A study on crime rate in England and Wales

A report submitted in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF BUSINESS ADMINISTRATION

IN

BUSINESS ANALYTICS

Submitted by

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Under the esteemed guidance of

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GITAM INSTITUTE OF MANAGEMENT

GITAM (deemed to be University)

(Established U/S 3 of UGC Act, 1956)

DECLARATION

I declare that the project entitled **A study on crime rate in England and Wales** submitted by me for the award of the degree of Bachelor of Business Administration [BUSINESS ANALYTICS], GITAM deemed to be university is original and has not been submitted previously in part or full to this or any university for the award of any degree or diploma or for any other similar title.

I, Nilesh Joshi a student of GITAM Institute of Management, GITAM deemed to be university, and pursuing Bachelor of Business Administration [Business Analytics] course hereby declare that the project works A study on crime rate in England and Wales is a genuine work done by me availing the guidance of my project guide and to my satisfaction.

Place: Nilesh Joshi

Date:
121713901022

CERTIFICATE

This is to certify that the project entitled is **A study on crime rate in England and Wales** is the bonafied work of **Nilesh Joshi (121713901022)** submitted in partial fulfilment of the requirement for the award of degree of Bachelor of Business Administration [Business Analytics] during the year 2018-2019.

Place:

Date:

ARUN KUMAR

Assistant Professor

GITAM INSTITUTE OF MANAGEMENT

ACKNOWLEDGEMENT

It is my pleasure to acknowledge and express my gratitude to all those who helped me throughout in the successful completion of this project.

I wish to express my gratitude to, prof. Gouthama Rao Yejju, director, GITAM Institute of Management, GITAM deemed to be University, Visakhapatnam, for giving me this valuable opportunity to experience the social project.

I wish to express my gratitude to ARUN KUMAR, Project Guide, GITAM Institute of Management, GITAM deemed to be University, Visakhapatnam, for giving me this opportunity.

Last but not the least I thank my entire teaching faculty, non-teaching faculty, my family and my friends who helped me directly or indirectly in this work.

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CHAPTER-1

Introduction

Crime in the United Kingdom describes acts of violent crime and non-violent crime that take place within the United Kingdom. Courts and police systems are separated into three sections, based on the different judicial systems of England and Wales, Scotland, and Northern Ireland.

Responsibility for crime in England and Wales is split between the Home Office, the government department responsible for reducing and preventing crime along with law enforcement in the United Kingdom; and the Ministry of Justice, which runs the Justice system, including its courts and prisons.

The Crime Survey for England and Wales 2015 figures show that crime in England and Wales is currently at its lowest level since the CSEW began in 1981, having decreased dramatically from its peak in 1995 and by 31% in the past five years alone. For example, 1.32 million violent crimes were counted in 2014/2015 compared to 4.2 million in 1994/95. By contrast, official police statistics are unreliable, due to widespread and inconsistent practices of "no criming", with 19% of reported overall crimes not recorded by police, one quarter of sexual crimes and one third of violent crimes.

There are two kinds of criminal trial in England and Wales: 'summary' and 'on indictment'. For an adult, summary trials take place in a magistrates' court, while trials on indictment take place in the Crown Court. Despite the possibility of two venues for trial, almost all criminal cases, however serious, commence in the magistrates' courts. Offences may also be deemed 'either way', depending on the seriousness of the individual offence. This means they may be tried in either the Magistrates or Crown Court depending on the circumstances. A person may even be convicted by the Magistrates court and sent to the Crown for sentence (where the magistrates feel they do not have adequate sentencing powers). Furthermore, even if the Magistrates retain the jurisdiction of an offence, the defendant has the right to elect for a Crown Court trial by jury. The jury is selected independently of the prosecution and the defence.

Rural crime has increased in England and Wales, criminals have become more organized and more sophisticated while budget cuts have reduced the effectiveness of police response. Expensive agricultural equipment is stolen and taken out of the country or used in ram raids, also livestock is stolen. It is suspected stolen livestock is slaughtered illegally outside licensed slaughterhouses and then illegally enters the food chain.

Crime by women in London is usually caused by poverty, drug or alcohol addiction or psychiatric illness. Other types of intervention are frequently more effective than prison at

preventing women reoffending. Specialist centres can help women avoid offending or reoffending. Prison has disastrous effects on the women's children and after their release makes it harder for the women to find work and lead honest lives.

REASON BEHIND INCREASING CRIME RATE:

Poverty Level and Job Availability: Statistically, poverty goes hand-in-hand with crime. Where poverty is prevalent in a community, that community will experience higher levels of crime. Generally, it's not the poverty itself that leads to higher crime rates but the factors associated with poverty, such as chronic joblessness, less access to quality schools, employment, role models and the real or perceived lack of opportunity. Crime offers a way for less-advantaged people to access goods they may not otherwise afford.

Social Level of Morality: Different homes and communities have different degrees of morality. In some families and communities, deviant behaviour is tolerated and encouraged. In others, even minor transgressions are reported and corrected. People's upbringing and social environment can shape their view of the world and directly affect their decisions in the future. For example, research shows that people who have been physically, sexually or emotionally abused as children are three times more likely than non-abused adults to commit acts of violence.

Social Problems Vs. Social Responsibility of Crime: Sociologists and criminologists have long tried to figure out why criminals commit crimes. Theories range from criminals getting a kick out of breaking the law to criminals only committing the crime because they had no other choice. Whether it be a matter of personal choice or because of necessity, England and Wales has chosen to use components of both theories in developing its criminal justice system.

MEASURES TAKEN TO REDUCE CRIME:

- creating community triggers to deal with persistent antisocial behaviour
- using community safety partnerships and police and crime commissioners, to work out local approaches to deal with issues, including antisocial behaviour, drug or alcohol misuse and re-offending
- establishing the national referral mechanism to make it easier for all the different agencies that could be involved in a trafficking case to cooperate, share information about potential victims and get access to advice, accommodation and support

- producing a new serious and organised crime strategy
- creating street-level crime maps to give the public up-to-date, accurate information on what is happening on their streets so they can challenge the police on performance

CHAPTER-2

METHODOLOGY

- **Tools used:** Tableau software is used to analyse the secondary data- A study on crime rate in England and Wales.

  Tableau Software is an interactive data visualization software company founded on January 2003 by Christian Chabot, Pat Hanrahan and Chris Stolte, in Mountain View, California. Tableau is a highly interactive solution for business intelligence. With Tableau, anyone can visualize and understand data without the need for any advanced skills in data science.

- **Data Source:** I took the secondary data from **kaggle.**

  Kaggle is an online community of data scientists and machine learners, owned by Google LLC (Limited liability company). Kaggle allows users to find and publish data sets, explore and build models in a web-based data-science environment, work with other data scientists and machine learning engineers, and enter competitions to solve data science challenges.

- **Need of the study:**
  1. To know the crime rate in England and Wales.
  2. To find out the measures taken by England and Wales police to reduce crime.
  3. To know the reason behind the increasing crime rate.

- **Objectives:**
  1. People will receive the basic knowledge and understanding of the key components of preventing crime.
  2. People will get to know about the different types of crimes which are being committed which will help them stay alert.
  3. To estimate the proportion of offenders and offences that come to the attention of criminal justice system.
  4. To provide the information on nature of offences committed.

- **Scope and study:**
    1. Provides analysis about the crimes from the year 2008-2018.
    2. Data is visualized by using tableau.
    3. Analysing the regional & type based crimes.

- **Limitations:**
    1. The data is only confined to England and Wales.
    2. Not all the complaints make it to the official reports; officers discretion.

RESEARCH METHODOLOGY

Methodology is the analysis of principles, rules and postulates employed and applied with discipline

Any useful information which is required for our research is known as Data. This information is used to develop an understanding of a natural phenomenon and in analyzing and predicting future events. “Research data is data that is collected, observed, or created, for purposes of analysis to produce original research results”. Data collection is the process of gathering and measuring information on targeted variables in an established systematic manner.

