



Building the Skills of the Immigrant Workforce in Silicon Valley: Learnings from the Boston, Salt Lake City, and Seattle Regions

Silicon Valley is home to a vibrant economy and diverse immigrant community. By [2020](#), Silicon Valley is projected to be short about 72,500 private sector workers in the low- to middle-skills levels. Though immigrant entrepreneurs in Silicon Valley have driven economic growth in the region, immigrants and refugees live at both ends of the socioeconomic spectrum, and many live in poverty, struggling with economic, cultural, legal, and language barriers. Investing in the skills development of all immigrants will contribute to the region's growth, meet employers' skills needs, and create for all a prosperous and vibrant community in which immigrants are able to reach their full career potential.

Seeking to identify promising practices to build the capacity of Silicon Valley's immigrant workforce, the National Immigration Forum (the Forum) interviewed 20 stakeholder organizations in Boston, Salt Lake City, and Seattle. Stakeholder organizations represented local educational and workforce sectors, chambers of commerce, and immigrant-serving organizations in these metropolitan regions. Based on our research, the Forum recommends that the Silicon Valley Community Foundation consider the following best practices:

1. Pilot Career Pathways programs to prepare immigrants for middle-skills jobs and connect to employment services and career opportunities.
2. Broker and invest in public-private partnerships with faith-based organizations to provide occupational and English language training.
3. Support economic empowerment programs that advance small business development.
4. Pilot Contextualized English Language programs to prepare immigrants for careers in the IT industry.
5. Build the next generation of immigrant integration leaders.

BACKGROUND

Silicon Valley's regional economy is among the fastest growing in the United States. In 2015, it was home to 16 [Fortune 500](#) companies. From 2010 to 2015, real [Gross Domestic Product](#) in the San Jose-Sunnyvale-Santa Clara metropolitan area grew by nearly 44 percent, compared to more than 20 percent nationwide. The region also experiences low unemployment: in [San Mateo](#) and [Santa Clara](#) Counties, the unemployment rate dropped between 2010 and 2015 from an average of 8.4 percent to 3.4 and 10.4 percent to 4.2 percent, respectively, compared to a national [average](#) of 9.6 percent in 2010 and 5.3 percent in 2015.

Immigrants are important contributors to Silicon Valley's economy. The foreign-born account for [37.4 percent](#) (or about 3 million) of Silicon Valley's total population, a significant share when compared to the proportion of the foreign-born population nationally (13.3 percent) and in the state of California (27.1 percent). Silicon Valley's immigrant population continues to [grow](#): Between July 2014 and July 2015, more than 14,300 foreign-born individuals moved to the area.

Immigrants comprise more than [45 percent](#) of Silicon Valley's total labor force. While the majority of the immigrant workforce in San Mateo and Santa Clara Counties are [fluent](#) in English, about 21 percent are English language learners. About 47 percent of adult English language learners have [household incomes](#) that are below 250 percent of the federal poverty level, compared to 28 percent of the overall adult population.

Similar to Silicon Valley, the Boston, Salt Lake City, and Seattle regions have strong or emerging high-tech industry presences and robust immigrant and refugee populations. [Immigrants](#) in Boston comprise more than 27 percent of the population. From 2000 to 2014, the foreign-born population in Boston increased by 19.2 percent, and Boston now has the 7th largest immigrant population among the 25 largest cities in the U.S. Foreign-born Bostonians have generally lower education attainment than native-born; in 2014, about one-third of the city's immigrant residents 25 years or older had a bachelor's degree or higher, compared to 45.9 percent of all Bostonians, and nearly 28 percent of immigrants older than 25 have not completed high school, compared to 15.7 percent of all Bostonians. The city is also known for its strong and growing tech sector, which [employs](#) the second-largest tech workforce behind Silicon Valley.

