

HOUSTON'S **ECONOMIC** FUTURE:
IMMIGRATION

A REPORT ON THE REGIONAL EFFECT OF IMMIGRATION

Introduction

In 2019, the Center published *Houston's Economic Future: Immigration*, a report on how immigration would shape the region's economy over the next several decades.

The report included a profile of the region's immigrant population along with results from an economic forecasting model the Center developed to look at how different immigration scenarios might affect economic growth.

In this white paper, we update several key parts of the immigration profile and scenario modeling we conducted using 2019 data. Figures from the original report primarily relied on data from 2017 and 2016.

In addition, this update provides a new analysis of the role immigration will play in the workforces of Greater Houston's energy, professional services, information technology and manufacturing sectors.

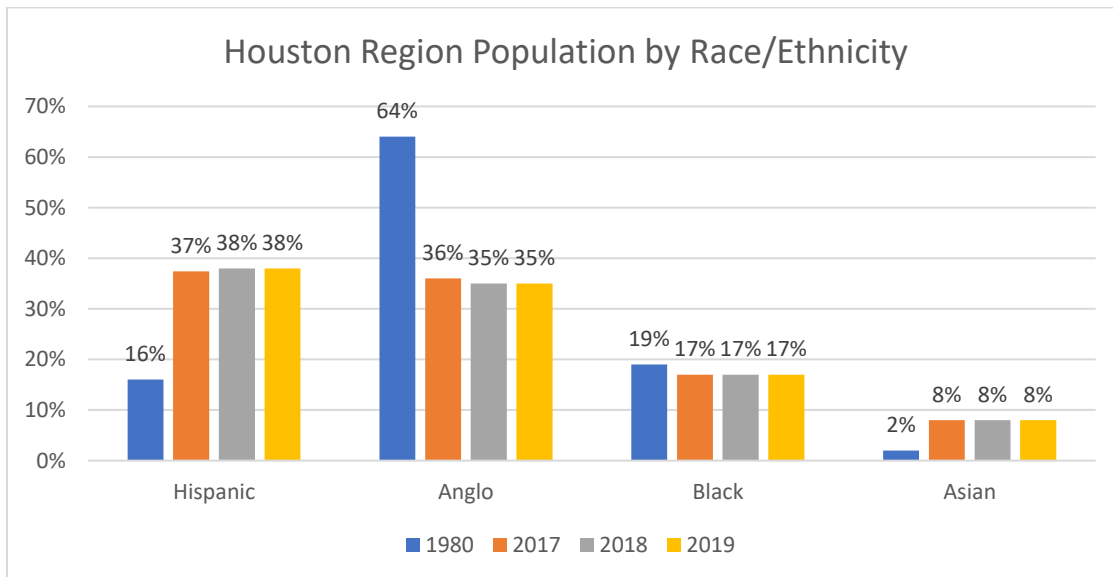
We found that growth in immigration rates slightly declined over the past couple years, but our update offers additional confirmation of the main findings of our 2019 report: Namely, immigration and the integration of immigrants are increasingly important to our region's future economic success.

Profile Update

Over the course of just a few decades, immigration rapidly transformed Houston into one of the nation's most diverse and growing regions.

As of 2019, 1.7 million immigrants reside in the 9-county Greater Houston region, accounting for a quarter of the overall population and representing an increase of 100,000 in just three years.

Anglos once formed a substantial majority of the region's population. Now the metro is majority minority, with no single group representing a substantial plurality of the population.

