The City of Paterson wants to understand what is limiting business growth in the City. A recurring question that city leadership often asks is: how can the city be transformed into a thriving, liveable city? Data compilation and analysis is needed for the City of Paterson to evaluate efforts in revitalizing the city’s main streets and improving economic activity.

During an initial meeting with the Economic Development Office they created a list of questions:

* Are application permits being processed efficiently?
* What is the trend in opening/closures of businesses?
* Are existing businesses faring well?
* Do residents feel that the City is safe and liveable?
* Are Public Safety response times decreasing?
* Are shootings (fatal & non-fatal) decreasing?
* What is the trend for other crime types?
* What are the locations?
* Are vacant, abandoned and foreclosed properties dealt with in a timely manner?

In order to explore the current landscape, create hypotheses of the causes that might be driving business and people outside of the downtown area, and create a performance program to track the evolution of the issue, the City has shared with us a series of datasets:

|  |  |  |
| --- | --- | --- |
| **Dataset name** | **Description** | **Metrics** |
| Vacant-Foreclosed- Abandoned Properties | List of vacant, abandoned and foreclosed properties | Property type (vacant/foreclosed/abandoned), address, violation date (2014 to 2020) |
| QoL\_calls | Summary of Quality of Life calls received by Public Safety for each month of 2020. | Call type (barking animal, blocked driveway, noise complaint, etc), number of calls, month. |
| Annual report Board of Adjustments | List of residential and commercial units that come up in front of Paterson Board of Approvals | Date of the meeting (2017-2019), applicant name, address, phone number, block number, lot number, number of units, commercial type |
| Incidents Non-Fatal shootings | List of non-fatal shootings during 2020 | Date, address, hour |
| 911 Calls for Service | 911 log of calls | Date, call hour, call type, status, closed date, last activity date, outcome, latitude, longitude, zip code, address. |

Our first step will be to quickly inspect the data in order to provide an assessment of what can and can’t be done as well as following steps. To do so, please answer the following questions:

* 1. For each dataset, what metrics would be useful for our problem? Map1 each question to the metric that might be used to answer it. Describe in detail what the analysis should be, as well as any assumptions you made or further questions you have about the data.
  2. What other metrics would ideally help the City of Paterson track the evolution of their efforts to revitalize the downtown area? Create a new list of metrics and datasets we can request the city to collect and/or share.

If this is your first time working with any government data, you can check the Baltimore Open Data portal (https://data.baltimorecity.gov/) as an example of datasets that a city typically collects.

1 Mapping research questions to potential data points is one crucial pre-analysis step. By “map,” we mean outline / describe plans for analysis by discussing potential data and data points that can be used to answer each research question.