Tapping the Talents of Highly Skilled Immigrants in the United States
Takeaways from Experts Summit

By Jeanne Batalova and Michael Fix
TAPPING THE TALENTS OF HIGHLY SKILLED IMMIGRANTS IN THE UNITED STATES
Takeaways from Experts Summit

By Jeanne Batalova and Michael Fix

August 2018
Acknowledgments

The authors gratefully acknowledge insightful presentations and thoughtful comments shared by more than 30 participants of the Migration Policy Institute’s Summit Meeting of Leading Experts on “Tapping the Talents of Highly Skilled Immigrants in the United States.”

The meeting, held on June 14, 2017, at MPI in Washington, DC, was made possible with the generous support of the J.M. Kaplan Fund and benefitted from the astute guidance of Suzette Brooks Masters. They also thank MPI’s Brian Salant for his invaluable research assistance.
# Table of Contents

Executive Summary ........................................................................................................... 1

I. Introduction .................................................................................................................. 5

II. Changing Demographic, Economic, and Political Context ....................... 6
   A. Immigration in the Context of Projected Labor and Skills Shortages ............... 6
   B. Impact of Occupational Licensing and Credentialing Requirements on Immigrants .... 7
   C. Digital Technology’s Impact on Immigrant Professionals ....................................................... 9
   D. The Potential Impacts of Anti-Immigrant Rhetoric on Skilled Immigration and Immigrants’ Integration Prospects ............................................................................................ 9

III. Brain Waste in the United States: What Do We Know? ..................... 10
   A. Skill Underutilization: Scale and Cost ...................................................................................... 10
   B. Factors Associated with Brain Waste ...................................................................................... 10
   C. Unique Challenges Facing Immigrant Professionals ............................................................ 11

IV. Opportunities for Reform ................................................................................. 12
   A. Incorporate Lessons from Strategies that Successfully Promoted Reform .......... 13
   B. Leverage Ongoing “Mainstream” Initiatives on Credentialing and Licensing .......... 14
   C. Encourage and Support State-Level Innovations ................................................................. 14
   D. Promote Community College and University Engagement ............................................. 15

V. Moving Forward: Setting an Agenda ............................................................... 16
   A. Research and Knowledge ........................................................................................................ 16
   B. Building Partnerships ............................................................................................................. 17
   C. Communications .................................................................................................................. 18
   D. Task Force on Talent ............................................................................................................. 18

Appendices ................................................................................................................... 19
   Appendix A. Summit Meeting of Leading Experts Agenda ................................................. 19
   Appendix B. List of Participants ............................................................................................... 21
   Appendix C. Additional Resources ......................................................................................... 23

Works Cited ................................................................................................................. 25

About the Authors ....................................................................................................... 29
Executive Summary

Economists project a shortage of 5 million workers with postsecondary education and training by the end of this decade. These skill shortages will be felt most in the occupations for which offshoring and automation are not immediate solutions, such as in the health-care sector. In this context, the rising education level of recent U.S. immigrants may represent a positive development for the U.S. economy. Unfortunately, as the U.S. evidence shows, this “brain gain” can easily turn into “brain waste” when the country fails to maximize the use of its people’s talent.

Migration Policy Institute (MPI) research finds that nearly 2 million, or one-quarter, of immigrant college graduates are either unemployed or work in jobs that require no more than a high school degree. This brain waste comes with a price tag of $10 billion in forgone federal, state, and local taxes each year. But there are also harder-to-quantify costs such as the impact of talent shortage on labor productivity and business competitiveness—a perennial challenge reported by U.S. employers.

This document seeks to capture the deliberations of a summit meeting convened by MPI on June 14, 2017, that drew together more than 30 leading experts, practitioners, and government and foundation officials focused on the topics of immigration and U.S. employment trends. The participants shared their collective U.S. and international knowledge and discussed how to maximize the recognition and use of the human capital of highly skilled immigrants in the United States. The participants were also called upon to think creatively about the future path of those seeking to address the issue of brain waste.

Several themes emerged from the summit discussions, outlined as follows.

A. Changing Demographic, Economic, and Political Context

1. The human capital of recent immigrants to the United States is rising.
   - In 2015, 48 percent of immigrants who entered the United States in the preceding five years had at least a bachelor’s degree—a sharp increase from 27 percent in 1990. These recently arrived immigrants were more likely to be college graduates than U.S.-born adults, nationally and in most states.
   - A recent study by the National Academies of Sciences concluded that highly skilled immigrants who came in the past two decades have had a mostly positive impact on the employment and wage opportunities of U.S.-born workers. These highly skilled immigrant workers have contributed to productivity growth, entrepreneurship, and technological change. Their potential fiscal impact is substantial: a typical recent immigrant with a bachelor’s degree contributes almost $500,000 more in taxes than he or she uses in public benefits over a lifespan.
   - The rising levels of human capital among recent immigrants put them in a position to make even greater contributions to the U.S. economy, science, and society.

2. The rapid expansion of credentialing and licensing requirements over the past few decades makes the U.S. labor market more difficult to understand, access, and navigate.
   - After World War II, just 5 percent of U.S. workers were in occupations licensed at the state level. Today, the share of jobs requiring a license stands at 29 percent. Research shows that licensing...
discourages geographic mobility, reduces access to employment, and lowers wages for excluded professionals.

- In the early 1970s, 28 percent of jobs in the U.S. labor market required some form of postsecondary education or credential. By 2010, this share had doubled to 59 percent. The increasingly dense web of the credentialing system has led to confusion among employers, educators, accrediting institutions, and students. Credentials are often not developed collaboratively by stakeholders to form coherent and commonly recognizable career pathways.

3. Digital technology could be a double-edged sword when it comes to skilled immigrants’ access to labor market opportunities.

- Traditional recruitment methods increasingly are complemented by technology-driven processes that could help connect employers and prospective workers in new and more efficient ways. Human-resource personnel often advertise online, search through profiles on Internet job-search sites, and use software to automatically scan resumes for keywords. Today, more than 80 percent of job openings requiring a university-level education are advertised online.

- However, without knowledge of how these online platforms work and how to craft a resume that is “machine readable,” newcomers may be unable to compete with other workers for jobs for which they are qualified.

- Also, many immigrants, especially the newly arrived, end up in temporary, contingent employment aided by digital tools and apps. While these “gig-economy” jobs, such as driving for Uber, provide a source of income and flexibility, they may be costly to immigrant professionals in the long run because they are not stepping stones toward professional careers in the mainstream labor market.

4. The growing anti-immigrant rhetoric heard in public discourse may discourage employers, licensing boards, and education and training providers from supporting initiatives focused on skilled immigrants.

- Under political pressure, these important stakeholders may choose not to promote changes and support services that address skilled immigrants’ unique challenges.

5. Brain waste is a reality for 2 million college-educated immigrants in the United States. These underutilized prospective workers face a number of unique challenges.