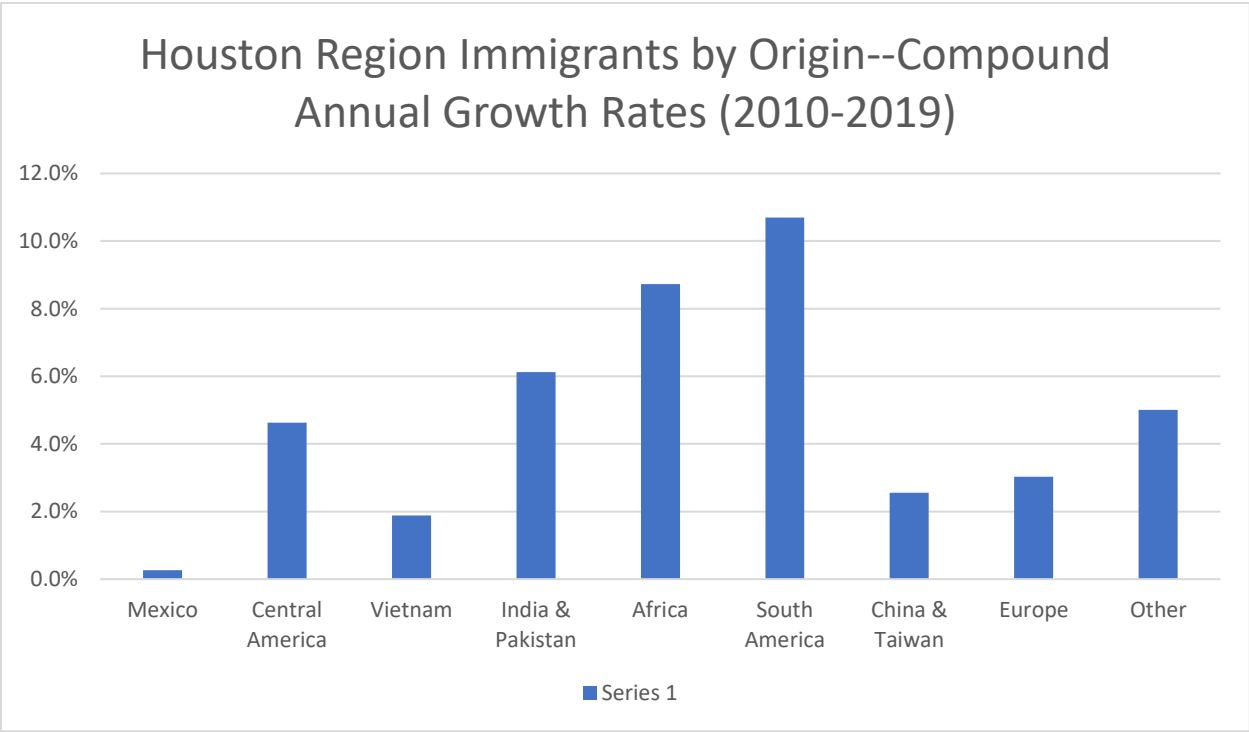
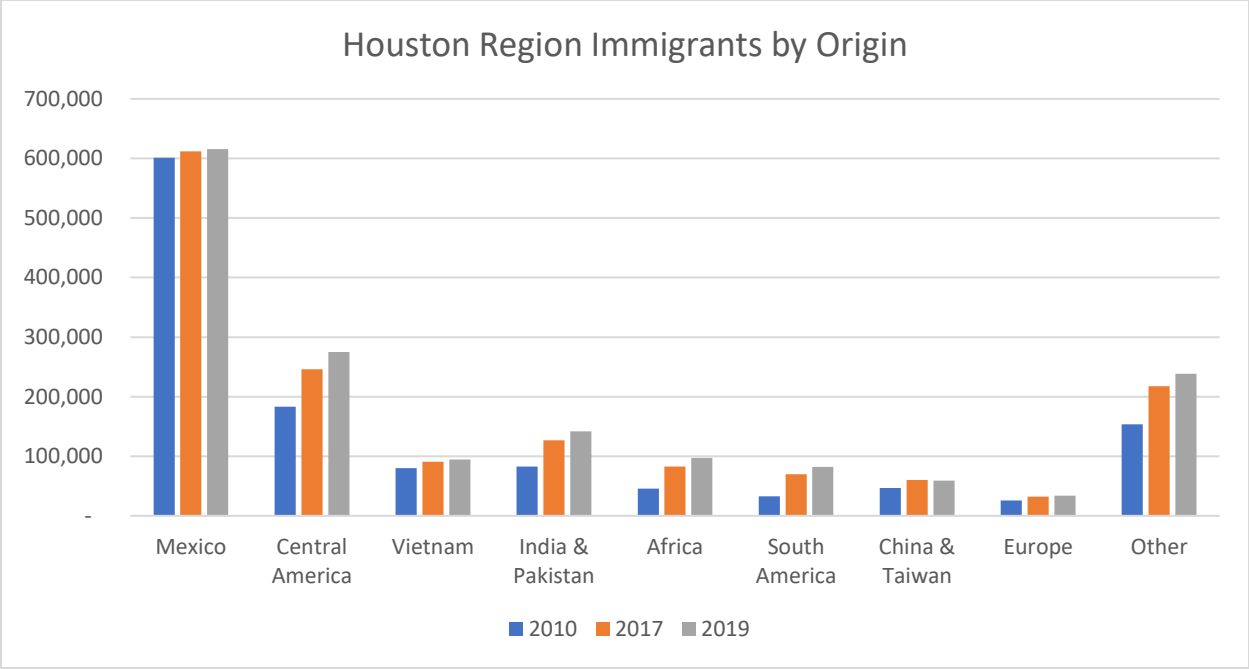


Houston's foreign-born population continues to grow robustly, increasing by 28 percent from 2010 to 2019, two times as fast as the national rate of 13 percent.

Immigration from Vietnam and Mexico dominated migration patterns to Houston during the 1980s and 1990s, but the countries of origin for immigrants have recently become significantly more diverse.

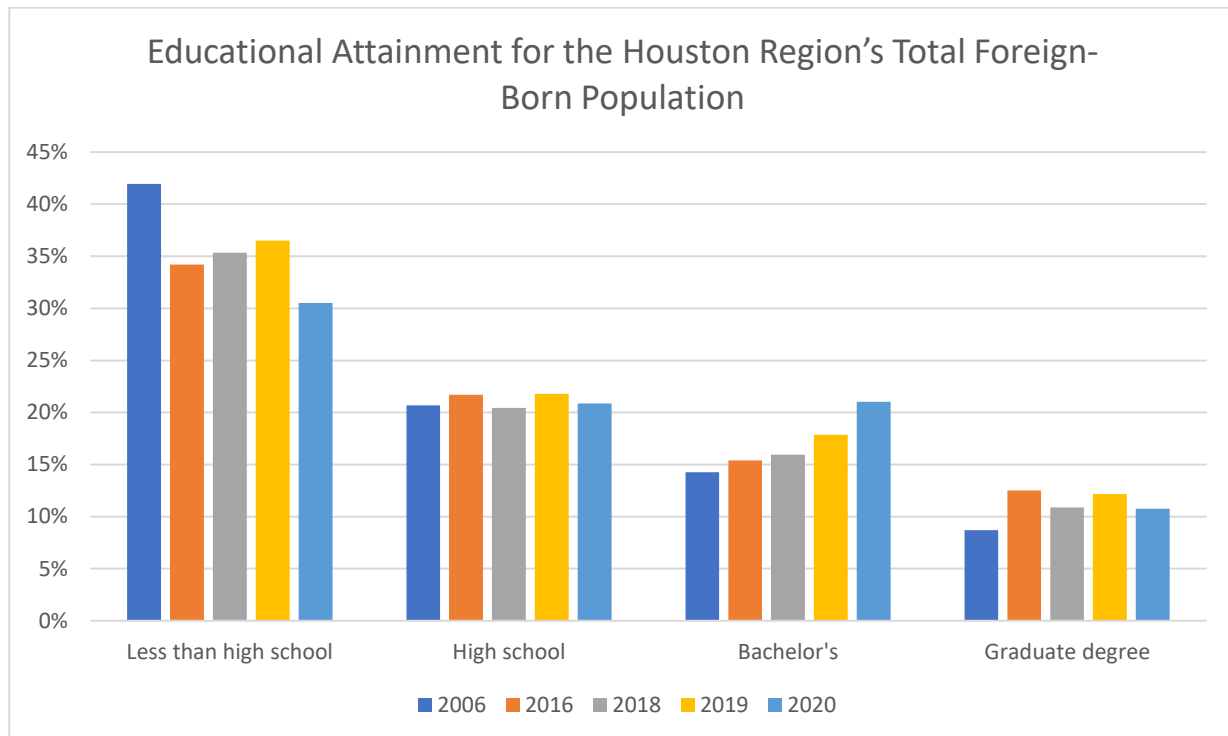
From 2010 to 2017, the flow of Mexican immigrants increased by just two percent. From 2017 to 2019, the trends in immigration by nationality largely held steady, with a moderate acceleration in immigration from Central America (12 percent) and a slight decline in immigration from China and Taiwan (-2 percent).

