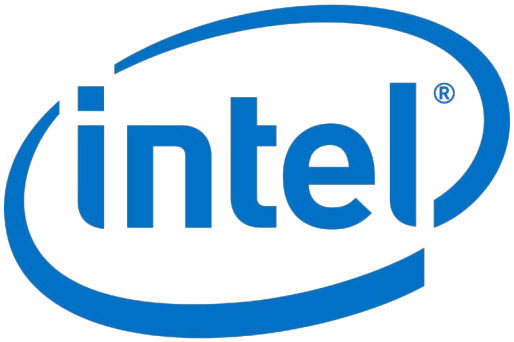
New American Economy

The Contributions of New Americans in Florida

Partners


intel


BRAD
FELD


Google


UNITED FRESH
PRODUCE ASSOCIATION


NCFC
National Council of
Farmer Cooperatives


AMERICAN FARM BUREAU FEDERATION


THE SPIRIT OF ENTERPRISE
U.S. CHAMBER OF COMMERCE


EWIC


Microsoft


AILA
AMERICAN
IMMIGRATION
LAWYERS
ASSOCIATION


SHRM
SOCIETY FOR HUMAN
RESOURCE MANAGEMENT


Council for
Global Immigration
A SHRM Affiliate


WESTERN GROWERS

The Contributions of New Americans in Florida

CONTENTS

Demographics

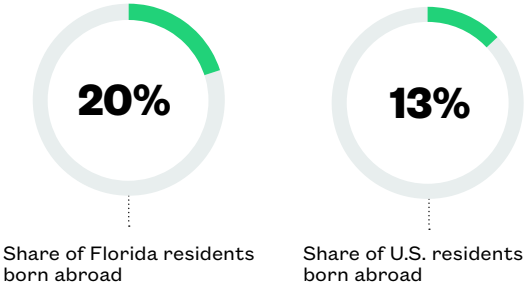
With its close proximity to Latin America and the Caribbean, Florida has for decades attracted large numbers of immigrants looking to settle in the United States and grab a piece of the American dream. From the 1960s to the 1990s, Florida was one of seven states that as a group attracted between 60 to 75 percent of all the immigrants arriving in America each year.[1] More recently, the number of foreign-born residents in the state has only continued to grow. Between 2010 and 2014, the immigrant population in Florida increased by almost 310,000 people. That meant that Florida, a state with an already large immigrant population, grew its foreign-born population by 8.4 percent during that period—or at a greater rate than the number of foreign-born residents increased in the country as a whole.

Today, Florida is home to almost 4 million immigrants. That means that one in five residents of Florida were born abroad. These immigrants play an important role in this state, where more than 19 percent of the population is already elderly—a higher proportion than any other place in America. By infusing Florida with young workers, immigrants help replenish the workforce and strengthen the state's tax base. New Americans in Florida today serve as everything from farm laborers to entrepreneurs, making them critical contributors to the state's economic success overall.

1 in 5 residents of Florida was born abroad.

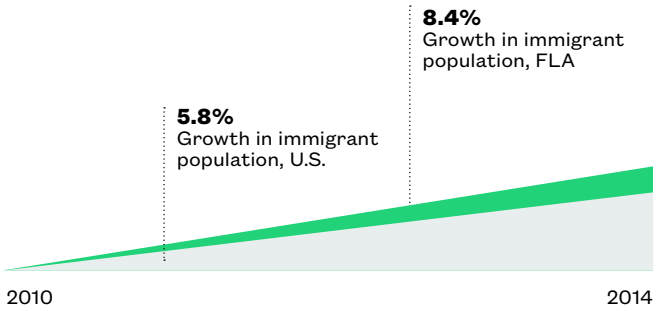
3,975,817

Florida residents were born abroad, the fourth largest immigrant population in the country.



307,977

people immigrated to Florida between 2010 and 2014.

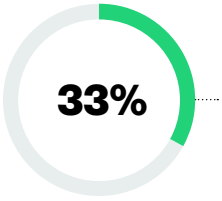


The Role of Immigrants as Entrepreneurs

338,011

immigrants in Florida are self-employed

Immigrant-owned businesses generated **$5.2B** in business income in 2014.



Share of entrepreneurs in Florida who are immigrants

506,778* people in Florida are employed at companies owned by immigrants.

* This is a conservative estimate that excludes large, publicly owned firms.

Given that the act of picking up and moving to another country is inherently brave and risky, it should be little surprise that immigrants have repeatedly been found to be more entrepreneurial than the U.S. population as a whole.[2] According to The Kauffman Foundation, a nonprofit group that studies entrepreneurship, immigrants were almost twice as likely to start a new business in 2015 than the native-born population.[3] The companies they founded ranged from small businesses on Main Street to large firms responsible for thousands of American jobs. Recent studies, for instance, have indicated that immigrants own more than half of the grocery stores in America and 48 percent of nail salons.[4] Foreign-born entrepreneurs are also behind 51 percent of our country's billion dollar startups,[5] and a substantial share of our Fortune 500 firms. The super-charged entrepreneurial activity of immigrants provides real and meaningful benefits to everyday Americans.

In 2010, roughly **1 in 10 American** workers with jobs at **private firms** were employed at **immigrant-founded** companies.

Such businesses also generated more than $775 billion in annual business revenue that year.[6] In Florida, like the country as a whole, immigrants are currently punching far above their weight class as entrepreneurs. Foreign-born workers currently make up 33.2 percent of all entrepreneurs in the state, despite accounting for 20.0 percent of Florida's population. Their firms generated $5.2 billion in business income in 2014. Florida firms with at least one immigrant owner provided jobs to roughly 507,000 Americans in 2007.[7]

Immigrant entrepreneurship was also important to Florida's recovery after the Great Recession. From 2007

to 2011, immigrants founded 36.7 percent of all new businesses in Florida.

Immigrant entrepreneurs have long been a critical part of Florida's economic success story. Patel, a local cardiologist with an interest in improving managed care, grew WellCare into the fifth-largest health maintenance organization in the country.[8] Three other Fortune 500 firms in the state, including the transportation giant CSX, Office Depot, and Harris Corporation, also had at least one founder who either immigrated to the United States or was the child of an immigrant. Together, these four firms employ more than 46,000 people and bring in almost $80 billion in annual revenue.

WellCare Health Plans, a **Fortune 500** healthcare firm based in the state, was originally founded by **Kiran Patel**, an immigrant born in Zambia.

All told, immigrants and their children have played a larger role founding Fortune 500 firms in Florida than they have nationwide. Of the 14 Fortune 500 firms based in the state, 42.9 percent have at least one founder who was an immigrant or the child of an immigrant. For the country as a whole, the equivalent figure is 41.2 percent.

Currently, there is no visa to come to America, start a company, and create jobs for U.S. workers—even if an entrepreneur already has a business plan and has raised hundreds of thousands of dollars to support his or her idea. Trying to exploit that flaw in our system, countries around the world—from Canada to Singapore, Australia to Chile—have enacted startup visas, often with the explicit purpose of luring away entrepreneurs who want to build a U.S. business but cannot get a visa to do so.[9] Here in the United States, many individuals have gone to great lengths to circumnavigate the visa hurdles. Many entrepreneurs sell a majority stake in their company and then apply for a visa as a high-skilled worker, rather than the owner of their firm. And a few enterprising venture capitalists, led by Jeff Bussgang in Boston and Brad Feld in Colorado, have launched programs that bring over foreign-born entrepreneurs to serve as "entrepreneurs in residence" at colleges and universities. Because nonprofit academic institutions are exempt from the H-1B cap, such entrepreneurs can secure their visas by working as mentors at a school, and then build their startups in their free time.

These innovative programs, which are currently available at 13 colleges and universities across the country, are already resulting in meaningful economic contributions. As of mid-2016, 23 entrepreneurs had secured visas through these programs nationally. The companies they founded had created 261 jobs and raised more than $100 million in funding.[10]

43%

of **Fortune 500** companies based in Florida were founded by immigrants or their children.

Those firms generate **$71.5B** in annual revenue, and employ **204,894** people globally.

Income and Tax Contributions

Immigrants in Florida play an important role contributing to the state as both taxpayers and consumers. In 2014, immigrant-led households in Florida earned $96.6 billion dollars—or 19.6 percent of all income earned by Floridians that year. With those earnings, the state's foreign-born households were able to contribute about one in every five dollars paid by Florida residents in state and local tax revenues, payments that support important public services such as public schools and police. Through their individual wage contributions, immigrants also paid more than $12 billion into the Social Security and Medicare programs that year.

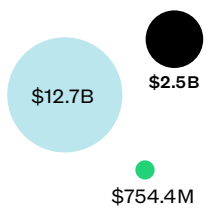
By spending the money they earn at businesses such as hair salons, grocery stores, and coffee shops, immigrants also support small business owners and job creation in the communities where they live. In Florida immigrants held $73.1 billion in spending power in 2014, defined in this brief as the net income available to a family after paying federal, state, and local taxes. Some specific ethnic groups within the immigrant community had particular power as consumers, such as Hispanic immigrants.

INCOME AND TAX CONTRIBUTIONS OF KEY GROUPS WITHIN FLORIDA'S IMMIGRANT POPULATION, 2014

Asian

$12.7B
Total Income in 2014

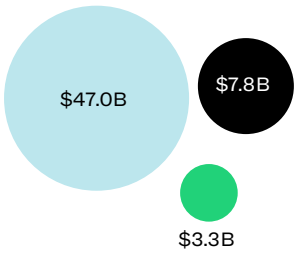
$3.2B
Total amount paid in taxes



Hispanic

$47.0B
Total Income in 2014

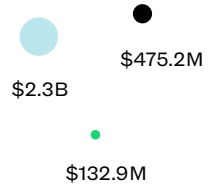
$11.1B
Total amount paid in taxes



Middle Eastern & North African

$2.3B
Total Income in 2014

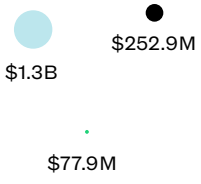
$608.1M
Total amount paid in taxes



Sub-Saharan African

$1.3B
Total Income in 2014

$330.0M
Total amount paid in taxes



Total income | Amount paid in federal taxes | Amount paid in state and local taxes

In 2014, immigrants in Florida earned **$96.6B**.

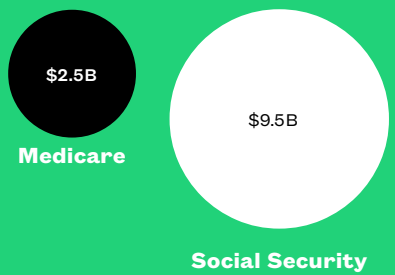
$6.4B — Went to state and local taxes...

$17.0B — Went to federal taxes...