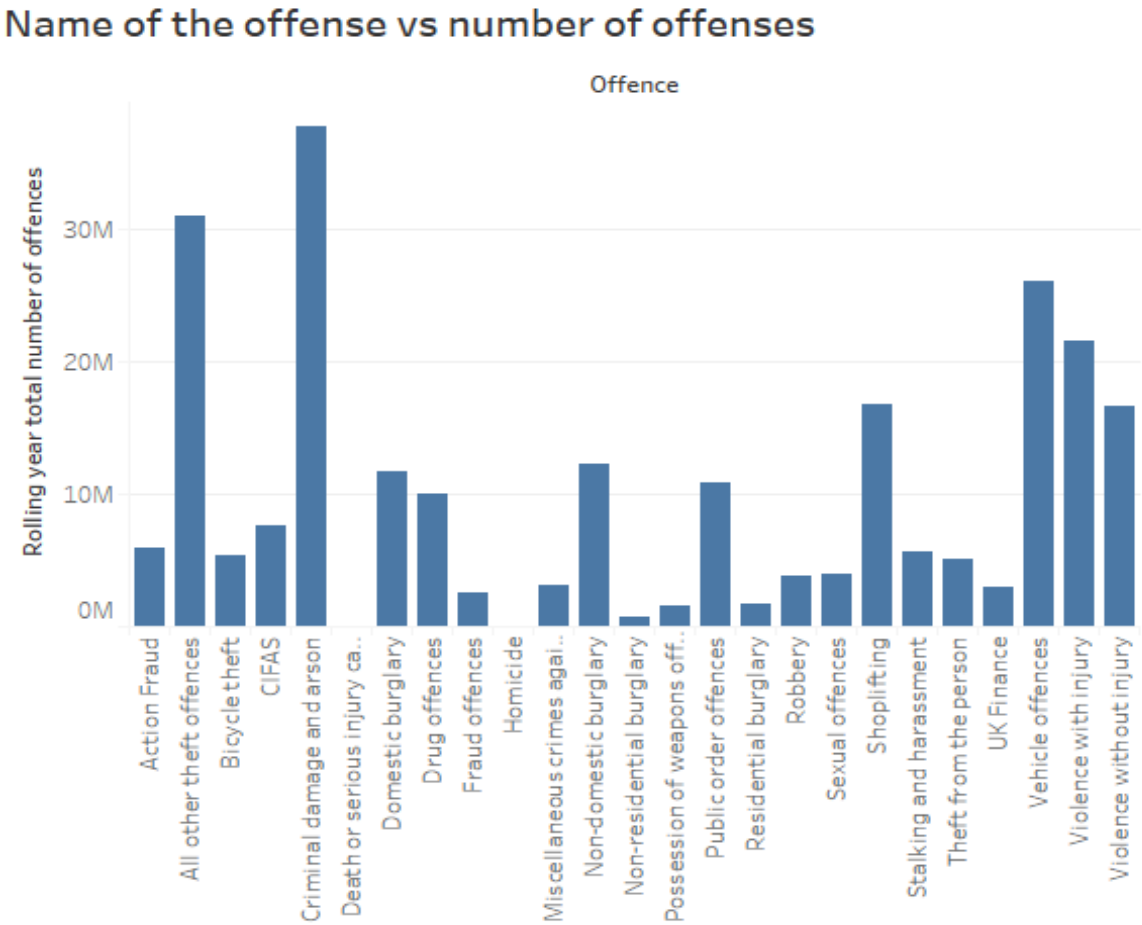
Secondary data refers to data which is collected by someone who is someone other than the user. Common sources of secondary data for social science include censuses, information collected by government departments, organizational records and data that was originally collected for other research purposes. Secondary data analysis can save time that would otherwise be spent collecting data and, particularly in the case of quantitative data, can provide larger and higher-quality databases that would be unfeasible for any individual researcher to collect on their own. In addition, analysts of social and economic change consider secondary data essential, since it is impossible to conduct a new survey that can adequately capture past change and/or developments.

In this research secondary data is collected through kaggle website. **Kaggle** is an online community of data scientists and machine learners, owned by Google LLC (Limited liability company). Kaggle allows users to find and publish data sets, explore and build models in a web-based data-science environment, work with other data scientists and machine learning engineers, and enter competitions to solve data science challenges.
The tool used in this report is tableau.
Tableau Software is an interactive data visualization software company founded on January 2003 by Christian Chabot, Pat Hanrahan and Chris Stolte, in Mountain View, California. Tableau is a highly interactive solution for business intelligence. With Tableau, anyone can visualize and understand data without the need for any advanced skills in data science.
I extracted the data from kaggle put in the excel and then input it in the tableau and constructed the graphs. There are different types of combinations of graphs.
Example: name of offence vs no. of offences, region vs no. of offences etc.
Then I have written the interpretations of each graphs according to descending order.

Benefits of the report:

- Report gives us consolidated and updated information.
- Report facilitates decision making and planning.
- Report discloses unknown information.
- Report solves current problems.

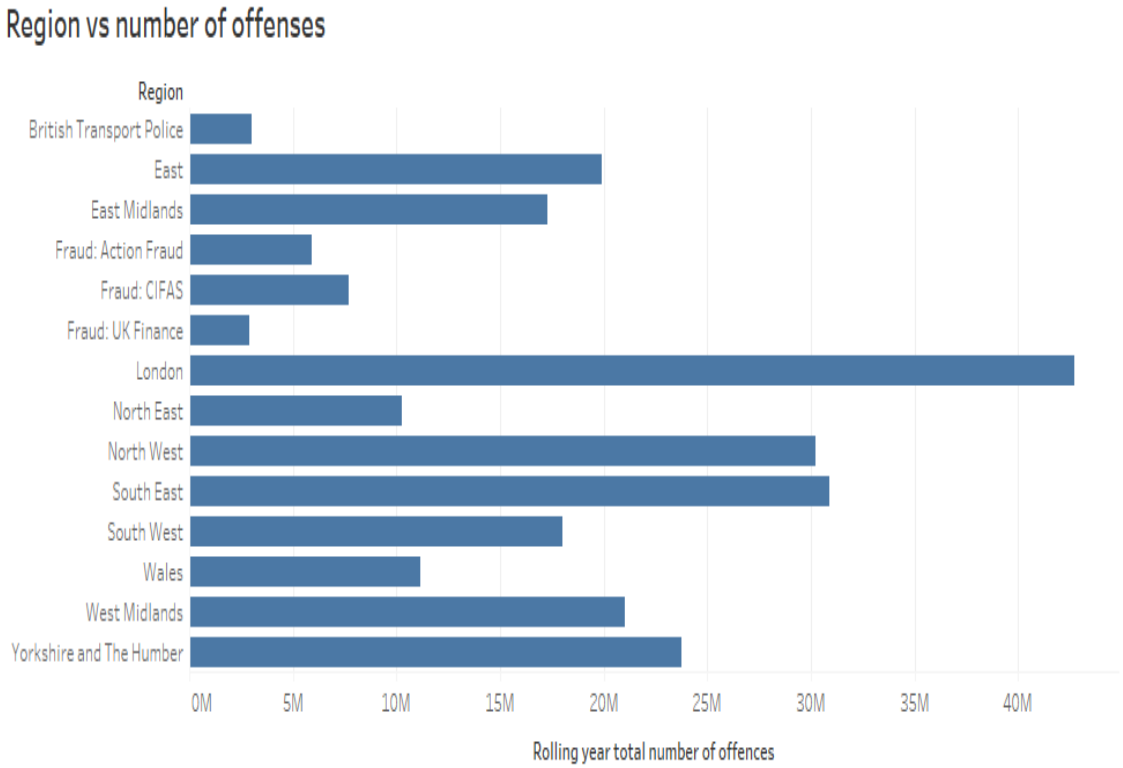
ANALYSIS:



