**Evaluating New York City rent prices in relation to subway access and venues**

**A: Introduction**

1. **Description and Discussion of Problem and Background**

It is common knowledge that New York City is an expensive place to live, ranking in at #4 on CNN’s list of “World’s most expensive cities to live in.”[[1]](#endnote-1) The Big Apple is known for expensive stores, expensive goods, and – above all else – expensive housing. Location is the backbone of land value, and New York City is one of the world’s most powerful financial centers, the “cultural capital of America,”[[2]](#endnote-2) and the home of over 8.5 million people.[[3]](#endnote-3) With the huge costs of land in NYC, buying property is often impossible. Instead, many younger New Yorkers rent apartments which provide them better locations with more convenience and flexibility at a relatively lower cost. But while these residents may not be buying, they are paying. According to StreetEasy, a website which tracks NYC housing costs, rent in NYC has “increased by 33 percent from December 2009 through June 2017, an annual pace of 3.9 percent per year.”[[4]](#endnote-4) That rate of increase is particularly scary to young professionals and students looking to NYC for all its professional and cultural benefits, but may worry about high costs wiping their savings out before they can really get a solid foundation.

This report seeks to explore and answer a few questions in relation to rental costs in NYC. First, which neighborhoods are more or less expensive for rent? Second, which neighborhoods have greater access to local venues that allow renters to experience the positive cultural and business aspects of the city? Finally, are there “value” buys which maximize access to local venues and minimize rental costs?

1. **Data Description**

Four distinct sets of data will be used throughout this report:

* 1. A .csv file from the StreetEasy Data Dashboard will be used to track median asking rent data by month for each neighborhood of New York City. This will allow for a comparison of rent data between neighborhoods as well as a calculation of the rate of growth in rent for each neighborhood between 2010 and 2020.[[5]](#endnote-5)
  2. Foursquare API will be used to find the number of venues located within each neighborhood, allowing for a quantitative comparison of cultural life between different parts of the city in 2020.[[6]](#endnote-6)
  3. NYC Open Data’s Neighborhood Tabulation Areas geospatial data will be used to help generate a choropleth map of New York City based on median rental prices for better visualization.[[7]](#endnote-7)
  4. NYC Open Data also produces geospatial data on Subway Entrances which will be used to measure access to subway transportation. Although not the same as venues, this will be a valuable metric in looking for good rental options.[[8]](#endnote-8)

1. https://www.cnn.com/travel/article/worlds-most-expensive-cities-2020/index.html [↑](#endnote-ref-1)
2. https://theculturetrip.com/north-america/usa/articles/12-best-us-cities-for-culture/ [↑](#endnote-ref-2)
3. https://worldpopulationreview.com/us-cities/ [↑](#endnote-ref-3)
4. https://streeteasy.com/blog/cost-of-living-new-york-city/ [↑](#endnote-ref-4)
5. https://streeteasy.com/blog/data-dashboard/?agg=Median&metric=Asking%20Rent&type=Rentals&bedrooms=Any%20Bedrooms&property=Any%20Property%20Type&minDate=2010-01-01&maxDate=2020-04-01&area=Flatiron,Brooklyn%20Heights [↑](#endnote-ref-5)
6. https://developer.foursquare.com/ [↑](#endnote-ref-6)
7. https://data.cityofnewyork.us/City-Government/Neighborhood-Tabulation-Areas-NTA-/cpf4-rkhq [↑](#endnote-ref-7)
8. https://data.cityofnewyork.us/Transportation/Subway-Entrances/drex-xx56 [↑](#endnote-ref-8)