\section{Data}

Data was sourced from the Dallas Open Data website hosted by Socrata in order to provide an illustration of the process of using open source NIBRS compliant incident data\footnote{Dallas OpenData, City of Dallas, https://www.dallasopendata.com/} . This website is designed to provide transparency to citizens and developers with a variety of data sets that pertain to city governance, services, and culture. The NIBRS based data set of interest on Dallas Open Data is titled Police Incidents. The Police Incidents data set is provided by the Dallas Police Department and is updated daily with incident reports dating back to June 1, 2014.

\par As of May, 2018, there are approximately 357,000 incident entries and there are 103 incident attributes. Some important features of an individual incident report include the unique identifier, âIncident Number w/Yearâ, the location details of the incident, the descriptive details of the complainant, the reporting officer details, and the details of the type of incident that occurred.

\par Classification of crime are based on preliminary information supplied to the Dallas Police Department by the parties that report. These incidents can be changed at a later date if more investigation is executed. Crimes classified as sexually oriented offenses, offenses where juveniles are the victim or suspect, property that is considered evidence, social service referrals, and vehicle information that could identify suspect or victim are not included in the data set.

\par The data that was used focused on burglaries in the city of Dallas. For dot and cluster map types we used the following data from the data set in.

|  |  |
| --- | --- |
| Attribute | Description |
| location1 | Contains address, city, zip code, state, latitude and longitude |
| mo | Modus Operandi (MO) or short description of the offense |
| premise | Location type of where incident took place |
| date1 | First date of the date occurrence of the incident |
| day1 | Day of the incident based on date of occurrence (date1) |
| time1 | The first starting time of the time occurrence of the incident |
| zipcode | Zipcode in which incident occurred |
| ucr\_offense | Uniform Crime Report Offense type |

/par Location1 is used to geocode locations of burglaries defined by the ucr\_offense. The other attributes are used as popups in the interactive maps. Burglaries at businesses and residences were used. This was chosen to simplify the maps based on one type of crime in this case burglary and two classes with burglary of a business and burglary of a residence.