Since [1990](#), the overall immigrant population in the Seattle metropolitan area has grown by 285 percent. Today, immigrants in Seattle make up about [18 percent](#) of the total population. Nearly 85 percent of immigrants in the region entered the U.S. before 2010. The majority of Seattle's foreign-born population have some college [education](#) or a post-secondary degree: about 36 percent have a Bachelor's degree or higher; 23.8 percent have some college or an associate's degree; 19.5 percent have a high school diploma or equivalent; and 20.4 percent have not completed high school. Seattle, especially the Bellevue area, is also considered one of our nation's major [tech hubs](#) where companies migrate to grow.

Salt Lake County is also experiencing an immigration boom. The immigrant and refugee population in the region [grew](#) by nearly 20 percent between 2009 and 2014, more than more than three times as much as the growth of the county's total population during this time (approximately 5.5 percent). Foreign-born workers also accounted for approximately 17 percent of the county's labor force in 2014. The majority of the foreign-born population in Salt Lake County do not have post-secondary [education](#): 34 percent have not graduated high school; 23.9 percent have a high school diploma or equivalent; 20 percent have some college education or an associate's degree; and 22.2 percent have a Bachelor's degree or higher. With its broad talent pool and favorable demographics, Salt Lake City has been one of the main [targets](#) for tech-oriented companies in the U.S.

After assessing publically available data and other inputs, the Forum talked to a number of leaders, including Chambers of Commerce and workforce, education, and community leaders, in Boston, Seattle, and Salt Lake City to learn about promising innovative workforce practices and policies that may be applicable to Silicon Valley. As a result of our research and interviews, we identified five recommendations for consideration by Silicon Valley Community Foundation and highlighted a number of programs, which we believe would be replicable in Silicon Valley.

RECOMMENDATIONS

Recommendation 1: Pilot Career Pathways programs in in-demand sectors to prepare immigrants for middle-skills jobs and connect to employment services and career opportunities.

One opportunity to connect immigrants who have completed ESL or adult education classes to career opportunities is through a career pathways program. Career pathways programs are programs with a clear sequence of education and training credentials aligned with employer-validated competencies. [Career pathways](#) can be particularly successful in serving populations that experience barriers to employment through their focus on [aligning](#) employers, adult basic education, occupational training, postsecondary education, and supportive services to provide comprehensive and flexible education and training programs aimed at preparing individuals for employment and career advancement in a specific industry or sector. The U.S. Department of Labor (DOL) published its [Career Pathways Toolkit: A Guide for System Development](#), which provides the workforce system with a framework, resources, and tools for states and local partners to develop, implement, and sustain career pathways systems and programs.

In its assessment of various education and workforce services to English language learners, published in 2015, Silicon Valley Alliance for Language Learners' Integration, Education, and Success (SV ALLIES) [found](#):

Access to employment services and labor market information was identified as a major gap in the pathway between ESL or adult education classes and career opportunities. Labor market information and services, especially assistance with career navigation, are in high demand among English language learner adults. The steps needed to move from successfully completing an ESL or vocational classes to obtaining a job are rarely straightforward and clear, especially to [English language learners] who may not have the social or professional networks to connect them to career opportunities.

Bridge programs can serve as a critical component of career pathways programs by providing individuals who do not meet the minimum requirements for a degree or program with additional instructional time to develop foundational skills needed to advance in a training program. [Bridge programs](#) generally focus on adults who are low-skilled, including English language learners. Students might receive assistance identifying career and education goals and improving study skills. They might also receive basic reading, math, writing, and English language instruction combined with occupational content. Some bridge programs also offer college credit and certificates.

Two career pathways and bridge programs offer promising models for adaptation in Silicon Valley. The Seattle Jobs Initiative's [Career Pathways Program](#) aims to help individuals attain a one- to two-year college credential in an industry sector. Partnering with area community colleges and community-based organizations, the program links short-term and long-term training in four targeted industry sectors: (1) Automotive, Trade, and Logistics; (2) Healthcare; (3) Office Occupations or Medical Office Professional; and (4) Manufacturing; while offering enhanced services such as career coaching and connections to employers.

