

## Team 2 --- Project Deliverable 1

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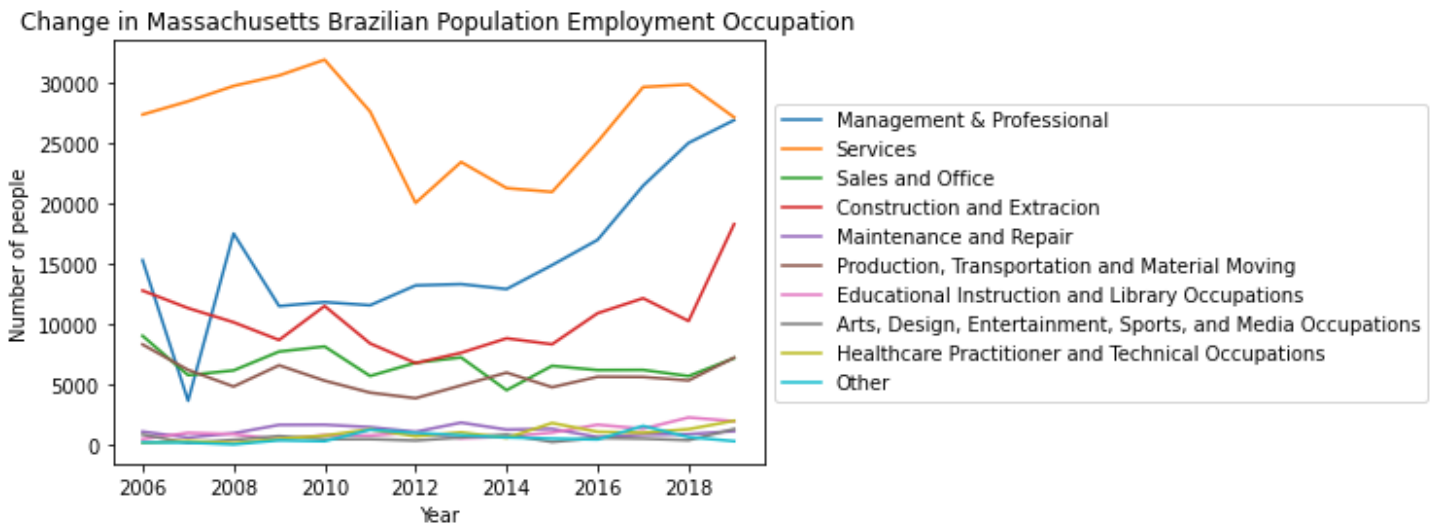
### Collect and pre-process a preliminary batch of data

Team 2 worked on the years 2005 - 2019 to preprocess and we received this data from our client in the form of an excel spreadsheet with multiple tabs per each year

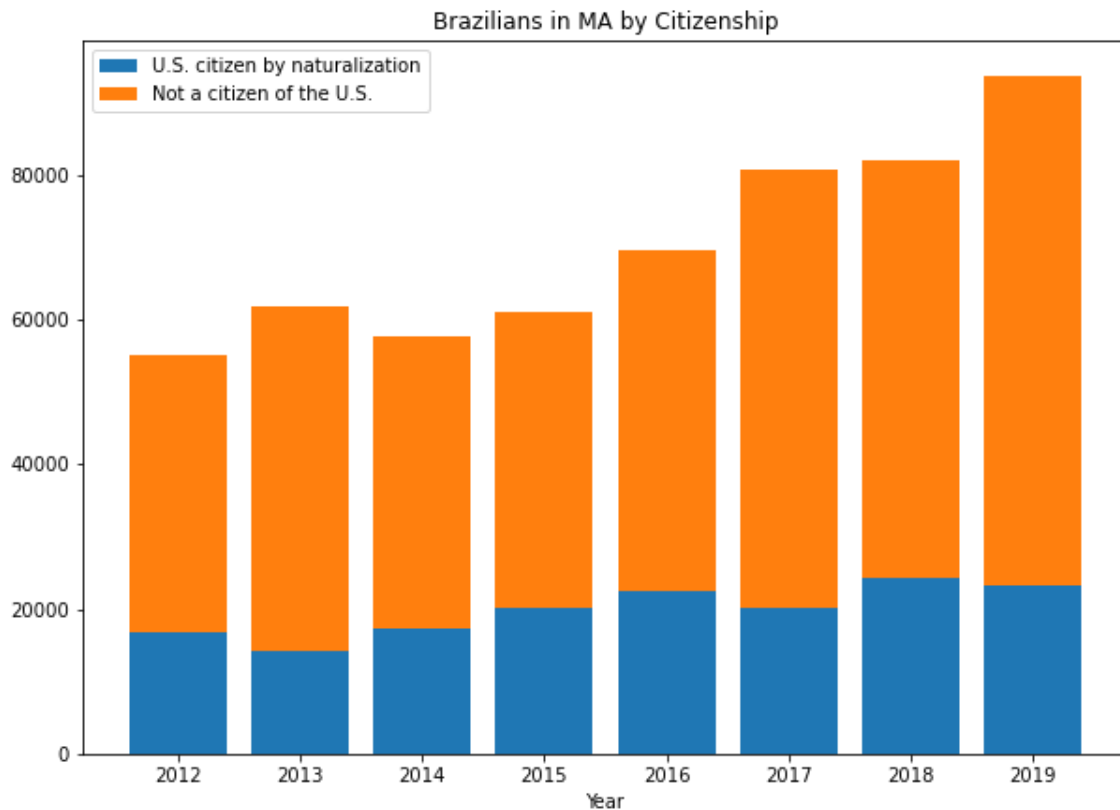
In the preprocessing we made functions so that it will be easy for the clients to add additional data in the future