Today, place of origin for immigrants in the region include 15 percent from Central America, 25 percent from Asia, and 6 percent from Africa.



One defining aspect of Houston’s immigrant community is its diversity, a characteristic that extends to education. The level of education of foreign-born residents is strongly tied to

immigration status. Both immigrants with legal status and undocumented immigrants tend to have educational attainment levels that on average are lower than the native-born population.

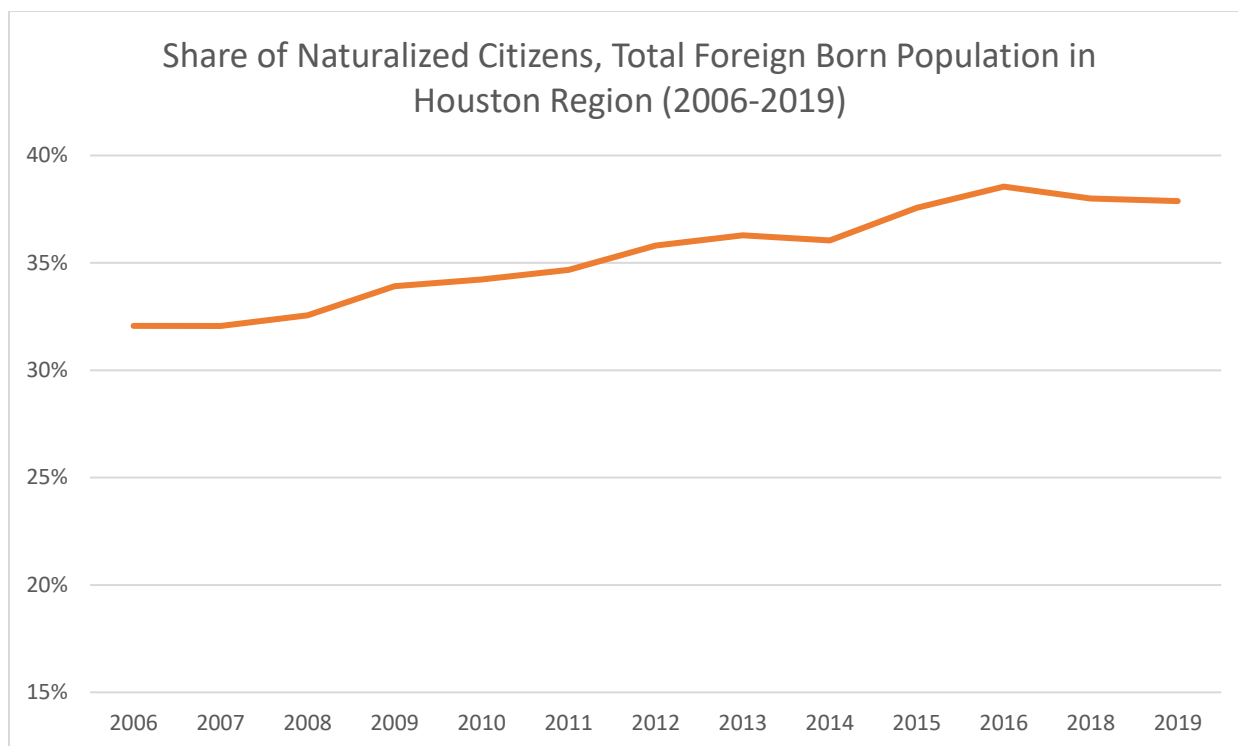


Overall, the level of education among Houston's immigrants has been improving, reflecting the past decade's changing immigration patterns. With the number of new undocumented immigrants dropping substantially and the region attracting more legal immigrants, educational attainment has subsequently risen.

Immigrants now versus 10 years ago in the Houston region are more likely to have graduated from high school, gone to college, and earned a high-level degree.

Just looking at 2016 to 2020 we found: The share of immigrants with less than a high school education declined from 34 percent to 31 percent, while the percentage of foreign-born individuals with a four-year degree or greater rose from 28 percent to 32 percent.

The past decade has been marked by a rise in more high-skilled immigrants entering Houston. The portion of the foreign-born population with a graduate degree grew from 8.7 percent to 12.5 percent from 2006 to 2016. However, recent data suggest a change of this trend, with the share of foreign-born residents with a graduate degree dropping to 11 percent as of 2020. It is unclear at this point whether this constitutes an actual trend, or just a one-year fluctuation in the data.

