

Battle of the DC Neighborhoods- Hospital and EMS (Emergency Medical Services) Availability

Final Capstone Presentation for Chris Odekirk

Introduction and Business Problem

- The purpose of this report is to address a need for anyone that requires near immediate access to hospitals and EMS services (fire stations and police stations).
- Anyone with a medical condition living in or moving to Washington, DC will want to know what neighborhoods have the best access to hospitals and EMS services.
- Washington, DC has 132 neighborhoods. Each neighborhood will be analyzed to determine which one has the best access to medical services.
- Medical services for this report will be limited to hospitals, urgent care clinics, fire stations, and police stations.

The Data

- In order to determine the neighborhood with the best access to medical services we will need to get a list of neighborhoods in Washington, DC and latitude and longitude of each of those neighborhoods.
- The neighborhood data was downloaded from www.opendata.dc.gov.
- There are 132 neighborhoods in Washington DC.
 - The grid coordinate for each neighborhood represents the center of that neighborhood.
- Each neighborhood is analyzed using the Foursquare API.
 - I used a call to the Foursquare API using category ID's for hospitals, urgent care clinics, fire stations, and police stations. Fire stations and police stations were added to the analysis due to their propensity to have ambulances and EMS services at their locations.
 - The call to the FOURSQUARE API returned results of all hospitals, urgent care clinics, fire stations, and police stations within 1000 meters of the neighborhoods center.
- Using the data we then determine which neighborhood in Washington, DC has the best access to medical services.