BEST LOCALES FOR A MICROBREWERY STARTUP IN THE DENVER METRO AREA

PICTURE: HTTPS://WWW.ENHANCEDTECH.COM/BLOG/NEW-TECH-BOOSTS-SMALL-SCALE-MANUFACTURERS/

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MICROBREWERY STATS

- IN 2019 MICROBREWERIES TOOK 13.6% OF US BEER MARKET BY VOLUME

- COLORADO – 3RD MOST BREWERIES IN US (348 TOTAL)

- DENVER METRO ECONOMY SUPPORTS MICROBREWERY PATRONAGE

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JC1   Joel Corley, 9/5/2020

DATA

- 2 Datasets:
  - **2018 US CENSUS BUREAU**
    - Total Population
    - Denver-Aurora-Lakewood Metro Boundaries
  - **Foursquare**
    - Brewery locations

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2018 US CENSUS BUREAU

- <census.gov>
  - US gov't. website with publicly available data
- Most recent, pertinent, dataset is from 2018
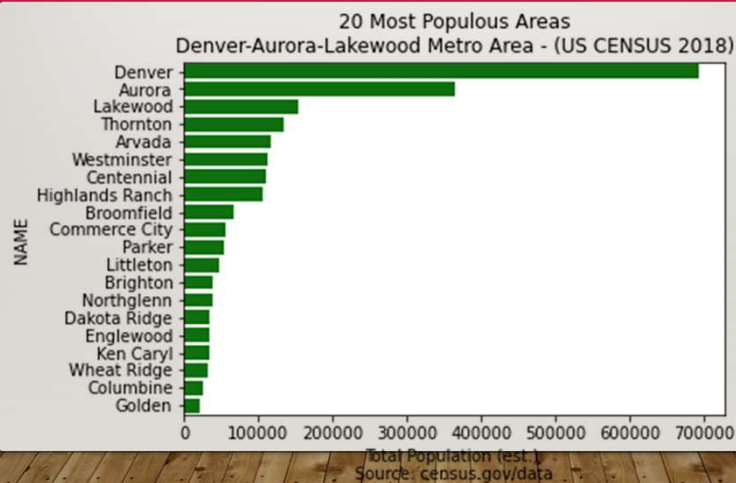- Annual population estimates made for country
  - Next CENSUS due in 2020

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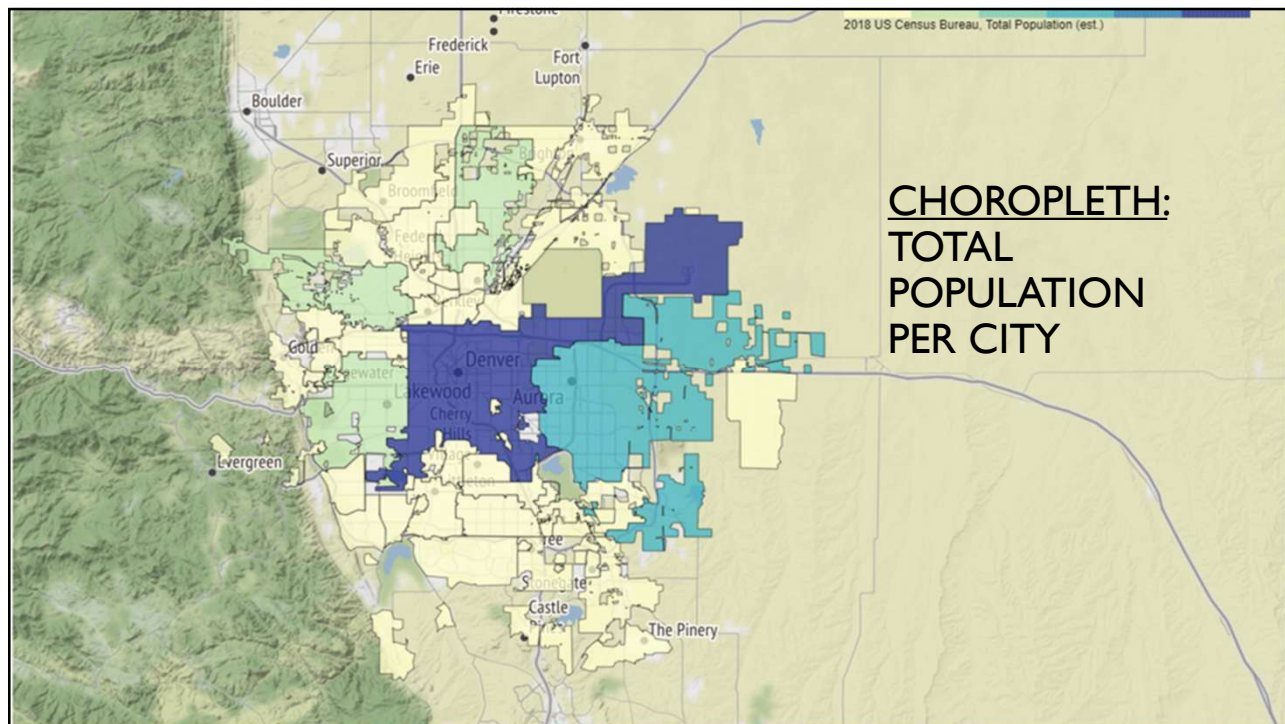# FOURSQUARE (FOURSQUARE.COM)

