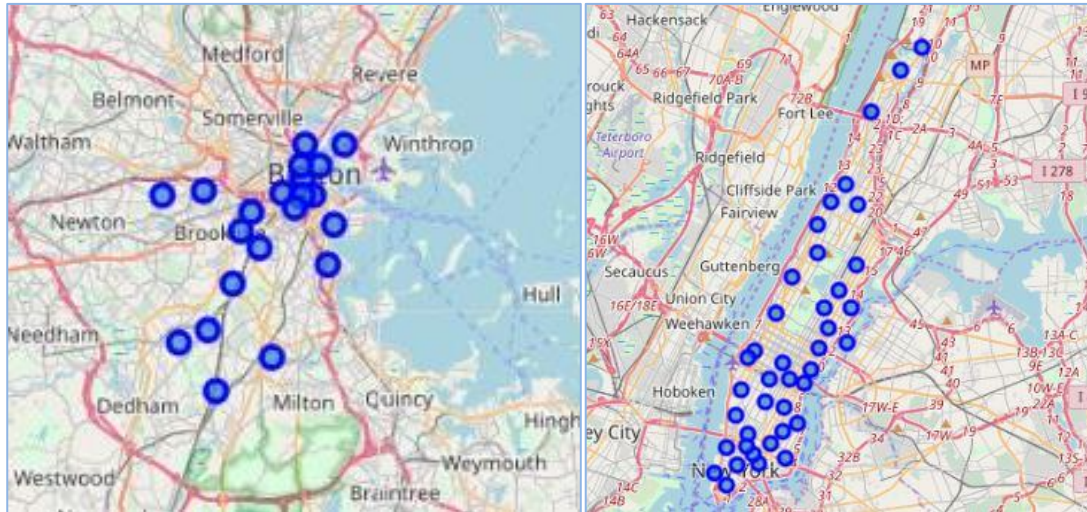# Comparison of Neighborhoods of Boston, MA and Manhattan, NY

IBM_Capstone_Project_UG

AIMS of the Study:

- Utilize the Foursquare data that regarding the venue visits in each of the neighborhoods in Manhattan, NY and Boston,MA to compare and identify neighborhoods with similar lifestyles.

- Associate the similar neighborhoods with the income and rental cost data to enable relocation, business scoping and others.

Approach:
- Collect neighborhoods of the two cities

- Utilize Foursquare data on venue visits in neighborhoods to cluster the neighborhoods into groups

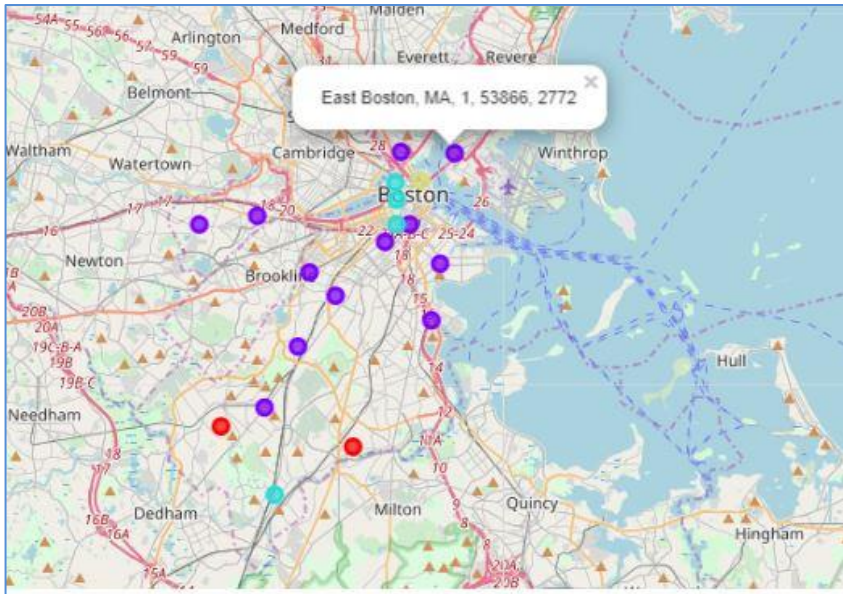- Associate the clusters with the income and rental costs for each of the neighborhoods