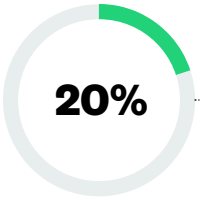
Leaving them with **$73.1B** in remaining spending power.

ENTITLEMENT CONTRIBUTIONS

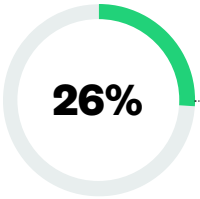
Florida's immigrants also contribute to our country's entitlement programs. In 2014, through taxes on their individual wages, immigrants contributed **$2.5B** to Medicare and **$9.5B** to Social Security.



The Role of Immigrants in the Broader Workforce



Immigrants made up 20% of Florida's population in 2014...



But they made up 26% of the employed population in the state.

Because they tended to be working-age,

Immigrants were **38.7%** more likely to work than native-born Floridians.

56.5%

of immigrants of all ages worked in 2014.

40.8%

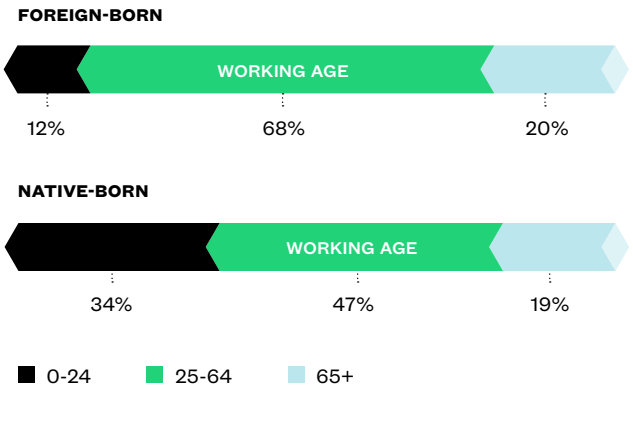
of the native-born population worked.

People who come to the United States often come here to work. Because of that, they often have skills that make them a good fit for our labor force—and a strong complement to American workers already here. In the country as a whole, immigrants are much more likely to be working-age than the U.S.-born. They also have a notably different educational profile. The vast majority of Americans—more than 79 percent of the U.S.-born population—fall into the middle of the education spectrum by holding a high school or bachelor's degree. Immigrants, by contrast, are more likely to gravitate toward either end of the skill spectrum. They are more likely to lack a high school diploma than the native-born, but also more likely to have an advanced degree. This makes them good candidates for labor-intensive positions, such as housekeeping, that many more educated U.S.-born workers are less interested in pursuing, as well as high-level positions that allow innovation-driven firms to expand and add jobs for Americans at all skill levels.

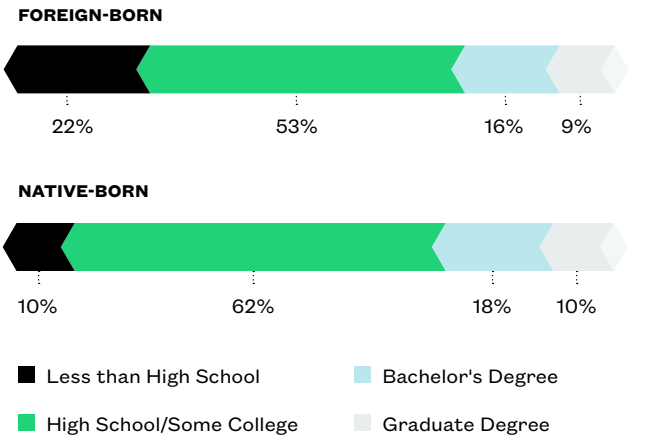
In Florida, nearly **68%** of the foreign-born population is working aged, compared to less than **48%** of the native-born population.

Immigrants in Florida in many ways resemble the trend in the country as whole. That 20.2-percentage point gap has major implications for the state's workforce. In 2014, immigrants in the state were 38.7 percent more likely to be actively employed than the state's native-born residents—a reality driven largely by the fact that a larger than average portion of the native-born population

AGE BREAKDOWN OF FLORIDA'S FOREIGN-BORN AND NATIVE-BORN POPULATIONS, 2014



EDUCATIONAL ATTAINMENT OF FLORIDA'S FOREIGN-BORN AND NATIVE-BORN POPULATION (AGES 25+), 2014



had already reached retirement age. Foreign-born individuals punched above their weight class as workers in the state as well: In 2014, they made up 25.7 percent of all employed individuals in the state, despite accounting for 20.0 percent of the Florida's population overall.

When it comes to education, however, Florida differs from the national pattern. Immigrants here are less likely to have either a bachelor's degree or graduate level training than native-born residents. Instead, they are considerably more likely to have less than a high-school education: More than one in five of the state's immigrants fall into that category, compared to 9.7 percent of natives.

The immigrants who are working in Florida contribute to a wide range of different industries in the state—many of which are growing and important parts of the local economy. Foreign-born residents make up almost three out of every five employees in the state's crop production industry. They also account for 42.4 percent of the state's workers in travel accommodation, contributing to Florida's sizable tourism industry, which welcomed a record 97.3 million visitors in 2014and provided jobs to more than 1.1 million.[11] Immigrants also frequently gravitate toward sectors where employers may struggle to find enough interested U.S.-born workers. Immigrants in Florida, for instance, make up 52.8 percent of workers in private households, an industry that includes maids and housecleaners.

Immigrants account for **42.4%** percent of Florida's workers in travel accommodation, contributing to Florida's tourism industry, which provided jobs to more than **1.1 million** Floridians.

In recent decades, immigrants have also played an important role in Florida's manufacturing industry. Studies have found that the arrival of immigrants to a community can have a powerful impact creating or preserving manufacturing jobs. This is because foreign-born workers give employers access to a large and relatively affordable pool of laborers, making it less attractive for firms to move work to cheaper locations offshore. One study by the Partnership for a New American Economy and the Americas Society/ Council of the Americas, for instance, found that every time 1,000 immigrants arrive in a given U.S. county, 46 manufacturing jobs are preserved that would otherwise not exist or have moved elsewhere.[12]

Aside from just looking at overarching industry groups, our work also examines the share of workers that are foreign-born in specific occupations and jobs. Reflecting their unique educational profile, immigrants in Florida are often overrepresented in particularly labor-intensive positions. While foreign-born workers make up 25.7 percent of the state's employed population, they account for 72.3 percent of what's known as miscellaneous personal appearance workers, a set of jobs that includes manicurists. They also make up 71.2 percent of those working as the type of laborers on farms that frequently pick crops by hand, and 39.6 percent of construction laborers.

The almost **3.7 million** immigrants who were living in Florida in 2010 created or preserved more than **168,700** manufacturing jobs.

INDUSTRIES WITH LARGEST SHARE OF FOREIGN-BORN WORKERS, 2014

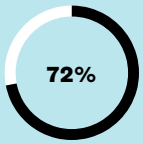
Share of workers who are immigrants

1	2	3	4	5
Crop production	**Private households**	**Traveler accommodation**	**Services to buildings and dwellings**	**Home health care services**
57%	**53%**	**43%**	**42%**	**41%**
42,623 immigrant workers	**48,501 immigrant workers**	**78,133 immigrant workers**	**70,757 immigrant workers**	**39,513 immigrant workers**
74,161 total workers	91,851 total workers	184,143 total workers	169,939 total workers	97,124 total workers

OCCUPATIONS WITH LARGEST SHARE OF FOREIGN-BORN WORKERS, 2014

1

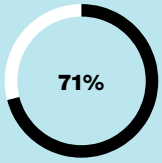
Misc. Personal Appearance Workers



31,734 immigrant workers
43,891 total workers

2

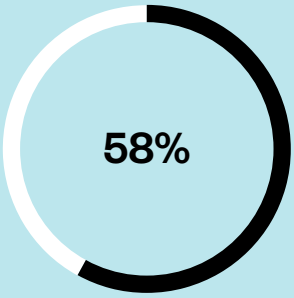
Misc. Agricultural Workers



39,462 immigrant workers
55,421 total workers

3

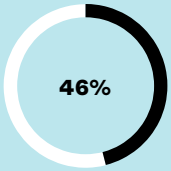
Maids and Housekeeping Cleaners



108,278 immigrant workers
185,531 total workers

4

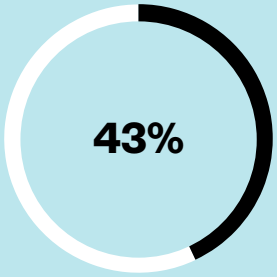
Painters, Construction and Maintenance



23,775 immigrant workers
51,584 total workers

5

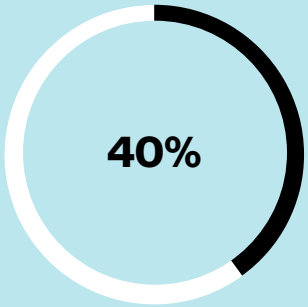
Nursing, Psychiatric, and Home Health Aides



71,968 immigrant workers
167,313 total workers

6

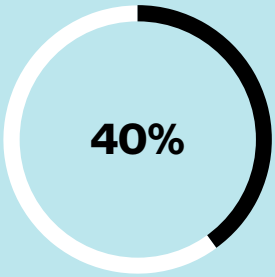
Janitors and Building Cleaners



81,071 immigrant workers
201,561 total workers

7

Construction Laborers



68,255 immigrant workers
172,478 total workers

8

Chefs and Head Cooks

15,786 immigrant workers
41,342 total workers

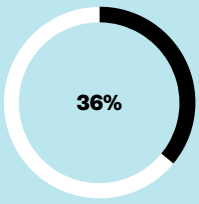
9

Other production workers, including cooling equipment operators

17,289 immigrant workers
45,600 total workers

10

Carpenters



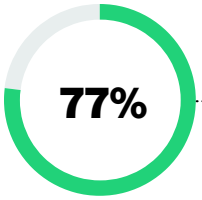
31,180 immigrant workers
85,430 total workers

■ Share of workers who are immigrants

Agriculture

39%

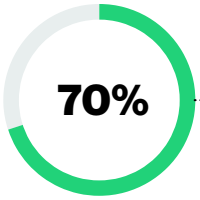
of farms in Florida produced fresh fruits and vegetables in 2014.



Share of miscellaneous agriculture workers on farms who are immigrants. (This is the occupation made up largely of laborers who hand pick crops in the field.)

$6.4B

Amount agriculture contributes to Florida's GDP annually.



Share of hired farmworkers in the state who are immigrants.

One sector of the economy of particular importance to Florida is agriculture. In 2014, the agriculture industry contributed $6.4 billion to the state's Gross Domestic Product (GDP), placing the state among the top 10 nationally in terms of the size of that contribution. It also directly employed almost 88,000 Floridians. Within that massive industry, fresh fruits and vegetables played a prominent role: In 2014 Florida exported more fresh fruits, as measured in farm receipts, than all but two other states in the country. It also produced almost $1.3 billion worth of Florida oranges, an iconic crop long associated with the state.