[Career Navigators](#) are a critical component of the program. These professional staff not only have expertise in serving individuals facing challenges to successfully developing workforce skills, completing educational programs, and/or obtaining employment, but they also have experience with community colleges and the targeted industry sectors. Participants in the Career Pathways Program are matched with a Career Navigator at the time of enrollment. Career Navigators support participants for up to three years while they complete their credentials and start their careers. The Career Navigators help participants access supportive services such as tutoring, housing, transportation, and childcare; enroll in college; access financial aid; select appropriate educational programs and courses; and prepare and access career opportunities during and after completion of the program.

In Boston, Jewish Vocational Service's [Bridges to College](#) (BTC) is a college preparatory program that has prepared more than 550 students for academic success. Participants must be 18 years or older, have a high school diploma or equivalent, have intermediate to high verbal and written English skills, and be a lawful permanent resident or U.S. citizen. The program partners with two local institutions of higher education and focuses on preparing students for further learning in general studies, health information technology, and biotechnology. Participants receive the following services free-of-charge: academic preparation in English, math, and science; academic and career coaching, including job and internship searches; assistance with academic course selection; tutoring; computer skills and LinkedIn workshops; and networking with alumni. The program also offers participants and alumni the opportunity to open Individual Development Accounts to accrue matches for their savings towards a degree or certificate program from an accredited, federally-sponsored institution of higher learning. Since 2009, out of nearly 690 students enrolled in the BTC program, - 80 percent completed it. Additionally, almost 85 percent of program graduates enrolled in college level classes.

There are several career pathways programs in Silicon Valley aimed at preparing workers for in-demand occupations. For example, the [Silicon Valley Career Pathways Program](#) is focused on developing the workforce for five industry sectors. There are also some promising integrated and contextualized learning programs in Silicon Valley. For instance, in San Jose, the Center for Employment and Training (CET), an eligible training provider in California, has a program in which students pay for occupational training through Pell Grants that align training, adult education, and supportive services. In addition, SV ALLIES in the Silicon Valley partners with the Workforce Investment Boards to provide immigrant adults contextualized English language learning, work readiness training, and career-technical training so that immigrants can access career pathways. Consideration can be given to adapting the Seattle Jobs Initiative's Career Pathways Program and/or the Boston's Bridges to College program models to help immigrants develop industry-related English skills and obtain a one- or two-year industry-recognized college certificate. The program model should include key components such as intensive services to support attainment of educational goals and robust employment services to build professional networks and access employment opportunities. Investing in career pathways programs focused on immigrants and English language learners would ensure that more low-skilled adults are able to reach their full career potential and meet the talent demands of employers in Silicon Valley.

Recommendation 2: Broker and invest in public-private partnerships with faith-based organizations and other community partners to provide occupational and English language training.

Churches and other faith-based organizations have an extensive history of providing services to vulnerable community members. Many of these churches have pastors and congregants who are immigrants, and faith-based organizations are serving communities with large immigrant populations. Because churches and faith-based organizations have built relationships of trust with many immigrants already, they are well positioned to provide support services.

These [services](#) include educational tutoring, after-school programs, and [job training](#). Partnerships with faith-based organizations have the potential to expand the reach of social and other services within communities. In Malden, Boston, The Immigrant Learning Center, a nonprofit that provides English language, literacy, and other services to the immigrant population, notes on its website that, “[Faith communities](#) from across the religious spectrum have a long history of welcoming and integrating immigrants and refugees. They are at the forefront of immigrant integration in the U.S.”

