Introduction

Throughout the COVID-19 pandemic, workers in certain industries in the United States have been critical to keeping the country's residents healthy and safe, and keeping the economy open. Many of these workers have endured difficult and dangerous conditions, working in close proximity to each other and to the public, and have been especially vulnerable to the COVID-19 virus.

Many of these workers, often dubbed "essential workers," are foreign born. In fact, immigrant workers have been important during the pandemic, and will continue to play a key role in rebuilding the economy post-pandemic.

The Institute for Immigration Research examined industries that have been important during the pandemic and focused on four with the highest shares of foreign-born workers: Agriculture, Manufacturing, Wholesale and Retail Trade, and Transportation. It is important to note that industries are the types of businesses a firm is involved in and occupations are the tasks or functions performed by individual workers within a business. Workers within an industry can work in any occupation.

Overall, foreign-born workers comprise 14 percent of the U.S. population and 16 percent of the workforce. In these four industries, there are approximately 3,984,000 foreign-born workers who make up 20 percent of the workforce. In the Agriculture industry, foreign-born workers account for 29 percent of all workers. They comprise 27 percent of the Manufacturing industry, 17 percent of the Transportation industry, and 16 percent of the Wholesale and Retail Trade industry.

This report will examine the immigrant workers in these four industries along a variety of socio-economic variables, compare them to similarly situated native U.S. workers, and discuss the important contributions these workers have made during the COVID-19 pandemic as well as their critical role in rebuilding the economy post-pandemic.

The data in this report is from the American Community Survey 2014-2018 5-year dataset unless otherwise noted.
Agriculture

During the pandemic, agricultural workers produce and harvest the food on which Americans have depended. Workers in this industry are also responsible for raising livestock and maintaining fisheries.

Numbers at a Glance
- 2,473,100: Approximate number of workers in the Agriculture industry
- 705,000: Approximate number of foreign-born workers in the Agriculture industry
- 29%: Share of workers in the Agriculture industry that are foreign born

Manufacturing

Workers in the Manufacturing industry produce much of our food and beverages, and have been responsible for making clothing, including face masks, and the cleaning agents and disinfectants that Americans are using to clean surfaces in our homes and public spaces, and soaps and sanitizers to clean our hands. Manufacturing industry workers make pharmaceuticals and medicines, including the COVID-19 vaccines.

Numbers at a Glance
- 3,437,300: Approximate number of workers in the Manufacturing industry
- 930,000: Approximate number of foreign-born workers in the Manufacturing industry
- 27%: Share of workers in the Manufacturing industry that are foreign born

Wholesale and Retail Trade

The workers in the Wholesale and Retail Trade industry include all of the individuals who sell us the products we need to continue to live our lives, including food, beverages, gasoline, and pharmaceuticals.

Numbers at a Glance
- 8,245,200: Approximate number of workers in the Wholesale and Retail Trade industry
- 1,347,100: Approximate number of foreign-born workers in the Wholesale and Retail Trade industry
- 16%: Share of workers in the Wholesale and Retail Trade industry that are foreign born

Transportation, Warehousing and Utilities

Workers in the Transportation, Warehousing, and Utilities industry are responsible for transporting our food and goods to the stores. Workers in this industry also play a key role in making sure that our electricity, heat, and air conditioning work, and that our sewage is treated.

Numbers at a Glance
- 5,897,200: Approximate number of workers in the Transportation and Warehousing and Utilities industry
- 1,002,200: Approximate number of foreign-born workers in the Transportation and Warehousing and Utilities industry
- 17%: Share of workers in the Transportation and Warehousing and Utilities industry that are foreign born
Mexico is the top country of origin for immigrant workers in all four industries, ranging from 82 percent of workers in the Agriculture industry to 18 percent in Transportation. India is in the top five in three of four of the industries.

Many workers in these four industries come from Mexico, Central and South America. The vast majority of foreign-born workers in Agriculture come from Mexico and Central America; 82 percent are from Mexico, and six percent of immigrant Agricultural workers come from Guatemala, El Salvador, and Honduras. In the Manufacturing industry, nearly half come from Mexico and Central and South America. One-quarter of immigrant workers in the Wholesale and Retail Trade industry are from Mexico. In Transportation, 31 percent are from Mexico, Cuba, the Dominican Republic, or El Salvador.

The remainder of the countries rounding out the top five are in Asia. One percent of Agricultural workers are from the Philippines; nine percent of workers in the Manufacturing industry are from India and China; 16 percent of Wholesale and Retail Trade workers are from India, the Philippines, and China; and five percent of workers in the Transportation industry are from India.

