WHERE TO RETIRE IN THE GREAT SMOKEY MOUNTAINS?

Final Capstone Project for IBM Certificate in Data Science

INTRODUCTION

The Great Smoky Mountains are a great area to retire.

- There are many recreational places to do outdoor activities such as fishing and hiking.
- > When it comes to retirement, many people are looking for a location that has good healthcare and plenty of outdoor activities.
- > But how would one go about picking a good location?

The state of Tennessee is a good section of the Great Smoky Mountains because they do not have any state income tax.

There are two major cities in Tennessee near the Great Smoky Mountains:

- ➤ Knoxville
- Chattanooga

This project will look at the characteristics of the neighborhoods in both cities and recommendation which is the best city to retire based on the healthcare and outdoor activities available nearby.

DATA DESCRIPTION

- ➤ Wikipedia was used to gather some information about each city, including the neighborhoods.
- Folium will be used to map the neighborhoods and get an idea of the healthcare and outdoor activities available in each city.
- ➤The neighborhod information from Widipedia was used in geolocator to determine the latitude and longitude for each neighborhood
- Foursquare API to find the healthcare facilities and outdoor activities near each neighborhood.
- ➤4d4b7105d754a06377d81259 Outdoors and Recreation
- ➤4bf58dd8d48988d104941735 Medical Center

METHODOLOGY

There were four major components to this analysis:

- Gather neighborhood information on Knoxville and Chattanooga from Wikipedia
- 2. Clean up the data from Wikipedia and determine the location of each neighborhood using geolocator
- 3. Use the location information to gather information on each of the following categories for each neighborhood from Foursquare:
 - Healthcare
 - Restaurants
- 4. Map the Foursquare information and determine the ideal location

RESULTS - KNOXVILLE IS THE CLEAR WINNER

- ➤ Chattanooga
 - Only 6 unique categories for outdoor recreation
 - ➤ Only 2 unique categories for healthcare

- ➤ Knoxville
 - ➤ 27 unique categories for outdoor recreation
 - ➤ 13 unique categories for healthcare

➤ Knoxville is the clear winner - but which neighborhood?

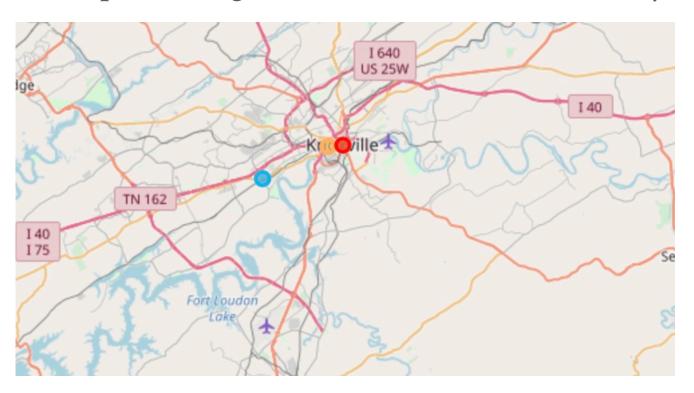
RESULTS - KNOXVILLE NEIGHBORHOODS

- ➤ Outdoor recreation
 - ➤ Two neighborhoods each had 20 outdoor recreation areas
 - ➤ East Knoxville
 - ➤ Old City Knoxville

- ➤ Healthcare
 - ➤ One neighborhood had 50 venues: Fort Sander
 - ➤ One neighborhood had 31 venues: Bearden

KNOXVILLE NEIGHBORHOODS

- ➤ Two neighborhoods the best for recreation and two different ones for recreation. Which is the best for retirement?
- ➤ Map the neighborhoods and see how they relate to each other:



Old City and East

Knoxville in the same

Location - red

Fort Sanders - Orange

Bearden - Blue

CONCLUSION

- ➤ Of the 4 neighborhoods of interest 3 are very near each other
 - ➤ Old City Knoxville
 - ➤ East Knoxville
 - ➤ Fort Sanders

➤ Any of these three neighborhoods would be the best for retirement based on healthcare and recreation available nearby