In Salt Lake City, the [LDS Humanitarian Center](#) states in its [One Year Evaluation](#) that one of its goals is to “provide job skills training and English language classes to refugees seeking to gain employment to help support themselves and their families.” The program started in October 2009 as a partnership in which both the Utah Department of Workforce Services and the Church of Jesus Christ of Latter-day Saints contributed funding and recruited participants. Through the [program](#), approximately 150 associates or participants receive about 12 months of training and job placement assistance. Associates [receive](#) four hours of intensive work training and four hours of language skills training five days a week. Associates work with job coaches, English teachers, job developers, and other volunteers to develop the skills needed to obtain employment.

The [evaluation](#) of the first year of the program’s implementation found that almost 60 percent of associates found full-time employment after an average of 11.2 months in the program, and nearly all of these positions offered benefits. Furthermore, almost 88 percent of associates made at least one level gain in English, and 58 percent made two or more level gains in 2010. In 2016, 64 percent of associates found a full-time position after about 8.6 months in the program.

Silicon Valley Community Foundation could help broker and invest in workforce partnerships between faith-based organizations, adult education and immigrant-serving organizations that provide ESL training, the public workforce system, and employers in Silicon Valley. Similar to the LDS Humanitarian Center Project model, these partnerships would focus on providing intensive occupational and English language training as well as coaching and employment services to prepare immigrants for in-demand occupations in the region. These partnerships would benefit from leveraging the experience Silicon Valley’s faith-based organizations have in serving immigrants, expand their capacity, and increase immigrants’ access to training and career preparation.

Recommendation 3: Support economic empowerment programs that advance small business development.

Immigrant entrepreneurs are key innovators and contributors to the nation's national economic growth as well as to local and regional economies. The National Foundation for American Policy found that immigrant entrepreneurs have a key role in "creating new, fast-growing companies," having started [51 percent](#) of U.S. startup companies valued at \$1 billion or more. Immigrants have [co-founded](#) more than one in four high-tech startups across the nation and more than half of all startups in Silicon Valley.

In addition, immigrants are more than twice as likely to [start](#) a small business than the native-born population. In 2013, immigrants owned 28 percent of "[Main Street](#)" businesses – those in the retail and accommodation, food, and neighborhood services – nationwide and 61 percent in the San Jose area. Main Street businesses have an important role in revitalizing communities by hiring workers, increasing the local tax base and spending on goods and services. San Jose Mayor Sam Liccardo [pointed out](#), "immigrant entrepreneurs...launch half of our City's small businesses each year." However, immigrants and refugees face [challenges](#) in starting small businesses. These barriers include lack of credit history; access to capital; and understanding of local business environment, regulations, and complex permitting processes.

An economic development [brief](#) issued by the Silicon Valley Community Foundation noted that "Community-based microenterprise and microfinance programs are important strategies to support low-wealth entrepreneurs who need capital to start or grow a business, but cannot qualify for a traditional bank loan. These programs provide start-up loans, technical assistance, and loans to invest in equipment, vehicles, remodeling or inventory." Robust microenterprise or economic empowerment programs that provide not only access to financial capital, but also to training on product development, market penetration, marketing strategies, and mentorship help immigrants struggling to start small businesses achieve their entrepreneurship goals and contribute to the growth of their communities.

For example, the non-profit organization International Rescue Committee (IRC) in Salt Lake City and the Salt Lake County government have partnered to implement several robust economic empowerment programs focused on assisting refugees with starting small food businesses. The [New Roots Program](#) started in 2010 with the goal of establishing a farmers' market in Sunnyvale Park in Salt Lake City. To date, the New Roots Program has provided more than 30 refugee farmers with instruction, resource access, and technical assistance regarding business development, agriculture, and selling healthy, affordable, and culturally appropriate vegetables. The Sunnyvale Farmers' Market is thriving and offers fresh, locally grown food products; fosters social interaction; and provides opportunities for producers to develop their product and marketing skills.

