

A red pushpin is pinned to a map, which is the background of the entire image. The map shows various geographical features like roads, rivers, and green spaces, though they are slightly out of focus. The pushpin is bright red and stands out prominently.

# Final Project: Global Movement

*Alyssa Laffin*

# My Map

Today I came with the goal of showing global trends and patterns in human movement. I find spatial thinking to be an important concept of GIS and Geography overall, and so therefore I found examining a global scale dataset to be fitting.

In order to represent movement then, I specifically focused on immigration and emigration patterns in the U.S. I specifically wanted to show the top twenty countries U.S citizens move to as well as the top 20 countries citizens immigrate from. I also wanted to highlight the amount of people and somewhat 'rank' and display where the most (or least) people are coming from and going to, in order to further analyze other spatial trends and just 'why' these patterns exist. Lastly, I wanted to show where people generally settle

## *Objectives:*

- *Show global pattern to expand spatial thinking*
- *Use variety of overlays to display different trends*
  - *Relate information largely back to U.S.*

# Data Used

## Immigration Data

- <https://www.dhs.gov/immigration-statistics/lawful-permanent-residents>
- [https://en.wikipedia.org/wiki/Immigration\\_to\\_the\\_United\\_States](https://en.wikipedia.org/wiki/Immigration_to_the_United_States)

## Emigration Data

- [https://en.wikipedia.org/wiki/Emigration\\_from\\_the\\_United\\_States#:~:text=Emigration%20from%20the%20United%20States%20is%20the%20process%20where%20citizens,immigration%20to%20the%20United%20States.](https://en.wikipedia.org/wiki/Emigration_from_the_United_States#:~:text=Emigration%20from%20the%20United%20States%20is%20the%20process%20where%20citizens,immigration%20to%20the%20United%20States.)

## Cities

- <https://backgroundchecks.org/cities-largest-immigrant-population.html>
- <https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.html> (shapefile)

## Images

- All images taken from Wikipedia pages where data was found

Leaflet web map API for migration overlay

# Weaknesses & Strengths

## Weaknesses

- ❑ Line width of flowmap does show numeric significance of populations, but does not have popup when clicked on to show true value
- ❑ Top ten cities where immigrants settle seem very insignificant due to size of map scale
- ❑ Arrows of flowmap and amount of arrows seem rather distracting or clustered (looks like a lot is going on)
- ❑ Buttons to show each flow (whether immigration or emigration) had to be separate with no option to toggle
- ❑ Could not upload any interactive features such as legend
- ❑ Keys to turn on and off flowmap (aesthetic feature)
- ❑ Inability to upload popups and proportional circle layer

## Strengths

- ❑ Good way to show larger global trends and find commonalities
- ❑ Allows viewer to think about ‘why’ people may be going to or coming from certain locations
- ❑ Good way to globally analyze large data set

# Thank You!

Link: [https://alyssalaffin.github.io/geo455\\_page/finalproject/finalproject.html](https://alyssalaffin.github.io/geo455_page/finalproject/finalproject.html)