**NJ Crime Unveiled: Trends, Targets, and Tactics for 2022**

**Abstract**

The FBI’s Crime Data Explorer (CDE) provides easy access to criminal and noncriminal law enforcement data. Through their website, crime data in New Jersey was obtained for the year 2022. Exploratory data analysis was conducted based on eleven different datasets, revealing notable patterns and insights. It was found that individuals aged 21 to 40, of white ethnicity, and females are being targeted more for crimes. Furthermore, Essex, Bergen and Atlantic counties were found to have the highest crime rates in the state predominantly involving Larceny/Theft offenses. Analysis of time intervals revealed that crime peaks during noon to 12:59 p.m. and midnight to 12:59 a.m. and residential locations were the most common crime scenes.

**Methodology**

The exploratory data analysis began by reviewing the datasets provided by CDE and forming specific research questions. The questions focused on identifying targeted demographics, high-crime areas, prevalent crime types, temporal patterns, and common crime locations.Upon deciding on the questions, initial data cleaning procedures were executed to address the multi-header .csv file. To do so, re and pandas modules were utilized in python. Column headers were cleaned and datasets were merged together to minimize the number of dataframes.

For the exploratory phase, each question was addressed systematically through diverse visualizations including bar charts, donut charts, treemaps, heatmaps and geomaps. Python libraries such as pandas, matplotlib, seaborn, geopandas and squarify were used in the process.

**Results**

The analysis revealed that individuals aged 21 to 40 (44.6%), white ethnic individuals (64.3%), and females (50.6%) are being targeted more. Essex (24,817), Bergen (14,782) and Atlantic (14,561) counties were found to have the highest crime rates in the state with Larceny/Theft offenses being the primary offense. The study highlighted the peak of crimes during midnight to 12:59 a.m and noon to 12:59 p.m. Lastly It was found that residence/homes are the most common crime locations, accounting for over 5 million inquiries.

**Conclusion**

What does all of this mean? The New Jersey State government and/or county governments should increase security in the counties Newark, Bergen and Atlantic to decrease the high crime rates. Specialized training programs addressing theft-related crimes could be initiated to mitigate these offenses. Increased security during peak crime periods, specifically midnight to 12.59 a.m. and noon to 12.59 p.m., is recommended. Additionally, the study proposes conducting more extensive analyses to assess whether crime rates have changed over the years, with a focus on individual counties. Such insights could guide policy interventions and resource allocations to enhance public safety.