Interpretation:

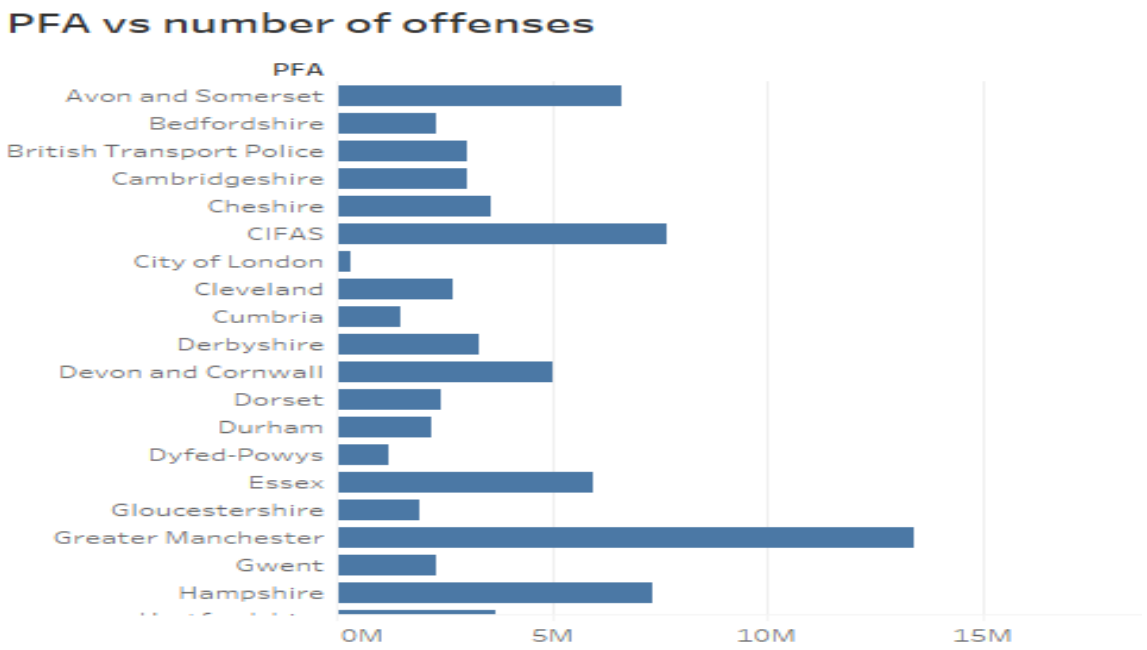
From the above bar graph, we can conclude that the highest number of offenses were in criminal damage and arson with more than 35 million followed by theft offenses with about 30 million. This is followed by vehicle offenses around 28 million followed by violence with injury with about 22 million. This is followed by violence without injury around 18 million followed by shoplifting around 18 million. This is followed by non-domestic burglary around 13 million followed by domestic burglary around 12 million. This is followed by public order offences around 11 million followed by drug offences around 10 million. This is followed by CIFAS around 8 million followed by action fraud around 7 million. This is followed by bicycle theft around 5 million followed by stalking and harassment around 4 million followed by theft from the person around 3 million. This is followed by sexual offences around 2 million followed by robbery around 2 million. This is followed by miscellaneous crimes against the society around 1 million which is followed by possession of weapons offences

around 1 million. This is followed by non-residental burglary around 0.5 million. Coming to death or serious injury caused by illegal driving and homicide which are not present in this graph.



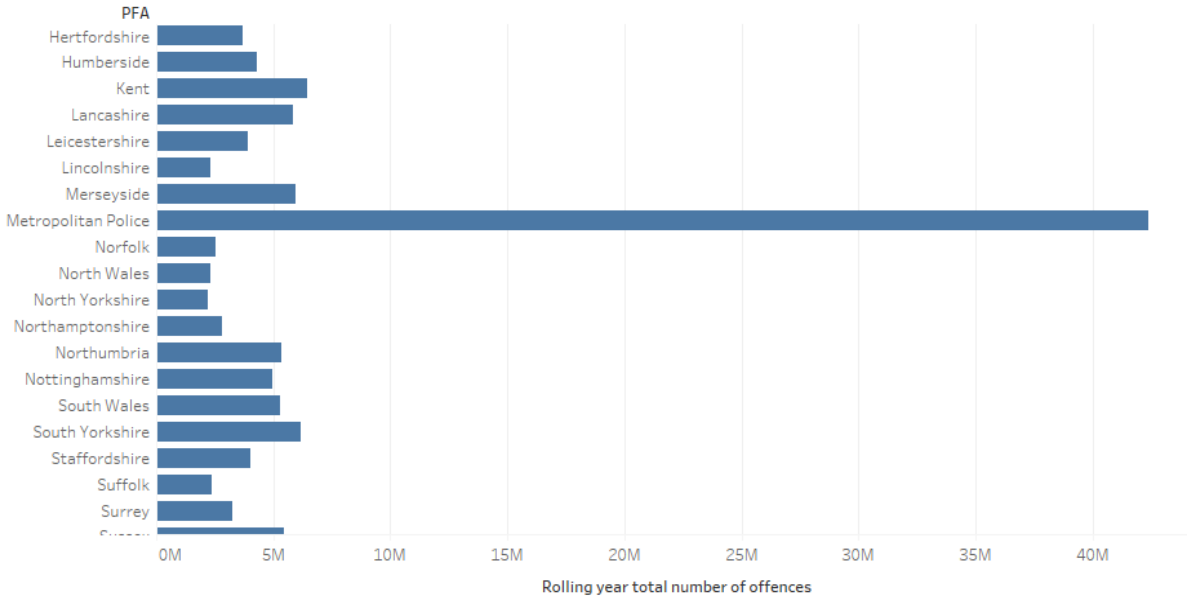
Interpretation:

From the above bar graph, we can conclude that the highest number of offenses were in London around 45 million followed by South East around 32 million. This is followed by North West around 30 million followed by Yorkshire and The Humber around 23 million. This is followed by West Midlands around 21 million followed by East around 20 million. This is followed by South West around 18 million followed by East Midlands around 17 million. This is followed by Wales around 11 million followed by North East around 10 million. This is followed by Fraud: CIFAS around 8 million followed by Fraud: Action fraud around 6 million. This is followed by British transport police around 4 million followed by Fraud: UK Finance around 2 million.



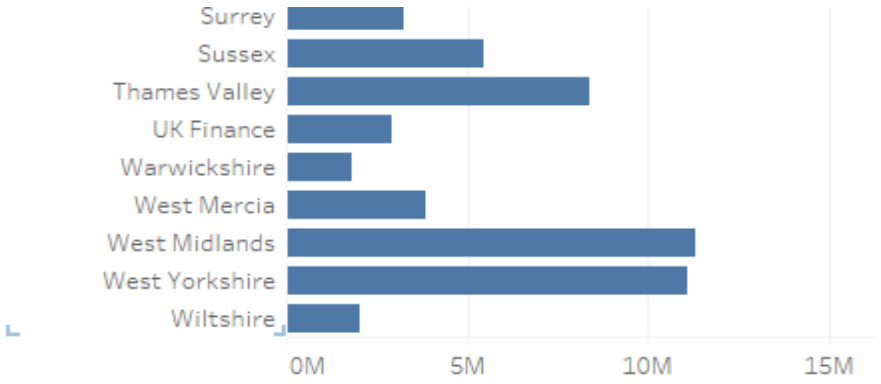
Interpretation:

From the above graph we can conclude that Greater Manchester has the highest number of crime recorded around 13 million. The least number of crime recorded is around 0.5 million in the City of London.