Cluster_0	Cluster_1	Cluster_2	Cluster_3	Cluster_4
West Roxbury, MA	Marble Hill, NY	Upper East Side, NY	West Village, NY	Mattapan, MA
	Chinatown, NY	Lincoln Square, NY	North End, MA	
	Washington Heights, NY	Clinton, NY		
	Inwood, NY	Midtown South, NY		
	Hamilton Heights, NY	Stuyvesant Town, NY		
	Manhattanville, NY	Beacon Hill, MA		
	Central Harlem, NY	Downtown, MA		
	East Harlem, NY	Hyde Park, MA		
	Yorkville, NY	West End, MA		
	Lenox Hill, NY			
	Roosevelt Island, NY			
	Upper West Side, NY			
	Midtown, NY			
	Murray Hill, NY			
	Chelsea, NY			
	East Village, NY			
	Lower East Side, NY			
	Tribeca, NY			
	Little Italy, NY			
	Morningside Heights, NY			
	Gramercy, NY			
	Battery Park City, NY			
	Carnegie Hill, NY			
	Turtle Bay, NY			
	Flatiron, NY			
	Hudson Yards, NY			
	Allston, MA			
	Brighton, MA			
	Charlestown, MA			
	Chinatown, MA			
	Dorchester, MA			
	East Boston, MA			
	Jamaica Plain, MA			
	Mission Hill, MA			
	Roslindale, MA			
	Roxbury, MA			
	South Boston, MA			
	South End, MA			

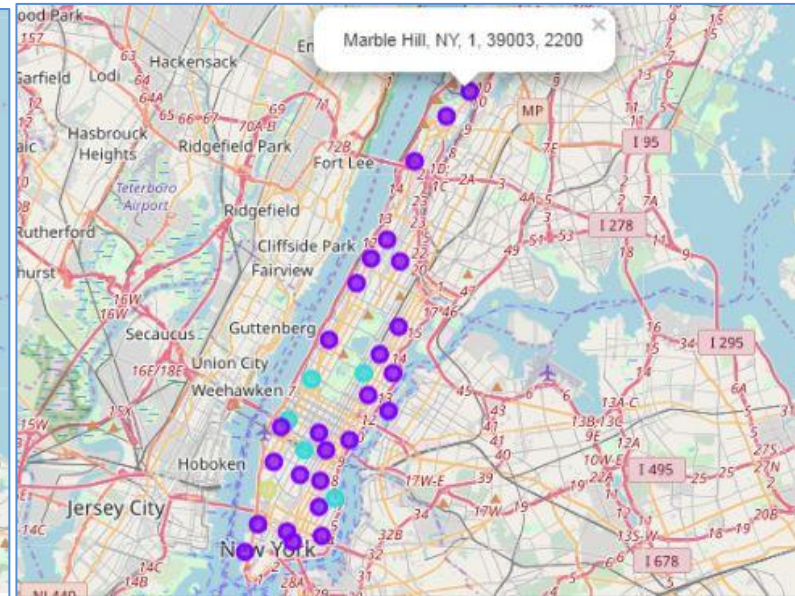# Clustering pattern of Manhattan_NY and Boston_MA neighborhoods

Data indicate that similar and distinctive neighborhoods exist in these two cities.

Visualization of the clustering pattern of Neighborhoods in Boston_MA and Manhattan_NY