No African, European, or Oceanic countries break the top five for any of these four industries.

Overall, native-born workers are more likely than foreign-born workers to identify as White in all four industries, and more likely to identify as Black in three of the four. Immigrant workers are more likely to identify as Asian or “Other.” The “Other” category is likely individuals who identify their ethnicity as Hispanic and do not identify their race as White, Black, Asian, or Native American. The race and ethnicity of immigrant workers is largely consistent with their countries of origin.

In terms of race, immigrant Agricultural workers are most likely to identify as White (62 percent) or “Other” (30 percent), while only four percent identify as Asian. Nearly all native-born workers in Agriculture identify as White (90 percent). With respect to ethnicity, foreign-born immigrant workers in Agriculture are overwhelmingly Hispanic (who can be of any race). Ninety percent of immigrant Agricultural workers identify as Hispanic, and more than half of the native-born agricultural workers are also Hispanic (57 percent).

Immigrant workers in Manufacturing are less likely to be White or Black than the native born, and more likely to identify as Asian or Other. Just over half of the immigrant workers in the Manufacturing industry identify as Hispanic (57 percent) compared to only 12 percent of the native-born workers.

Foreign-born workers in the Wholesale and Retail Trade industry are the most likely to identify as Asian (31 percent) and the least likely to identify as White (42 percent). Workers in the Transportation industry are most likely to identify as Black (18 percent), likely reflecting the share of workers from Cuba and the Dominican Republic. Less than half of immigrant workers in these last two industries identify as Hispanic.

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**Race and Ethnicity**

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Manufacturing</th>
<th>Wholesale and Retail Trade</th>
<th>Transportation, Warehousing and Utilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign Born</td>
<td>Native Born</td>
<td>Foreign Born</td>
<td>Native Born</td>
</tr>
<tr>
<td>White</td>
<td>62%</td>
<td>90%</td>
<td>44%</td>
<td>76%</td>
</tr>
<tr>
<td>Black</td>
<td>2%</td>
<td>3%</td>
<td>7%</td>
<td>16%</td>
</tr>
<tr>
<td>Asian</td>
<td>4%</td>
<td>1%</td>
<td>25%</td>
<td>2%</td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other Race</td>
<td>30%</td>
<td>3%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Not-Hispanic</td>
<td>10%</td>
<td>89%</td>
<td>43%</td>
<td>88%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>90%</td>
<td>11%</td>
<td>57%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Gender

There are more men than women working in all four industries combined. Overall, more than half of the workers are male. However, there are slight differences by industry and between the native- and foreign-born.

The highest shares of males work in the Transportation industry. More than three-fourths of all workers in Transportation are male, but native-born workers are more likely to be female; 22 percent of native-born Transportation workers are female compared to 17 percent of foreign-born workers.

The majority of Agricultural workers are male, but here there are slightly higher shares of female workers among the foreign born. Only 24 percent of native-born Agricultural workers are female, compared to 31 percent of foreign-born workers.

Both native-born and foreign-born workers in the Manufacturing industry are more likely to be male. However, a higher share of foreign-born workers are female (48% compared to 41%)

Wholesale and Retail Trade is the only industry in which there are slightly higher shares of female workers among the native born (51 percent), while men outnumber women among the foreign-born.

Large shares of foreign-born workers in these four industries have lived in the United States for a long time. In each of these industries, more than half of the foreign-born workers arrived more than 20 years ago. Transportation workers have been in the United States the longest. The median year of immigration is 1993. Sixty-three percent arrived prior to 2000. Slightly more than half of the immigrant workers in the Wholesale and Retail Trade industry arrived prior to 2000 (55%), while 45 percent arrived in the last two decades. The median year of immigration for Wholesale and Retail Trade is 1996. More than half (58%) of the immigrant workers in the Manufacturing industry arrived in the U.S. prior to 2000, and 85% arrived prior to 2010. The median year of arrival for Manufacturing workers is 1998.

Agricultural workers are the most recent arrivals, but more than half (53 percent) arrived prior to 2000, and only 13 percent have arrived since 2010. The median year of arrival for Agricultural workers is 1999.

Many foreign-born workers in these industries are not yet proficient in English (speak English well or very well). Research has found that immigrants learn English over time, and those who arrived in the United States most recently are likely those who do not speak English well yet. Transportation is the only industry in which more than half of the immigrant workers (55 percent) are English proficient. Forty-nine percent of Wholesale and Retail Trade workers, and 37 percent of Manufacturing workers are proficient in English. At the other end of the spectrum, only 18 percent of foreign-born Agricultural workers are proficient in English.