Florida's leading role as a grower of fresh produce makes the state's agriculture industry inherently reliant on immigrants. Fresh fruits and vegetables—unlike commodity crops such as corn, soybeans, and wheat—almost always must be harvested by hand. And the so-called "field and crop workers" that perform that work are overwhelmingly immigrant: From 2008-2012, foreign-born workers made up 72.9 percent of field and crop laborers in the country as a whole. In Florida, that reality means that even when managers, packers, and equipment managers are included, immigrants are still a huge part of the state's overall agricultural workforce. In 2014, seven out of every 10 hired farmworkers in the state were born abroad.

Between the 1998-2000 and 2010-2012 time periods, the share of produce consumed by Americans that was imported grew by **79.3%**.

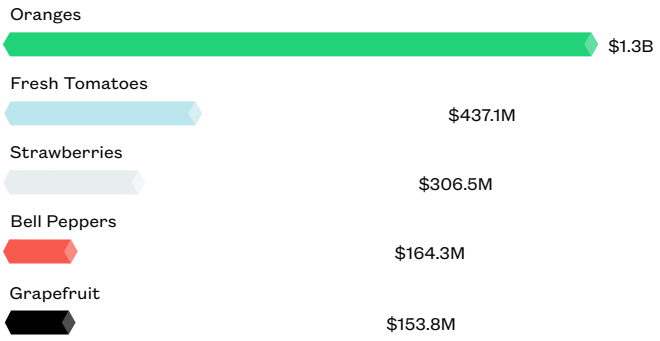
The current visa system for agriculture presents many problems for states like Florida. The H-2A visa program, which is designed to bring in temporary farm laborers, is too expensive and burdensome for many U.S. farms.[13] Growers frequently complain that delays issuing H-2A visas result in workers arriving weeks late, leading to crop loss. The visa's lack of portability also means that growers must often commit to pay workers for a longer period than they actually need them. For Florida

$3.2B

Farm receipts generated from the sale of fruits, vegetables, and nuts in 2014.

Florida's leading agricultural exports include other plant products (including sweeteners, coffee, and cocoa), fresh fruits, processed fruits

TOP FIVE FRESH PRODUCE ITEMS PRODUCED IN THE STATE, AS MEASURED BY FARM RECEIPTS

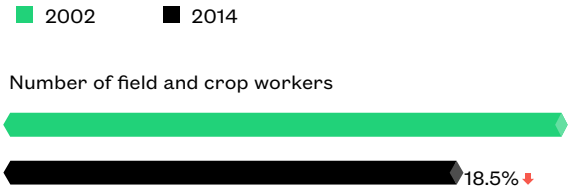


growers, the lack of a workable visa—coupled with a huge drop-off in the number of farmworkers who have immigrated in recent years—has led to a labor picture that is increasingly untenable. Between 2002 and 2014, the number of field and crop workers in Florida decreased by 18.5 percent. Wage trends indicate that caused a major labor shortage on Florida farms: Real wages for the state's field and crop workers jumped by 6.1 percent during the period.

The shortage of qualified field and crop workers has made it difficult for many farmers in Florida to keep pace with rising consumer demand for fresh fruits and vegetables. From 1998 to 2012, the amount of strawberries eaten by U.S. consumers during the winter months skyrocketed. While Florida growers tried to keep up with that rising demand, they were only able to raise their production by 84.4 percent between the 2003-2005 and 2010-2012 time periods. During that same time frame, however, the amount of strawberries imported from Mexico more than quadrupled. Such patterns have been repeated widely across the country, as shortages of field and crop workers and increased global competition has hampered the ability of produce growers to scale up the number of acres they devote to labor-intensive fresh fruits and vegetables. Labor issues explain an estimated 27.0 percent of that market share loss.[14]

This difficulty expanding, in Florida and elsewhere, has cost the United States revenues and jobs. If labor shortages had not slowed the ability of farmers to expand, the country could have been home to 24,000 additional jobs by 2012, including 17,000 in fields outside agriculture like transportation and irrigation. The U.S. economy would have had $1.3 billion in additional farm income by 2012 as well.[15]

THE SUPPLY OF FIELD AND CROP WORKERS IN FLORIDA IS DECREASING, LEADING TO LABOR SHORTAGES



8,504

Decline in the number of field and crop workers in Florida from 2002-2014

When farms lack enough field and crop workers, they often are unable to complete their harvest, leading to crop loss in the fields. Wages go up as well, as growers struggle to compete for the small pool of workers remaining.

SPOTLIGHT ON

Gary Wishnatzki

Owner, Wish Farms

Farmers who have worked in the industry for decades say that in recent years they have experienced the most severe labor shortages of their careers. That is certainly what Gary Wishnatzki, the owner of Wish Farms in Plant City, Florida, says he has seen in the last five years. To bring in the harvest on his 600-acre farm, Wishnatzki typically needs 700 to 800 workers. Strawberries, his primary crop, are incredibly labor-intensive, requiring pickers to revisit each bush every three days to pick the rapidly ripening fruit. His organic strawberries involve even more careful tending. Wish Farms, as his business is called, grows the most organic produce of any farm in the state.

Over the past decade, the shortage of workers has become a pressing issue. "Three years ago, the situation got so bad, we were barely keeping our heads above water," Wishnatzki recalls. That year, despite extensive recruiting, he had only 500 of the workers he needed. He lost about a fifth of his crop, an event he says cost him hundreds of thousands of dollars.

"**Three years ago**, the situation got so bad, we were barely keeping our heads above water," Wishnatzki recalls. That year, despite extensive recruiting, **he had only 500 of the farm workers he needed."**

That event led Wishnatzki to scale back the number of active acres on his farm. Last year, he grew just 500 acres of strawberries. While Wishnatzki was able to find enough workers to bring in that smaller crop, he says the threat of another shortage—and a drop-off in the number of farm laborers immigrating from Mexico in recent years—makes it difficult for him to be overly selective. "We get so desperate for workers, we can't really put any requirements on the people who show up," Wishnatzki says. "We tolerate absenteeism; our workers pretty much come and go as they please. As an employer, you feel like you've pretty much lost control of the labor force."

Wishnatzki says he wishes there were a better system for him and all the farmers in Florida's fertile central Gulf coast, many of whom struggle with similar issues each year. Like many fresh produce growers, Wishnatzki says he sees the H-2A visa program, which is designed to bring in temporary farm workers, as a "last resort" for

his operation: Farmers face mountains of paperwork and overwhelming costs, and laborers also often arrive weeks late, causing crops to spoil in the fields. For now, Wishnatzki has managed to get by without H-2A, largely by scooping up workers who became available when a nearby neighbor consolidated his operation. But he is building a contingency plan. "When we realized the workers weren't coming back, we had to get creative," he says. Wishnatzki and a partner have been slowly building something on the side—a machine they hope will one day be capable of conducting a full strawberry harvest. They already have six patents and have founded a firm to capitalize on their idea, Harvest CROO Robotics.

> "**I worry that Congress isn't going to act** until the farming industry is in a full-blown crisis," Wishnatzki says, "but by then, it might be too late."

For now though, Wishnatzki says he is stuck waiting for Congress to reform the H-2A visa system. It's a wait that has gotten longer—and has grown less hopeful each year. That makes him worry about the long-term financial health of agriculture, an industry his family entered in the 1920s.

"I worry that Congress isn't going to act until the farming industry is in a full-blown crisis," Wishnatzki says, "but by then, it might be too late."

Science, Technology, Engineering, and Math

Between 2014 and 2024, science, technology, engineering, and math—or "STEM"—fields are projected to play a key role in U.S. economic growth, adding almost 800,000 new jobs and growing 37.0 percent faster than the U.S. economy as a whole.[16] Immigrants are already playing a huge part ensuring that Florida remains a leading innovator in STEM fields like aviation, aerospace, and life sciences. Despite making up 20 percent of the state's population, foreign-born Floridians made up 22.3 percent of STEM workers in the state in 2014. Our outdated immigration system, however, makes it difficult for STEM employers to sponsor the high-skilled workers they need to fill critical positions. This is problematic because it can slow the ability of firms to expand and add jobs for U.S.-born workers. It also makes little sense, given the country's ongoing shortage of STEM talent—an issue that heavily impacts employers here. In 2014, 8.6 STEM jobs were advertised online in Florida for every one unemployed STEM worker in the state.

Immigrants, however, are not just a crucial piece of Florida's STEM workforce now—they are also likely to power it in the future. In 2014 students on temporary visas made up roughly one out of every 4 students earning a STEM Master's degree at Florida's universities, and 35.2 percent of students earning a PhD-level degree in STEM.

Immigrants are playing a huge part ensuring that Florida remains a leading innovator **in STEM fields like aviation, aerospace, and life sciences.**

Even after America's universities invest in their education, however, many of those students struggle to remain in the country after graduation. Creating visa pathways that would make it easier for them to stay would have a major economic benefit to Florida.

115,905

available STEM jobs were advertised online in 2014, compared to **13,454** unemployed STEM workers.

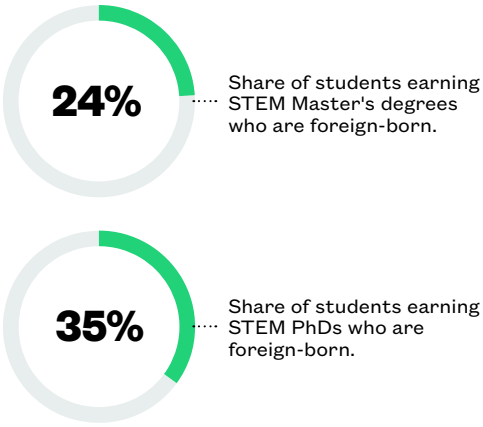
The resulting ratio of open jobs to available workers was

8.6 to 1

If half of Florida's **2,439** advanced level STEM grads on temporary visas stayed in the state after graduation…

3,195

jobs for U.S.-born workers would be created by 2021.



A study by the Partnership for a New American Economy and the American Enterprise Institute found that every time a state gains 100 foreign-born STEM workers with graduate-level STEM training from a U.S. school, 262 more jobs are created for U.S.-born workers there in the seven years that follow.[17] For Florida, that means that retaining even half of the 2,439 graduates earning advanced-level STEM degrees in 2014 could result in the creation of almost 3,200 new positions for U.S.-born workers by 2021.

