**Salary**

Salaries were grouped by region, city & state and by school. They were further broken down by the following categories:

* Starting Median Salary
* Mid-Career Salary
* Mid-Career 10th Percentile
* Mid-Career 25th Percentile
* Mid-Career 75th Percentile
* Mid-Career 90th Percentile

For the purposes of our analysis, we used Starting Median Salary and Mid-Career Salary by City & State.

Once grouped, both salaries were compared against mortgage. As a rule of thumb, housing should be no more than three times one’s salary. As highlighted in our analysis, areas like San Francisco, California and New York, New York are unaffordable for most families that earn an average salary.

**BLS**

Our team also reviewed mid-career salary by city against average monthly expenses as summarized by the Bureau of Labor Statistics (BLS). The difference between these figures is what a family of four can expect to take home after all expenses, including but not limited to housing, food, and car payments. It’s important to note that the BLS data we are using is a national average, not by region. We included the average monthly expenditures of $3,348, which is monthly expenses, excluding housing.

**Deep Learning Model**

Based on school, school median salary, household expenses, and mortgage, our model attempts to predict the region in which a family of four lives. For example, if one has a mid-career median salary of $6,908, a mortgage payment (excludes taxes, insurance, and HOV fees) of $688 and/ or rent of $776.12, then the region predicted is the South. Said another way, using salary and household expenses, the model predicts the region of the family of four.