**Capstone 2: Project Proposal**

**Steven Ho**

**Springboard Data Science Career Track**

**Problem Identification**

**Problem Statement**

City Owl Partners LP is currently an asset management firm located in New York City, New York. With the spike of the global pandemic due to Covid-19, City Owl moved to a work from home setting for their employees to slow the spread of the disease. Now after 2 years of the pandemic, senior management is looking to open the office again and welcome employees back to the office. However, there is only one issue, no one wants to return to the office in NYC due to a number of reasons: employees have moved to different parts of the country, still a pending fear of the pandemic, the lack of safety resources in the city, and overall cost of living. City Owl’s number one goal is to keep turnover rate low and keep everyone satisfied with their accommodations. City Owl has hired our team to create a few scenarios in which US city of the country that they can possibly move to that will keep all employees safe and happy with the increases in cost of living. With the help of research based around New York City as the benchmark index, we will be able to create a scenario and make a proposal for which cities in relative to NYC that can be accommodating for the firm and their employees.

1. **Context**
   1. City Owl Partners LP is having an issue with employees returning to the office and want to find a possible relocation scenario that will give their employees the most satisfaction and best for a cost-of-living scenario for their employees compared to what they currently have in NYC
2. **Criteria for Success**
   1. We hope to provide an outline and different scenarios using a code, slide deck and a written paper to outline the best possible scenarios for each US city that makes the most sense for their current employees. Using NYC as an index, we hope to be able to have a presentation on the new city locations and how they compare when looking at data points such as Housing, cost of living, restaurant prices, groceries, and local purchasing power.
3. **Scope of solution space**
   1. Using the Cost-of-Living index data provided, I will provide different scenarios comparing them to NYC and how they can compare using Cost of Living indices such as Groceries, restaurant prices, and local purchasing power. I will display data visualization tools and the codes behind each statistical inference.
4. **Constraints within solution space**
   1. The main constraint that will come across our desk will be the overall elephant in the room: the worldwide pandemic of Covid-19. With the increases of the pandemic hitting across the country and all major US cities, we will have to analyze how fast the spread is across different cities and how they compare to NYC
5. **Stakeholders to provide key insight**
   1. Steven Ho - Partner
   2. Robert Lewis - Partner
   3. Lydia Hunter - Chief Operating Officer
   4. Barbara Williams - Head of Human Resources
6. **Key data sources**
   1. Cost of Living Index - provides data on rent, overall cost of living, groceries, restaurant prices, and local purchases power all based in relative to NYC’s current market situations
   2. Covid-19 statistics and fluctuations between each city