SPOTLIGHT ON

Rachana Vidhi

PGD Technical Valuation Engineer, NextEra Energy Resources

Rachana Vidhi's interest in chemical engineering always exceeded the mandatory academic requirements. Born and raised in India, Vidhi completed her bachelor's degree in engineering at the Indian Institute of Technology in Kharagpur, India, in 2010. After that, like many promising foreign students, she decided to move to the United States to pursue further education. She enrolled in a Ph.D. program at the University of South Florida. In 2014, Vidhi graduated at the top of her class with a chemical engineering degree.

Vidhi's successes as a student, however, didn't stop there. In 2014, she was awarded the John and Barbara Yellot Award, which is given annually to one promising graduate student concentrating on solar energy in the United States. Her articles and studies have been published in scientific journals and presented at various conferences, and her papers have been cited multiple times. Among Vidhi's many other accomplishments, she also founded the world's first student chapter of the International Solar Energy Society while at USF.

In spite of Vidhi's many successes to date, however, the immigration laws in this country have not made it easy for her to stay here and contribute. When she began her job search after graduation, she was discouraged to learn that many positions she wanted required her to have citizenship or a green card to apply. "Many companies," she says, "had unofficial policies of not sponsoring visas for graduates." That made it difficult for her to get a job while on her Optional Practical Training (OPT) Visa, the visa students use to remain in the country immediately after graduation.

In the end, Vidhi was able to secure a position with NextEra Energy Resources—her top choice. The company extended her an offer to join their team as a Power Generation and Distribution Technical Valuation Engineer.

Today, Vidhi says she is proud to be a valuable part of her dream company, **the number one generator of solar and wind power in North America**.

In 2015, in order to stay at NextEra she applied for an H-1B visa, the country's largest visa for high-skilled individuals. Throughout the application process, she remained realistic, knowing the chances of getting an H-1B were slim despite her qualifications. In recent years, the government has received so many applications for H-1B visas only about 35 percent of them will ultimately be successful.

Vidhi says the situation was stressful. "I definitely want to stay in the United States," she says, "I am very happy here... I don't want to have toleave due to an immigration issue; after getting so much education and putting in all that hard work, it would be so disappointing." Vidhi says her company was very supportive of her throughout the process, connecting her with a top law firm to help with the time consuming process. "I should [have been] using my time for more important things," she says.

Luckily, Vidhi won the H-1B visa lottery in 2015 and her future at NextEra is secure for at least two more years. Even with all of her valuable qualifications, the process was stressful. "There are too many confusing rules that you know nothing about until you are in the middle of the situation," Vidhi says of our immigration system, "It's painful. There is no other word for it."

Healthcare

In the coming years, the American healthcare industry is projected to see incredibly rapid growth—adding more new positions from 2014 to 2024 than any other industry in our economy.[18] Already, caregivers are facing near unprecedented levels of demand. Between 2013 and 2015, the number of Americans with health insurance rose by almost 17 million,[19] opening the door for many patients to receive more regular care. The country's 76.4 million baby boomers are also aging rapidly—at a major cost to our healthcare system. Studies have found that elderly Americans spend three times more on healthcare services than those of working age each year.[20]

In Florida, a state where nearly one out of every five residents is currently elderly, finding enough healthcare workers remains a challenge—and one that will likely worsen in the future. While the state has a healthy supply of practicing physicians, shortages impact a wide range of other healthcare fields. In 2014, 4.7 healthcare jobs were listed online in Florida for every one unemployed healthcare worker in the state. Other occupations, such

FLORIDA HAS A SHORTAGE OF HEALTHCARE WORKERS

143,532

available healthcare jobs were advertised online in 2014, compared to **30,302** unemployed healthcare workers.

The resulting ratio of open jobs to available workers was

4.7 to 1

Additional number of psychiatrists needed now: **901**

Shortage of occupational therapists by 2030: **7,665**

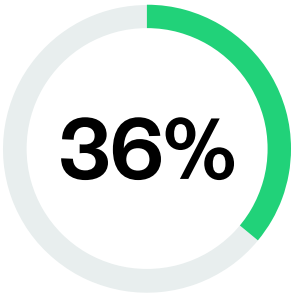
Shortage of dentists projected by 2025: **1,152**

FOREIGN-BORN AND FOREIGN-EDUCATED PROFESSIONALS HELP FILL HEALTHCARE LABOR GAPS

Foreign-Educated

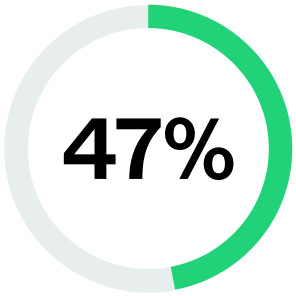
Doctors

19,884 graduates of foreign medical schools



Psychiatrists

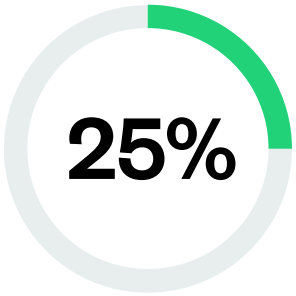
1,017 graduates of foreign medical schools



Foreign-Born

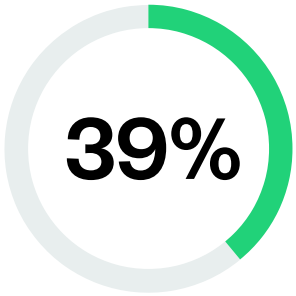
Nurses

50,410 foreign-born workers



Nursing, Psychiatric, and Home Health Aides

66,727 foreign-born workers



as psychiatrists, that are already stretched thin are projected to need hundreds of new workers by 2030, as are several health occupations that cater largely to seniors.

Immigrants are already playing a valuable role helping Florida meet some of its healthcare workforce gaps. More than one in three physicians in Florida graduated from a foreign medical school, a likely sign they were born elsewhere.

Immigrant healthcare practitioners also made up more than one in four nurses in the state in 2014, and close to two in five individuals working as nursing, psychiatric, or home health aides. Between 2012 and 2022, the U.S. Bureau of Labor Statistics projects that home health aides will be the third-fastest growing occupation in the United States.[21] In Florida, a state where immigrants already make up a huge portion the home healthcare workforce, foreign-born residents will likely be critical to meeting this increased demand for care at home.

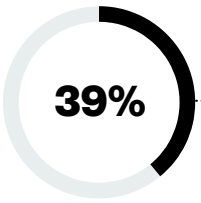
Only **three other states** have a higher share of foreign-educated doctors than Florida.

Housing

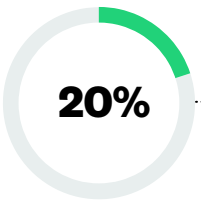
Immigrant families have long played an important role helping to build housing wealth in the United States. One study released by the Partnership for a New American Economy and Americas Society/Council of the Americas, for instance, found that in recent decades the country's more than 40 million immigrants collectively raised U.S. housing wealth by $3.7 trillion. Much of this was possible because immigrants moved into neighborhoods once in decline, helping to revitalize communities and make them more attractive to U.S.-born residents.[22]

In Florida, immigrants are actively strengthening the state's housing market. In 2014, immigrant-led households held almost $218 billion in housing wealth in Florida or more than one out of every four dollars concentrated in real estate that year. They also paid 26.6 percent of the money Floridians spent on rent, despite making up 21.7 percent of the state's households. Because Florida's immigrants are more likely to be working age, they help address another major concern of housing experts as well— that the large wave of baby boomers retiring in the coming years could result in more homes going up for sale than there are buyers to purchase them. In a state where seniors already own 38.8 percent of homes, immigrant families made up more than one in four new homebuyers from 2010 to 2014.

Immigrants are **bolstering the housing market** by buying the wave of homes coming on the market as the baby boomers retire.



Share of homeowners who are already elderly.



Share of homebuyers in the last four years who were foreign-born.

906,922

Number of immigrant homeowners in 2014

$217.8B

Amount of housing wealth held by immigrant households

20% OF TOTAL

$727.7M

Amount paid by immigrant-led households in rent

27% OF TOTAL

Visa Demand

One key measure of the demand for immigrant workers involves the number of visas requested by employers in a given state. Before an employer can formally apply for many types of visas, however, it must first obtain "certification" from the Department of Labor—essentially a go-ahead from the DOL that the employer can apply for a visa to fill a given job or role. For the H-1B visa, which is used to sponsor high-skilled workers, an employer gains certification by filing what's known as a Labor Condition Application, or LCA. In the LCA the employer must detail the position the foreign national would fill, the salary he would be paid, and the geographic location of the job. Firms must also attest that hiring an immigrant will not adversely impact similarly situated American workers. For two other large work visa categories—the H-2A for agricultural laborers and the H-2B for seasonal or temporary needs—employers file what is known as a Labor Certification application, or a "labor cert" for short. To get a labor cert approved, the employer must demonstrate that it is unable to locate an American worker that is available, willing, and able to fill the job.

H-1B

Number of positions:

29,447

Top jobs:

Computer Systems Analysts

Computer Programmers

Software Developers, Applications

GREEN CARD

Number of positions:

2,005

Top jobs:

Software Developers, Applications

Computer Systems Analysts

Financial Managers

H-2A

Number of positions:

13,544

Top crops or jobs:

Citrus

Berries

Oranges

H-2B

Number of positions:

6,512

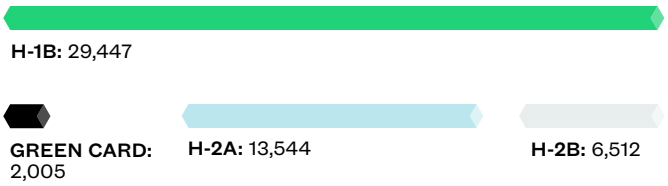
Top jobs:

Maids and Housekeeping Cleaners

Landscaping and Groundskeeping Workers

Amusement and Recreation Attendants

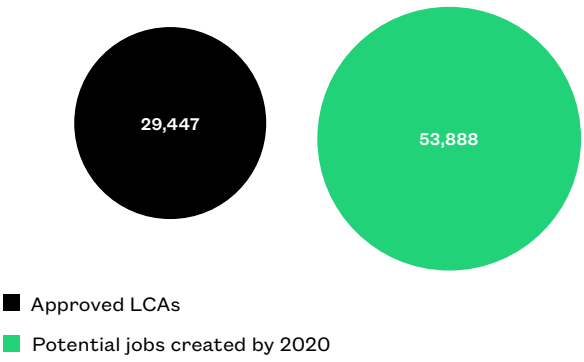
CERTIFIED POSITIONS BY VISA TYPE, 2014



* This includes only employment-based green cards

IF ALL APPROVED LCAS HAD TURNED INTO VISAS...

29,447 LCAs for H-1B workers could have created **53,888 jobs**.



