 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 945,454 | 54% | 18% | 36% | 29% | 17% | \$23,026 | \$27,473 |
| Milwaukee-Waukesha-West Allis, WI | 44,295 | 57% | 33% | 32% | 23% | 13% | \$22,711 | \$29,508 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 142,965 | 52% | 26% | 27% | 30% | 17% | \$24,000 | \$32,670 |
| Nashville-Davidson-Murfreesboro-Franklin, TN | 66,676 | 56% | 35% | 31% | 20% | 14% | \$20,646 | \$28,000 |
| New Haven-Milford, CT | 41,245 | 51% | 23% | 35% | 26% | 16% | \$25,000 | \$32,561 |
| New Orleans-Metairie, LA | 42,124 | 59% | 30% | 33% | 25% | 12% | \$23,000 | \$27,473 |
| New York-Newark-Jersey City, NY-NJ-PA | 2,400,571 | 53% | 25% | 33% | 24% | 18% | \$26,000 | \$34,066 |
| North Port-Sarasota-Bradenton, FL | 34,129 | 51% | 28% | 34% | 24% | 14% | \$21,470 | \$26,831 |
| Ogden-Clearfield, UT | 17,126 | 51% | 33% | 32% | 25% | 11% | \$22,826 | \$26,347 |
| Oklahoma City, OK | 54,777 | 65% | 46% | 29% | 17% | 9% | \$20,824 | \$27,401 |
| Omaha-Council Bluffs, NE-IA | 29,996 | 63% | 49% | 23% | 18% | 11% | \$22,711 | \$30,000 |

| Metropolitan statistical area | N | LEP | Educational Attainment | | | | Median Annual Wages | |
|--|---------|-----|------------------------|---------|--------------|----------------------------|---------------------|-------------|
| | | | Less than HS | HS only | Some college | College or advanced degree | Foreign-born | Native-born |
| Orlando-Kissimmee-Sanford, FL | 167,849 | 44% | 20% | 32% | 33% | 16% | \$21,077 | \$25,029 |
| Oxnard-Thousand Oaks-Ventura, CA | 90,395 | 66% | 49% | 21% | 21% | 9% | \$21,368 | \$30,000 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE | 229,306 | 53% | 25% | 31% | 23% | 21% | \$24,569 | \$31,616 |
| Phoenix-Mesa-Scottsdale, AZ | 266,004 | 57% | 41% | 27% | 22% | 10% | \$22,711 | \$30,000 |
| Pittsburgh, PA | 20,610 | 41% | 15% | 26% | 31% | 28% | \$24,028 | \$29,610 |
| Portland-South Portland, ME | 8,852 | 39% | 18% | 28% | 35% | 20% | \$21,077 | \$28,455 |
| Portland-Vancouver-Hillsboro, OR-WA | 130,322 | 58% | 31% | 27% | 28% | 14% | \$23,743 | \$29,614 |
| Providence-Warwick, RI-MA | 86,762 | 49% | 31% | 33% | 25% | 11% | \$26,347 | \$30,526 |
| Provo-Orem, UT | 18,249 | 54% | 28% | 28% | 32% | 12% | \$23,185 | \$20,023 |
| Raleigh, NC | 59,960 | 55% | 38% | 25% | 21% | 16% | \$19,614 | \$29,627 |
| Richmond, VA | 37,699 | 55% | 32% | 29% | 22% | 17% | \$22,600 | \$29,731 |
| Riverside-San Bernardino-Ontario, CA | 413,671 | 59% | 41% | 27% | 22% | 9% | \$25,029 | \$26,347 |
| Rochester, NY | 22,244 | 42% | 20% | 29% | 34% | 17% | \$22,626 | \$27,031 |
| Sacramento-Roseville-Arden-Arcade, CA | 157,251 | 58% | 28% | 28% | 32% | 13% | \$24,239 | \$30,000 |
| St. Louis, MO-IL | 43,033 | 46% | 22% | 31% | 29% | 18% | \$23,026 | \$28,595 |
| Salt Lake City, UT | 68,490 | 54% | 36% | 29% | 23% | 12% | \$23,403 | \$27,401 |
| San Antonio-New Braunfels, TX | 117,783 | 62% | 39% | 29% | 22% | 10% | \$22,025 | \$25,293 |
| San Diego-Carlsbad, CA | 300,714 | 56% | 35% | 24% | 26% | 15% | \$24,000 | \$28,800 |
| San Francisco-Oakland-Hayward, CA | 519,760 | 58% | 28% | 26% | 26% | 21% | \$28,000 | \$35,541 |
| San Jose-Sunnyvale-Santa Clara, CA | 223,890 | 60% | 28% | 25% | 26% | 21% | \$29,000 | \$31,900 |
| Santa Rosa, CA | 40,534 | 61% | 42% | 25% | 26% | 8% | \$25,947 | \$30,969 |
| Scranton-Wilkes-Barre-Hazleton, PA | 12,957 | 65% | 34% | 34% | 18% | 14% | \$21,921 | \$28,032 |

