Brewery Development Location – IBM Data Science Capstone Project

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# **Introduction/Business Problem**

A new investor would like to develop a brewery within the city of Charlotte, North Carolina which will add to the +40 currently in the city. The investor wants to identify an optimal location which maximizes customers by identifying highly traveled areas of the city throughout the day, identifies a location where public transportation is close by, and is within close proximity to other venues and breweries. Several alternatives should be proposed as a final deliverable, so the investor can make an intelligent decision.

# **Data Description**

While harnessing the power of Foursquare data, there will be other manual and automated data sources that will be utilized in determining the outcome alternative for investment location. Below are a few data sources and how they will be utilized:

1. **Foursquare:** Utilized for extracting brewery location data in Charlotte.
2. **Google Maps/Analytics:** Utilized for identifying highly trafficked areas at various times of the day. This can also be used to pin-point certain venues and capture their traffic during the day (busy times) at certain times. A Manual data set will be generated for at least 3 breweries per each cluster relating to High/Med/Low times foot traffic levels for Monday through Sunday.
3. **NCDOT AADT Mapping Application:** This application will be utilized to analyze the various transportation routes in Charlotte, NC to identify if a transportation route is near the potential brewery location.

<http://ncdot.maps.arcgis.com/apps/webappviewer/index.html?id=5f6fe58c1d90482ab9107ccc03026280>

1. **Charlotte Area Transit System:** Utilized for understanding the specific mass transit routes around the greater charlotte area. Data will be generated based on distance to mass transit pickup/dropoff locations.
2. **LoopNet.com**: This website will be utilized for identifying commercial/industrial lease space and prices around the greater charlotte area. Square footage and price data will be captured.