Comparison of the neighborhood clustering patterns in the two targeted cities

Boston, MA
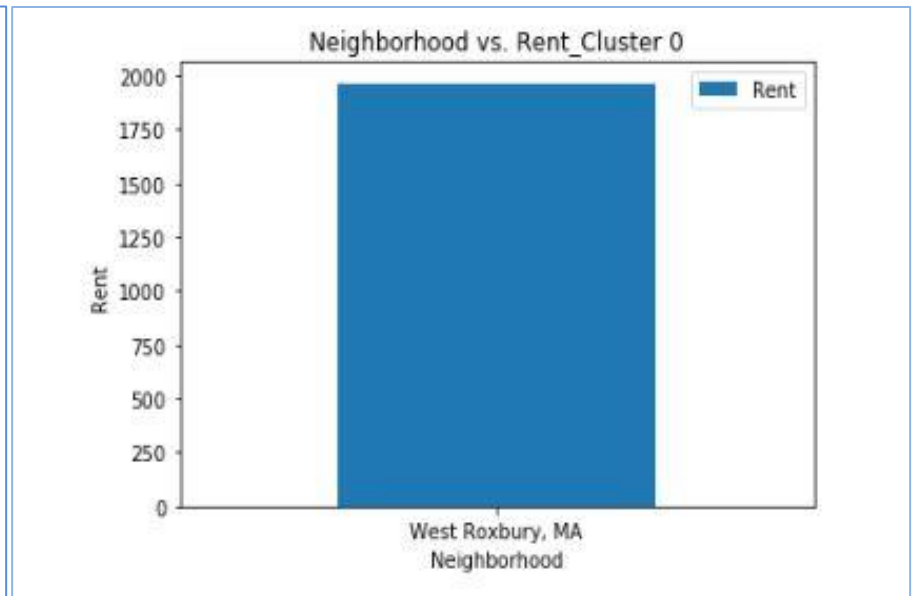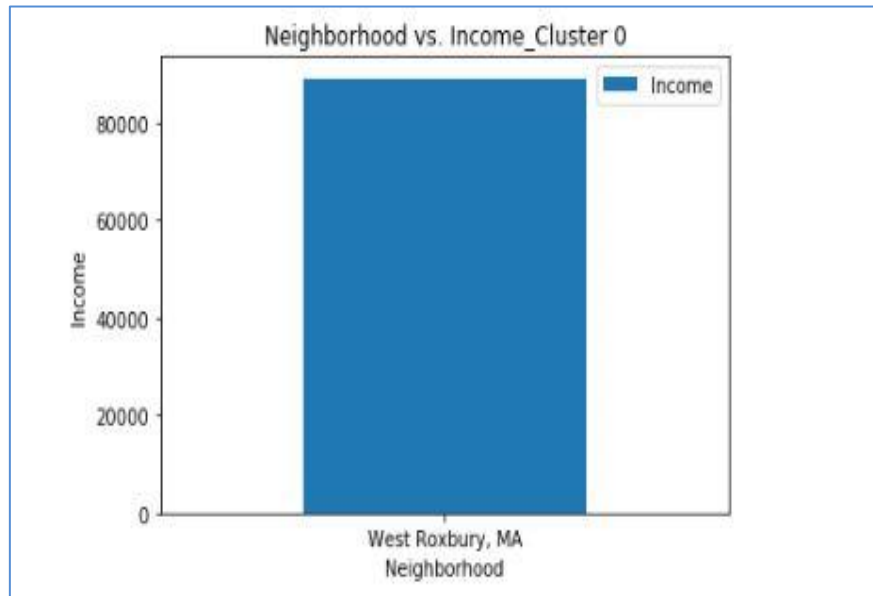
Manhattan, NY

