Abstract

The purpose of this analysis was to visualize San Francisco crime data from 2003 to 2015 over space and time. The city was divided by police districts and then analyzed with the main focus on violent crimes. Geospatial analysis like Hotspot and Tracking Analysis were performed along with statistical data exploration to gain insights. The tools used for the analysis were ArcGIS Pro, ArcMap, and Tableau. Insights such as trends in the crime rate over the years, which day of the week is criminally more active, which police districts are prone to violent crimes and also hotspots where the crime rate is high than usual were few of the insights achieved after the analysis. The conclusions obtained were consistent with information derived from the literature regarding why the regions with hotspots were found to have a considerable amount of criminal activity.

References


Index Terms

Computer Science  Security

Keywords

Crime visualization, geospatial analysis, hotspots, statistical data exploration, ArcGIS, Tableau.