Applying for certification, however, is not the same as receiving a visa. The H-1B program is currently capped at 85,000 visas a year for private sector employers. In the country as a whole, this resulted in almost half of all such applications being rejected in fiscal year 2014 alone. The H-2B program is similarly limited to just 66,000 visas per year. Even permanent immigrants get ensnared in the limitations of our outdated immigration system. Only seven percent of all green cards can go to nationals of any one country in a given year—resulting in backlogs lasting years for many Indian, Chinese, Mexican, and Filipino workers.[23]

When companies are denied the visas they need, company expansion is typically slowed—often at a real and meaningful cost to the U.S.-born population. One study by the Partnership for a New American Economy and the American Enterprise Institute estimated that when a state receives 100 H-2B visas, 464 jobs are created for U.S.-born workers in the seven years that follow.[24] The fact that H-1B visa holders actually create—not take away—jobs from Americans has also been widely supported in the literature. A 2013 paper written by professors at Harvard University looking at the 1995 to 2008 period found that 1 additional young, high-skilled immigrant worker hired by a firm created 3.1 jobs for U.S.-born workers at that same company during the period studied.[25] Other academics have tied each H-1B visa award or labor request with the creation of four[26] or five[27] American jobs in the immediate years that follow.

CITIES ARE DEMANDING VISAS ALL OVER THE STATE

H-1B

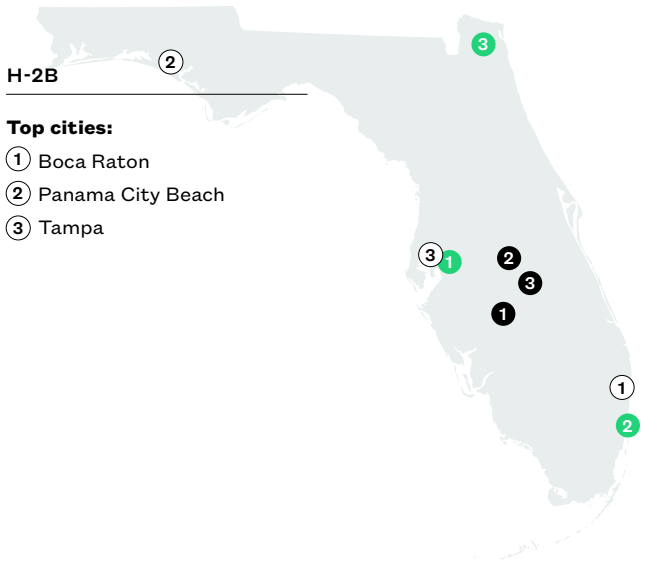
Top cities:
1. Tampa
2. Miami
3. Jacksonville

H-2A

Top cities:
1. Arcadia
2. Winter Haven
3. Avon Park

H-2B

Top cities:
1. Boca Raton
2. Panama City Beach
3. Tampa



In this brief, we rely on a more conservative estimate of the impact of the H-1B program on the American workforce. Specifically, we use the estimate that every 1 additional H-1B visa awarded to a state was associated with the creation of 1.83 more jobs for U.S.-born workers there in the following seven years.[28] On the previous page, we show the number of jobs that would have been created for U.S.-born workers in Florida by 2020 if all the fiscal year 2014 LCAs for H-1Bs category had turned into actual visas.

We also show how the large number of H-1B visas denied to workers in several Florida metropolitan areas in 2007 and 2008 cost U.S.-born tech workers in those cities in the two years that followed.

HOW THE SMALL SUPPLY OF H-1B VISAS HURTS TECH WORKERS IN FLORIDA CITIES

TAMPA

1,096 H-1B denials for tech workers in the metro area cost computer workers there...

1,901

Potential new jobs and **$12.4M** in aggregate wage growth in the two years that followed.

JACKSONVILLE

612 H-1B denials for tech workers in the metro area cost computer workers there...

1,185

Potential new jobs and **$6.4M** in aggregate wage growth in the two years that followed.

FORT LAUDERDALE

500 H-1B denials for tech workers in the metro area cost computer workers there...

614

Potential new jobs and **$5.7M** in aggregate wage growth in the two years that followed.

ORLANDO

420 H-1B denials for tech workers in the metro area cost computer workers there...

556

Potential new jobs and **$6.1M** in aggregate wage growth in the two years that followed.

WEST PALM BEACH

408 H-1B denials for tech workers in the metro area cost computer workers there...

543

Potential new jobs and **$5.8M** in aggregate wage growth in the two years that followed.

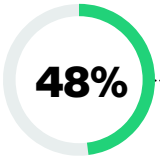
Naturalization

Florida's immigrants are not only living in the state, they are also laying down roots in the state as well. Our analysis found that immigrants in Florida are naturalizing, or becoming citizens, at considerably higher rates than they are in the country overall. In 2014, 53.5 percent immigrants in Florida were already U.S. citizens. Nationally, the equivalent figure was 47.3 percent.

Like almost all parts of the country, however, Florida is also home to a population of immigrants who are eligible to naturalize, but haven't yet done so. Embracing public policies that would help those individuals navigate the naturalization process could have an important economic impact on the state. Studies have found that immigrants who become citizens seek out higher education at greater rates than non-citizens.[29] Because citizenship allows immigrants to pursue a greater range of positions, including public and private sector jobs requiring a security clearance, it also has been found to raise a person's annual wages. One study by researchers at the University of Southern California pegged the size of that wage increase at 8 to 11 percent.[30] If the average non-citizen in Florida saw a wage boost at the low end of that range, or 8 percent, she would earn almost $2,100 more per year— money that could be reinvested in the state's economy through her spending at local businesses. Multiplied by the roughly 888,000 non-citizens in Florida currently eligible to naturalize, such policy initiatives could collectively boost wages in the state by more than $1.8 billion.

888,290

Number of non-citizens eligible to naturalize in 2014



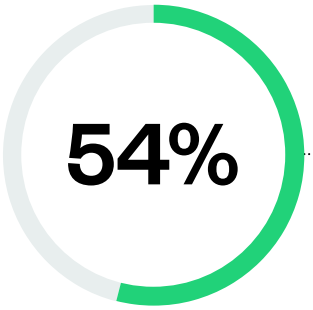
Share of non-citizen population eligible to naturalize.

The average non-citizen in Florida earns **$25,781** per year. If they naturalized, they each could earn an average of **$2,063 more** per year.

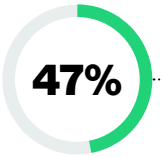
$1.8B

Aggregate additional earnings if eligible non-citizens naturalized.

NATURALIZATION RATES IN FLORIDA



Share of immigrants in Florida who are citizens.



Share of immigrants in the U.S. as a whole who are citizens.

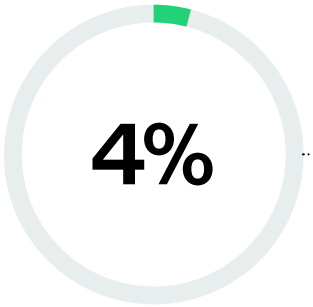
International Students

Policymakers are increasingly realizing that international students provide huge benefits to the communities where they live and study. The World Bank has found that an increase in the number of international graduate students studying at American schools leads to large boosts in the number of patents awarded to local research universities in the years that follow.[31]

In Florida, the roughly 38,000 international college students studying on temporary visas make up just 3.9 percent of all college students in the state. Still, their economic contribution is enormous. They support more than 14,000 jobs in the state, including positions in transportation, health insurance, and retail.

Through their tuition payments and day-to-day spending, international students in the broader United States contributed more than **$30.5 billion** to the U.S. economy in the 2014-2015 school year and supported more than **370,000 jobs.**[32]

International students represent a very small portion of all students in Florida, but they make a big impact...



International students make up only **4%** of all students in Florida.

$1.1B

Economic contribution of international students to the state, 2015.

14,389

Jobs supported by international students, 2015.

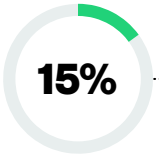
Voting Power

Immigrants in Florida do not only make a difference to the state's economy, they also play a large role at the voting booth. In 2014, Florida was home to more than 2 million foreign-born residents who were eligible to vote, including an estimated 1.4 million foreign-born residents who had formally registered. Those numbers are particularly meaningful given the narrow margins of victory that have decided elections in the state in recent years. In 2012, President Barack Obama won Florida by roughly 74,000 votes.

The power of immigrant voters is likely to continue to be a large factor in upcoming elections. Based on voting participation patterns in recent years, we would expect roughly 1.1 million foreign-born voters to cast formal ballots in the presidential election this year. An additional 467,000 more immigrants will either naturalize or turn 18 by 2020, expanding the pool of eligible new American voters in Florida to more than 2.3 million people.

2,057,261

Number of immigrants eligible to vote.



Share of eligible voters who are immigrants.

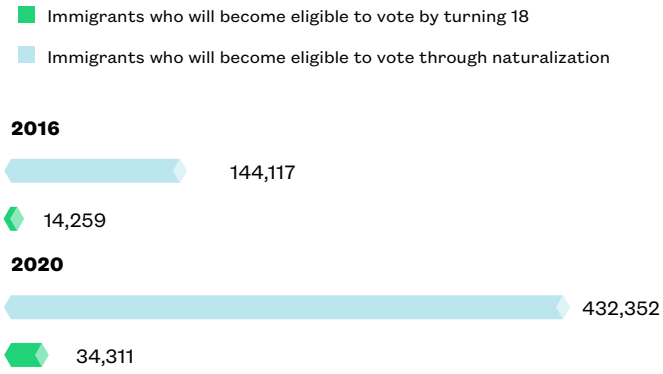
1,393,352

Number of immigrants registered to vote.

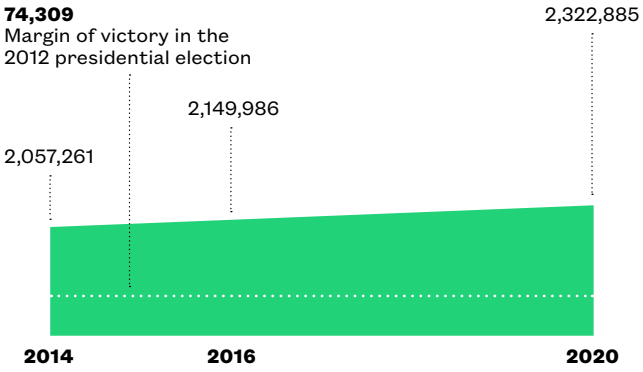
74,309

Margin of victory in the 2012 presidential election.