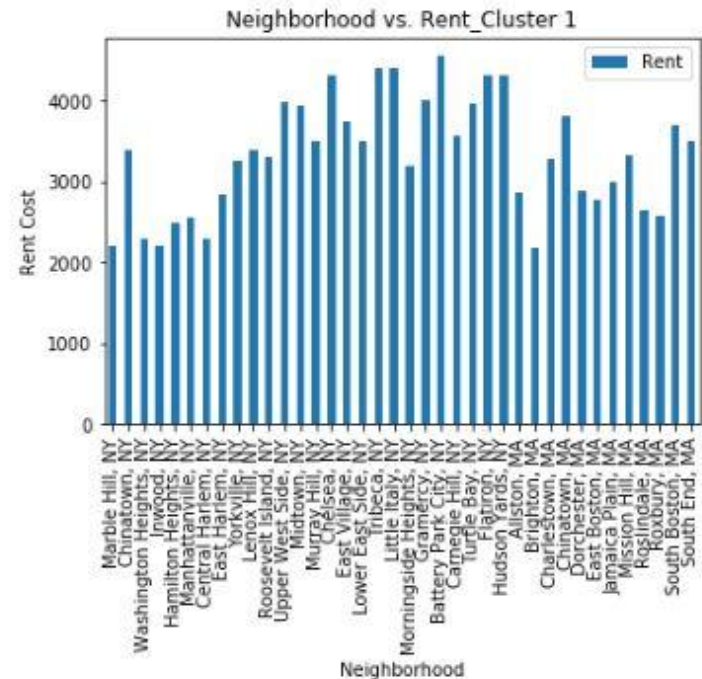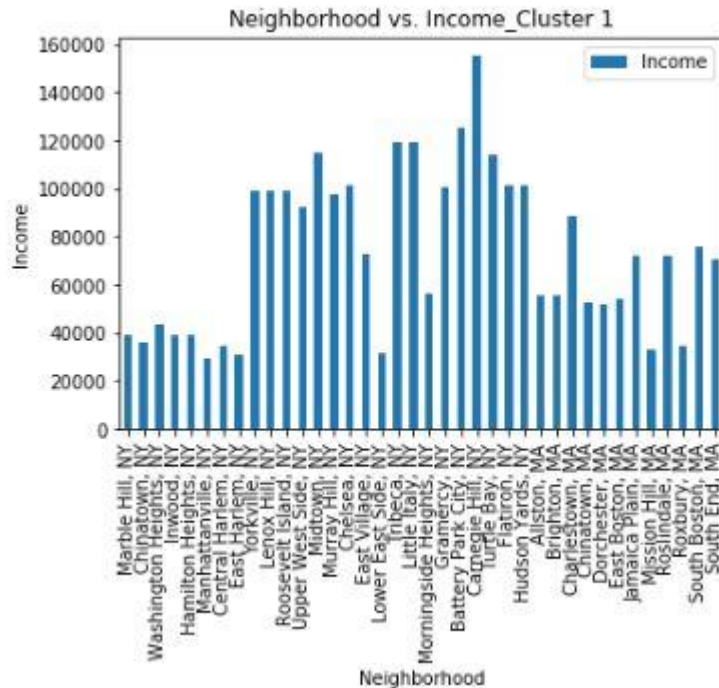## Like colors indicate neighborhoods with similar lifestyle patterns

Visualization of Income and Rental costs of Neighborhoods in Boston_MA and Manhattan_NY to Target Further Evaluations

Income and rental cost of neighborhoods of Cluster_0.

Visualization of Income and Rental costs of Neighborhoods in Boston_MA and Manhattan_NY to Target Further Evaluations
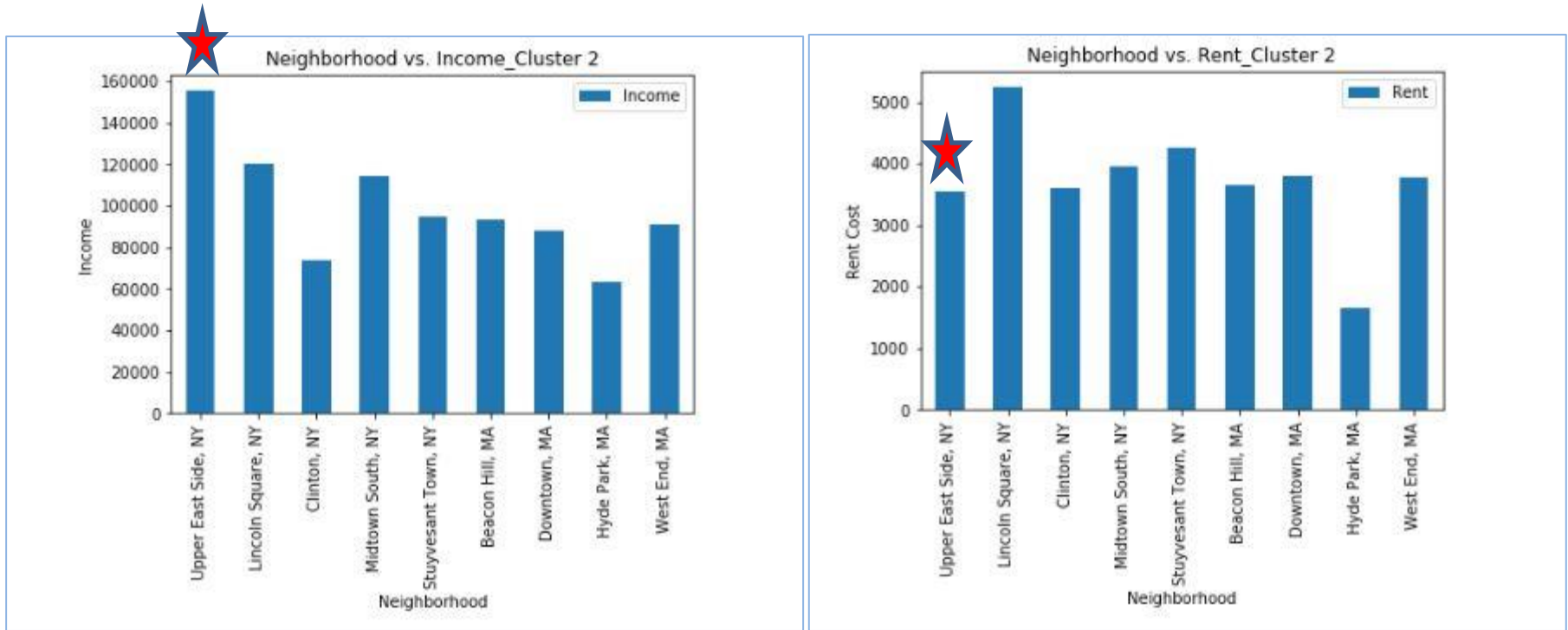
Income and rental cost of neighborhoods of Cluster_1