| Metropolitan statistical area | N | LEP | Educational Attainment | | | | Median Annual Wages | |
|--|---------|-----|------------------------|---------|--------------|----------------------------|---------------------|-------------|
| | | | Less than HS | HS only | Some college | College or advanced degree | Foreign-born | Native-born |
| Seattle-Tacoma-Bellevue, WA | 237,707 | 50% | 23% | 27% | 31% | 19% | \$26,347 | \$34,139 |
| Spokane-Spokane Valley, WA | 12,546 | 50% | 22% | 33% | 33% | 12% | \$22,426 | \$26,840 |
| Springfield, MA | 18,165 | 44% | 18% | 32% | 35% | 15% | \$25,808 | \$29,421 |
| Stockton-Lodi, CA | 74,349 | 63% | 41% | 27% | 23% | 9% | \$24,776 | \$28,905 |
| Syracuse, NY | 10,795 | 38% | 22% | 29% | 29% | 20% | \$22,300 | \$29,000 |
| Tampa-St. Petersburg-Clearwater, FL | 145,188 | 48% | 22% | 34% | 29% | 16% | \$23,227 | \$27,131 |
| Toledo, OH | 6,426 | 48% | 23% | 31% | 26% | 19% | \$20,646 | \$25,808 |
| Tucson, AZ | 50,364 | 54% | 34% | 30% | 26% | 10% | \$20,646 | \$25,000 |
| Urban Honolulu, HI | 75,396 | 59% | 17% | 32% | 35% | 17% | \$27,331 | \$31,616 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 41,803 | 41% | 17% | 31% | 33% | 20% | \$25,000 | \$28,000 |
| Washington-Arlington-Alexandria, DC-VA-MD | 562,778 | 48% | 28% | 27% | 25% | 21% | \$26,631 | \$36,131 |
| Wichita, KS | 21,681 | 60% | 41% | 29% | 18% | 12% | \$24,776 | \$27,401 |
| Winston-Salem, NC | 23,751 | 63% | 51% | 28% | 13% | 8% | \$20,000 | \$27,000 |
| Worcester, MA-CT | 37,219 | 47% | 17% | 37% | 29% | 17% | \$26,430 | \$31,616 |
| Youngstown-Warren-Boardman, OH-PA | 2,508 | 32% | 14% | 31% | 29% | 27% | \$24,421 | \$25,000 |

Source: Five-year American Community Survey sample, 2011–15 collected from IPUMS.

Notes: Data refer to individuals ages 18–64, in the civilian labor force, and employed during the week before the survey administration. Median wage data are further restricted to those individuals who reported positive wage and salary income during year before the survey.

Notes

- ¹ For more information on the organizations and activities that make up the workforce system, see Eyster et al. 2016.
- ² Many contest the notion of a skills gap and, rather than blaming workers for lacking skills, they put the onus on employers and labor-market intermediaries to invest in skill development through employer-provided training or coordination with education providers. See Andrew Weaver, “The Myth of the Skills Gap,” *MIT Technology Review*, August 25, 2017, <https://www.technologyreview.com/s/608707/the-myth-of-the-skills-gap/>.
- ³ “Becoming Bilingual in Immigration & Workforce: What Philanthropic Leaders Need to Know,” YouTube video, 1:29:25, Grantmakers Concerned with Immigrants and Refugees, August 2, 2016, <https://www.youtube.com/watch?v=s-ls2DBwP6k&feature=youtu.be>.
- ⁴ “Ensuring Immigrants’ Access to WIOA: Data and Advocacy Tools for Adult Educators.” YouTube video, 1:03:02, Coalition on Adult Basic Education, February 22, 2017, <https://www.youtube.com/watch?v=qd1MOrfeBo4>.
- ⁵ Advocates were concerned in particular about two changes: A new set of six common performance measures emphasizing employment outcomes that apply to Title I workforce services and Title II adult education services alike; and a reconstitution of the former English Language/Civics funding as the new Integrated English Literacy and Civics Education with a greater emphasis on workforce outcomes compared with citizenship outcomes. Though WIOA Title I requires participants to have legal authorization to work in the US, Title II is silent on immigration status. For information on WIOA and its impact for immigrants, see National Skills Coalition, 2016.
- ⁶ The BLS system reports the “1) typical education needed for entry, 2) commonly required work experience in a related occupation, and 3) typical on-the-job training needed to obtain competency in the [each] occupation.”
- ⁷ As a point of comparison, recent research finds 7.6 million unauthorized individuals in the labor force, making up 4.7 percent of the total US workforce of 161 million (Paral 2018). That study found that 62 percent of foreign-born workers were employed in lower-skilled jobs (requiring no formal educational credential, or a high school diploma or equivalent) and 12 percent had middle-skilled jobs (requiring some college, a postsecondary nondegree award, or an associate’s degree), yet our analysis finds a share of 50 percent in lower-skilled jobs and 25 percent in middle-skilled jobs following BLS classifications. The difference may be because of differences in job classifications, Paral’s correction for the undercount of undocumented immigrants (which he addresses using a secondary dataset), and differences in definition of the workforce; ours is limited to 18- to 64-year-olds in the civilian labor force and Paral’s includes a broader group (16+ in civilian and military positions).
- ⁸ Immigrants in middle-skilled and high-skilled positions have had more years of residence in the US, on average, than immigrants in lower-skilled occupations, although the difference is not large (median of 18 years compared with 16 years).
- ⁹ For information documenting the insufficient English language training opportunities in another local area, see Soricone et al. 2011. The broader national challenge of limited ESL-training supply to meet demand is discussed in McHugh, Gelatt, and Fix, 2007.
- ¹⁰ Soricone et al. (2011) noted that the research suggests that considerable time is required for language acquisition; one paper estimated an immigrant with native language literacy would need 500 to 1,000 instructional hours to reach a minimal functional level of English and cited another study that suggested 150 hours were needed to achieve one level gain in ESL.
- ¹¹ This issue of “mainstreaming” has been discussed in the European context, where immigrant integration policies including workforce training have treated immigrants’ needs explicitly and “developed group-targeted policies,”

that are now increasingly being transformed to incorporate immigrants into broader service systems (Benton, McCarthy, and Collett 2015).

¹² “Employment Projections,” US Bureau of Labor Statistics, accessed May 25, 2018, https://www.bls.gov/emp/ep_crosswalks.htm.

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