THE GROWING POWER OF THE IMMIGRANT VOTE



PROJECTED POOL OF ELIGIBLE IMMIGRANT VOTERS, 2014-2020



Undocumented Population

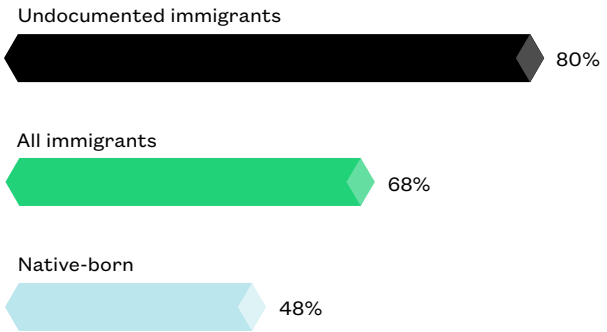
The United States is currently home to an estimated 11.4 million undocumented immigrants, the vast majority of whom have lived in the United States for more than five years. The presence of so many undocumented immigrants in our country for such a long time presents many legal and political challenges that are beyond the scope of this report. But while politicians continue to debate what to do about illegal immigration without any resolution, millions of undocumented immigrants are actively working across the country, and collectively, these immigrants have a large impact on the U.S. economy.

One recent study found that **86.6%** of undocumented males in the country were employed in 2012 and 2013, suggesting that **most immigrants who come here illegally do so to work.**[33]

And because employers are required by law to gather Social Security numbers for all their hires, many undocumented individuals are paying into our tax

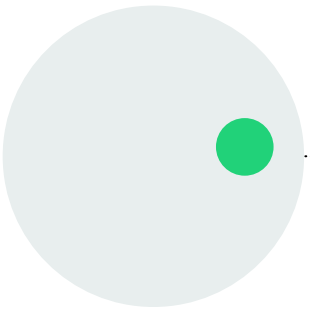
UNDOCUMENTED IMMIGRANTS ARE MORE LIKELY TO BE WORKING-AGED THAN NATIVES OR OTHER IMMIGRANTS

Share of population ages 25-64, 2014



829,045

Estimated number of undocumented immigrants in Florida.

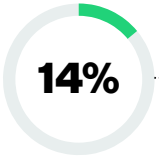


4%

Share of Florida's population made up of undocumented immigrants.

93,744

Estimated number of undocumented entrepreneurs in Florida.



Rate of entrepreneurship among undocumented population (ages 25-64).

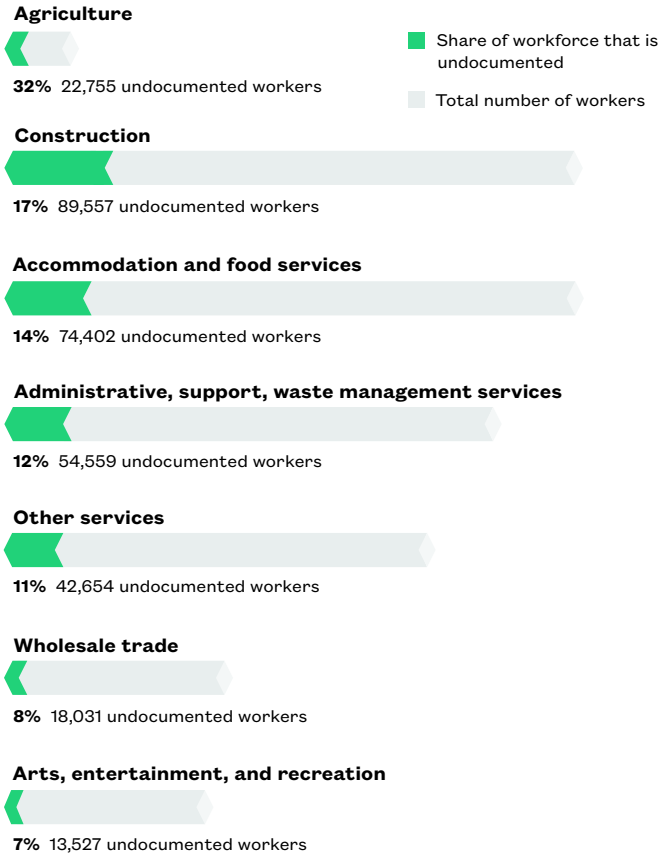
$1.3B

Total business income of self-employed entrepreneurs.

9%

Share of all working-age entrepreneurs in Florida who are undocumented immigrants.

THE FLORIDA INDUSTRIES WHERE UNDOCUMENTED IMMIGRANTS MAKE UP THE LARGEST SHARE OF THE WORKFORCE, 2014



system as well—often under falsified or incorrect Social Security numbers.[34] These undocumented immigrants generally lack access to federal aid programs such as Medicaid, food stamps, and Temporary Assistance for Needy Families, so they also draw down far less from these programs than their native-born counterparts.[35]

Of course, there are many compelling reasons that having a large undocumented population is a problem for a society. It undermines law and order, permits a shadow economy that is far harder to regulate, and is simply unfair to the millions of people who have come here legally. But as the undocumented immigration problem has gone largely unaddressed for the past 30 years, undocumented workers in the country have begun to play an increasingly integral role in many U.S. industries. In some sectors, such as agriculture, undocumented immigrants account for 50 percent of all hired crop workers, making them a critical reason why the industry is able to thrive on U.S. soil.[36] Many studies have also indicated that these undocumented workers are not displacing the U.S.-born, but rather, taking jobs few Americans are interested in pursuing. Economists have found that low-skilled immigrants, the group that most undocumented immigrants fall into, tend to pursue different jobs than less-skilled natives. While U.S.-born workers without a high school degree are often overrepresented in forward-facing roles like

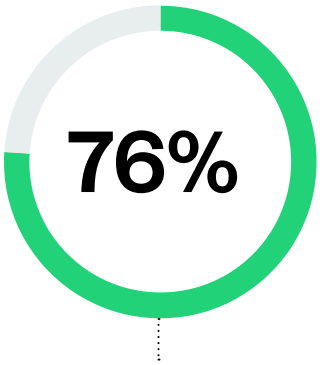
cashiers, receptionists, and coffee shop attendants, many less-skilled immigrants pursue more labor-intensive work requiring less human interaction, filling jobs as meat processors, sewing machine operators, or nail salon workers.[37] This phenomenon exists within industries as well. In construction, for instance, less-skilled immigrants often work as painters and drywall installers, allowing natives to move into higher paying positions requiring more training, such as electricians, contractors, and plumbers.[38]

The challenge of undocumented immigration is particularly evident in Florida, which is home to one of the largest undocumented populations in the country. But just as with the nation as a whole, as these immigrants spend years and decades in America, they get further integrated into our economy. In Florida, there is evidence that undocumented immigrants are playing an important role in the workforce. In this section, we estimate the size and the characteristics of the undocumented population in Florida by conducting a close analysis of the American Community Survey from the U.S. Census. This work uses a series of variables to identify immigrants in the survey who are likely to lack legal status—a method that has recently emerged in the academic literature on immigration.[39] (See the Methodology Appendix for more details.)

Using this technique, we estimate that Florida is home to more than 829,000 undocumented immigrants. These individuals are far more likely than the native-born population—or even the broader foreign-born one—to be in the prime of their working years, or ranging in age from 25-64. They also contribute to a range of industries that could not thrive without a pool of workers willing to take on highly labor-intensive roles. In 2014, for instance, undocumented immigrants made up 14.0 percent of all employees in Florida's accommodation and food services industry, a sector that includes dishwashers, food preparation workers, and short order cooks. They also made up 11.9 percent of workers employed in the administrative, support, waste management services sector, as well as almost one in three workers in the agriculture industry. In Florida, a state that grows a large amount of fresh produce, many agriculture positions require workers to handpick crops in the field.

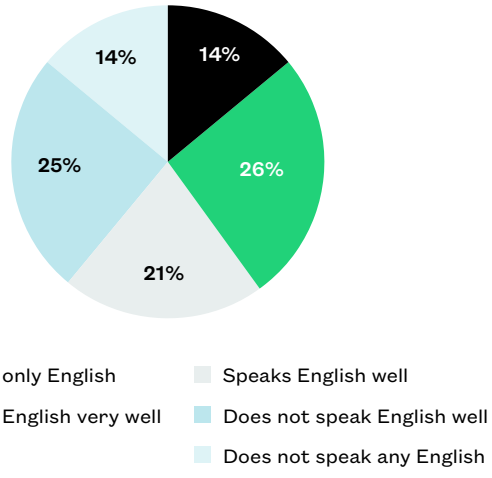
MEASURES OF ASSIMILATION AMONG FLORIDA'S UNDOCUMENTED POPULATION, 2014

Time in the United States



Share of undocumented immigrants who have been in the U.S. for five years or more.

English Proficiency (population ages 5+)



In 2014, undocumented immigrants in Florida earned **$11.2B**.

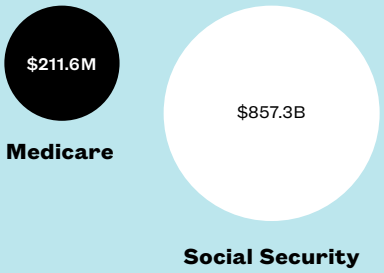
$406.9M — Went to state and local taxes...

$882.4M — Went to federal taxes...

Leaving them with **$9.9B** in remaining spending power.

ENTITLEMENT CONTRIBUTIONS

Undocumented immigrants also contribute to our country's entitlement programs. In 2014, through taxes on their individual wages, immigrants contributed **$211.6M** to Medicare and **$857.3B** to Social Security.



Large numbers of undocumented immigrants in Florida have also managed to overcome licensing and financing obstacles to start small businesses. In 2014, an estimated 14.2 percent of the state's working-age undocumented immigrants were self-employed—meaning Florida was one of two dozen states where unauthorized immigrants boasted higher rates of entrepreneurship than either legal permanent residents or immigrant citizens of the same age group. Almost 94,000 undocumented immigrants in Florida were self-employed in 2014, many providing jobs and economic opportunities to others in their community. Undocumented entrepreneurs in the state also earned an estimated $1.3 billion in business income that year.

The larger political debate around the economic cost or benefits of undocumented immigration tends to focus on the expense of educating immigrant children or the healthcare costs associated with increased use of emergency rooms and other services. These costs are real and can be substantial, but taken alone they paint an incomplete picture of the impact of undocumented immigration. This is because the debate infrequently recognizes that since most undocumented immigrants are working, they also make large federal and state tax contributions and frequently are net contributors to many of our most important—and most imperiled—benefits programs.

Social Security's Chief Actuary, for example, has credited unauthorized immigrants with contributing **$100 billion more to Social Security than they drew down in benefits** during the last decade.[40]

Several in-depth studies at the state level have similarly come to the conclusion that undocumented immigrants represent a net benefit to the states in which they live. One paper, from researchers at Arizona State University, estimated that undocumented immigrants in that state pay $2.4 billion in taxes each year—a figure far eclipsing the $1.4 billion spent on the law enforcement, education, and healthcare resources they use.[41] Another study estimated that, on a per capita basis, Florida's undocumented immigrants pay $1,500 more in taxes than they draw down in public benefits each year.[42]

In 2014, we estimate that Florida households led by undocumented immigrants earned almost **$11.2 billion** in income.