Visualization of Income and Rental costs of Neighborhoods in Boston_MA and Manhattan_NY to Target Further Evaluations
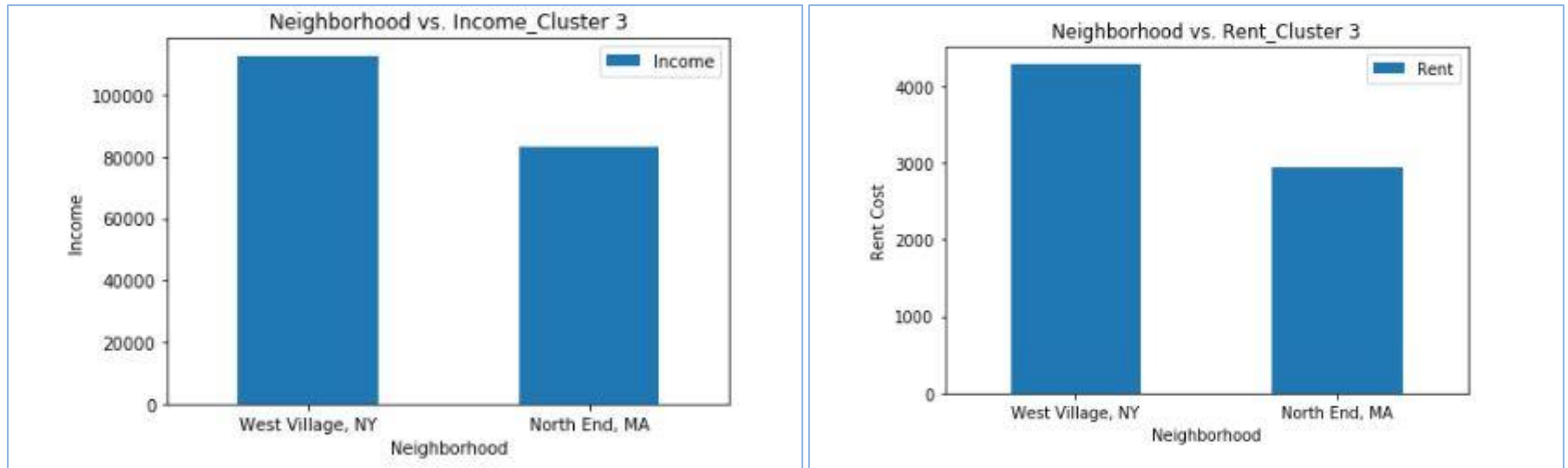
Income and rental cost of neighborhoods of Cluster_2

⭐ Suitable for further study to evaluate reasons for lower rent

Visualization of Income and Rental costs of Neighborhoods in Boston_MA and Manhattan_NY to Target Further Evaluations

Income and rental cost of neighborhoods of Cluster_3

Visualization of Income and Rental costs of Neighborhoods in Boston_MA and Manhattan_NY to Target Further Evaluations

Income and rental cost of neighborhoods of Cluster_4