The share of immigrant workers who are naturalized U.S. citizens conforms closely to the share who are proficient in English. Immigrant workers in the Transportation Industry are the most likely to be U.S. citizens (61 percent) while only 18 percent of Agricultural workers are U.S. citizens. For agricultural workers, the low level of U.S. citizenship is likely due to the fact that many lack English proficiency, are unauthorized workers, or have a temporary status that does not provide a clear path to citizenship. Workers in Wholesale and Retail Trade and Manufacturing fall in between, with 50 percent and 41 percent, respectively.
The Center for Migration (CMS) studies estimated the number of foreign-born workers in select sectors, including health care, manufacturing, transportation, retail, and construction, that lack immigration status. Overall, CMS found that 28 percent of the immigrant workers in these sectors are unauthorized. In some sectors, the share is much higher. For example, according to the Center for Migration Studies, more than half (53 percent) of all immigrant workers in Agriculture and farms sector are unauthorized. Approximately 36 percent of the foreign-born workers in the Food processing, manufacturing agents including all foods and beverages sector are unauthorized. Similarly, 36 percent of foreign-born workers in Grocery and related product merchant wholesale sector are unauthorized, and 28 percent of foreign-born workers in the Grocery stores, including all food and beverage stores, are unauthorized.

Many of these undocumented workers and their lawful noncitizen and U.S. citizen family members were ineligible for relief payments under the Coronavirus Aid, Relief, and Economic Security (CARES) Act that passed in 2020, despite the fact that these families pay taxes. Many unauthorized workers do not have access to health insurance or health care. In some states, they have been denied access to the COVID-19 vaccine, or are fearful that receiving the vaccine could have negative repercussions on their ability to remain in the United States.

In January 2021, the Governor of Nebraska made headlines when he said, “You’re supposed to be a legal resident of the country to be able to be working in those plants, so I do not expect that illegal immigrants will be part of the vaccine with that program.” These remarks were roundly criticized, particularly given the large meatpacking industry in that state and the COVID outbreaks in meatpacking plants. The governor’s office later clarified that proof of U.S. citizenship would not be required to receive a vaccine.

Other states have reacted differently. In Minnesota, for example, health officials have prioritized the state’s 45,000 food-processing workers, many of whom are unauthorized immigrants. In 2020, several plants had to close after large outbreaks of COVID and the deaths of several workers. Food processing plants took additional safety steps to protect workers and the food supply, and are now vaccinating workers. In an effort to minimize vaccine hesitancy, health care workers do not ask for identification or proof of immigration status.
Overall, across all four industries, foreign-born workers are less likely to have a high school diploma. However, at the other end of the spectrum, in three of the four industries, immigrant workers are more likely to have a Master’s, Professional, or Doctoral degree.

Workers in the Agriculture industry were the least educated, and many workers lack a high school education. Immigrant workers are much less likely than native-born workers to have a high school degree. Only 28 percent of immigrant workers completed high school. Workers in the Agriculture industry were the least likely to have a Bachelor’s degree or higher.

Workers in the Manufacturing industry were the most likely to have at least a Bachelor’s degree. Here, the native born are more likely than the foreign born to have a Bachelor’s degree (30 percent to 23 percent). Moreover, immigrant workers are much less likely to have a high school diploma. Forty-one percent of immigrant workers in Manufacturing lack a high school diploma compared to only nine percent of native-born workers.

Overall, Agricultural workers tend to have the lowest personal incomes, with the majority earning less than $40,000 per year. Foreign-born workers are even more likely to earn less than $40,000 compared to their native-born counterparts. Eighty-eight percent of immigrant workers in the Agricultural industry earn less than $40,000 per year.

More than two-thirds (67 percent) of foreign-born workers in Manufacturing earn less than $40,000 per year compared to 49 percent of the native-born workers. Moreover, 22 percent of native-born workers earn $75,000 or more, compared to only 14 percent of the immigrant workers.

In the Wholesale and Retail Trade industry, native- and foreign-born workers are equally as likely to earn less than $40,000 and more than $75,000 a year. Notably, nearly three-fourths of the workers in this industry earn less than $40,000 per year, regardless of their nativity.

In the Transportation industry, both the foreign born and native born are more likely to earn more than $75,000 per year compared to all of the other industries. However, immigrants are much more likely to earn less than $40,000 and much less likely to earn more than $75,000, when compared to their native-born counterparts.