Although we are currently unable to calculate the amount spent on any public benefits or services used by undocumented immigrant families, we can gain a fairly clear sense of the amount they are paying in taxes each year. A variety of studies have estimated that anywhere from 50 to 80 percent of households led by undocumented immigrants file federal income taxes annually.[43] Federal government officials have also estimated that 75 percent of undocumented workers have taxes withheld from their paychecks.[44] In this paper, we make the assumption that 50 percent of the country's undocumented households paid income taxes in 2014. Although many experts would call this share highly conservative, it has been modeled in several academic papers, and also by think tanks that specialize exclusively in the study of U.S. tax policy.[45]

In 2014, we estimate that Florida households led by undocumented immigrants earned almost than $11.2 billion in income. Of that, they paid an estimated $882.4 million in federal taxes. They also contributed more than $857.3 million directly to the Social Security program through taxes on their individual wages. Florida's undocumented immigrants also made an

important impact through their state and local tax contributions—money that many localities use to pay for police forces, public education, and city services like garbage collection and recycling. We estimate that Florida's undocumented immigrants paid more than $406.9 million in state and local taxes in 2014.

Giving legal status to undocumented immigrants would increase their access to a variety of public benefits—resulting in potentially higher costs for federal, state, and local governments. But because legalization is expected to raise the earning power of undocumented immigrants and give them access to a wider array of jobs and educational opportunities, it would have the opposite effect as well, potentially allowing them to spend more as consumers and pay more in taxes each year.[46] Provisions within immigration reform requiring that undocumented immigrants pay any back taxes before normalizing their status would temporarily boost U.S. tax revenues still further.

But while the debate over legalization continues without resolution, the data suggests that the undocumented immigrants in Florida have largely assimilated into the United States, making it less likely that mass deportation will ever be a realistic option. We estimate that 76.0 percent of the state's undocumented population has been in the United States for five or more years. More than 60.5 percent speak English well, very well, or fluently. Studies show that when immigrants with limited English proficiency learn the language, they see a substantial wage benefit and become less isolated in their communities.[47] The labor market outcomes and educational levels of their children increase with time as well.[48]

Methodology

The vast majority of data that appears in this brief was calculated by the Partnership for a New American Economy research team, using a variety of publicly available data sources. Our work relied most heavily on the 2014 American Community Survey (ACS) 1-year sample using the Integrated Public Use Microdata Series (IPUMS) database.[1] Unless otherwise noted this data is weighted using the person weight for analysis at the individual level, and is weighted using the household weight for analysis at the household level.

Demographics

The data points on the foreign-born population in the demographics section are calculated using both the 2010 and 2014 ACS 1-year sample.

Entrepreneurship

The data on self-employed immigrants and the business income generated by immigrant entrepreneurs come from the 2014 ACS 1-year sample. We define immigrants as foreign-born individuals (excluding those that are children of U.S. citizens or born on U.S. territories).

The number of employees at immigrant-owned firms is estimated by using the 2007 Survey of Business Owners (SBO) Public Use Microdata Sample (PUMS),[2] which is the most recent microdata on business owners currently available. The estimates are weighted using the tabulation weights provided in the dataset. We define immigrant-owned businesses as firms with at least one foreign-born owner. For confidentiality, the data exclude businesses classified as publicly owned firms because they can be easily identified in many states. Based on our own analysis, we believe that many of the publicly owned firms excluded from this data are companies with 500 employees or more. As a result, the final number of employees at immigrant-owned companies in this report is a conservative estimate, and is likely lower than the true value.

Fortune magazine ranks U.S. companies by revenue and publishes a list of top 500 companies and their annual revenue as well as their employment level each year. To produce our estimates, we use the 2015 Fortune 500 list.[3] Our estimates in this section build on past work done by PNAE examining each of the Fortune 500 firms in the country in 2011, and determining who founded them.[4] We then use publicly available data, including historical U.S. Census records and information obtained directly by the firms, to determine the background of each founder. In the rare cases where we could not determine a founder's background, we assumed that the individual was U.S.-born to be conservative in our estimates. Some firms created through the merger of a large number of smaller companies or public entities were also excluded from our analysis. These included all companies in the utilities sector and several in insurance.

To produce the Fortune 500 estimates for each state, we allocate firms to the states where their current headquarters are located. We then aggregate and report the annual revenue and employment of the firms in each state that we identify as "New American" Fortune 500 companies. These are firms with at least one founder who was an immigrant or the child of immigrants.

Income and Tax Contributions

Using the 2014 ACS 1-year data, we estimate the aggregate household income, tax contributions, and spending power of foreign-born households.

To produce these estimates, a foreign-born household is defined as a household with a foreign-born household head. Immigrant sub-groups are defined as follows: 1) Asian immigrants refer to the foreign-born persons who self identify as Chinese, Taiwanese, Japanese, Filipino, Asian Indian, Korean, Native Hawaiian, Vietnamese, Bhutanese, Mongolian, Nepalese, Cambodian, Hmong, Laotian, Thai, Bangladeshi, Burmese, Indonesian, Malaysian, Pakistani, Sri Lankan, Samoan, Tongan, Guamanian/Chamorro, Fijian, or other Pacific Islanders; 2) Hispanic immigrants include those foreign-born persons who report their ethnicity as Hispanic; 3) Immigrants grouped under Sub-Saharan Africa originate from African countries, excluding the North African countries of Egypt, Libya, Tunisia, Algeria, and Morocco ; 4) Middle Eastern and North African immigrants are foreign-born persons from North Africa as well as the following Middle Eastern countries: Iran, Iraq, Bahrain, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arab, Syria, United Arab Emirates, and Yemen.

In this brief, mirroring past PNAE reports on this topic, we use the term "spending power."[5] Here and elsewhere we define spending power as the disposable income leftover after subtracting federal, state, and local taxes from household income. We estimate state and local taxes using the tax rates estimates produced by Institute on Taxation and Economic Policy by state income quintiles.[6] For federal tax rate estimates, we use data released by the Congressional Budget Office in 2014 and calculate the federal tax based on the household income federal tax bracket.[7]

Social Security and Medicare contributions are drawn from taxes on an individual's wage earnings.[8] This is far different from a household's overall income, which may include other revenue streams such as rental income and returns on investments. To account for this difference between overall federal taxes and Social Security and Medicare contributions, we estimate Medicare and Social Security contributions based on wage and salary data provided at the individual level in the ACS. For self-employed individuals, we use the self-employment income as the income base. The amount of earnings that can be taxed by the Social Security program is capped at $117,000, while there no such limit for the Medicare program.[9] We use a flat tax rate of 12.4 percent to estimate Social Security contributions and 2.9 percent for to capture Medicare contributions. This estimates the total amount that immigrants and their employers contributed in 2014.[10]

It is also worth noting that half of the amount contributed to Social Security and Medicare (6.4 percent of Social Security tax rate and 1.45 percent of Medicare tax rate) comes from individual workers, while the other half comes directly from their employers. Self-employed workers have to pay the full tax themselves. When estimating Social Security and Medicare contributions, we include all individual wage earners in the households and aggregate the amount paid by state.

Workforce

We use the 2014 ACS 1-year sample to estimate all data points in the workforce segment of the report. We define the working age population as those 25 to 64 years old. When estimating how much more foreign-born persons are likely to be employed than native-born persons, however, we calculate the percentage of native-born and foreign-born residents of all ages who were employed in 2014. The reason why we choose a more inclusive population for that estimate is because we want to make the point that the increased likelihood of being working aged that we see among immigrants leads to higher employment in the vast majority of states.

Because the employment status of people who are 16 years old or younger is not available in the ACS, we assume that these young people are not employed. The employed population also does not include those in the Armed Forces.

To estimate how much more likely immigrants are to be employed than natives, we calculate the percent difference between the immigrant and native-born employment rates. Our estimates on the share of immigrants and natives of different education levels only take into consideration individuals aged 25 or older.

The North American Industry Classification System, or NAICS Industry code, is used to estimate the industries with the largest share of foreign-born workers. All individuals 16 years old and above are included in these calculations. The total number of workers for certain industries in some states is extremely small, thus skewing results. In order to avoid this, we calculate the percentile distribution of the total number of workers per industry per state and drop the industries in each state that fall below the lowest 25th percentile. Estimated occupations with the largest share of foreign-born workers per state also follow the same restrictions—the universe is restricted to workers age 16 and above, and the occupations per state that fall under the 25th percentile benchmark are not included.

Our estimates on the number of manufacturing jobs created or preserved by immigrants rely on a 2013 report by the Partnership for a New American Economy and the Americas Society/Council of the Americas. That report used instrumental variable (IV) strategy in regression analysis and found that every 1,000 immigrants living in a county in 2010 created or preserved 46 manufacturing jobs there.[11] We use that multiplier and apply it to the 2010 population data from the ACS to produce our estimates.

Agriculture

We access the agriculture GDP by state from Bureau of Economic Analysis, which includes GDP contributions from the agriculture, forestry, fishing, and hunting industry.[12] The share of foreign-born agricultural workers is estimated using 2014 ACS 1-year sample. Additional data on agriculture output, top three crops per state, and leading agricultural exports come from United State Department of Agriculture (USDA)'s state fact sheets.[13] When displayed, data on sales receipts generated by the top fresh produce items in each state come the Farm and Wealth Statistics cash receipts by commodity tables available from the USDA's Economic Research Service.[14]

The agriculture section uses the Quarterly Census of Employment and Wage (QCEW) to estimate the percentage of crop farms producing fresh fruits and vegetables, and change in real wage of agricultural workers between 2002 and 2014. The QCEW data uses the North American Industry Classification System (NAICS) to assign establishments to different industries. We identify the following farms as fresh fruits and vegetable farms: other vegetable and melon farming, orange groves, citrus, apple orchards, grape vineyards, strawberry farming, berry farming, fruit and tree nut combination farming, other non-citrus fruit farming, mushroom production, other food crops grown under cover, and sugar beet farming.

The decline in the number of field and crop workers comes from the quarterly Farm Labor Survey (FLS) administered by USDA.[15] Stephen Bronars, an economist with Edgeworth Economics, previously analyzed and produced these estimates for the PNAE report, "A Vanishing Breed: How the Decline in U.S. Farm Laborers Over the Last Decade has Hurt the U.S. Economy and Slowed Production on American Farms" published in 2015. Additional information on those calculations can be found in the methodology section of that paper.[16]

Finally, for a small number of states, we also produce estimates showing how growers in the state are losing market share for specific produce items consumed each year by Americans, such as avocados or strawberries. Those estimates originate in a 2014 report produced by PNAE and the Agriculture Coalition for Immigration Reform.[17] The author used data from the USDA's annual "yearbook" for fresh fruits and vegetables, among other sources, to produce those estimates. More detail can be found in the methodology of that report.

