**Introduction / Business Problem**

With the Covd-19 pandemic of 2020, the state of Louisiana has experienced a significant change in business along with the rest of the United States. Businesses such as bars and dine-in restaurants have curtailed business while firms such as big box retail and takeout restaurants have seen an increase in demand. With the changes in the business operating conditions, there is an opportunity for short term profitability with the right business in the right location.

Current restrictions in the state of Louisiana differ by parrish, but the following are common to all the large population centers in the state:

* Bars are limited to 25% indoor capacity
* Dine-in establishments are limited to 50% of seating capacity
* Most entertainment venues (theaters, clubs) are closed or limited to 25% capacity
* All current restrictions are found in https://ready.nola.gov/incident/coronavirus/safe-reopening/#377

Based on the current restrictions, take-out or fast-food restaurants are an opportunity to profit in the current business climate. A venue such as a fast food restaurant or food truck could fill the gap created by limited bar and dine-in capacity.

Therefore, a use of a venue database could be used to determine which areas of the state of Louisiana could be under-served by fast food restaurants where a food truck or small take-out restaurant could be profitable.

**Data**

The data that will be sourced for this project will involve the following

* <https://www.louisiana-demographics.com/cities_by_population> - a list population centers in the state of Louisiana which will be pulled into a pandas dataframe.
* The Foursquare API database. Venues will be called from the API based on the latitude and longitude of the top 8 population centers in Louisiana.
* Current Covid-19 restrictions in the state of Louisiana for data interpretation (<https://ready.nola.gov/incident/coronavirus/safe-reopening/#377>)

The dataframe of the population will be run through geocoder to determine the latitude and longitude of each of the top 8 population centers in the state. This information will feed into a call to the Foursquare API to pull a list of venues 2500 meters from the population centers. From there the data will be analyzed and a recommendation made.