Best Museum City in the US

Introduction

　　While tourists come to the US for a variety of reasons, museums are a huge tourist attraction. Because of this a tourism company wants to build a museum guide package for their customers. Rather than a tour they want to provide all information so their customers can view the spots at their own pace and luxury. They want to find the best city for their package by analyzing which city has the highest density of museums. Tourists may not have cars or even a license. The denser a city is with venues, tourists will have closer and more options. To do this they're going to analyze five cities: New York, NY; Chicago, IL; Boston, MA; San Francisco, CA; and Los Angeles, CA.

Data and Methodology

　　Using the FourSquare API, data on museums in these five cities (New York, Chicago, San Francisco, Los Angeles, and Boston) will be collected. The number of the museums and their visual mapping will be analyzed. Then, the average of the distance of the museums to the mean coordinates will be taken for each city to see the distance of the museums.

Results

　　There were 121 museums in New York, 62 in Chicago, 35 in Boston, 62 in Chicago, 54 in San Francisco, and 94 in Los Angeles. It can be seen that New York and Los Angeles have the highest number of museums among the five cities. However, the highest number doesn't always translate to the highest density. The mean distance from the mean coordinates was 0.027 for New York, 0.057 for Chicago, 0.022 for Boston, 0.039 for San Francisco, and 0.099 for Los Angeles.

Discussion

　　While we can see that the actual number of museums is high in Los Angeles, the distance of the museums poses a problem. We also must rationally think about how much the number of museums matters. In a given amount of time, a person can only visit so many museums and after that number, it doesn't matter. So since the number isn't as important, let's look at the mean distances from mean coordinates. We can see that New York has the highest number of museums and a low mean distance so it is the obvious first choice. But what about Los Angeles? While the number of museums is high, the mean distance is also high, making it difficult for tourists to access those museums. A city with a low mean distance is Boston but Boston also has the least amount of museums. But we decided earlier that after a number of museums it does not matter how many museums are there. While the exact threshold

for what that number is is out of the scope of this project, we can reasonably conclude that Boston is still a great choice since there are 35 museums to see and they can all be accessed easily.

Conclusion

New York is the obvious first choice for the best museum city in the US and Boston is a reasonable second place.