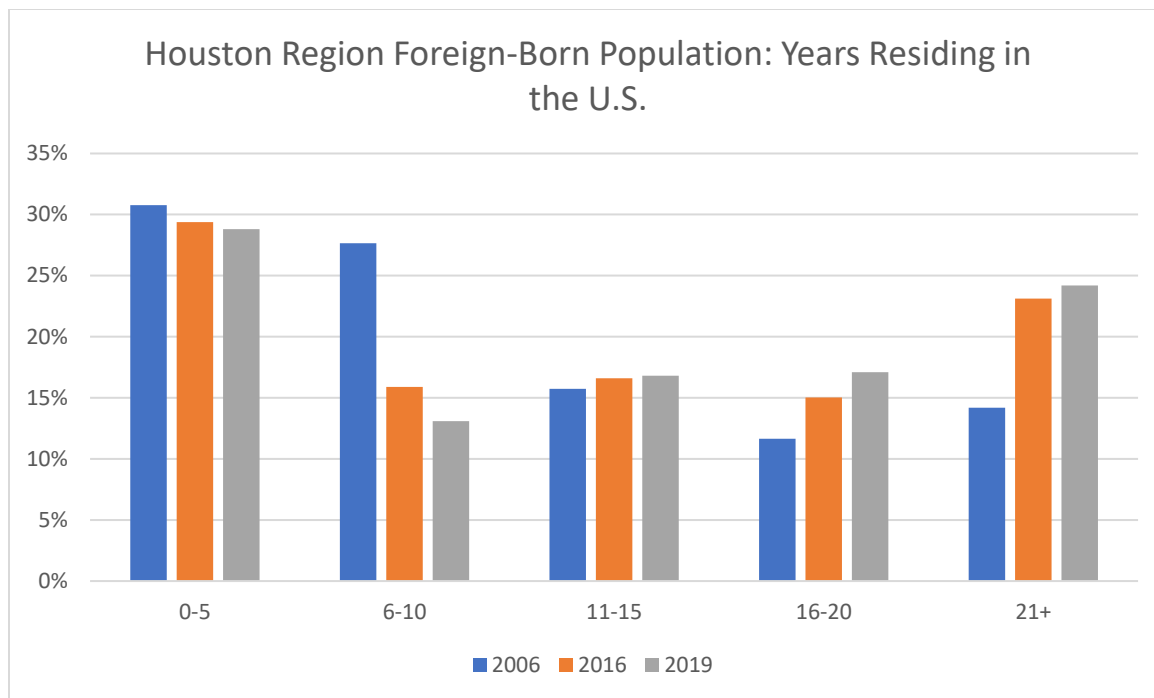


Naturalization is perhaps the most important milestone in the integration of immigrants, as research identifies tangible economic benefits associated with citizenship. Encouraging citizenship among eligible immigrants is important to realizing the potential effects of immigrants on their local economies.

From 2006 to 2019 the percentage of naturalized citizens rose from 32 to 38 percent. However, the percentage of immigrants in Greater Houston eligible to become citizens is significantly lower than the nationwide percentage at 38 vs. 48 percent in 2019, respectively.

Over the past few years, however, improvement in naturalization rates have plateaued. As of 2019, the naturalization rate stands at 38 percent.

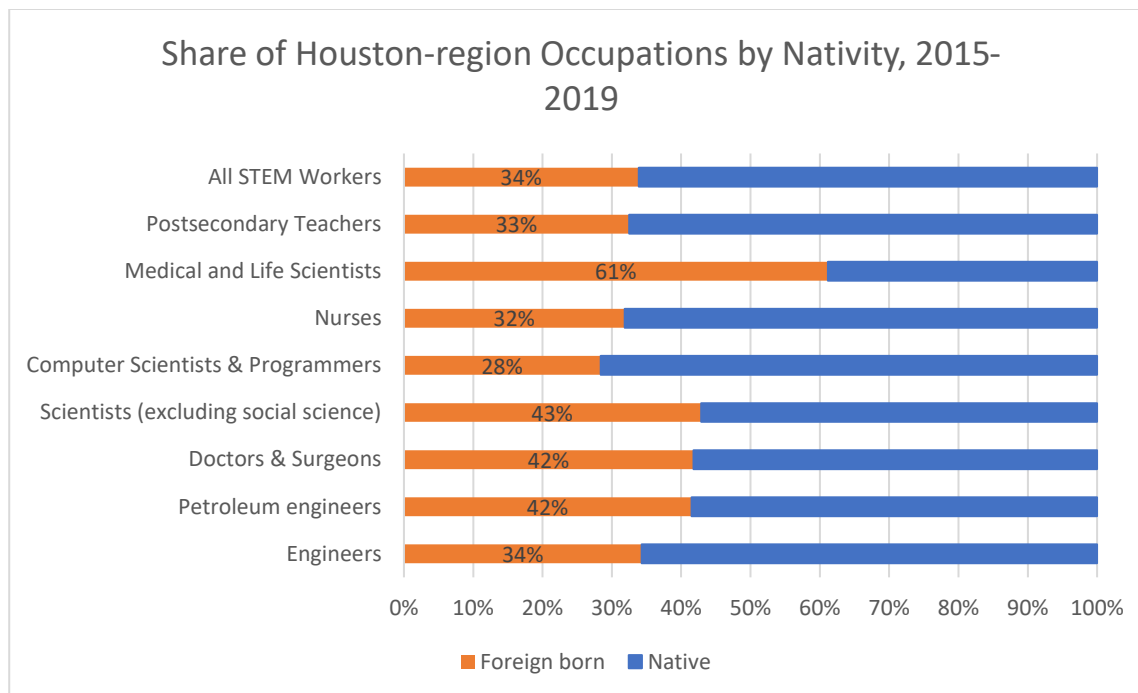
Several factors contribute. Compared to the nation at large, undocumented immigrants make up a larger share of Houston's total foreign-born population. In addition, many immigrants here have temporary status and are ineligible for citizenship. Lastly, those from Mexico and Central America—representing more than half of the region's foreign-born population—are the least likely to naturalize.



The majority of non-citizens have become permanent members of the community. This longevity suggests that immigrants play a critical role in the Greater Houston community.

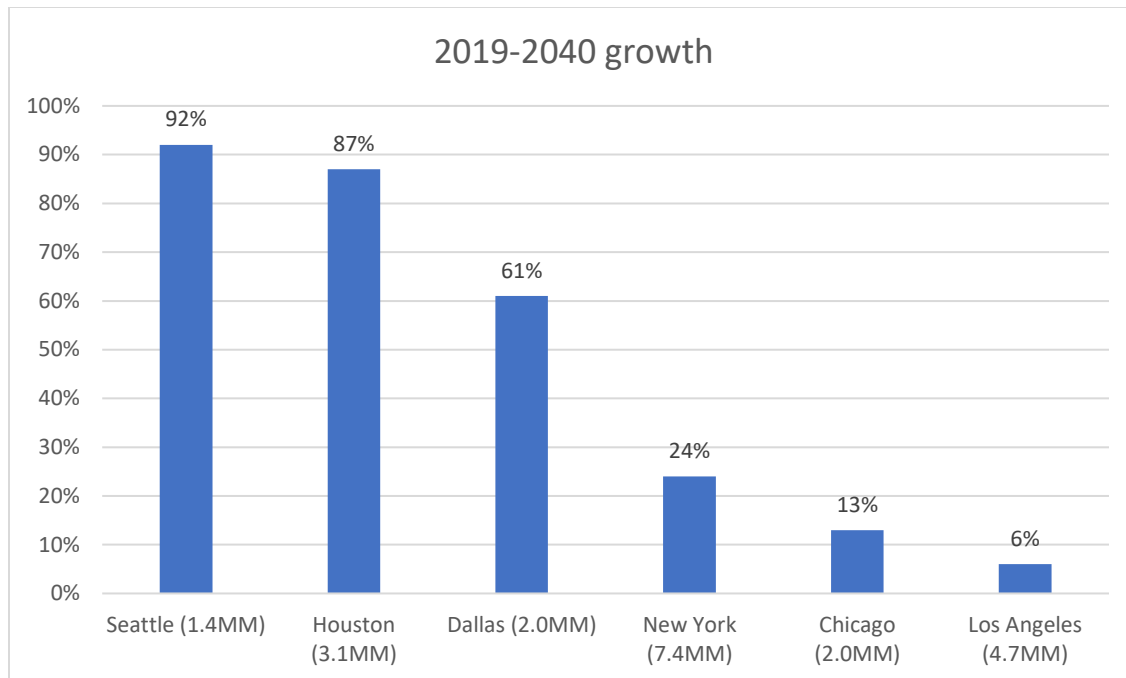
More than half of Houston's non-citizen foreign-born population has resided within the U.S. for more than ten years, with just under a quarter having lived in America for over twenty-one years.