### Top 5 Occupations in the Agriculture Industry

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Foreign Born</th>
<th>Occupation</th>
<th>Native Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other agricultural workers</td>
<td>71%</td>
<td>Farmers, ranchers, and other agricultural managers</td>
<td>37%</td>
</tr>
<tr>
<td>Farmers, ranchers, and other agricultural managers</td>
<td>7%</td>
<td>Other agricultural workers</td>
<td>34%</td>
</tr>
<tr>
<td>Graders and sorters, agricultural products</td>
<td>3%</td>
<td>Driver/sales workers and truck drivers</td>
<td>3%</td>
</tr>
<tr>
<td>First-line supervisors of farming, fishing, and forestry workers</td>
<td>3%</td>
<td>Fishing and hunting workers</td>
<td>3%</td>
</tr>
<tr>
<td>Packers and packagers, hand</td>
<td>2%</td>
<td>First-line supervisors of farming, fishing, and forestry workers</td>
<td>2%</td>
</tr>
<tr>
<td>219 Other Occupations</td>
<td>14%</td>
<td>377 Other Occupations</td>
<td>21%</td>
</tr>
</tbody>
</table>


### Agriculture

Foreign-born Agricultural workers earn less than native-born workers in the same industry because foreign-born workers are more likely to work in occupations that pay less. Immigrant workers may be unable to occupy higher paying occupations for a variety of reasons including education level, English proficiency, lack of immigration status, or discrimination. New American Economy found that in California and Washington state, more than half of all Agricultural workers are foreign born (65 percent and 51 percent respectively), and in Florida, 44 percent are foreign born.

In the Agriculture industry, 71 percent of foreign-born workers are in the “other agricultural workers” occupation (which tend to be low level jobs) compared to 34 percent of native-born workers. Only 10 percent of immigrant workers are farmers, ranchers, and other agricultural managers or first-line supervisors compared to 39 percent of native-born workers.
Manufacturing

In the Manufacturing industry, native-born workers are more likely than their foreign-born counterparts to be managers and first-line supervisors. Managers and supervisors do not fall within the top five Manufacturing occupations for immigrant workers. The top occupations for immigrant workers include packaging and filling machine operators, butchers and other meat processing workers, and other food processing workers (22 percent).

A New American Economy report found that immigrants make up a large share of the Meatpacking sector in particular. Forty-four percent of all Packaging and filling machine operators are immigrants; 49 percent of Butchers and other meat processing workers are immigrants; and more than half (53 percent) of all Hand packers and Packagers are immigrants. Furthermore, workers in this sector have been extremely vulnerable to COVID-19. Smithfield Farms, a large meatpacking company, was forced to shut down after more than 200 workers got COVID-19. Immigrant workers are also more likely to work as sewing machine operators, an occupation that does not fall in the top 10 for native-born workers in the Manufacturing industry.

### Top 5 Occupations in the Manufacturing Industry

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Foreign Born</th>
<th>Occupation</th>
<th>Native Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging and filling machine operators</td>
<td>10%</td>
<td>Packaging and filling machine operators</td>
<td>6%</td>
</tr>
<tr>
<td>and tenders</td>
<td></td>
<td>and tenders</td>
<td></td>
</tr>
<tr>
<td>Sewing machine operators</td>
<td>7%</td>
<td>Other managers</td>
<td>5%</td>
</tr>
<tr>
<td>Butchers and other meat, poultry, and</td>
<td>6%</td>
<td>Laborers and freight, stock and material</td>
<td>4%</td>
</tr>
<tr>
<td>fish processing workers</td>
<td></td>
<td>movers, hand</td>
<td></td>
</tr>
<tr>
<td>Food processing workers, all other</td>
<td>6%</td>
<td>First line supervisors of production and</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>operating workers</td>
<td></td>
</tr>
<tr>
<td>Bakers</td>
<td>5%</td>
<td>Food processing workers, all other</td>
<td>4%</td>
</tr>
<tr>
<td>333 Other Occupations</td>
<td>66%</td>
<td>437 Other Occupations</td>
<td>77%</td>
</tr>
</tbody>
</table>

Thirty-seven percent of immigrant workers are a cashier, a retail salesperson, or a first-line supervisor of retail sales workers compared to 38 percent of native-born workers in these three occupations. These workers are likely proficient in English since they interact with the public. Because keeping shops and gas stations open has been important to meeting Americans’ needs during the pandemic, workers in these occupations likely continued to work, but they were at risk for the virus. New American Economy found that nearly 17 percent of all grocery store and supermarket workers in the United States are foreign born. In California, more than one third (34 percent) are immigrants, and in New York 31 percent are immigrants.14
Transportation