Interpretation:

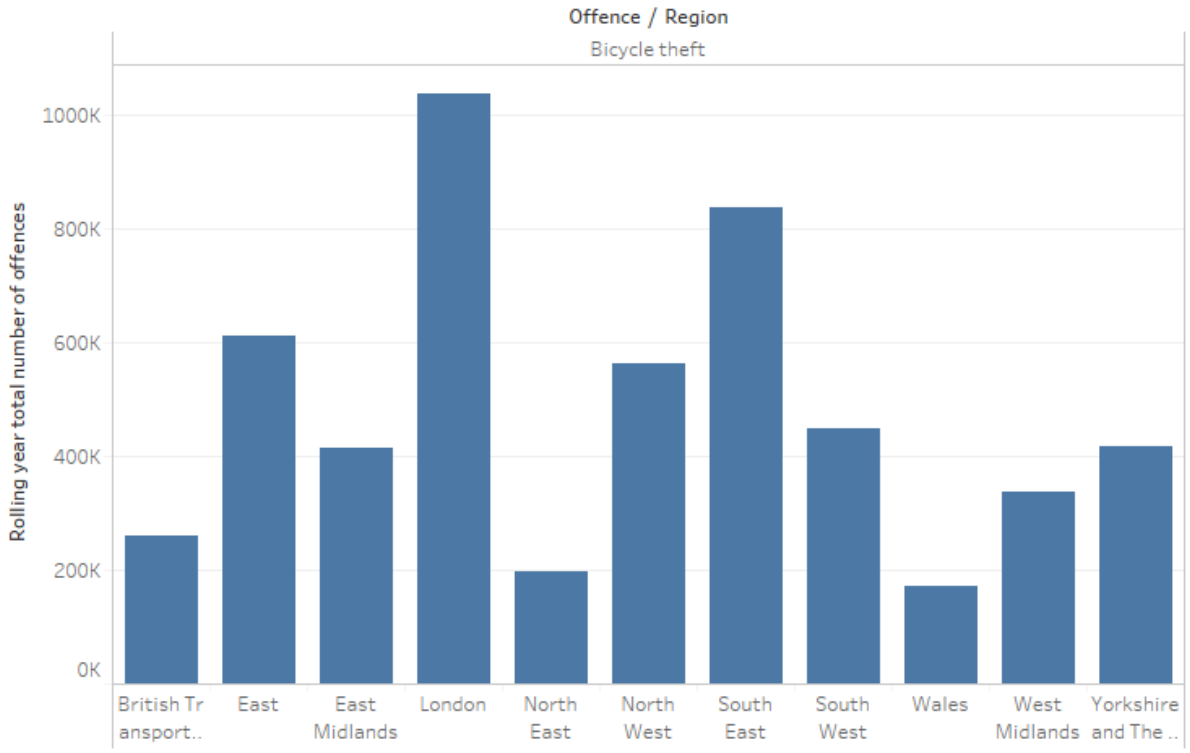
From the above graph we can conclude that metropolitan police has the highest number of crime recorded around 45 million. The least number of crime recorded is around 1 million in Suffolk.



Interpretation:

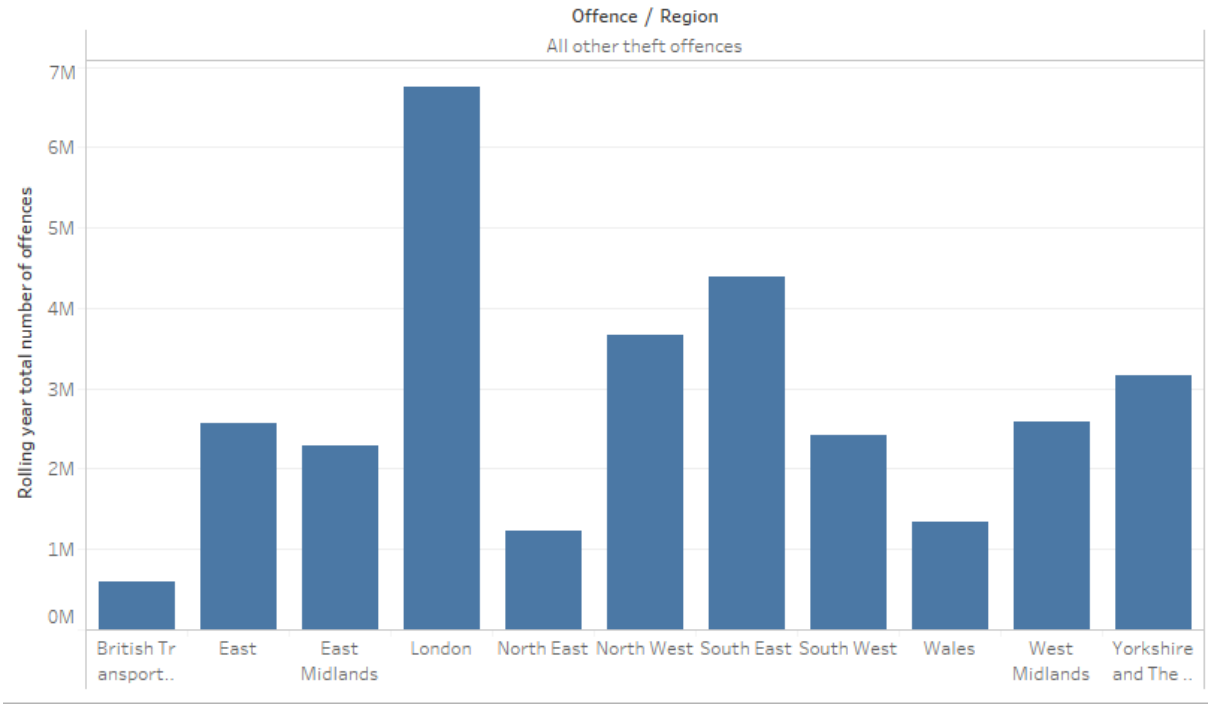
From the above graph we can conclude that West Midlands has the highest number of crime recorded around 12 million. The least number of crime recorded is 1 million in Warwickshire.

Region and name of the offense vs number of offenses



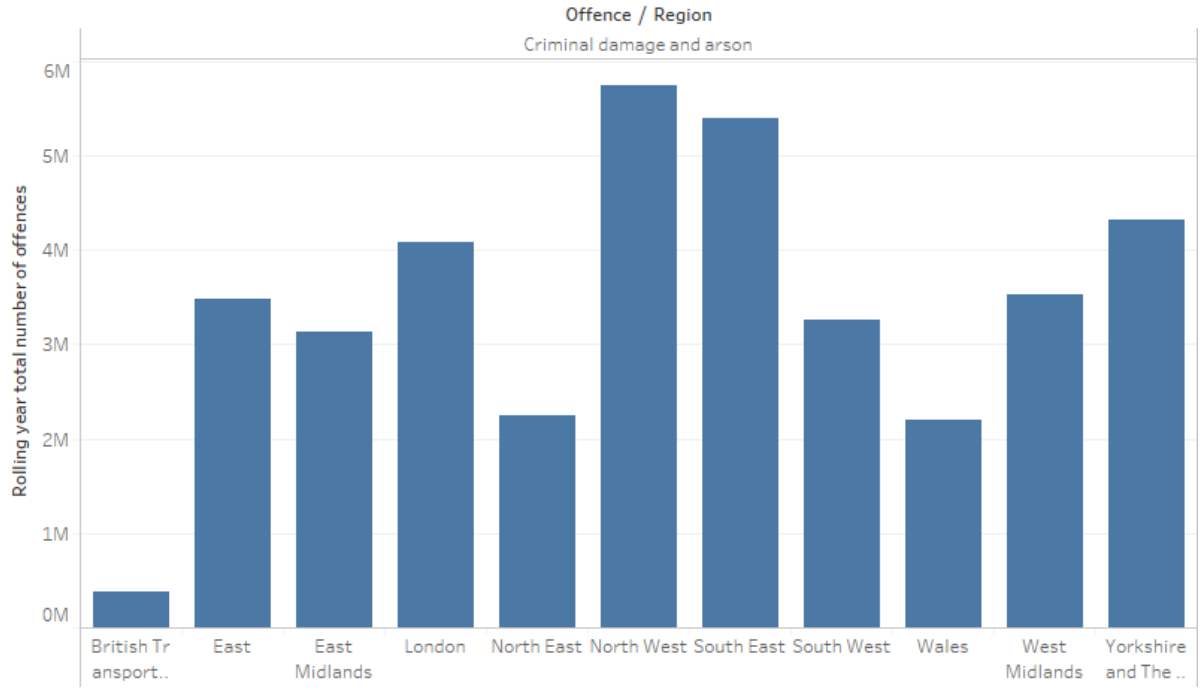
Interpretation:

From the above graph we can conclude that London has the highest number of offences in bicycle theft which is around 1000k followed by Wales has the least number of offences around 200k.