Moreover, Houston's foreign-born population is increasingly comprised of long-term residents. For instance, the percentage of foreign-born individuals living within the U.S. for over ten years grew 13 percentage points from 2006 to 2016, rising from 42 percent to 55 percent. As of 2019, this figure reached 58 percent.



A substantial portion of the region’s foreign-born population is highly skilled. As noted previously, more than a quarter of Greater Houston’s immigrant population has a bachelor’s degree or higher. These individuals, who often come to Houston on employment visas, provide a sizeable portion of the region’s high-skilled workforce.

Foreign-born individuals comprise 29 percent of the Houston-area workforce but are overrepresented in many of the region’s white-collar occupations. More than 83,000 immigrants here work in science, technology, engineering or mathematics (STEM) occupations, representing 36 percent of all Houston-area workers in this category. Altogether, foreign-born workers occupy 34 percent of all STEM jobs in the region.



Virtually no other region of the country will be and is affected by immigration more than Houston. Assuming that immigration to the region continues at its current pace, Houston’s foreign-born population will almost double in the next 20 years. Immigration and the integration of immigrants will become increasingly important to our region’s future.

A simple analysis of Census data illustrates how Houston is among the nation’s leaders in attracting immigrants. We chose five metropolitan regions to compare with Houston. Using American Community Survey data from 2007-2011 and 2015-2019, we calculated the compound annual growth rate for each region’s foreign-born population across these periods. These growth rates were then used to project the change in foreign-born individuals for each region by 2040.

Among the comparison set, Houston ranks second in growth among the foreign-born population on a percentage basis. Assuming historical trends remain constant, the number of immigrants in the Houston region will rise 87 percent to 3.1 million individuals by 2036. While Seattle’s immigrant population is projected to rise 92 percent over the same period, this figure reflects the lower base from which it starts.

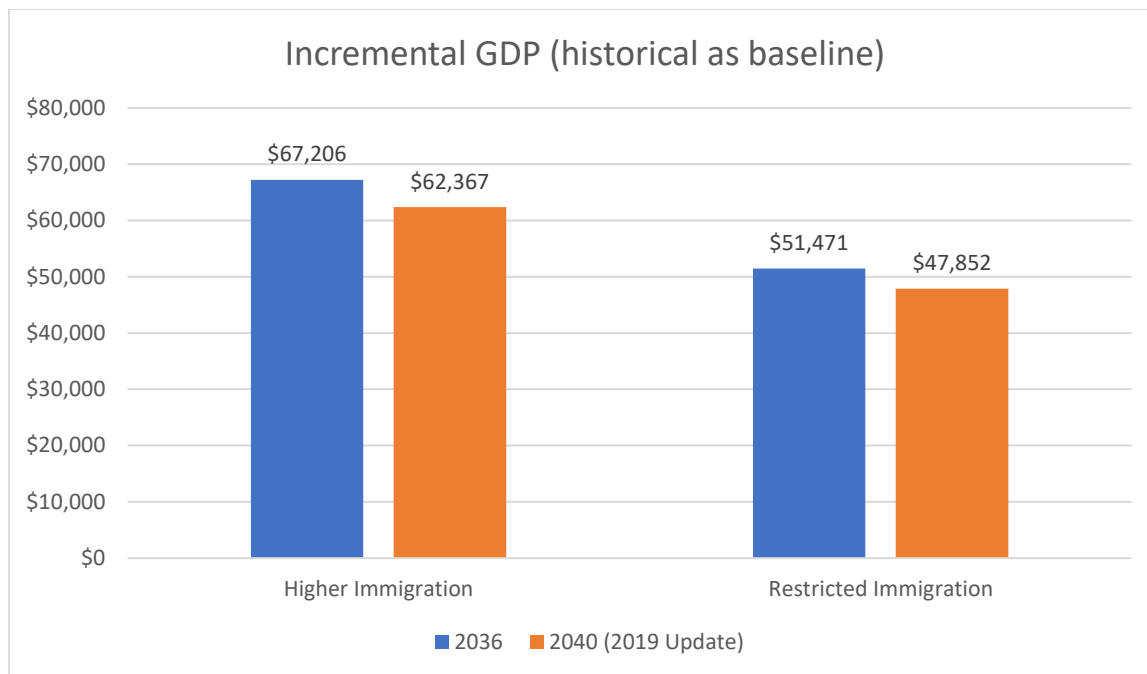
Scenarios

It is widely accepted population growth and capital investments that improve worker productivity spur economic growth. Historically, Texas and Houston's economies have grown in tandem with population growth, which in turn increases from natural increase as well as domestic and international migration. In recent years, international migration has been a key driver in expanding Houston's workforce, which in turn has led to economic growth.

Demographers predict that, with immigration, the region will add 4 million residents in the next 20 years. As such, newcomers will play a critical role in ensuring our region's economic growth. We assess the extent of immigrant workers' economic contributions by projecting how a change in their numbers would affect growth in the region's gross domestic product (GDP).