- MPI research finds that skilled immigrants with very low English proficiency are five times more likely to be underemployed than their fully proficient counterparts. In addition to English proficiency, immigrants may need U.S.-specific cultural and communication skills. The way healthcare providers interact with patients in the “patient-centered” system of the United States, for example, differs from “doctor-centered” systems seen in Asia or Eastern Europe.

- The interruption in work that many immigrants experience leaves their skills to degrade in the fast-moving U.S. economy. Interrupted work is a common reality for women taking time off to care for young children, refugees who have lived in refugee camps, and refugees and other immigrants forced to take survival jobs upon arrival.

- Immigrants often struggle to overcome their English language, content knowledge, and soft skill deficits. There is a lack of “bridging” classes because they are expensive to develop and are difficult to customize and scale.
Like regulators, employers often discount foreign credentials and training. Small- and mid-sized companies may not have human resource staff familiar with multiple immigrant statuses and visas, and may shy away from hiring noncitizens altogether. In larger firms, top management may support the idea of diversifying the workforce, while human-resource staff may be less attuned to this goal. Some employers may even discriminate against foreign-sounding names and accents.

In an online survey of approximately 4,000 immigrant professionals across the United States, Bergson-Shilcock and Witte found that 20 percent had faced discrimination based on their “gender, race, ethnicity, and other factors.”

6. A major challenge to policy reforms that might address the underutilization of professional immigrants is the complexity of the underlying factors.

- Multiple stakeholders shape immigrants’ access to and success in the labor market. Some have protectionist interests, others lack information, still others struggle to provide services given limited funding.
- Immigrant professionals lack a unified identity—unlike, for example, DREAMers—and are not a focus of immigrant- or workers-rights advocates.
- While the integration of professional immigrants in the United States has received little attention to date, Canada, Australia, and the European Union have developed—and evaluated—a range of public and nonprofit programs to address brain waste over the past 15–20 years. The lessons learned in this process might be useful in the U.S. context.

B. Opportunities for Reform

Immigrants’ skill development and use are subjects of long-standing interest to researchers at MPI and other organizations represented at the summit. Building on this knowledge base, meeting participants focused on the following four leverage points.

1. Incorporate lessons from strategies that successfully promoted reform.

- International and U.S. experiences highlight the critical importance of political will, the engagement of multiple actors, and public commitment in addressing complex obstacles.
- Public commitments to deadlines and deliverables, to developing benchmarks of success, and to engaging local-level policymakers in partnerships have been prerequisites to reforms in Europe and Canada.
- Proponents of change need to emphasize the community and economic self-interest in promoting policies that reduce brain waste, and highlight the relatively low marginal costs of policies and practices that qualify highly skilled potential workers. An important element of their communications strategy should be the fact that 90 percent of highly skilled professional immigrants in the United States are legal permanent residents, naturalized citizens, or legal temporary workers.

2. Leverage ongoing “mainstream” initiatives to streamline credentialing and licensing.

- The credentialing and licensing barriers discussed earlier affect veterans, military families, and those who have been in the criminal justice system—as well as immigrant professionals.

2 The term refers to unauthorized youth and young adults who could be eligible for legalization under the Development, Relief, and Education for Alien Minors Act (DREAM Act).
Several strategies to reduce occupational licensing barriers have been proposed, including making the application process transparent; encouraging reciprocity agreements across states (such as the Nursing Compact); and making professional associations prove that the benefits of new licensing regulations outweigh their costs.

Reforms of the credentialing system that emphasize demonstrable competencies, employ a common set of metrics to evaluate students' learning, promote career building and job transitions, and encourage lifelong learning would likely reduce the entry barriers faced by highly skilled immigrants.

3. **Encourage and support state-level innovations.**

   - **Minnesota** turned to foreign-trained physicians to alleviate labor shortages in rural and underserved areas and to increase linguistic and cultural diversity among the state's primary care providers. To this end, the state legislature created a Task Force on Foreign Trained Physicians in 2014 to recommend strategies for integrating immigrant physicians into the state's health-care system.

   - Responding to pressing skill shortages, **Michigan** launched several initiatives aimed to promote skilled immigrants' integration. To address informational barriers, Michigan's State Office of New Americans partnered with the nonprofit Upwardly Global and the Department of Licensing and Regulatory Affairs (LARA) to develop online licensing guides for 44 professions, including those of accountants, physician's assistants, teachers, and veterinarians. And to connect employers with skilled immigrant job seekers, the state created the Michigan International Talent Solutions program in 2015.

   - **Maryland's** Department of Labor, Licensing, and Regulation partnered with the Baltimore Alliance for Careers in Healthcare (BACH) to ask major hospitals in the Baltimore metropolitan area about their skills shortages. The hospitals are now working with the department and BACH to pilot apprenticeship programs based on competency, not time. The pilot aims to provide career pathways for internationally trained immigrants who can apply existing knowledge and skills to in-demand careers.

4. **Deepen the involvement of business leaders and other key stakeholders in efforts to address the problem of brain waste.**

   - To engage employers, the work here could build on the Conference Board's studies of current and future skills shortages that may be met by highly skilled, underemployed immigrants, and not just future flows of immigrants on temporary visas. Increased focus could be put on small and medium enterprises (SMEs) and immigrant-owned businesses that have proven to be comparatively open to hiring highly skilled immigrants.

   - One way to promote the labor force integration of highly skilled immigrants is to encourage foreign universities to get their degree programs accredited by U.S. professional boards. Mexico's UNAM School of Veterinarians worked with the Council of Education of the American Medical Veterinary Association to work out an agreement that permits UNAM graduates to sit for U.S. board exams.
C. Future Research Directions

Going forward, a number of research questions will need to be answered to understand the shifts and factors affecting brain waste. These questions may include:

- Where will shortages occur that can be met by high- and middle-skilled workers, including immigrants? (For example, early childhood education and care, and advanced manufacturing.)
- How might the changing political context flowing from the Trump administration’s shifts in immigration and refugee policies affect the job prospects of college-educated immigrants?
- What is the overlap between the underemployment of highly skilled immigrant professionals and the overall density of licensing within a state? To what extent can the two be disentangled?
- What are the implications of digital, technology-driven changes in the job search, recruitment, and application processes for high-skilled immigrants?
- What practices and initiatives work? And how can they be scaled up?

I. Introduction

Two million college-educated immigrants and refugees in the United States are either underemployed or in jobs that do not require a college degree. This represents a substantial waste of human capital. As a policy issue, the skill underutilization (also known as brain waste) of immigrants in the United States has been overshadowed by the politically volatile issues of illegal immigration and refugee flows. However, as research shows, neglecting immigrant professionals is bad for the economy. The Migration Policy Institute (MPI) finds that when college-educated immigrants work in low-skilled jobs, the resulting brain waste costs them and the U.S. economy almost $40 billion per year in forgone earnings and $10 billion in forgone federal, state, and local taxes.

