UK Crime Data Analysis Report

**Introduction**

This report presents a detailed analysis of crime data, focusing on key trends and anomalies within specific regions and crime types. The data, sourced from various tables, includes crime information categorized by year, location, and type. The primary regions of interest in this analysis are London and Greater Manchester, with a particular focus on identifying significant trends and anomalies. The analysis provides a comprehensive examination of crime trends and anomalies, identifies key crime types and geographical patterns, and offers recommendations for targeted interventions and policy adjustments.

#### **Data Cleaning and Normalization**

#### The dataset underwent a comprehensive cleaning and normalization process to ensure accuracy and reliability. Various tables were combined to facilitate easier analysis and comprehensive insights. Missing values were addressed by filling them using the mean of the previous year where applicable. Consistent formatting was ensured across the dataset to maintain uniformity and ease of analysis.

**Key Insights**

1. **A graph of different colored lines

   Description automatically generatedTop Increasing and Decreasing Crimes**:
   * **Shoplifting**: significant increases observed from 2021 onwards.
   * **Theft from Person**: a steady increase starting in 2021.
   * **Public Order Offences**: peaked in 2021 and slightly decreased thereafter.
   * **Robbery**: showed steady rates over the years with slight fluctuations.
   * **Bicycle Theft**: Decreased notably after 2020.
2. **Percentage Change in Knife Crime**:
   * The percentage of crimes involving knives fluctuated over the years, with 21.84% in 2019, 19.46% in 2020, 18.59% in 2021, 19.61% in 2022, and 20.5% in 2023.
   * The percentage changes in crimes involving knives show fluctuations, with a peak in 2021 and a subsequent decline, followed by slight variations in the following years.

A graph of a number of people

Description automatically generatedA pie chart with numbers and a number of blue and purple circles

Description automatically generated

1. **Top Areas Affected by Fraud and Computer Misuse (2020 - 2023)**:
   * **A graph of an object shooting

     Description automatically generated with medium confidence**The analysis identified the top three areas with the highest incidence of fraud and computer misuse offences which are London, West Midlands and East Midlands, respectively.
2. **Firearm Offences Trends:**

* shows a decrease from 6.7K in 2019 to 5.7K in 2021,

followed by an increase to 6.4K in 2023.

1. **Most Dangerous City**:
   * **London**: is the most dangerous city based on high crime rates and significant trends.
2. **Anomalies in Crime Data**:
   * **Burglary**: is crime with the highest number of anomalies, indicating significant deviation that require further investigation.

**Recommendations**

1. **Targeted Interventions**:
   * Focus on increasing crime types for intervention strategies.
   * Allocate resources to areas with high rates of "Violence with Injury" and "Theft from Person" in London, and "Stalking and Harassment" and "Shoplifting" in Greater Manchester.
2. **Policy Adjustments**:
   * Investigate the factors contributing to changes in crime rates.
   * Implement policies addressing the root causes of these trends.
3. **Further Research**:
   * Conduct studies on the dynamics driving crime correlations.
   * Explore socio-economic factors, law enforcement practices, and community programs' impact on crime trends.