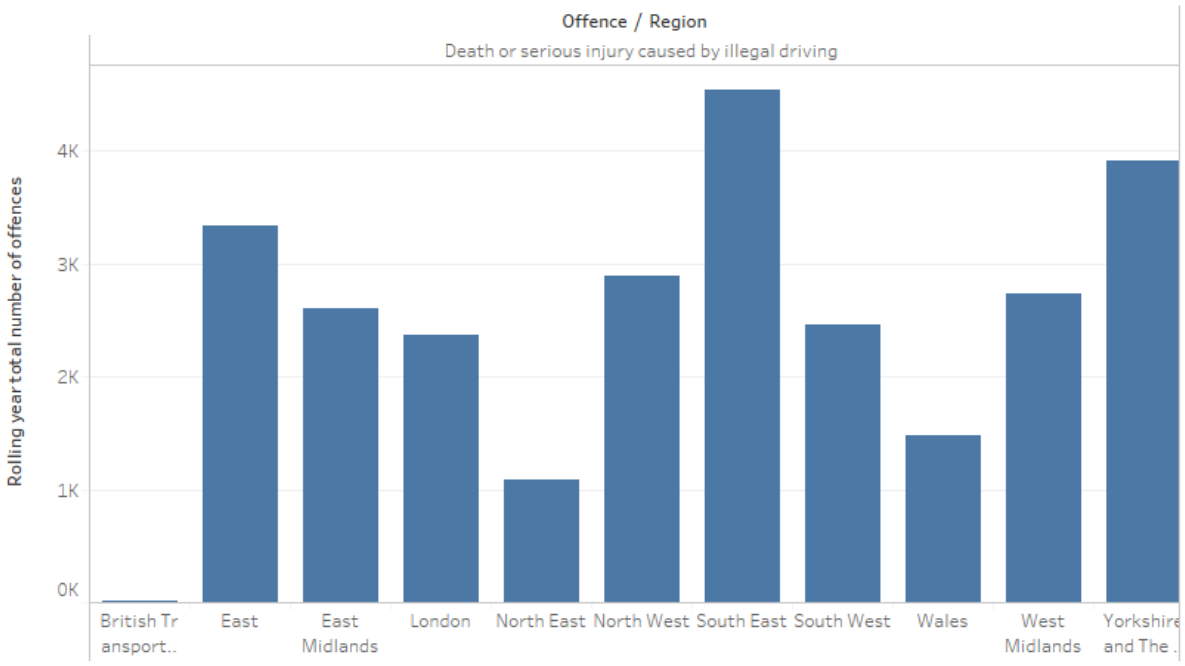
Interpretation:

From the above graph we can conclude that London has the highest number of offences in all other theft offences which is around 7 million followed by british transport police has the least number of offences around 1 million.



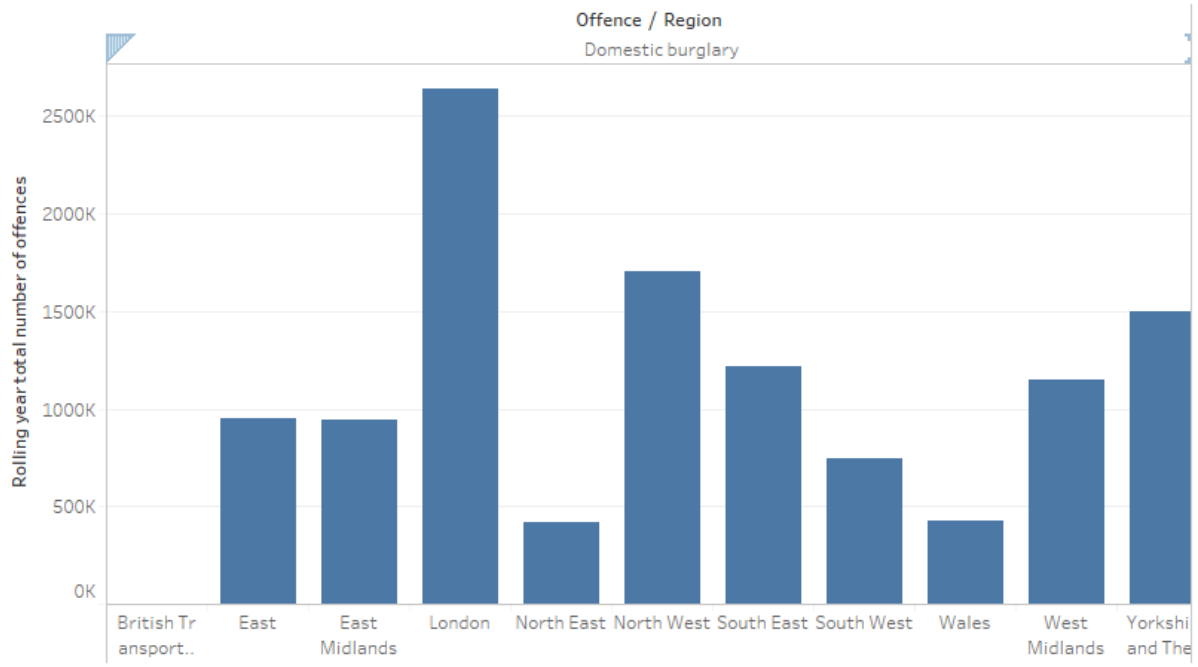
Interpretation:

From the above graph we can conclude that north west has the highest number of offences in criminal damage and arson which is around 6 million followed by british transport police has the least number of offences around 0.5 million.



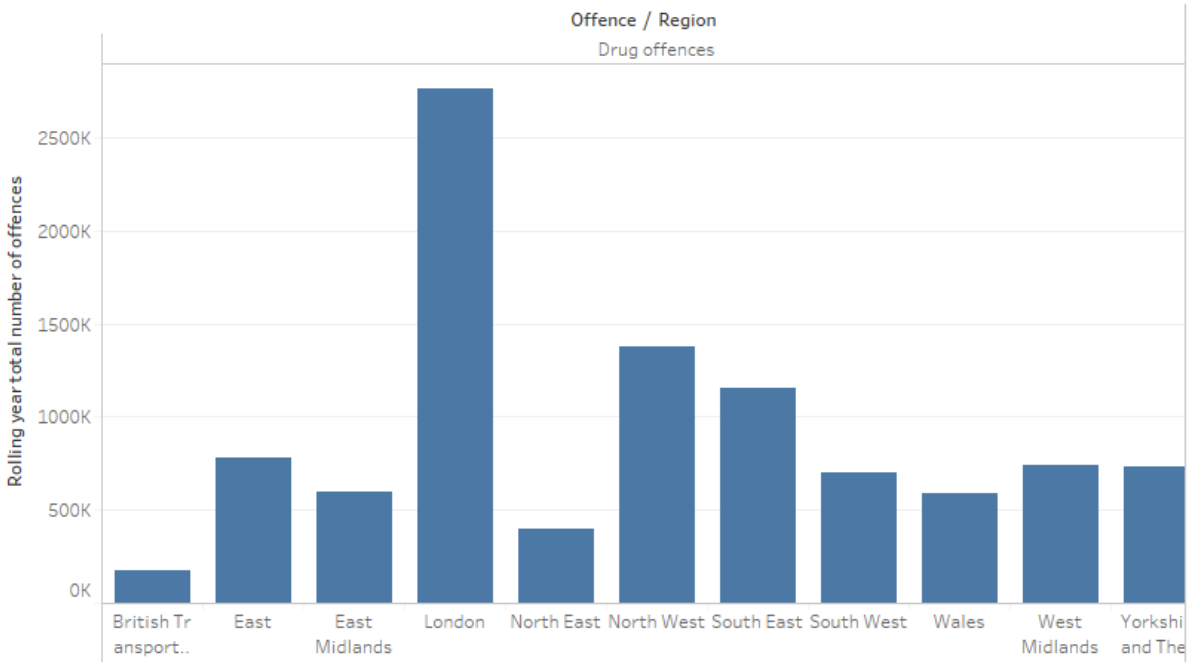
Interpretation:

From the above graph we can conclude that south east has the highest number of offences in death or serious injury caused by illegal driving which is around 5k followed by british transport police has the least number of offences around 0.5k.



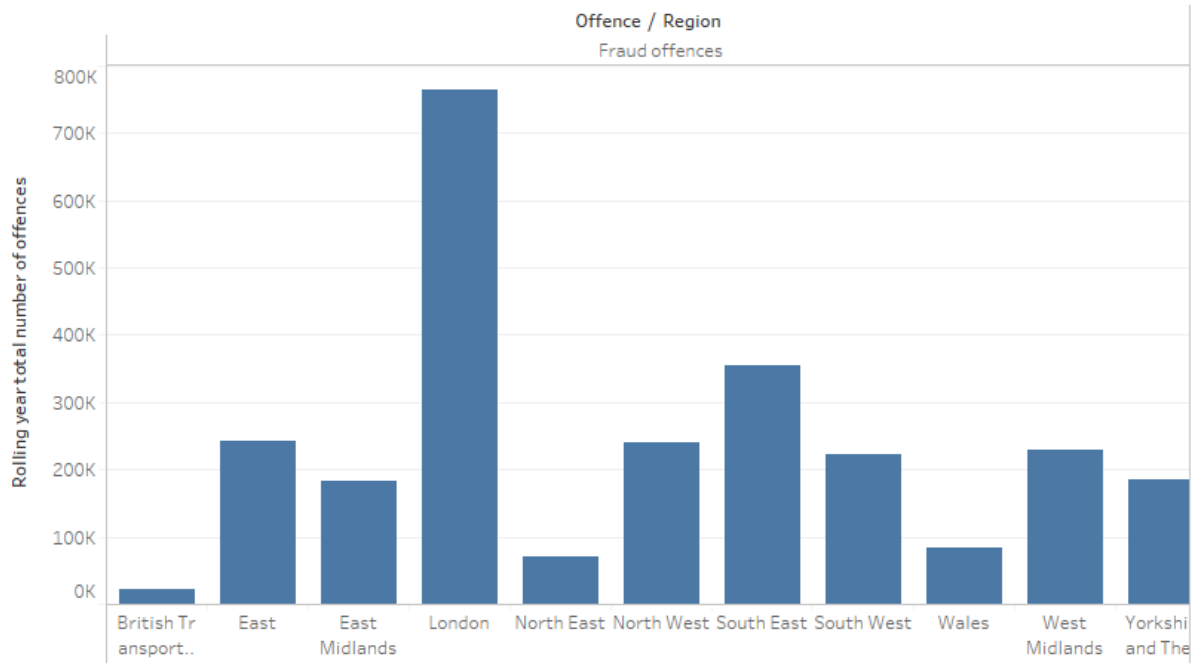
Interpretation:

From the above graph we can conclude that london has the highest number of offences in domestic burglary which is around 2500k followed by british transport police has the least which is zero crime recorded.



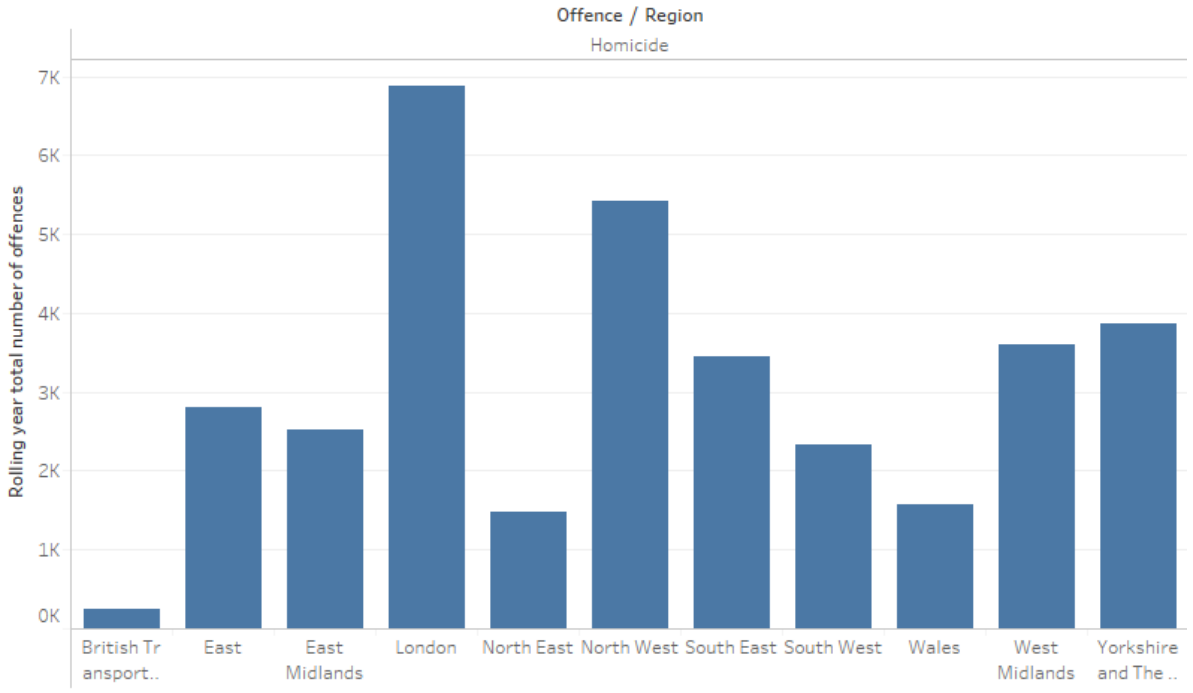
Interpretation:

From the above graph we can conclude that london has the highest number of offences in drug offences which is around 3000k followed by british transport police has the least number of offences around 0.5k.