In mid-June 2017, MPI convened a meeting of leading U.S. and international experts, practitioners, and government and foundation officials to explore how to better leverage the qualifications of highly skilled immigrants. The Summit Meeting on “Tapping the Talents of Highly Skilled Immigrants in the United States” had four goals:

1. Outline the changing political, demographic, and economic context to better understand how highly skilled immigrants’ underemployment is affected by shifts in federal and state policies as well as demographic and economic conditions.

2. Review the current state of knowledge on brain waste and identify remaining gaps.

3. Explore new opportunities made possible, for example, by new technology, available funding, and related credentialing and licensing initiatives.

4. Consider strategic next steps to improve the recognition and use of highly skilled immigrants’ qualifications, including the possible convening of a national task force.

---


5 Batalova, Fix, and Bachmeier, Untapped Talent.
The summit came at an inflection point in global and U.S. efforts to recognize immigrant qualifications. Other immigrant-receiving countries such as Canada and Australia have invested significant funding to tackle the barriers immigrant professionals face, including difficulties getting foreign credentials recognized, a lack of English (and French) language skills, and employer bias against hiring foreign-trained professionals.

In the United States, the past decade has seen an increase in the number and sophistication of state, local, and civil-society institutions addressing the underutilization of immigrants. Efforts to integrate immigrant professionals into the U.S. labor market may be even more important going forward, given the fact that half of recent U.S. immigrants arrived with a college degree. However, the changed and charged political context flowing from the Trump administration’s shifts in immigration and refugee policies may make it harder for college-educated immigrants to gain a foothold in the U.S. labor market.

This report summarizes and builds on selected themes that emerged from discussions at the summit.

II. Changing Demographic, Economic, and Political Context

The meeting started with a discussion of so-called megaforces—shifts in occupational licensing, the educational attainment of new immigrants, the availability of skills, automation, and technology—that are likely to transform the supply of and demand for highly skilled workers. The participants also considered how the increasingly anti-immigrant rhetoric heard on the national stage might affect skilled professionals’ immigration and integration prospects.

A. Immigration in the Context of Projected Labor and Skills Shortages

Changing demographics, technological developments, and increased global competition are powerful forces reshaping the U.S. labor market. The demographic trends of low fertility and the aging of the U.S. population are contributing to slow labor force growth. At the same time, the increasing mechanization of manual tasks and outsourcing of manufacturing production and some service jobs will mean that many employers will need fewer workers in the future. Projections by the Committee for Economic Development (CED) and others identify several professions that will be at risk of severe labor shortages. These shortages will result from mismatches in the availability of skills needed for jobs that cannot be easily outsourced or made automatic, and mismatches in the geographic location between new jobs and qualified job seekers.

The CED analysis identified three groups of occupations—health care, skilled trades, and several science, technology, engineering, and math (STEM) occupations—that are likely to have the most acute labor shortages. Several factors may make it difficult to meet the rising demand in these occupations. One is changing demographics, such as the aging of the U.S. population and retirement of those who provide

---


9 Ibid.
services or train future workers. Other factors reflect the nature of the jobs involved. Most health-care services require "in-person" care delivered in a particular location, which limits the potential for automation, telework, or outsourcing. Jobs performed by skilled trade professionals such as crane operators, machinists, and electricians cannot be sent abroad. A common feature of many health-care and skilled-trade occupations is the lengthy, specialized training needed as well as a license or credential to practice. The long period of specialized training also makes it difficult to quickly switch into these occupations in response to new openings.

Economists agree that if qualified workers are unwilling to move to the places where jobs are, this will represent a serious obstacle to economic growth. To address this gap between labor supply and demand, policymakers in the United States and other countries have considered several options: raising the retirement age; encouraging the return of people who have left the labor market (e.g., mothers, veterans, discouraged workers, former prison inmates); or upskilling the current workforce to increase its productivity. As will be discussed here, they have also considered reforming the nation’s increasingly complex credentialing and occupational licensing systems.

At a time when labor and skill shortages persist in specific fields, the United States’ increasingly educated immigrant population represents an important potential source of skilled labor. Between 2000 and 2015 the number of immigrant college graduates rose 90 percent. Nearly half of the recently arrived immigrants (i.e., those who entered in the past five years) have at least a bachelor’s degree—a sharp rise from 1990, when the share was 27 percent. These recently arrived immigrants are more likely to be college graduates than U.S.-born adults nationally and in most states.

The positive potential fiscal impact of these recent arrivals is substantial: a typical recent immigrant with a bachelor’s degree contributes almost $500,000 more in taxes than he or she uses in public benefits over a lifetime, according to the National Academies of Sciences.

### B. Impact of Occupational Licensing and Credentialing Requirements on Immigrants

One reason for the disconnect between employers’ skill needs and immigrant employment is that many occupations experiencing shortages are governed by a dense web of licensing requirements. After World War II, just 5 percent of U.S. workers were in occupations licensed at the state level. Today, the share of jobs requiring a license at a state, federal, or local level stands at 29 percent. Licensing requirements are especially high in health care, where 75 to 80 percent of all nonphysicians are licensed. They also play a role in other fields such as advanced manufacturing, where greater automation has led to higher educational and credentialing requirements.

The main goals of occupational regulations are to protect health and public safety and to safeguard quality. Licensing and less restrictive forms of occupational regulations such as state certification and

---


11 National Academies of Sciences, *The Economic and Fiscal Consequences of Immigration*.


14 Batalova and Fix, "New Brain Gain."


registration vary significantly across states. More than 1,100 professions in health care, law, education, transportation, personal care, and other sectors are regulated across the nation, but fewer than 60 such regulations are common to every state.  

Research shows that licensing discourages mobility across states, reduces access to employment, and decreases wages for excluded professionals. Occupational regulations often do not raise service quality, and they shift the cost burden of compliance onto consumers. One study estimates that the license-related economic burden amounts to $100 billion per year. That said, licensing has also been found to reduce the racial and gender gap in wages for licensed workers.  

These obstacles to entering professions affect the U.S. born and immigrants alike. When they move to a particular state, professionals licensed in another state or country often must repeat part or all of their education, retake entry examinations, and pay licensing fees. For those unable to invest money and time in retraining to obtain necessary licenses, the obstacles may prove extremely difficult to surmount.  

In addition to the growing number of professions requiring licenses, the level of education needed to obtain better-paying jobs has also been increasing. In the early 1970s, 28 percent of jobs in the U.S. labor market required some form of postsecondary education or credential. By 2010, this share had more than doubled to 59 percent, and was projected to rise to 65 percent within the decade. The growth in demand for educational credentials has led to an increase in both the value and number of credentials, and also to confusion among employers, educators, accrediting institutions, and students, as credentials are often not aligned with career pathways.  