Similarly, the IRC partnered with Salt Lake County to run the [Spice Kitchen Incubator](#), a business incubator serving refugees and other community members in Salt Lake City who are interested in starting a full- or part-time food business. The program provides budding entrepreneurs with access to commercial kitchen space; training on aspects of the food business and cooking techniques; markets and market positioning; capital; and mentorship. Through the incubator, food businesses representing the diversity of refugees in the Salt Lake City region have added

“new flavors” to the region. In developing these programs, strategic consideration was given to how the emerging businesses could contribute to the social and cultural fabric of the Salt Lake City region as well as support the area’s economic growth.

The Silicon Valley Community Foundation should consider partnering with immigrant-serving organizations in the region to identify opportunities to support economic empowerment programs aimed at immigrants facing barriers to starting small businesses. The programs should engage appropriate community partners and reflect the entrepreneurial interests of potential participants.

Recommendation 4: Pilot a Contextualized English Language program to prepare immigrants for careers in the IT industry.

Information Technology (IT) is one of the [fastest-growing](#) industries in the U.S. It is a part of the science, technology, engineering, and mathematics (STEM) sector, which has been driving our economic growth. Moreover, many employers require IT skills for employees in various middle-skills occupations. Many employers in the Information and Communication Technologies (ICT) industry report experiencing [difficulty](#) in filling their open positions because many applicants lack the required technical skills. In San Diego, [more than 50 percent](#) of the region’s ICT employers reported difficulty in finding workers with the desired technical skills.

Contextualized English language programs and integrated education and training programs offer new [approaches](#) to preparing immigrants for career advancement. Contextualized English language programs help participants build vocabulary that is specific to an industry or employer while integrated education and training programs allow participants to build basic skills, including English, and occupational skills concurrently by combining adult education and technical skills training. These approaches enable immigrants to accelerate their skills development and entry into the labor market, saving them time and money.

The Salt Lake County’s Office of New Americans is exploring opportunities to implement these models to prepare immigrants and refugees in the region for the workforce. As part of its [New Americans Welcoming Plan](#), the Office’s goals are to partner with employers to pilot on-site English training classes and measure the return on investment of these programs. The Office is in the process of identifying interested employer partners to develop a contextualized English language program focused on the biotechnology and life sciences industry.

In Seattle, the [Ready to Work](#) initiative was designed for immigrants, refugees and others who face immense barriers to learning English and gaining employment. This innovative program combines English language proficiency instruction, digital literacy training, and job skills development to prepare students to enter or advance in the workforce. In 2015, the first year following its launch, [22 students](#) – including Ethiopians, Eritreans, Mexicans, Vietnamese, Somalians, Chinese, Guatemalans, Thai, and Cambodians – completed the program.

Another example is the Skills and Opportunity for the New American Workforce, a [project](#) of the National Immigration Forum. In partnership with the Community College Consortium for

Immigrant Education and Miami Dade College, this project provides customized, contextualized English language instruction for incumbent frontline retail workers at the worksite and local community colleges. Training is delivered in person and virtually. The curriculum incorporates vocabulary and concepts relevant to the retail industry, such as customer service, store safety, technology, and team communication. Both workers and employers [identified](#) key benefits to participating in the program. In the first year, participating workers experienced increased English-language fluency, leading to improved confidence and better productivity, and some received promotions at the conclusion of training. Employer partners noted improvement in store productivity as a result of participants' increased language skills and quality of work, reduced time per task, and higher employee retention at participating sites, thus reducing the turnover-associated cost of recruiting and training new workers. Building on the [success of year one](#), the project's second year is well underway and includes revamped technology tools to assist retail employees with achieving the skills they need to reach their fullest potential and unlock career pathway opportunities.

The Silicon Valley Community Foundation should consider funding a workforce program to prepare immigrants for middle-skill jobs in the IT industry by using contextualized English language training or the integrated education and training models. A contextualized English training program may be particularly applicable to foreign-trained workers who have technical skills in IT but need advanced English vocabulary training to enter into the field in the U.S. An integrated education and training program may be helpful for immigrants participating in adult education programs and interested in beginning a career in the IT industry. Both models would require strong partnerships with employers and community colleges.