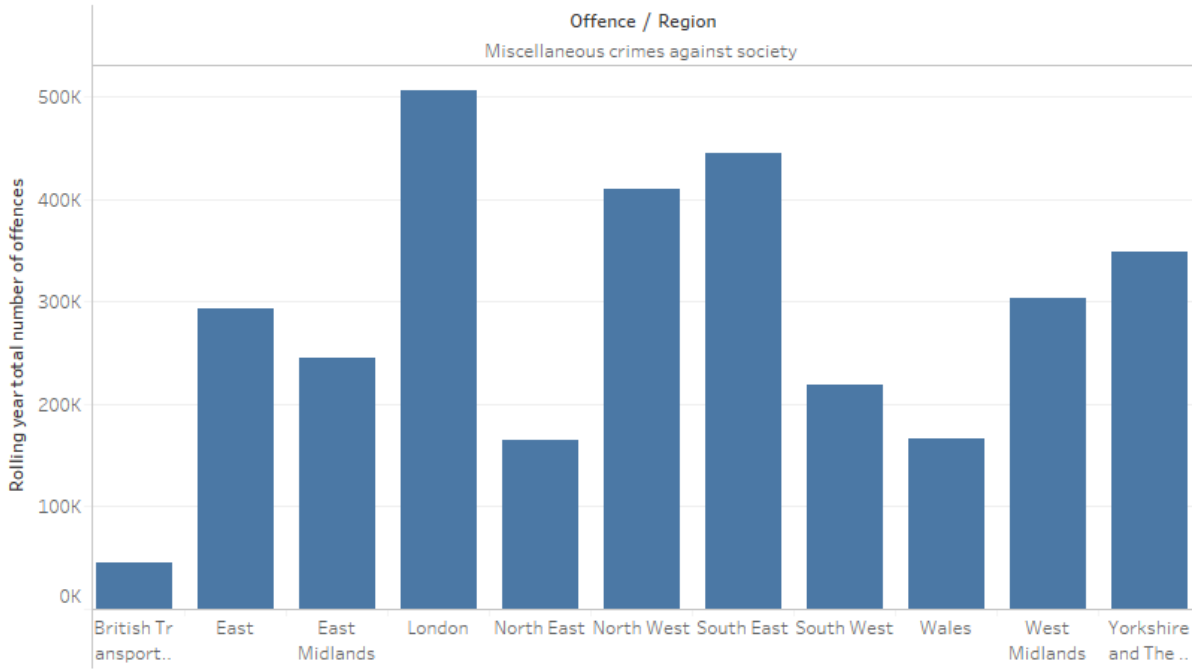
Interpretation:

From the above graph we can conclude that london has the highest number of offences in fraud offences which is around 800k followed by british transport police has the least number of offences around 0.5k.



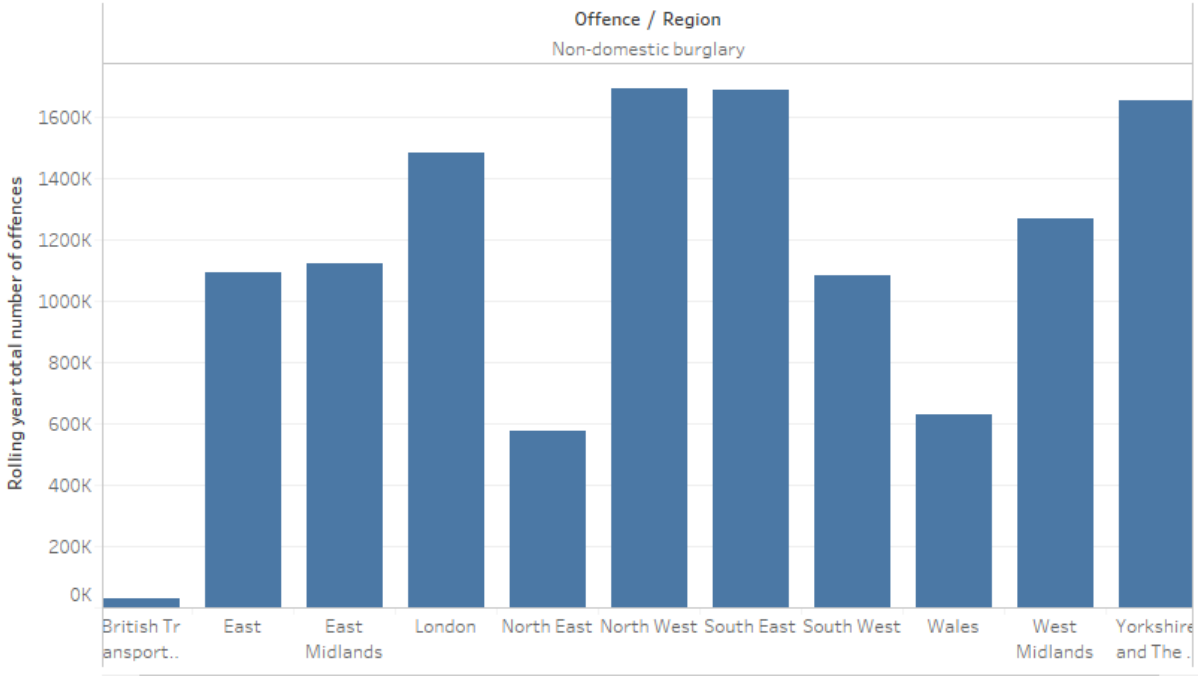
Interpretation:

From the above graph we can conclude that london has the highest number of offences in homicide which is around 7k followed by british transport police has the least number of offences around 0.5k.



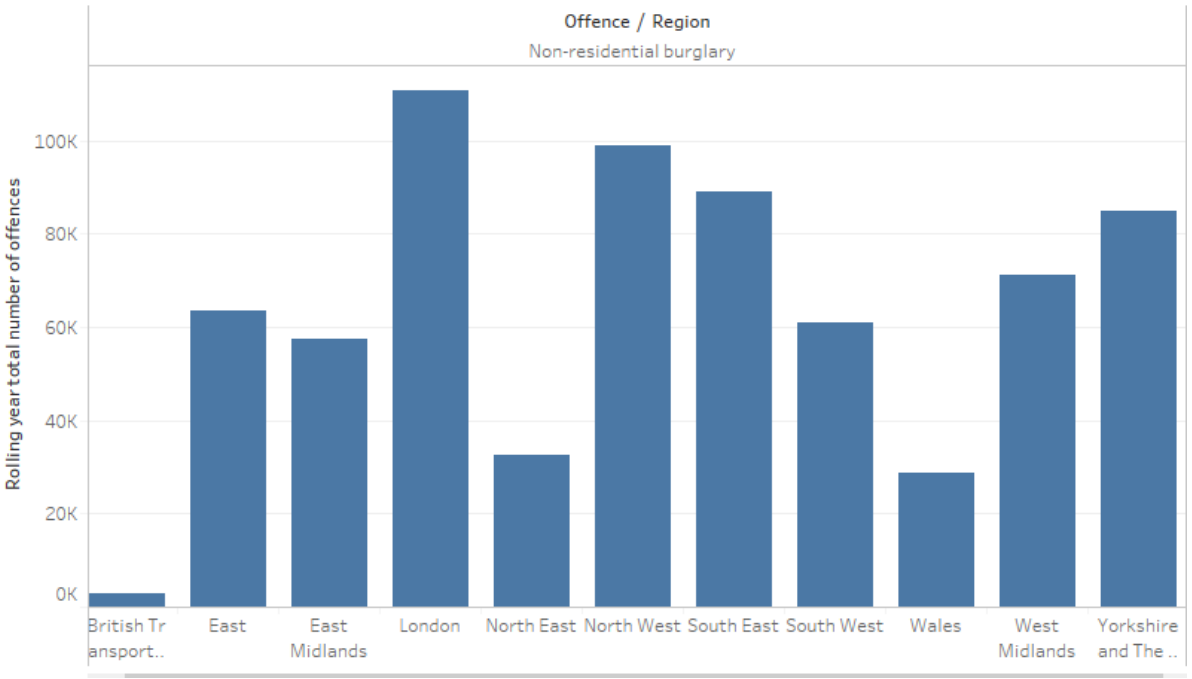
Interpretation:

From the above graph we can conclude that london has the highest number of offences in miscellaneous crimes against society which is around 500k followed by british transport police has the least number of offences around 50k.