The increasingly complex web of credentials may do little to generate trust among employers, who revert to traditional methods of recruitment, including personal referrals. Immigrant professionals who obtain their education and work experience abroad face additional barriers. Their foreign education and training are less valued by U.S. employers and occupational regulators, and they often lack professional and social networks. MPI research shows that holding a foreign college degree (instead of one from the United States) increases the risk of low-skilled employment among immigrant college graduates by 44 percent for men and 62 percent for women even when other factors are held constant.
C. **Digital Technology’s Impact on Immigrant Professionals**

Traditional recruitment methods are increasingly complemented by technology-driven processes. Online job search platforms such as LinkedIn and Monster.com were designed to improve access to jobs and qualified workers. By leveraging the power of user networks and sophisticated search and filtering capabilities, prospective workers can find a better match for their skills. On the employer side, human-resources departments often advertise online, search through profiles on Internet job-search sites, and use software to automatically scan resumes for keywords. Today, more than 80 percent of job openings requiring a university-level education are advertised online. The challenge here is that without knowledge of how these online platforms work and how to craft a resume that is “machine readable,” newcomers may be unable to compete with other workers for jobs for which they are qualified.

Digital tools and apps, growing in number and sophistication, connect workers not only to traditional employers but also to contingent, freelance employment. Although data are sparse, some evidence suggests that many immigrants, especially the newly arrived, end up in temporary employment. While these “gig-economy” jobs, such as driving for Uber or designing business logos via 99designs.com, provide a source of income and flexibility, they may be costly to immigrant professionals in the long run because they are not stepping stones toward professional careers in the mainstream labor market.

D. **The Potential Impacts of Anti-Immigrant Rhetoric on Skilled Immigration and Immigrants’ Integration Prospects**

A recent study by the National Academies of Sciences that examined the economic and fiscal impacts of U.S. immigration concluded that highly skilled immigrants who came in the past two decades have had a positive impact on the employment and wage opportunities of U.S.-born workers. These highly skilled immigrant workers contributed to productivity growth, entrepreneurship, and technological change. The rising levels of human capital among recent immigrants put them in a position to make even greater contributions to the U.S. economy, science, and society.

Anti-immigrant rhetoric, however, may not only discourage the future immigration of foreign professionals but prompt those already in the country to leave. Worrisome early patterns can be seen in the relocation of engineers working on artificial intelligence from the United States to Canada, lower numbers of international students accepting offers to study in U.S. graduate schools, and the lower enrollment rates of students from the Middle East. At a global level, powerful players such as Canada, Australia, the United Kingdom, and Germany already compete with the United States for foreign skilled professionals.

---


28 Anthony P. Carnevale, Tamara Jayasundera, and Dmitri Repnikov, *The Online College Labor Market: Where the Jobs Are* (Washington, DC: Georgetown University, Center on Education and the Workforce, 2014), [https://cew.georgetown.edu/cew-reports/the-online-college-labor-market/](https://cew.georgetown.edu/cew-reports/the-online-college-labor-market/).


workers and students.\textsuperscript{33} It is likely that they will step up their recruitment efforts to attract U.S.-based or U.S.-bound talent, native and immigrant alike.\textsuperscript{34}

Although highly skilled immigrants are generally not the primary target of the Trump administration’s enforcement policies and immigration priorities (which, for example, include construction of a U.S.-Mexico border wall), the “buy American and hire American” emphasis of an April 18 executive order\textsuperscript{35} signed by President Trump may have a chilling impact on the field of immigrant integration. Employers, licensing agencies, education and training providers—key actors in addressing brain waste—may feel additional political pressure to deemphasize immigrant workers as a target population.

### III. Brain Waste in the United States: What Do We Know?

The summit participants turned next to what is known about the scope and costs of immigrants’ skill underutilization, drawing on U.S.-based research by MPI and World Education Services, among others. They also explored pressing technical, institutional, and other challenges affecting the labor market integration of highly skilled immigrants.

#### A. Skill Underutilization: Scale and Cost

MPI research finds that nearly 2 million highly skilled immigrants in the United States—or one out of every four—are either relegated to low-skilled jobs or unable to find work. This brain waste comes at a significant cost. College-educated immigrants employed in low-skilled work forgo more than $39 billion in wages annually. As a result, federal, state, and local governments miss out on more than $10 billion in unrealized tax receipts. These lost earnings and tax revenues affect the U.S. economy at every level by lowering productivity and consumer demand, and are accompanied by critical labor and skills shortages.

#### B. Factors Associated with Brain Waste

Brain waste affects some groups of immigrants more than others. Those with very low English proficiency are five times more likely to be underemployed than their fully proficient counterparts, even holding constant other critical human capital characteristics.

Brain waste is particularly acute for immigrants who were educated outside the United States. Country of origin and race/ethnicity are also predictors: 47 percent of Mexican immigrants and 35 percent of Africans and South Americans are either unemployed or employed in low-skilled jobs. Underemployment rates are especially high and persistent among Black immigrants, a finding consistent with a 2015 National Academies of Science study of immigrant integration.

---


Legal status and citizenship also play a role. MPI research estimates that about 1.1 million immigrant college graduates are unauthorized. These graduates, as well as refugees, are more likely to be underemployed. In contrast, those on temporary work visas are the least likely to be underemployed. Naturalized citizens have a much lower risk of brain waste than those with permanent residence status (aka green-card holders), suggesting that there is a “citizenship premium” for highly skilled immigrants in the U.S. labor market. Notably, 90 percent of all underemployed immigrants are legally present in the United States, hence brain waste is not an issue only for unauthorized immigrants.

Gender is significant too, but it is mitigated by place of education. Foreign-educated immigrant women are more likely to be underemployed than foreign-educated immigrant men.

MPI also found that field of study makes a big difference: engineering and STEM degrees are rewarded, but education and business degrees are generally not.

C. Unique Challenges Facing Immigrant Professionals

The discussion then shifted from the characteristics of underemployed highly skilled immigrants to the institutional barriers they face.

1. Meeting Licensing Requirements

Immigrants face several unique barriers when it comes to occupational regulations. They must meet English proficiency standards. Their foreign education or work experience may not count toward practical experience requirements. In Illinois, for example, foreign-educated engineers must prove that they worked under a U.S. engineer for four years to be eligible to take the licensing exam. Physicians and nurses who have been practicing in their home countries and have been out of school for a number of years must retake exams required of recent graduates. Midcareer doctors may be ineligible for medical residencies, which prioritize recent graduates. Finally, because information on the steps and costs of obtaining a license are not clear, navigating licensing procedures becomes a significant barrier to professional employment.

2. Bridging Educational and Language Skill Gaps

Some immigrant professionals may lack course credits that are essential to obtaining credentials or applying for licenses. For others, lack of English proficiency and U.S.-specific cultural and communication skills represents a barrier to finding skilled employment. The way health-care providers interact with patients in the patient-centered system of the United States, for example, differs from the doctor-centered systems seen in Asia or Eastern Europe. The interruption in work that many immigrants experience leaves their skills to degrade in the fast-moving U.S. economy. Interrupted work is a common reality for women taking time off to care for young children, refugees who have lived in refugee camps, and refugees and other immigrants forced to take survival jobs upon arrival.