Science, Technology, Engineering, and Math

We use the STEM occupation list released by U.S. Census Bureau to determine the number and share of foreign-born STEM workers as well as the number of unemployed STEM workers from 2014 ACS 1-year data.[18] Per U.S. Census classification, healthcare workers such as physicians and dentists are not counted as working in

the STEM occupations. All unemployed workers who list their previous job as a STEM occupation are counted as unemployed STEM workers.

To capture the demand for STEM workers, we use the Labor Insight tool developed by Burning Glass Technologies, a leading labor market analytics firm. Burning Glass, which is used by policy researchers and academics, scours almost 40,000 online sources daily and compiles results on the number and types of jobs and skills being sought by U.S. employers. This search includes online job boards, individual employer sites, newspapers, and public agencies, among other sources. Burning Glass has an algorithm and artificial intelligence tool that identifies and eliminates duplicate listings—including ones posted to multiple job boards as part of a broad search.[19]

The data on STEM graduates are from the 2014 Integrated Postsecondary Education Data System (IPEDS) completion survey.[20] A study by the Partnership for a New American Economy and the American Enterprise Institute found that every time a state gains 100 foreign-born STEM workers with graduate-level STEM training from a U.S. school, 262 more jobs are created for U.S.-born workers there in the seven years that follow.[21] We use this multiplier and the number of STEM advanced level graduates on temporary visas to estimate the number of jobs created for U.S.-born workers.

The last part of the STEM section presents data on patents with at least one foreign-born inventor. The data is originally from a study by Partnership for a New American Economy in 2012, which relied on data from U.S. Patent and Trademark Office's database as well as LinkedIn, direct correspondence, and online profiles to determine the nativity of individual inventors.[22]

Healthcare

We estimate the number of unemployed healthcare workers using the 2014 ACS 1-year sample. Healthcare workers are healthcare practitioners and technical occupations, or healthcare support occupations as defined by U.S. Census Bureau.[23]

Unemployed healthcare workers are individuals who report their previous job as a healthcare occupation, and their employment status as currently not working but looking for work. We took the number of job postings for healthcare workers from the Burning Glass Labor Insight tool, a database that scours online sources and identifies the number and types of job postings. We describe this resource in detail in the section on STEM methodology.

We then delve into specific occupations within the broader healthcare industry. To produce the figures on the total number of physicians and psychiatrists and the share born abroad, we use American Medical Association (AMA) Physician Masterfile data. To give a sense of the supply and demand of physicians and psychiatrists, we also calculate the physician and psychiatrist density in each state by dividing the total number of physicians or psychiatrists by the population estimates in 2015 for each state.[24] As for the share of foreign-born nurses and home health aides, we use the 2014 ACS 5-year sample data because data from the 1-year sample is too small to make reliable estimates.

We estimate the shortage of psychiatrists, dentists, and occupational therapists using data from the various U.S. government offices. For example, the shortage of psychiatrists refers to the current lack of psychiatrists per the U.S. government's official definition of a mental health shortage area (1/30,000 residents) in each county, aggregated within each state.[25] The shortage of dentists is from an analysis by U.S. Department of Health and Human Services,[26] and the shortage of occupational workers is from a journal article published by PM&R, the official scientific journal of the American Academy of Physical Medicine and Rehabilitation.[27] For psychiatrists, we project future shortages by accounting for individuals in these occupations as they reach the retirement age of 65.

Housing

The data in the housing section comes from the 2014 ACS 1-year sample. Immigrant homeowners are defined as foreign-born householders who reported living in

their own home. We estimate the amount of housing wealth held by immigrant households by aggregating the total housing value of homes owned by immigrant–led households. We also estimate the amount of rent paid by immigrant-led households by aggregating the rent paid by such families. We then calculate the share of housing wealth and rent that immigrant households held or paid compared to the total population. For characteristics of homeowners, a foreign-born new homebuyer is defined as a household with a foreign-born household head who owned and moved to the current residence within the last five years.

Visa Demand

The data on visa demand are drawn primarily from the 2014 Annual Report produced by the Office of Foreign Labor Certification within the U.S. Department of Labor.[28] Our figures on the number of visa requests authorized for each state—as well as the occupations and cities those visas are tied to—originate directly from that report.

In this section, we also present estimates on the number of jobs that would have been created if all the visas authorized in 2014 had resulted in actual visa awards. The multipliers we use to produce these estimates originate in a 2011 report released by PNAE and the American Enterprise Institute. That report, written by the economist Madeline Zavodny, used a reduced-form model to examine the relationship between the share of each state's population that was immigrant and the employment rate of U.S. natives. More detail on Zavodny's calculations and the multipliers produced for each visa type can be found in the methodology appendix of that report.[29]

For purposes of these briefs, we use Zavodny's finding that the award of 100 additional H-1B visas in a state is tied to 183 additional jobs for natives there in the 7 years that follow. The award of 100 additional H-2B visas creates 464 additional jobs for natives in the state during that same time period. We apply these multipliers to the number of visas in those categories authorized for each state in 2014.

In many of the state reports, we also present figures showing how visa denials resulting from the 2007 and 2008 H-1B lotteries cost the tech sectors of metropolitan areas both employment and wage growth in the two years that followed. The economists Giovanni Peri, Kevin Shih, and Chad Sparber produced these estimates for a PNAE report on the H-1B visa system that was released in 2014. That report relied on Labor Condition Application and I-129 data that the authors obtained through a Freedom of Information Act request, as well as American Community Survey data from 2006 and 2011. The authors did regressions that examined the causal relationship between a "shock" in the supply of H-1B computer workers and computer employment in subsequent years for more than 200 metropolitan areas. More information on those estimates can be found in the methodology appendix of that report.[30]

Naturalization

Using the ACS 2014 1-year sample, non-citizens eligible to naturalize are defined as non-citizens who are 18 years or above, can speak English, and have continuous residence in the United States for at least five years.

Researchers at the University of Southern California's Center for the Study of Immigrant Integration published a report in 2012, "Citizen Gain: The Economic Benefits of Naturalization for Immigrants and the Economy," which concluded that immigrants experience an 8 to 11 percent gain in their individual wages as a result of becoming naturalized. Because this earnings gain phases in over time—and we want to be conservative in our estimates—we model a wage increase of just 8 percent when discussing the possible gains that could accrue due to naturalization.[31] We use this multiplier and the mean individual wages of non-citizens in each state to estimate the additional earnings that non-citizens would earn if they naturalized. Finally, we calculate the aggregate wage earnings boost by multiplying the total number of non-citizens who are eligible for naturalization by the average increase in wage income per person.

International Students

We obtain the size and share of postsecondary students who are international in each state from the 2014 Integrated Postsecondary Education Data System (IPEDS) fall enrollment data. Those figures are then applied to preexisting work previously done by NAFSA, an organization representing professionals employed in the international offices of colleges and universities across the United States. NAFSA has developed an economic value tool and methodology that estimates the total economic benefit and jobs created or supported by international students and their dependents in each state.[32] The economic contributions include the costs of higher education along with living expenses minus U.S.-based financial support that international students receive.

Because the enrollment data from IPEDS that we use in this brief is different from the underlying data used by NAFSA, our figures differ slightly from the NAFSA estimates of the economic contributions made by international students in the 2014-2015 school year.

Voting

The estimates for the number of registered and active voters who are foreign-born are calculated from the Voter Supplement in the Current Population Survey (CPS) for the years 2008, 2010, 2012, and 2014 using the IPUMS database. The sample in CPS includes civilian non-institutional persons only. Foreign-born individuals who stated having voted between 2008 and 2014 are termed active voters.

Using data from the 2014 ACS 1-year sample, we estimate the number and share of foreign-born eligible voters. We define them as naturalized citizens aged 18 or older who live in housing units. Persons living in institutional group quarters such as correctional facilities or non- institutional group quarters such as residential treatment facilities for adults are excluded from the estimation. We also estimate the number of new foreign-born voters who will become eligible to vote in 2016 and 2020, either by turning 18 or through naturalization, as well as the total number of foreign-born voters in these years. The estimates of newly eligible voters for 2016 include naturalized citizen ages 16 and 17 as of 2014 (thereby becoming of voting age by 2016). Those eligible to vote in 2020 include all naturalized citizens ages 12-17 in 2014. Applicable mortality rates are also applied.[33] In addition, we estimate newly naturalized citizens using data from the Department of Homeland Security, which show the two-year average of new naturalized citizens by state.[34] We discount from these numbers the percentage of children below 18 in households with a naturalized householder by state. Estimates of total foreign-born voters include naturalized citizens aged 18 or older in 2014, discounted by average U.S. mortality rates by age brackets, summed to the pool of newly eligible foreign-born voters.

Margin of victory in 2012 refers to President Barack Obama's margin of victory over Republican candidate Mitt Romney in terms of popular vote. The margins are negative in states that Romney won in 2012.[35]

Undocumented

Using data from the 2014 ACS, we applied the methodological approach outlined by Harvard University economist George Borjas[36] to arrive at an estimate of the undocumented immigrant population in the overall United States and individual states. The foreign-born population is adjusted for misreporting in two ways. Foreign-born individuals who reported naturalization are reclassified as non-naturalized if the individual had resided in the United States for less than six years (as of 2014) or, if married to a U.S. citizen, for less than three years. We use the following criteria to code foreign-born individuals as legal U.S. residents:

- Arrived in the U.S. before 1980
- Citizens and children less than 18 year old reporting that at least one parent is native-born
- Recipients of Social Security benefits, SSI, Medicaid, Medicare, Military insurance, or public assistance

- Households with at least one citizen that received SNAP
- People in the armed forces and veterans
- People attending college and graduate school
- Refugees
- Working in occupations requiring a license
- Government employees, and people working in the public administration sector
- Any of the above conditions applies to the householder's spouse

The remainder of the foreign-born population that do not meet this criteria is reclassified as undocumented. Estimates regarding the economic contribution of undocumented immigrants and the role they play in various industries, and tax contributions are made using the same methods used to capture this information for the broader immigrant population in the broader brief. When estimating the aggregate household income, spending power, and tax contributions, we are not able to make reliable estimates for undocumented-led households in Alaska, Maine, Montana, North Dakota, South Dakota, Vermont, and West Virginia due to the small sample size of undocumented-led households in ACS. Finally, the variables giving a sense of the undocumented population's level of assimilation—including their English proficiency and time in the United States—are estimated by examining the traits of the undocumented population in the 1-year sample of the ACS.

Endnotes

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ABOUT

New American Economy

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