The top occupation for both foreign- and native-born workers in the Transportation industry is driver/sales workers and truck drivers (29 percent to 26 percent, respectively), and they are equally likely to be school bus drivers (3 percent). However, immigrants are more likely to be taxi drivers (15 percent to 3 percent) and shuttle drivers and chauffeurs and city bus drivers.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Foreign Born</th>
<th>Occupation</th>
<th>Native Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver/sales workers and truck drivers</td>
<td>29%</td>
<td>Driver/sales workers and truck drivers</td>
<td>26%</td>
</tr>
<tr>
<td>Taxi drivers</td>
<td>15%</td>
<td>Bus drivers, school</td>
<td>3%</td>
</tr>
<tr>
<td>Shuttle drivers and chauffeurs</td>
<td>7%</td>
<td>Laborers and freight, stock, and material movers, hand</td>
<td>3%</td>
</tr>
<tr>
<td>Bus drivers, transit and intercity</td>
<td>3%</td>
<td>Other managers</td>
<td>3%</td>
</tr>
<tr>
<td>Bus drivers, school</td>
<td>3%</td>
<td>Taxi drivers</td>
<td>3%</td>
</tr>
<tr>
<td>356 Other Occupations</td>
<td>43%</td>
<td>457 Other Occupations</td>
<td>62%</td>
</tr>
</tbody>
</table>

Conclusion

Workers in the Agriculture, Manufacturing, Wholesale and Retail Trade, and Transportation industries have been very important to the United States during the COVID-19 pandemic. Because they grow and process our food and ensure that we have everything we need, many workers in these industries work in close contact with one another and with the public, leaving them vulnerable.

Large shares of workers in these four industries are immigrants. Many have been in the United States for many years. However, many remain noncitizens, are poorly educated, do not speak English well, and work in low paying occupations within the industry. Some lack legal immigration status. As a result, many foreign-born workers in these four industries tend to fill occupations that do not pay them well or provide them with benefits such as sick leave and health insurance. These immigrant workers are left very vulnerable to the virus.

As the country recovers from coronavirus and opens up after a lengthy lockdown, immigrants in these four industries will continue to be essential. Immigrants are, and always have been, one key to economic growth in the United States.

It is in the best interest of the country to recognize the work that immigrants have been doing and acknowledge that it is in the best interest of all Americans if our immigrant workers are treated well.

Acknowledgements

The Institute for Immigration Research thanks Eirini Giannaraki, Kevin Nazar, Wenjing Wang, and Michele Waslin for providing data, writing, editing, and fact checking this report. Thank you to Katharine Rupp and James Witte for their suggestions, editing, and production assistance.
Immigrant Workers and the COVID-19 Pandemic

Endnotes

1 The IIR defined the Agriculture industry as: Crop production; Animal production and aquaculture; Fishing, hunting, and trapping; Support activities for agriculture and forestry.
2 The IIR defined Manufacturing industry as: Animal food, grain and oilseed milling; Sugar and confectionery products; Fruit and vegetable preserving and specialty food manufacturing; Dairy product manufacturing; Animal slaughtering and processing; Retail bakeries; Bakeries and tortilla manufacturing, except retail bakeries; Seafood and other miscellaneous foods; Not specified food industries; Beverage manufacturing; Cut and sew, and apparel accessories and other apparel manufacturing; Pharmaceutical and medicine manufacturing; Soap, cleaning compound, and cosmetics manufacturing.
3 The IIR defined the Wholesale and Retail Trade industry as: Drugs, sundries, and chemical and allied products merchant wholesalers; Grocery and related product merchant wholesalers; Farm product raw material merchant wholesalers; Petroleum and petroleum products merchant wholesalers; Supermarkets and other grocery (except convenience) stores; Convenience Stores; Specialty food stores; Beer, wine, and liquor stores; Pharmacies and drug stores; Health and personal care, except drug, stores; and Gasoline stations.
4 The IIR defined the Transportation and Warehousing and Utilities industry as: Air transportation; Rail transportation; Water transportation; Truck transportation; Bus service and urban transit; Taxi and limousine service, Electric power generation, transmission and distribution; Natural gas distribution; Electric and gas, and other combinations; Water, steam, air-conditioning, and irrigation systems; Sewage treatment facilities; and other non-specified utilities.
6 Ibid.
7 Ibid.
13 Ibid.
14 Ibid.
The IIR’s mission is to produce valid, reliable, and objective multidisciplinary research on immigrants and immigration to the United States and to disseminate this information through peer-reviewed academic journals, as well as in print and digital formats that make this research easily accessible to policy-makers, the media, the business community, and the general public. The Institute for Immigration Research is a joint venture between George Mason University and the Immigrant Learning Center, Inc. (ILC) of Malden, MA.

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