For these and other reasons, many immigrant college graduates have to overcome deficits in English language, content knowledge, and soft and other skills before they can be considered for middle- and high-skilled jobs. The challenge here is that supplementary (stand-alone) courses are often hard to find: so-called bridging courses can be expensive to develop and are difficult to customize and scale. English classes supported by federal or state funding are generally not advanced enough to equip immigrants with the professional or academic English skills needed to pass license and other tests.

Although the additional educational and language requirements that immigrant professionals must satisfy were developed to ensure that internationally trained professionals meet U.S. standards, the reality is that in combination they can present an insurmountable barrier to many immigrants who have to balance family and other obligations with their professional aspirations.

3. Employer Bias

Employers are often hesitant to hire immigrant professionals. There are several reasons for this reluctance. Small- and mid-sized companies may not have human-resources staff familiar with the confusing array of immigrant statuses and visas, and may shy away from hiring noncitizens altogether. In larger firms, top management may support the idea of diversifying the workforce, while human-resources staff may be less attuned to this goal.

Like regulators, employers often discount foreign credentials and training. Employers value local work experience, leading to a Catch-22: to get a job, one needs work experience and professional networks—but to obtain these, one needs to get hired. Employers may not trust the results of foreign-credential evaluations prepared by third-party credential evaluation agencies. Qualified immigrant candidates may be effectively excluded by employers’ reliance on LinkedIn and other online platforms not used by these candidates.

Some employers discriminate against foreign-sounding names and accents. MPI research finds that Hispanic and Black immigrant college graduates face additional challenges to securing employment compared with their White counterparts, even when other characteristics are taken into account. Bergson-Shilcock and Witte found that 20 percent of immigrant professionals in a survey of several thousand faced discrimination based on their “gender, race, ethnicity, and other factors.”

A Canadian study found that employers were less likely to interview candidates with non-European-sounding names even when their credentials were identical.

IV. Opportunities for Reform

The wasting of professional talent is a common by-product of international migration. At the same time, a certain level of underemployment is to be expected in any labor market: Even among U.S.-born college graduates not every worker is able to secure employment that matches his or her qualifications. MPI finds that 18 percent of U.S.-born highly skilled workers are in jobs below their skill levels or are unemployed (compared with 25 percent among their immigrant counterparts). In this context, it would be an unrealistic goal for immigrant underemployment to be reduced to zero. However, if the level of brain waste among immigrants is brought down to the “natural” or “expected” level of the U.S. born, an additional 500,000 immigrant professionals would be available to fill critical skill gaps in middle- and high-skilled occupations. Given the expected shortfall of 5 million U.S. workers with postsecondary education and training by 2020, adding an extra half million highly skilled immigrant workers makes good policy sense.

A major challenge to policy reform is the complexity of the brain waste issue. Multiple stakeholders shape immigrants’ access to and success in the labor market. Some have protectionist interests, others lack information, still others struggle to provide services given limited funding. Immigrant professionals lack a

37 Bergson-Shilcock and Witte, Steps to Success.
39 Carnevale, Smith, and Strohl, Recovery.
unified identity—unlike, for example, DREAMers—and are not a focus of immigrant- or worker-rights advocates. While professional immigrants’ integration in the United States has received little notice, Canada, Australia, and the European Union have developed—and evaluated—a range of public and nonprofit programs to address brain waste over the past 15–20 years.

Immigrants’ skill development and use are subjects of long-standing interest to MPI and other summit meeting participants. MPI research has described programs that provide career navigation, that bridge skill and language gaps, improve immigrants’ job search skills, engage employers, and improve foreign credential recognition. MPI researchers have also written extensively about cooperative international policies and mutual recognition agreements. Studies put out by both MPI and World Education Services outline reforms for service providers, funders, and policymakers. Building on this knowledge base, the summit experts focused on the following four leverage points.

A. **Incorporate Lessons from Strategies that Successfully Promoted Reform**

International and U.S. experiences highlight the critical importance of political will, engagement of multiple actors, and public commitment in addressing complex obstacles.

- **The France-Quebec Accord.** A bilateral arrangement between France and the Canadian province of Quebec developed a common qualification framework for more than 70 middle- and high-skilled occupations. The engagement of senior leadership was essential to overcome the resistance of regulatory bodies and labor unions. Top policymakers made public commitments to timetables and deadlines, offered benchmarks of success, and engaged local-level policymakers in partnerships to resolve difficult issues.

- **Massachusetts Task Force on Immigrant Healthcare Professionals.** The Massachusetts Immigrant and Refugee Advocacy (MIRA) Coalition reached out to the state’s governor and mayor of Boston to promote increased labor market access for foreign-trained health-care workers. MIRA’s effort highlighted bipartisan, inclusive leadership (involving state and local leaders), and focused on a few, actionable recommendations. Further, this Massachusetts model emphasized the need to introduce the issue of brain waste from an “economic benefits” not “immigrant rights” perspective.

---


44 Bergson-Shilcock and Witte, *Steps to Success*.

45 Mendoza et al., *Reinventing Mutual Recognition Arrangements*. 
B. **Leverage Ongoing “Mainstream” Initiatives on Credentialing and Licensing**

The credentialing and licensing barriers discussed earlier affect veterans, military families, and those who have been in the criminal justice system—as well as immigrant professionals. Several strategies have been proposed, including making the application process transparent, using less restrictive forms of occupational regulation such as voluntary state certification (or “right-to-title”), encouraging reciprocity agreements across states (such as the Nursing Compact), and making professional associations prove that the benefits of new regulations outweigh their costs.47

Existing initiatives that could guide future work on brain waste include:

- **The Lumina Foundation’s Connecting Credentials.** A proliferation of overlapping credentials makes it difficult for employers to understand their meaning. The Lumina Foundation’s initiative brings together more than 100 organizations to rethink the U.S. credentialing marketplace.48 The reformed system would emphasize demonstrable competencies, employ a common set of metrics to evaluate students’ learning, promote career building and job transitions, and encourage lifelong learning.49 All these will likely reduce entry and credentialing barriers for high-skilled immigrants.

- Efforts to help reduce the impacts of licensing restrictions faced by military families, which frequently move from state to state and gain qualifications over the course of their military service, are already in motion thanks to high-profile supporters such as Michelle Obama and Jill Biden.50 These efforts may offer strategic lessons for reducing immigrant underemployment.

- In late 2016, the U.S. Department of Labor awarded a coalition of states and national associations a $7.5 million Occupational Licensing Review and Portability Grant to review and propose ways to ease the licensing burden and to improve the portability of licenses across states.51

The good news is that a series of important initiatives are underway to reform occupational licensing in some states and nationally in ways that may benefit high-skilled immigrants. At the same time, these “mainstream” efforts will need to specifically address the unique needs of foreign-trained professionals.