### Preliminary Analysis (figure and analysis below):

Many more visualizations/charts/analysis can be found on the [Team 2 branch](#)



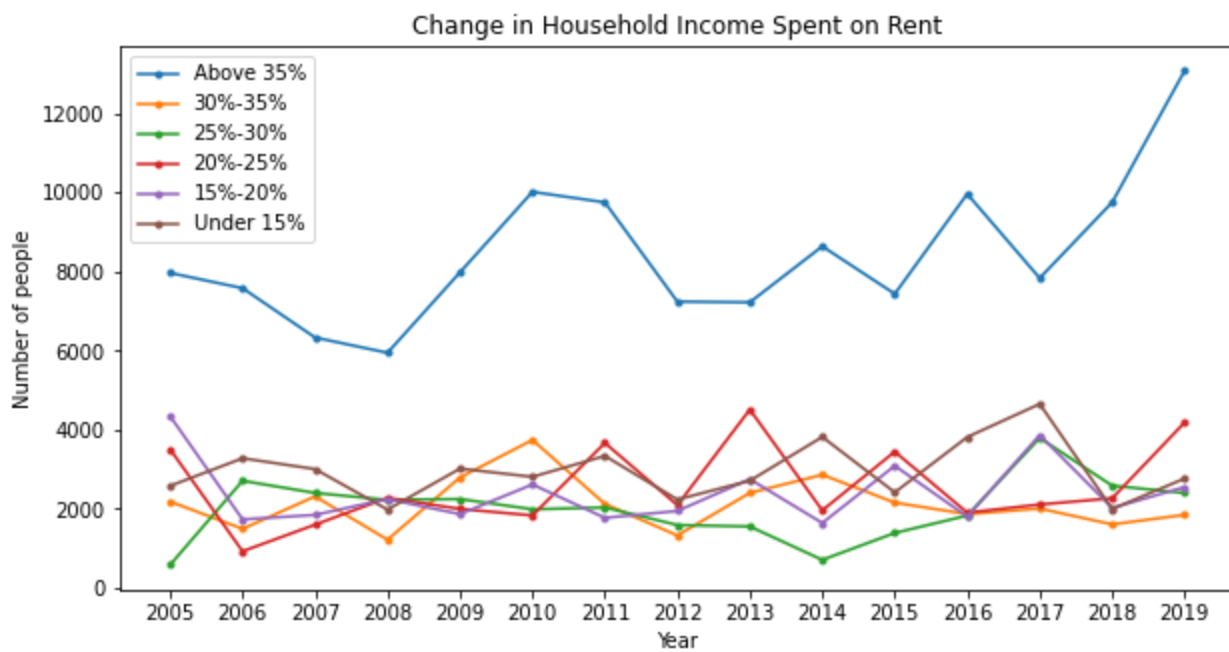
In Massachusetts, a longstanding majority of Brazillians worked in service jobs, however, Management & Professional jobs (M&P) grew slowly in popularity and eventually converged with service jobs in 2019. On the country wide scale this happened back in 2008, but it is clear that MA Brazilians are catching up to the trend.



Between the years 2012-2019, the Brazilian population in Massachusetts is growing, but the numbers of Brazilians in Massachusetts that are naturalized US citizens have remained relatively steady over the years. This means that non-US citizens are driving the growth of the Brazilian population in Massachusetts.



The median personal earnings for the Brazilian community in Massachusetts dropped sharply in 2014 and rocketed in 2015. What happened in these 2 years is worth surveying.



The figure above depicts the change in the percentage of household income spent on rent. We can see that the most populated percentage bracket of household income is the above 35% range. It is worth noting that this above 35% bracket has remained the most populated by almost double of all other percentage brackets over the years 2005-2019. It is worth exploring further how this compares to the change in Brazilian household income over the years to determine if this trend of above 35% is due to stagnant income levels, or the increasing cost of rent in Massachusetts over the years, or a combination of both.

### **Key Questions**

More than 1 question answered in explanations above as data was collected by the client.

### **Refine project scope and list of limitations with data and potential risks of achieving project goal**

- Household TEMP.xlsx cannot be used as a valid data source. So we cannot extract features such as median household income.
- Originally we were going to work with Census data specific to Boston, MA from 1970-2020. However, as we were doing our searching for the data it became difficult to find consistent information about Boston, MA Census specifically.
- Our new scope is based on data provided from the client for the change in the Brazilian population in each US state over the years 2005-2019.

### **5. Submit a PR with the above report and modifications to original proposal**

- We have discussed with the client changes to the original requirements and received approval for our new plan.
- For a more detailed explanation of our trajectory for the project see the github repo "Team 2" under "Meeting Notes" and "Meeting 11\_4.pdf"