Since our previous modeling effort looked 19 years in the future to 2036 (The 200 birthdays of Houston and Texas) to assess the impact of immigration policies, the revised model outputs detailed below are based on the year 2040, in order to maintain the same number of years in the forecast.

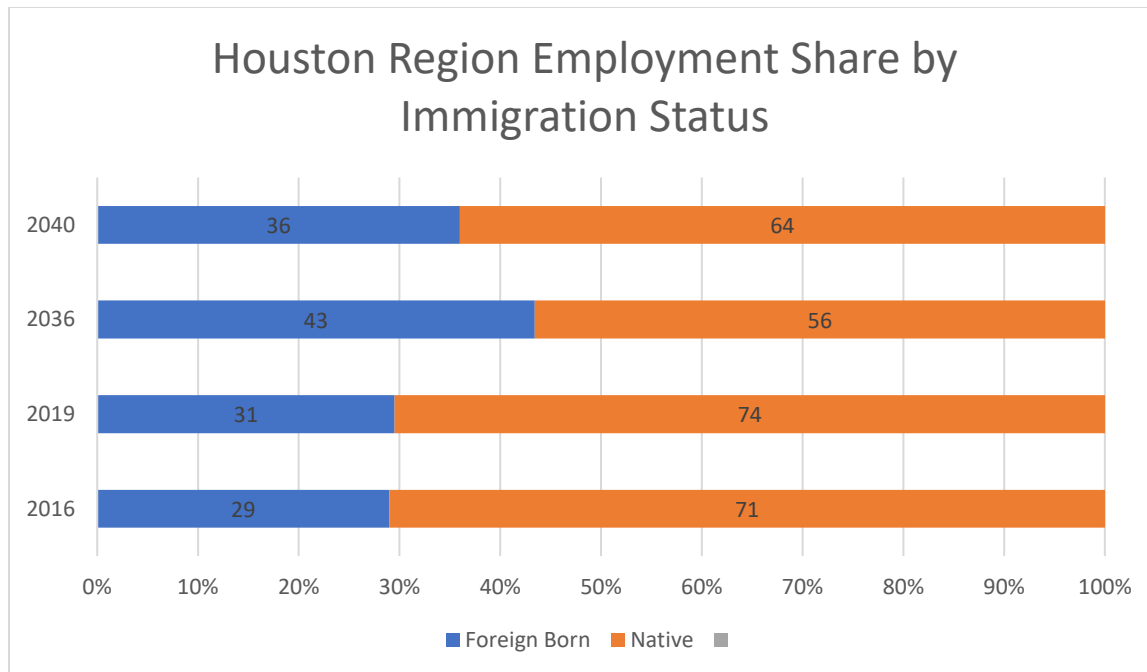
GDP—and measurements of its growth—is one of the most accepted indicators of economic activity. We project the change in GDP by 2040 under two cases—higher immigration (an across-the-board 30% in immigration to the region) and restricted immigration (an overall 30% decrease in immigration). The probability of each of these scenarios actually occurring is remote. We selected them to illustrate the extent to which changes in immigration can affect the economy. For more information on our model approach and the assumptions used, please see the [model methodology detailed in our original report](#).



The model, as in the original report, continues to demonstrate that immigration fuels economic growth. The revised figures suggest a lesser impact from the different immigration scenarios, due to a decrease in the growth of foreign-born workers in the Houston region from 2017 to 2019. Overall, the revised outputs confirm our 2019 report's core findings that the region's future economic growth is tied to immigration.

Our modeling from two years ago suggested that a higher immigration scenario would yield a \$67 billion benefit to the economy, and a restricted immigration scenario would produce a \$51 billion loss in GDP from the revised historical baseline from 2007 to 2019.

Today, the model suggests that the higher immigration scenario would produce a \$62 billion benefit, while restricting immigration by 30 percent would decrease GDP from the baseline by \$48 billion.



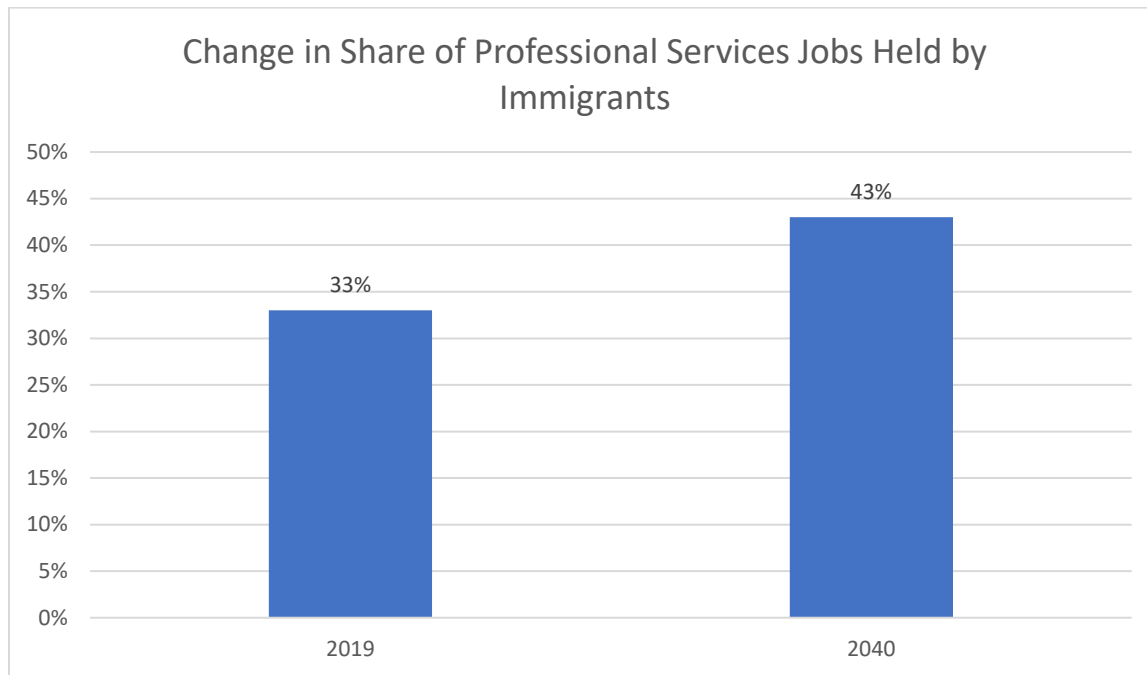
In 2016, the legal and undocumented population accounted for 29 percent of all employment in the Houston metro. This figure grew to 31% by 2019. However, growth in foreign born labor has been declining in recent years. While the original forecast estimated that the share of jobs held by foreign-born workers in the region would rise from 29% to 43%, our new forecast assumes these changing trends and now indicates that this figure will grow from 31% in 2019 to 36% in 2040.