C. **Encourage and Support State-Level Innovations**

As in most areas of immigrant integration policy, the states have been an important source of innovation in reducing brain waste.52 The participants discussed a few examples: **Minnesota** is the first state to implement a comprehensive program to integrate immigrant medical graduates into the state’s healthcare workforce. Minnesota turned to foreign-trained physicians to alleviate labor shortages in rural and underserved areas and to increase linguistic and cultural diversity among the state’s primary care providers. To this end, the state legislature created a Task Force on Foreign Trained Physicians in 2014 to

46 From U.S. Department of the Treasury, Office of Economic Policy, CEA, and Labor Department, Occupational Licensing: “State certification, or ‘right-to-title,’ means that individuals seeking to assume a profession’s official title must obtain the permission of the government, but anyone is allowed to perform the duties of the profession, regardless of whether or not they have been certified.”

47 U.S. Department of the Treasury, Office of Economic Policy, CEA, and Labor Department, Occupational Licensing.


49 Lumina Foundation, Connecting Credentials.


52 IMPRINT offers two online resources that map out state-level legislative developments relevant to the occupational licensing of foreign-trained immigrants and refugees as well as various services and programs designed to assist the labor market integration of these workers. See IMPRINT, “Mapping Immigrant Professional Integration,” accessed November 6, 2017, www.imprintproject.org/maps/.
recommend strategies for integrating immigrant physicians into the state’s health-care system. A year later, the International Medical Graduate Assistance Program was created, and identified 99 international graduates interested in entering the health-care field. They will be eligible for state-funded residency positions if they agree to work in underserved areas for five years after their participation program. The program also will offer career guidance and support, including support in improving medical English proficiency.

- Responding to pressing skill shortages, **Michigan** launched several initiatives to promote skilled immigrants’ integration. To address informational barriers, Michigan’s State Office of New Americans partnered with the nonprofit Upwardly Global and the Department of Licensing and Regulatory Affairs (LARA) to develop online licensing guides for 44 professions, including those of accountants, physician’s assistants, teachers, and veterinarians. To connect employers with skilled immigrant job seekers, the state created the Michigan International Talent Solutions program in 2015. And to help immigrant professionals boost their English proficiency, Michigan’s governor awarded $250,000 for innovative English language programs.

- In an effort to be truly employer driven, **Maryland** sought direct input from seven major hospitals regarding their skills shortages. The hospitals are now piloting several registered apprenticeship programs based on competency instead of time. These allow participants to demonstrate core skills and receive incremental wage increases upon the skills’ mastery. This model is ideal for internationally trained skilled immigrants because it accounts for prior knowledge and allows participants to progress at an individual pace. With this approach, the Baltimore Alliance for Careers in Healthcare (BACH) helps immigrants access employment opportunities in their occupational field and move up the career ladder in the United States. Using a grant from the U.S. Department of Labor, the Maryland Department of Labor, Licensing, and Regulation funded the pilot program, led by BACH, for skilled immigrants in health-care occupations and set up competency-based apprenticeships for the occupation of environmental care supervisors. One of Maryland’s largest employers, Johns Hopkins Hospital, became a champion of this program, after which other hospitals followed. Plans are now underway for the piloting of apprenticeships for surgical technologists and licensed practical nurses.

- **Rhode Island**, a leader in addressing skill underutilization among immigrants, has plans to embed skills assessments in the State Higher Education Attainment Goals and to start a center where students can demonstrate their competencies to employers and education institutions can offer credit for prior learning based on these demonstrated skills. Both initiatives should increase the labor market access of skilled immigrants.

### D. **Promote Community College and University Engagement**

Community colleges are often the first place immigrant professionals turn to when they seek to improve their language skills, fill content gaps, or attain industry-recognized credentials through apprenticeships.

---


54 McHugh and Morawski, *Unlocking Skills*.

55 Minnesota Department of Health, *International Medical Graduate Assistance Program*.


58 McHugh and Morawski, *Unlocking Skills*.

Several community colleges are part of the Welcome Back network that focuses specifically on assisting foreign-trained medical professionals to prepare for licensing exams and to find jobs in the health-care and related fields.60

Westchester Community College, for instance, offers coursework that can bridge gaps in content knowledge and boost immigrants’ professional and technical-level English skills.

Pima Community College’s free, noncredit program Transitions to Jobs addresses three challenges that foreign-educated professionals often face: navigation of the U.S. job market, career and skill development, and gaining U.S. work experience.61 Participants develop U.S.-style resumes and gain specific language and workplace skills through mock interviews. They are also encouraged to volunteer for positions related to their skill set in order to gain U.S.-based experience and develop references.

Several innovative programs demonstrate how institutes of higher education can address licensing and other integration challenges before and after immigrants arrive in the United States. For example, foreign universities may get their degree programs accredited by U.S. professional boards. Mexico’s UNAM School of Veterinarians worked out an agreement with the Council of Education of the American Medical Veterinary Association that UNAM graduates could sit for U.S. board exams. Since 2000 Florida International University’s Nicole Wertheim College of Nursing & Health Sciences has offered a fast-track program designed for foreign-trained physicians to gain required credentials to become nurses and nurse practitioners in half the usual time.62

V. Moving Forward: Setting an Agenda

Beyond consolidating knowledge, one goal of the Tapping Talent Summit was to consider future ways to address the problem of brain waste.

A. Research and Knowledge

The meeting discussions benefited from a deepening knowledge base regarding the trends in migration, underemployment and its costs, and the reach of licensing restrictions. Going forward a number of research questions will need to be answered regarding macro changes affecting the field:

- Where will shortages occur that can be met by high- and middle-skilled workers, including immigrants? (Examples include early childhood education and care, and advanced manufacturing.)
- Will the rise in immigrants’ education levels persist in the current political climate? With what implications for brain waste?
- How will proposals for comprehensive immigration reform—that would sharply reduce overall numbers and focus on the more highly educated—affect brain waste?

60 Several community colleges are part of the Welcome Bank Initiative, including Bunker Hill Community College in Boston, MA, and Highline College in Puget Sound, WA.
61 For more on this and other programs, see the Community College Consortium for Immigrant Education (CCCIE) blog at http://cccie.org/blog/.
As noted above, there is a clear overlap in the research agendas around brain waste, and the credentialing and licensing fields. Questions include:

- What is the overlap between the underemployment of highly skilled immigrant professionals and the overall density of licensing within a state? To what extent can the two be disentangled?
- What are the implications for the policy levers that immigrant advocates and others might choose?

Several provocative issues bearing on the opportunities and challenges presented by technology were also pointedly discussed:

- Are skilled immigrants disproportionately represented in the emerging “gig economy?” What are the implications for their economic mobility?
- What are the implications of digital, technology-driven changes in the job marketplace for the job search, recruitment, and application processes of highly skilled immigrants?

