**Finding NYC's neighborhoods which will benefit the most out of building a medical service nearby them**

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1. Introduction

A medical emergency is an acute injury or illness that poses an immediate risk to a person's life or long-term health. For emergencies starting outside medical care, a key component that can make a difference between life and death is the response time – i.e. the time frame in which the medical emergency start till the emergency medical services arrival. As a result, geographers have been increasingly involved in emergency medical-services planning. Of particular importance has been the application of location-optimization models that minimize ambulance response time. Therefore, it is necessary to geographers to know which neighborhood will be benefit the most out of building a medical service nearby them.

1. Problem

Focusing in New York City, our aim in this project is to find out which neighborhoods have the biggest response time, i.e. – finding the neighborhoods that their distance to a nearby medical service is the largest.

1. Required data

Since the main feature to investigate is distance, our data sets will only need to contain medical centers coordinates and neighborhoods coordinates (latitude and longitude) in New York City. For the neighborhoods data set we can use the following link:

* <https://cocl.us/new_york_dataset>

For the hospitals data set we can use the following data from Wikipedia:

* <https://en.wikipedia.org/wiki/List_of_hospitals_in_Manhattan>
* <https://en.wikipedia.org/wiki/List_of_hospitals_in_the_Bronx>
* <https://en.wikipedia.org/wiki/List_of_hospitals_in_Brooklyn>
* <https://en.wikipedia.org/wiki/List_of_hospitals_in_Queens>
* <https://en.wikipedia.org/wiki/List_of_hospitals_in_Staten_Island>