Sector-specific Analysis

Professional Services

The professional services sector include an array of occupations and sub-industries, including legal, consulting, accounting and more. As of 2019, the sector employed 500,000 workers, and we project that number will rise to 789,000 by 2040.

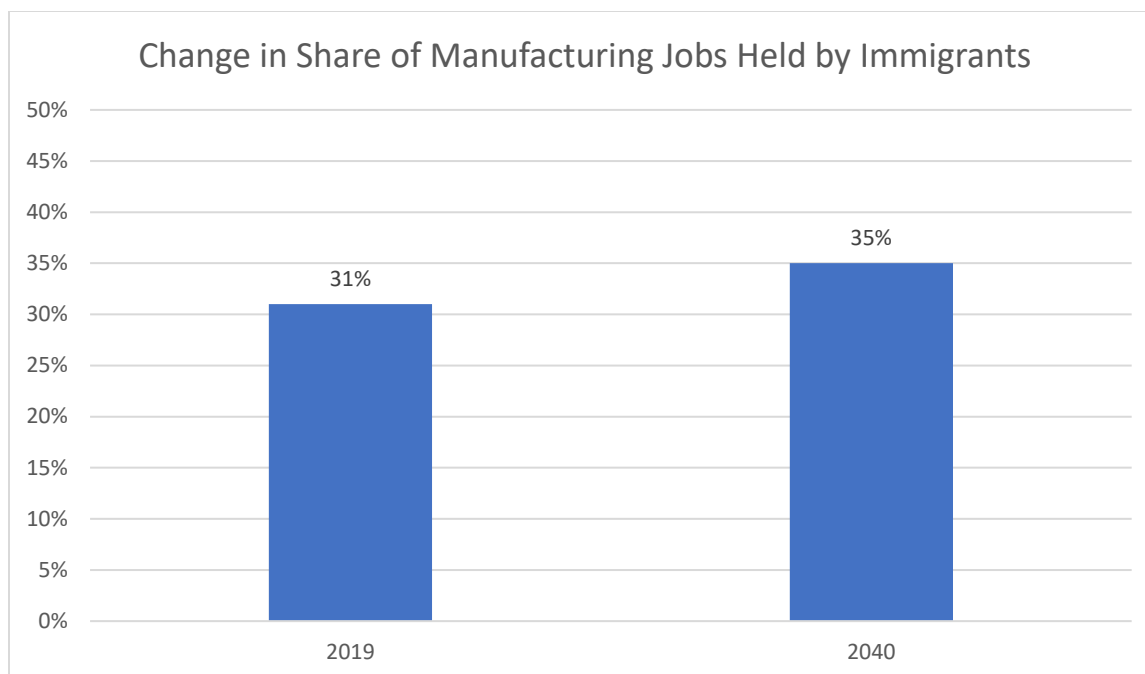
Of this 289,000 increase, CHF's modeling indicates that 189,000 (65%) of these new jobs will be filled by foreign-born workers. Accordingly, we expect the share of immigrant labor in the professional services sector to grow from 33% to 43%.



Manufacturing

The Manufacturing sector comprises 9% of Greater Houston's employment and 17% of the region's GDP. As of 2019, the sector currently employs 350,000 workers, and we project that this number will rise to 415,000 by 2040.

Of this 47,000 increase, CHF's modeling indicates that 28,000 (60%) of these new jobs will be filled by foreign-born workers. Accordingly, we expect the share of immigrant labor in the Manufacturing sector to grow from 31% to 35%.



Energy

The energy (mining) sector comprises 3% of the region's employment and 4% of GDP. For the purposes of this update, we refer to firms categorized under the "mining" category, which may exclude businesses that many associate with the energy sector such as petrochemical refiners (whose contributions are documented in the manufacturing section of this document).

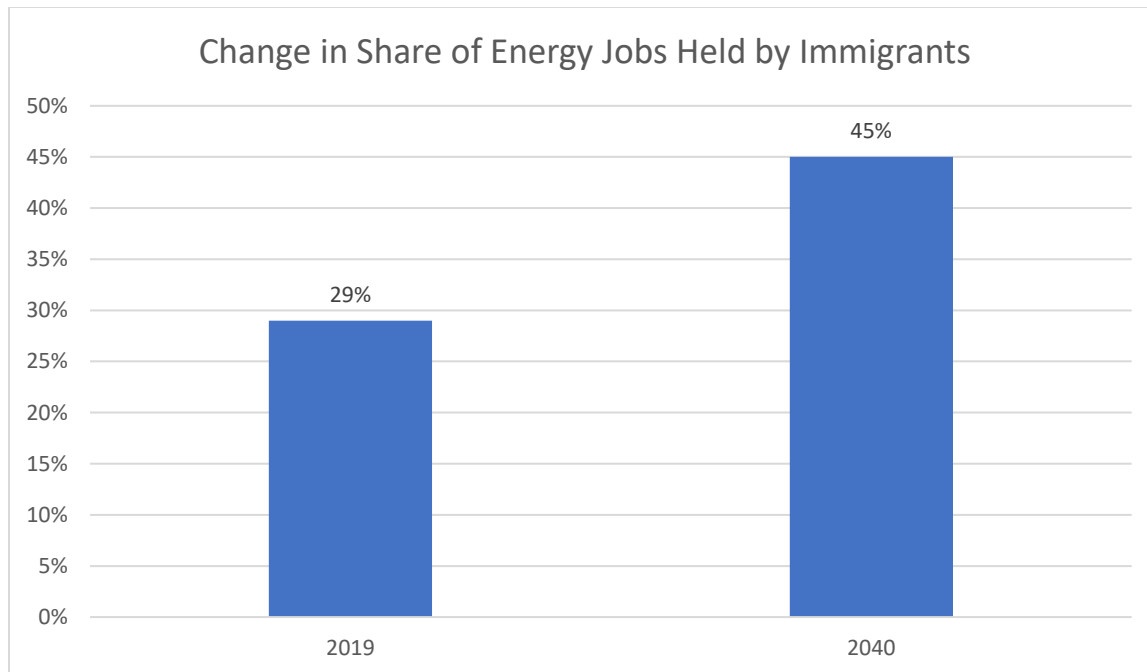
Conversations the Center held with regional energy leaders highlighted a number of immigration-related concerns. The industry has experienced major workforce challenges during the last several years with the anti-immigrant rhetoric and increased restrictions on immigration due to general policy and exacerbated by pandemic travel restrictions.