Efforts to reduce brain waste are hampered by a lack of data, especially assessments of successful practices. These include:

- Maryland’s competency-based Registered Apprenticeship pilot programs, led by BACH and supported by the Maryland Department of Labor, Licensing and Regulation;
- the Council of Education of the American Medical Veterinary Association’s recognition of veterinary licenses earned at Mexico’s national university.

The opportunities or, more probably, the challenges presented by shifting federal policies and declining federal spending were also noted. Three sets of policies that might be monitored include:

- shifts in the refugee program (e.g., a sharp decrease in the number of resettled refugees), and specifically in the funding available to meet the needs of highly skilled refugees;
- the ongoing implementation of the 2014 Workforce Innovation and Opportunity Act (WIOA) and, in particular, the extent to which states and others use WIOA funding to build college-educated enrollees’ language and career skills;
- the impacts of any health-care reform bill that might reduce support for health care in underserved communities; and
- the policies and practices of sending countries that smooth or impede economic integration.

---

**One positive step is to deepen the involvement of business leaders in addressing brain waste.**

---

**B. Building Partnerships**

One positive step is to deepen the involvement of business leaders in addressing brain waste. The work here could build on the Conference Board’s studies of current and future skills shortages that may be met by highly skilled, underemployed immigrants, not just future flows of immigrants on temporary visas. Another focus could be on SMEs and immigrant-owned businesses that have proven to be comparatively open to hiring highly skilled immigrants. The goals here would include building awareness of the issue, deepening employer trust in the credentials immigrants bring, and increasing employer involvement in related policy making.
It is critical to continue to align efforts to reduce brain waste with those seeking to limit overregulation in occupational licensing. The focus here should not be on just high-skilled occupations but also those that require mid-level skills. In parallel, the organizational and research work carried out as part of efforts to rationalize the credential granting and recognition processes could expand its focus on immigrants—especially those educated abroad.

**C. Communications**

Given that underemployed highly skilled immigrants are unlikely to self-identify as a disadvantaged group, consideration should be given to how experts and stakeholders can better communicate policies that promote their economic integration to state legislators, licensing boards, and employer groups.

This advocacy would logically emphasize community and economic self-interest in promoting policies that reduce brain waste, noting, perhaps, the relative low marginal costs of policies and practices that qualify these highly skilled potential workers, and the fact that 90 percent of high-skilled professional immigrants are legal permanent residents, naturalized citizens, or legal temporary workers.

**D. Task Force on Talent**

The summit participants also discussed what it would take to create a high-level Task Force on Talent in the 21st Century, a discussion that drew on MPI’s extensive experience with similar initiatives, including its Transatlantic Council on Migration. The point of departure was the insight that underemployed immigrants are not a group with a distinct and recognized identity—unlike, for example, DREAMERS. While there is a set of effective, sophisticated civil-society institutions that have focused on brain waste over the past decade, their number and the scale of their efforts have remained modest when compared with the economic losses of brain waste. The issue of brain waste has had only a few, however stalwart, institutional champions within the federal government and among philanthropists and prominent immigrant-rights organizations.

The key to MPI’s successful task forces has been a combination of “poetry and plumbing,” i.e., a compelling vision married to the necessary resources. Successful efforts require a steady stream of work, the creation of a virtual “library” of information, a dedicated staff, skillful chairpersons, and a commitment from one or more institutions to promote the idea widely.

*While there is a set of effective, sophisticated civil-society institutions that have focused on brain waste over the past decade, their number and the scale of their efforts have remained modest when compared with the economic losses of brain waste.*
Appendices

Appendix A. Summit Meeting of Leading Experts Agenda

June 14, 2017 | Washington, DC

<table>
<thead>
<tr>
<th>9:00 am – 9:30 am</th>
<th>Welcoming Remarks and Introductions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Michael Fix and Demetrios G. Papademetriou</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9:30 am – 11:00 am</th>
<th>Session I. Implications of the Changing Political, Economic, and Demographic Context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This session will outline policy changes by the Trump administration that are relevant to overcoming brain waste among highly skilled immigrants and refugees. It will also highlight other big-picture changes (labor market, demographics, competition from other countries) that have implications for demand for and supply of highly skilled workers.</td>
</tr>
<tr>
<td></td>
<td><strong>Moderator: Michael Fix (MPI)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Ice breakers:</strong> Evelyn Ganzglass (Connecting Credentials), Morris Kleiner (University of Minnesota), Diane Lim (The Conference Board), Nicole Smith (Georgetown University).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11:15 am – 12:15 pm</th>
<th>Session II. What Do We Know About Brain Waste in the United States: Its Scale, Costs, and Abiding Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This session will synthesize the latest trends in brain waste—its scale, causes, and economic costs—drawing from U.S.-based research by MPI and World Education Services (WES), among others. The session will explore pressing technical, institutional, and other challenges affecting the labor market integration of highly skilled immigrants (e.g., rigidity of the relicensing process, lack of opportunities to acquire professional English, employer bias in hiring and promotion, limited systematic knowledge of what works). Finally, it will discuss the remaining knowledge gaps, such as limited systematic evaluation of existing programs.</td>
</tr>
<tr>
<td></td>
<td><strong>Moderator: Brenda Dann Messier</strong> (Rhode Island Office of the Postsecondary Commissioner)</td>
</tr>
<tr>
<td></td>
<td><strong>Ice breakers:</strong> Jeanne Batalova (MPI), José Ramón Fernández Peña (Welcome Back Initiative Director), Mimi Oo (New Americans Alliance for Development), Stacey Simon (IMPRINT), Teresita Wisell (Community College Consortium for Immigrant Education).</td>
</tr>
</tbody>
</table>
### 12:30 pm – 1:30 pm

**Drawing Lessons from Other Countries’ Successes and Failures:**

Lunch Conversation with Demetrios G. Papademetriou, Tim Foran, and Ambassador Mendoza

This luncheon session will highlight both successful and unsuccessful efforts to promote the economic integration of highly skilled immigrants in Europe, Canada, and Asia. It will explore ways in which international experience and practice might be applicable to the U.S. context in the short and long terms.

**Reflections from:** Demetrios G. Papademetriou (MPI), Tim Foran (Immigration, Refugees and Citizenship Canada), and Ambassador Juan Carlos Mendoza Sánchez (Institute for Mexicans Abroad)

**Moderator/Host:** Andrew Selee (MPI)

### 1:45 pm – 3:15 pm

**Session III. Opportunities for Reform**

This session will explore new opportunities and solutions for reform and innovation that can transcend some of the challenges explored in the morning sessions. It will discuss, among other things, how technology can be used to scale the existing successful models of career navigation and professional English acquisition; ways to address immigrant-specific needs by supporting broader licensing reforms; access to public and private funding opportunities; and approaches for improving employer engagement.

