The United States is a nation founded on immigrants and has benefitted for many years from the influx of the immigrant work force. The U.S. has long been known as a land of opportunity and many people want to take advantage of those opportunities, by both legal and unlawful means. Since 2013, I have been transcribing immigration hearings for a company that contracts with the DOJ, and the majority of these are hearings for undocumented immigrants.

For my capstone project, I wanted to dive a bit deeper into the legal immigrant side, the people who have applied for a green card, or work permit, in order to work or possibly later obtain citizenship legally. These immigrants are known as lawful permanent residents, or LPRs, as I will refer to them going forward.

I was curious to see under which class of admission most LPRs applied and if that changed much over the years, especially leading up to or at the beginning of new presidential terms. I then looked at which countries had the highest number of LPRs over the time period covered by the data available. I also was curious to know where the highest concentrations of LPRs are residing in the U.S. and if these places were scattered all over the U.S. or tended to be near the borders.

I downloaded data from the U.S. government’s open data site, specifically the Department of Homeland Security. The data that I used files offered county-level data for the top 200 counties of residence for new LPRs and was available in single files ranging from 2018 as the most recent back to 2007 as the earliest it was stored in this format. I cleaned and grouped all 11 files to get a good picture over the last decade. A number of cells in the admission counts column were listed as “D.” I researched this on the data.gov website and found that the cells were designated as “not Disclosed” and stood for values of 0-3 in order to protect the privacy of immigrants whose identity might be determined from this data. I chose to replace the D with a 1, as the lowest value I could fill in to represent an individual. I also grouped the classes of admission in each file. There are six major classes, but the data provided a number of subclasses as well.

For clarity, I’ll quickly review these six major classes of admission. I provided a link in my ReadMe sources if anyone wants further information. The first is: Immediate Relatives, which is a spouse, parent, or child of a U.S. citizen over 21. Then we have Family-Sponsored Preferences, which are family members not included in Immediate Relatives. Next is Employment-based Preferences, which are for those seeking to provide needed skills or create new U.S. jobs. After that is Refugees and Asylees Adjustment, for persons with fear of persecution in their home countries. The Diversity Program is a sort of visa lottery for countries with low levels of immigration. And Other is for persons covered by special legislation, such as NACARA for Nicaraguan civil war refugees or HRIFA for Haitian refugees, just as a few examples.

I created a breakdown of the class of admission using a bar chart to examine the change in percentages by class. These can be viewed as a total number for all 11 years or by year by using the slider. At the bottom we have a line chart showing the changes in each admission class over the 11-year period. Because I primarily transcribe asylum hearings, I naturally assumed that the majority of LPRs were also coming in under the asylum or refugee class of admission, but that does not seem to be the case in reality.

I find it interesting that the Immediate Relatives class is the only one that shows significant variation, and it seems to be in years during or preceding a presidential election. I have noted three points of interest. The first increase took place in 2008, during a presidential election year. During the next election year, 2012, a slight decrease occurred. Then, the next increase takes place in the two years leading up to the next presidential election. It seems like that the changes prior to 2016 are likely steeper than those in 2008 due to the fact that immigration reforms were a big priority in the 2016 political campaigns. After reviewing the decade of data, we can now answer the question of which class of admission is most applied for. The Immediate Relatives class accounts for more than 40% of new LPRs annually.

Next, I calculated the top 10 countries from which LPRs originated, for each year and in total. The bar chart gives you great information on the numbers, while the map shows you more visually where the immigrants are coming from. What I found most interesting about this was that after reviewing the chart year by year, you can see that while the proportion of LPRs from the countries may vary, the top 10 countries themselves haven’t changed in the past 11 years. I was also surprised to see that Cuba had moved its way up the ranks and was 2nd only to the perpetual top-runner Mexico by 2018. According to my preliminary work in a Python notebook, in 2018 some 32,000 immigrants from Cuba ended up residing in Miami-Dade County, Florida, which is nearly half the number of ALL admissions from Cuba that year. Online sources confirmed that Miami-Dade County has the largest concentration of Cuban-Americans in the U.S.

That finding led to the question of where other LPRs were settling, now that I had an idea what countries the LPRs were coming from. Do LPRs tend to scatter wherever they can find work or do they settle closer to the borders because their relatives also live there? Maybe they prefer to settle in places where there is already a large community of their countrymen and women residing. This tree map shows the admissions grouped by county and state. I used a limit of 20 counties to keep this visualization from getting too busy, but as you can see, all 20 counties ended up located in only 9 or 10 states. California had the largest total admissions over not only the full decade, but each individual year, followed by New York, Florida, and Texas, as you might expect. The other states vary a bit over the decade, but not greatly.

I was curious about why some of these states were included in this grouping, but I wanted to explore these locations in a map format, both by state and then county. First, I wanted to look at it by state to see it from a larger viewpoint. You can better see how the border states are clearly the areas of higher number of legal permanent residents. But this view doesn’t necessarily mean the whole state receives large number of LPRs. Let’s break it down to look at it by county. The county visual is small, but you can see the counties change a bit, like Clark County in Nevada. Some year it makes the top 20 and some years Middlesex County in Massachusetts takes over.

One thing this visual brought out was that King County, Washington and Cook County, Illinois (which is basically Chicago) were consistently in the top 10 and they are not border cities. I did some further research and found out some interesting facts. About 1 in 7 WA state residents is an immigrant and WA state is one of our country’s highest food-producing states, which leads to a large number of immigrants coming to work in food production in WA. More than 50% of the state’s farmers, fishers, and foresters are immigrants. And as for Chicago, a recent report from 2019 lists Chicago as the #1 immigrant-friendly city out of the top 100 largest cities in the U.S. due to its high levels of immigrant support and sanctuary city status.

So, to answer to my LPR location questions, we can see that the top 10 countries of origin for new LPRs have not changed in the past 11 years except for rank, with Mexico leading the pack for all 11 years. As for resettlement location, it appears that the majority of LPRs, for the most part over the past decade, tend to reside in cities near the borders, with a few exceptions. As more than 40% of LPRs qualify for admission status through immediate relatives, they are likely joining these relatives in locations where there is already a large concentration of other people from their home countries.

I hope you enjoyed this analysis of lawful permanent residents in the U.S.