Recommendation 5: Build the next generation of immigrant integration leaders.

It is critical to build the next generation of leaders able to inform public policies and the design and implementation of effective services to assist immigrants in maximizing their economic, social, and cultural contributions to the U.S. The [Immigrant Integration Lab](#), launched in 2012 and housed at Boston College School of Social Work, is focused on growing leaders dedicated to the well-being of immigrants. Led by Dr. Westy Egmont, a renowned expert and leader on advocating for immigrant integration, the Lab is “an applied research lab exploring the intersection of social work, social policy, and immigrant inclusion.” It is the first center and graduate program created to develop human services professionals focused on serving immigrants. Through a rigorous academic approach, the Lab “seeks to understand the appropriate services and delivery systems that lead to full social, civic, and economic integration of the foreign born in the United States.”

Through the Lab, students are able to take courses, assist with research projects, and participate in field placements. Students develop leadership skills, gain a deep understanding of the value and contributions of immigrants to the country, and are able to analyze and develop policies that promote immigrant integration. The Lab's reach is widespread; its alumni are thriving in careers in federal and state government, academia, policy and advocacy, direct service provision, and more across the country. Currently, there are about 500 students taking the courses.

Given the large immigrant population in Silicon Valley, the Silicon Valley Community Foundation should consider partnering with San Jose State University or another local university to establish a research center on the economic and social integration of immigrants in the region. The center can offer academic classes, conduct research, and partner with community organizations for hands-on field placements to help students better understand how economic, education, housing, transportation, workforce, and other social and public policies affect the well-being of immigrants and refugees within the region. Through research and evaluation activities, the center can identify best practices that support the integration of immigrants and individuals who are English language learners and grow the body of evidence on these issues. The center can also lift up lessons learned about the region's policies as they apply to national policies, over time becoming a national leader and resource for advocates, policy makers, and service providers.

CONCLUSION

To build the skills of immigrants in Silicon Valley so they can reach their full career potential and meet the workforce needs of the region's employers, the Silicon Valley Community Foundation should consider investing in workforce and economic empowerment programs and growing the next generation of immigrant integration leaders. The lessons learned from Boston, Salt Lake City, and Seattle provide important perspectives on how to design effective programs and engage key partners. Altogether, the recommendations in this report aim to expand the capacity of Silicon Valley's immigrant workforce by (1) leveraging the expertise and expanding the reach of faith-based organizations to provide occupational and English language training; (2) preparing immigrants for middle-skills jobs through attainment of one- to two-year credentials; (3) supporting immigrants in achieving their entrepreneurship goals; (4) preparing immigrants for careers in the IT industry through strong partnerships with employers and community colleges; and (5) growing the next generation of immigrant integration leaders prepared to inform public policies and the design and implementation of effective services.

The Forum consulted with the following organizations and individuals during its research. Their perspectives were invaluable and helped inform the Forum's development of its recommendations.

Boston

Jewish Vocational Services

The Immigrant Integration Lab at Boston College School of Social Work

The Immigrant Learning Center, Inc.

Massachusetts Immigrant and Refugee Advocacy Coalition (MIRA)

City of Boston, Immigrant Advancement Department

Boston Welcome Back Center

The North Shore Workforce Investment Board (NSWIB)

Greater Boston Chamber of Commerce

Salt Lake City

Down Town Salt Lake City Alliance

International Rescue Committee in Salt Lake City and Salt Lake County

The Salt Lake County's Office of New Americans

Utah Department of Workforce Services
Refugee and Immigrant Center, Asian Association of Utah

Seattle

The Seattle Jobs Initiative

OneAmerica

Seattle Metropolitan Chamber of Commerce

The Workforce Development Council of Seattle-King County

Office of Immigrant and Refugee Affairs, City of Seattle

Puget Sound Welcome Back Center, Highline College

Washington Student Achievement Council

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