**Moderator:** Margie McHugh (MPI)

**Ice breakers:** Jorge Madrazo Cuellar (Alliance SeaMar-UNAM), Paul Feltman (WES), Erin Roth (Maryland Department of Labor; Licensing and Regulation).

### 3:30 pm – 4:30 pm

**Session IV. Next Steps**

With the new policy context in mind, this concluding session will aim to identify a small number of high-yield, actionable reforms aimed at improving the recognition and utilization of qualifications of highly skilled immigrants and discuss convening of a Task Force on Qualification Recognition and Skills Building.

**Moderator:** Suzette Brooks Masters

**Ice breakers:** Mariam Assefa (WES), Nikki Cicerani (Upwardly Global), Eva Millona (Massachusetts Immigrant and Refugee Advocacy Coalition, or MIRA), Demetrios G. Papademetriou (MPI)
Appendix B. List of Participants

The following participants contributed their expertise and ideas:

Mariam Assefa  
*Executive Director and CEO, World Education Services*

Jeanne Batalova  
*Senior Policy Analyst and Manager, Migration Data Hub, Migration Policy Institute*

Meghan Benton  
*Senior Policy Analyst, Migration Policy Institute*

Suzette Brooks Masters  
*Strategist and Consultant focused on immigrant integration*

Courtney Brown  
*Vice President of Strategic Impact, Lumina Foundation*

Nikki Cicerani  
*President and CEO, Upwardly Global*

Brenda Dann-Messier  
*Commissioner, Postsecondary Education, Rhode Island Office of the Postsecondary Commissioner*

Mark Espinoza  
*Senior Director, Public Affairs, Walmart Corporate Affairs*

Paul Feltman  
*Deputy Executive Director for Global Talent Policy and Programs, and Director of the Global Talent Bridge Program, World Education Services*

José Ramón Fernández-Peña  
*Chair, Executive Board, American Public Health Association; Associate Chair and Associate Professor, Department of Health Education; and Welcome Back Initiative Director, San Francisco State University*

Michael Fix  
*President, Migration Policy Institute*

Tim Foran  
*Senior Director, Horizontal Policy and Programs, Settlement and Integration Policy Branch Immigration, Refugees and Citizenship Canada*

Evelyn Ganzglass  
*Co-Director, Connecting Credentials, Lumina Credentials Initiative, Corporation for a Skilled Workforce*

Alison Howard  
*Associate Director, Immigration and Education, The Conference Board of Canada*

Morris Kleiner  
*Professor, Humphrey School and the AFL-CIO Chair in Labor Policy, University of Minnesota*

Diane Lim  
*Principal Economist, The Conference Board*

Jorge Madrazo Cuellar  
*Coordinator, the Alliance Sea Mar Community Health Centers; Director, Center for Mexican Studies, National University of Mexico*

Margie McHugh  
*Director, National Center on Immigrant Integration Policy, Migration Policy Institute*

Juan Carlos Mendoza Sánchez  
*Director, Institute of Mexicans Abroad*

Eva Millona  
*Executive Director, Massachusetts Immigrant and Refugee Advocacy*
Ann Morse  
*Program Director, Immigrant Policy Project, National Conference of State Legislatures*

Mimi Oo  
*Program Director, New Americans Alliance for Development*

Demetrios G. Papademetriou  
*President, MPI Europe, and President Emeritus, Migration Policy Institute*

Erin Roth  
*Director, Policy, Division of Workforce Development and Adult Learning, Maryland Department of Labor, Licensing and Regulation*

Brian Salant  
*Research Assistant, Migration Policy Institute*

Andrew Selee  
*Incoming President, Migration Policy Institute*

Stacey Simon  
*Director, IMPRINT*

Nicole Smith  
*Research Professor and Chief Economist, Center on Education and the Workforce, Georgetown University*

Daniel Wilkinson  
*Network Engagement Specialist at Lutheran Immigration and Refugee Service and Workforce Engagement Coordinator, Higher*

Teresita Wisell  
*Vice President of Workforce Development and Community Education, Westchester Community College; and Executive Director, Community College Consortium for Immigrant Education*

Additional contributors included Amanda Bergson-Shilcock, Director of Upskilling Policy, National Skills Coalition; Steve Tobocman, Director, Global Detroit; Kate Brick, Director, State and Local Initiatives, New American Economy; and Angela Marek, Director of Research, New American Economy.
Appendix C. Additional Resources

Brain Waste

United States


European Union, Canada, and Oceania


Asia


Credentialing


Occupational Licensing

Works Cited


About the Authors

**Jeanne Batalova** is a Senior Policy Analyst at the Migration Policy Institute (MPI) and Manager of the Migration Data Hub, a one-stop, online resource that provides instant access to the latest facts, stats, and maps covering U.S. and global data on immigration and immigrant integration. She is also a Nonresident Fellow with Migration Policy Institute Europe.

Her areas of expertise include the impacts of immigrants on society and labor markets; social and economic mobility of first- and second-generation youth and young adults; and the policies and practices regulating immigration and integration of highly skilled workers and foreign students in the United States and other countries.

Her book, *Skilled Immigrant and Native Workers in the United States*, was published in 2006.

Dr. Batalova earned her PhD in sociology, with a specialization in demography, from the University of California-Irvine; an MBA from Roosevelt University; and bachelor of the arts in economics from the Academy of Economic Studies, Chisinau, Moldova.

**Michael Fix** is a Senior Fellow at MPI, and previously served as its President. He joined MPI in 2005, as Co-Director of MPI’s National Center on Immigrant Integration Policy and later assumed positions as Senior Vice President, Director of Studies, and CEO.

Mr. Fix’s research focus is on immigrant integration and the education of immigrant children in the United States and Europe, as well as citizenship policy, immigrant children and families, the effect of welfare reform on immigrants, and the impact of immigrants on the U.S. labor force.

Prior to joining MPI, Mr. Fix was Director of Immigration Studies at the Urban Institute in Washington, DC, where his focus was on immigration and integration policy, race and the measurement of discrimination, and federalism.

He serves on the MPI Board of Trustees as well as the Board of MPI Europe, and is a Policy Fellow with IZA in Bonn, Germany. In 2013, he was nominated to be a member of the National Research Council’s Committee on the Integration of Immigrants into U.S. Society, which produced a seminal study on the integration of immigrants in the United States.

Mr. Fix received a JD from the University of Virginia and a bachelor of the arts degree from Princeton University. He did additional graduate work at the London School of Economics.
The Migration Policy Institute is a nonprofit, nonpartisan think tank dedicated to the study of the movement of people worldwide. MPI provides analysis, development, and evaluation of migration and refugee policies at the local, national, and international levels. It aims to meet the rising demand for pragmatic and thoughtful responses to the challenges and opportunities that large-scale migration, whether voluntary or forced, presents to communities and institutions in an increasingly integrated world.

www.migrationpolicy.org