- Search query sent to publicly available database
- Search Criteria:
  - Venue category = 'brewery'
  - Coordinate Pair: (Latitude, Longitude)
  - 15-mile radius from coordinates
- 50 Breweries returned
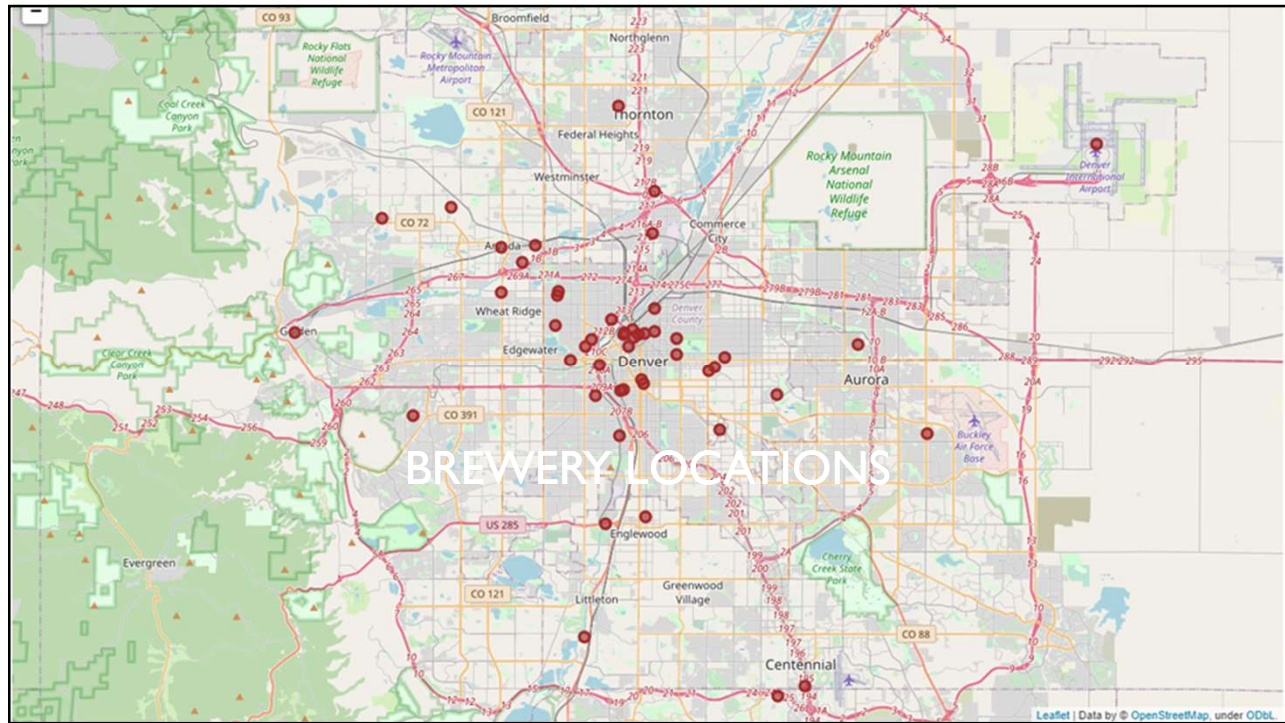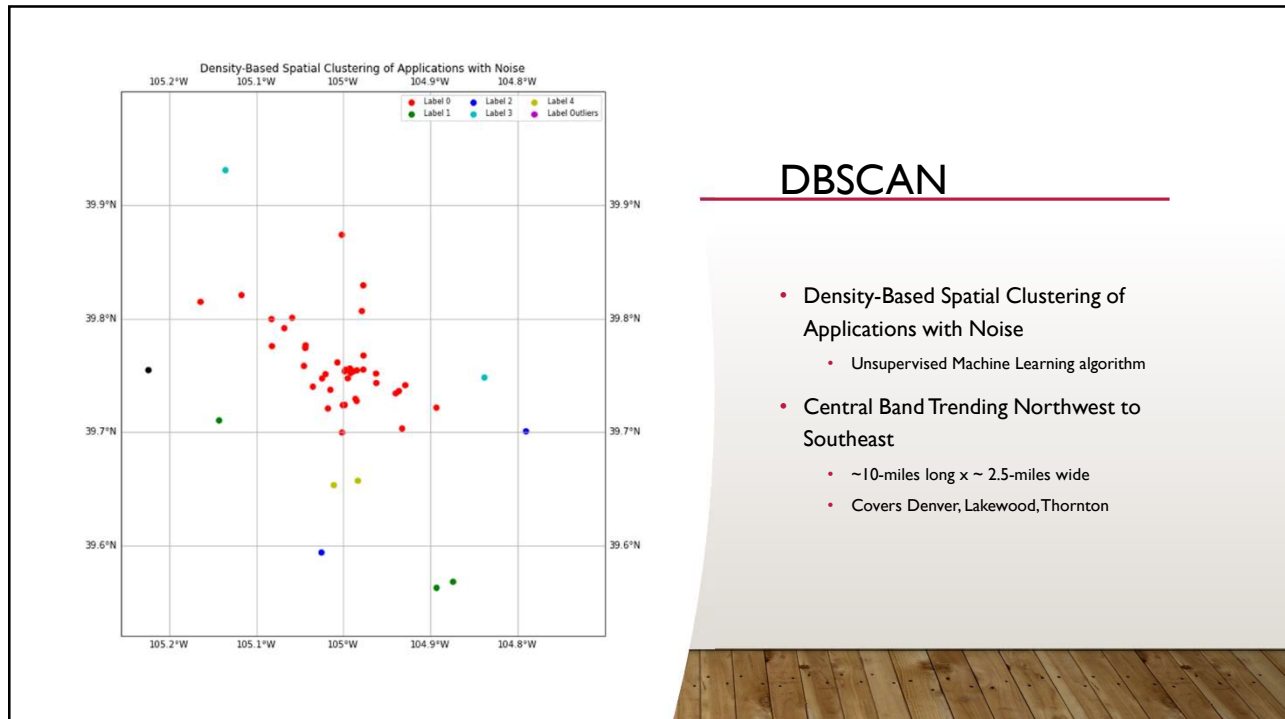
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20 MOST POPULATED METRO CITIES

20 Most Populous Areas
Denver-Aurora-Lakewood Metro Area - (US CENSUS 2018)

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2018 US Census Bureau, Total Population (est.)

CHOROPLETH:
TOTAL
POPULATION
PER CITY

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POPULATION DENSITY

- Outliers:
  - Aetna Estates
  - Glendale
- 75th Percentile: 4,523
- 50th Percentile: 3,219
- 25th Percentile: 1,191
- Min: 22

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BREWERY LOCATIONS

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DBSCAN

- Density-Based Spatial Clustering of Applications with Noise
  - Unsupervised Machine Learning algorithm
- Central Band Trending Northwest to Southeast
  - ~10-miles long x ~ 2.5-miles wide
  - Covers Denver, Lakewood, Thornton

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CONCLUSIONS

- Most metro breweries found within Northwest-Southeast trending band (60 % + of dataset)
- 3rd Most Populous Metro City Lakewood has single brewery
- 3 Most Populous Cities (Denver-Aurora-Lakewood) spread out.
  - Geographic subdivision of cities needed
- Larger brewery dataset needed to supplement Foursquare

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