First, L1B visas for intra-company transfers are extremely important to the operation of multinational energy companies. However, new restrictions on moving employees and obtaining these visas has complicated the ability to plan and execute new projects. Moreover, the previous administration's travel bans for some countries effectively stranded some workers of multinational energy firms. Another issue raised was wait times to secure green cards for employees. One interviewee noted that workers from India and China, a major source of STEM workers, often must wait an average of five to eight years to secure permanent status.

Overall, interviewees stressed the need for a more consistent and stable immigration policy that would give businesses a predictable environment to plan. They stressed that without this certainty, multinationals could move projects offshore to other, more welcoming countries.

More flexibility and more opportunities to convert temporary visas to residency status would reduce the burden on multinational businesses.

As of 2019, the sector currently employs 126,000 workers, and we project that this number will rise to 313,000 by 2040. Of this 187,000 increase, CHF's modeling indicates that 114,000 (61%) of these new jobs will be filled by foreign-born workers. Accordingly, we expect the share of immigrant labor in the energy sector to grow from 29% to 45%.

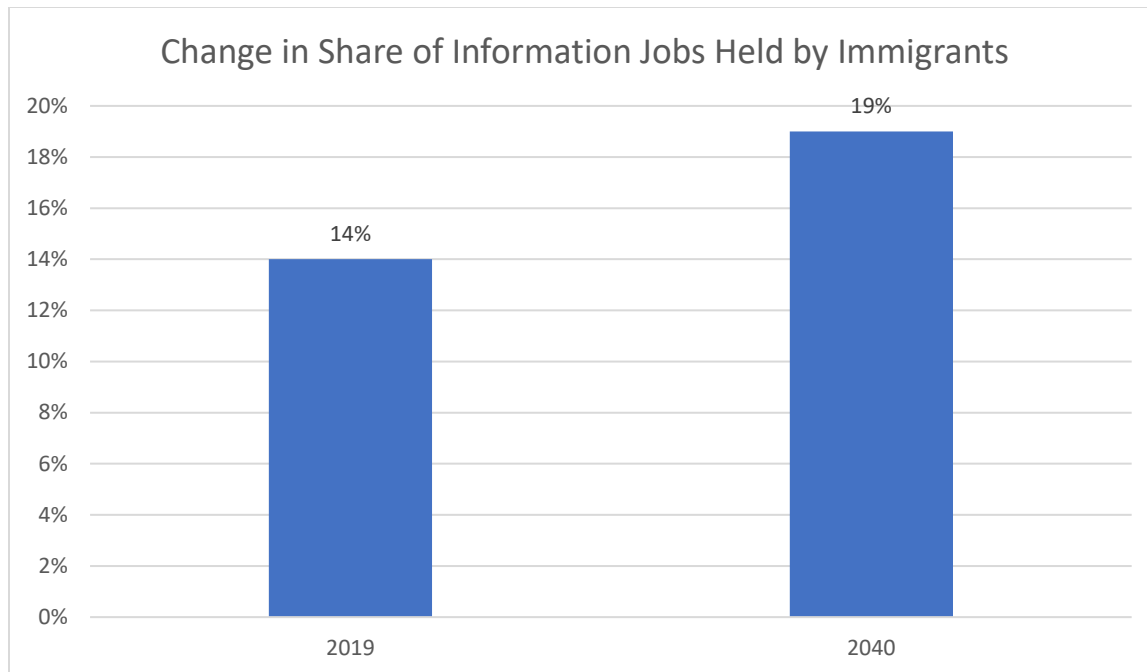


Information

The Information sector covers 2 percent of the Houston economy's total employment and 2% of regional GDP.

In spring of 2020, the Center convened a roundtable of regional Information technology leaders to discuss how immigration affects their businesses. Throughout this wide-ranging conversation, participants universally acknowledged that immigration is a key to their ability to recruit and retain workers needed to operate and grow their businesses. Some of the key points that emerged included: IT firms often hire foreign nationals because they are more likely to hold advanced degrees in the field; many cybersecurity jobs in IT require security clearances, which can create problems for foreign nationals; and because IT lends itself easily to remote work, many professionals are opting to live in more welcoming countries due to a perceived anti-immigrant climate.

As of 2019, the sector currently employs 47,000 workers, and we project that this number will decline to 38,000 by 2040. Of this 8,000 decline, CHF's modeling indicates that virtually all of the jobs removed from the sector over the next 21 years will be those held by native-born workers. Accordingly, we expect the share of immigrant labor in the information sector to grow from 14% to 19%.



Conclusion

The data continues to make a compelling case that immigration will continue to drive economic growth over future decades—such is the case in Greater Houston more so than virtually anywhere else in the country. The revised 2019 figures show that the decline in immigration rates over the past couple of years—by nearly fifty percent—directly lead to a decrease in projected GDP growth by 2040. As such, employers all have a stake in ensuring that our region continues to attract and retain immigrants.

Across the professional services, energy, manufacturing and information sectors, growth in employment is expected to be driven by foreign-born workers filling new jobs through 2040. Our modeling also shows that restricting the flow of these immigrants would incur a \$48 billion penalty to GDP on Greater Houston's economy by 2040.

A special thanks to JPMorgan Chase & Co., Marek Brothers and Chan Zuckerberg Initiative for supporting the Center's immigration work.

CHF plans to expand its immigration initiative in 2021, with a focus on expanding our outreach efforts, extending our research agenda, working with business and community partners and building a consensus around the message that immigration is key to the future of our region's economic success..