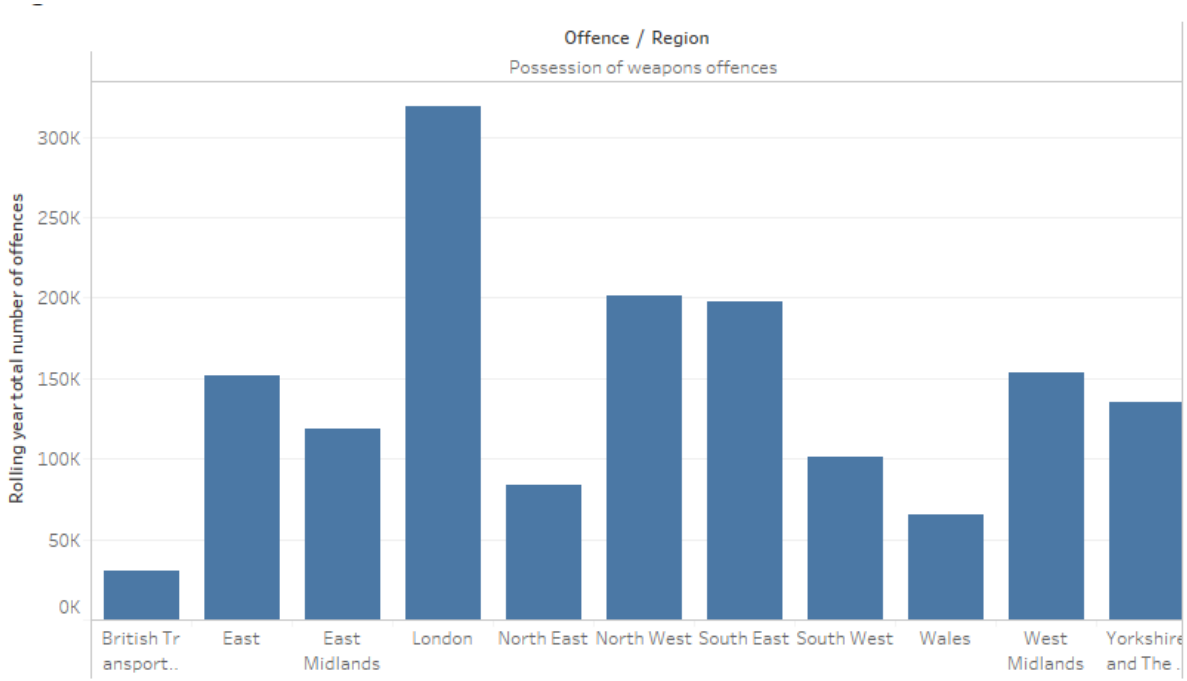
Interpretation:

From the above graph we can conclude that north west has the highest number of offences in non-domestic burglary which is around 1600k followed by british transport police has the least number of offences around 0.5k.



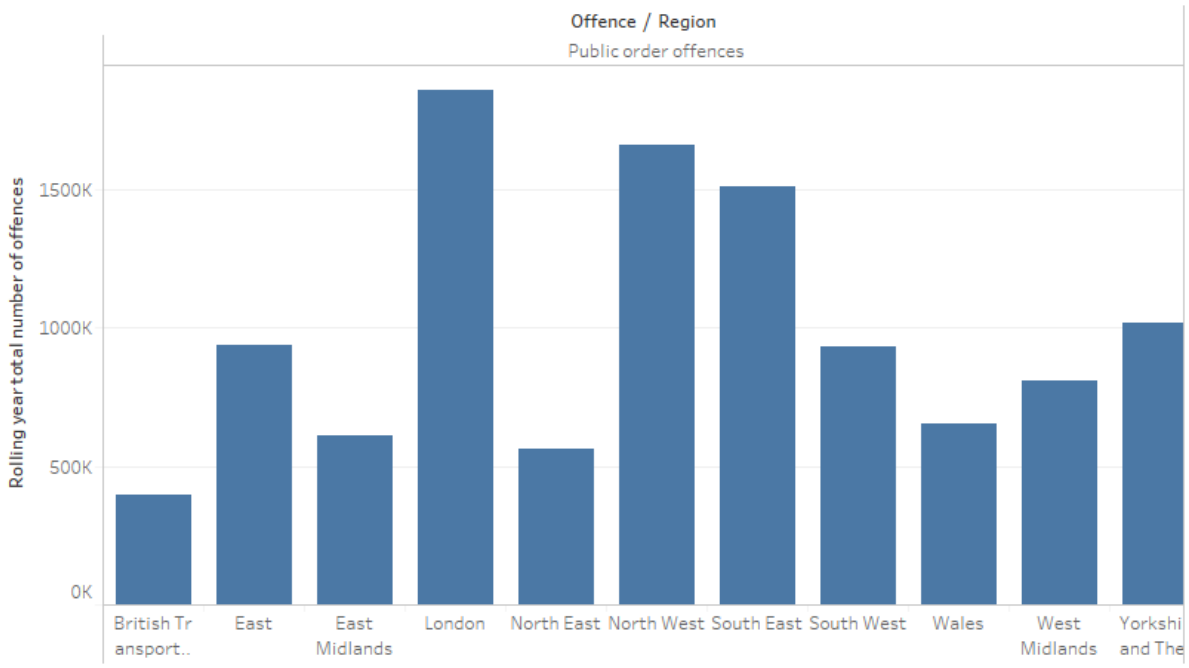
Interpretation:

From the above graph we can conclude that london has the highest number of offences in non-residential burglary which is around 120k followed by british transport police has the least number of offences around 0.5k.



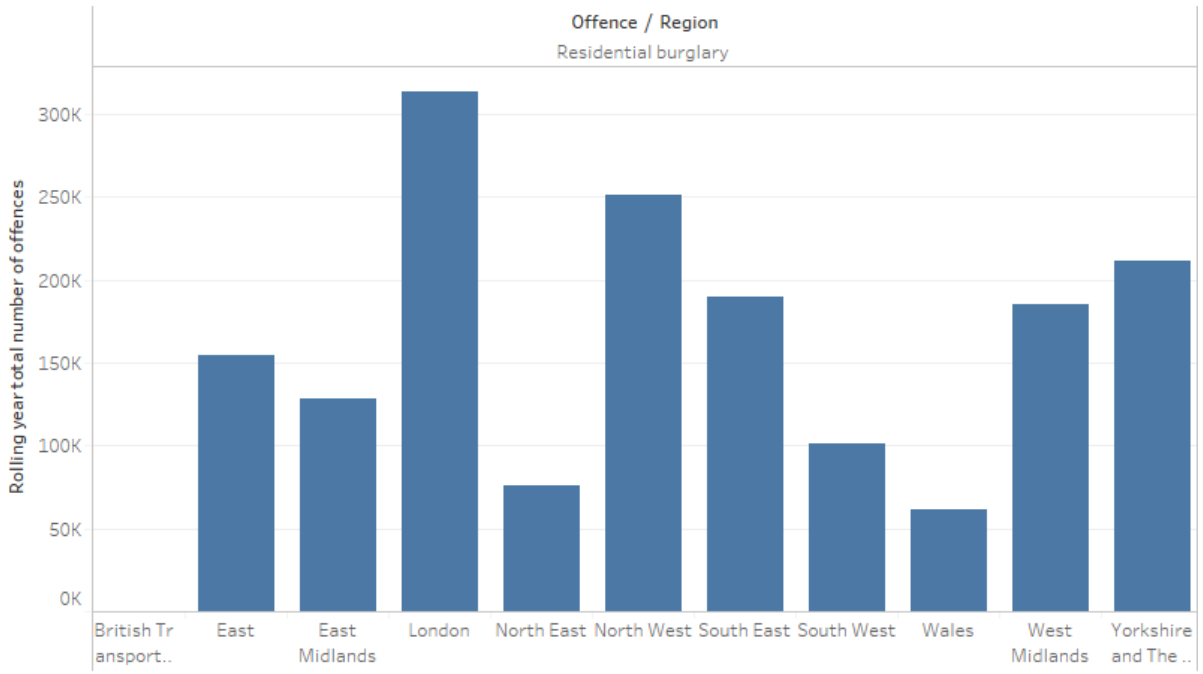
Interpretation:

From the above graph we can conclude that london has the highest number of offences in possession of weapons offences which is around 300k followed by british transport police has the least number of offences around 25k.



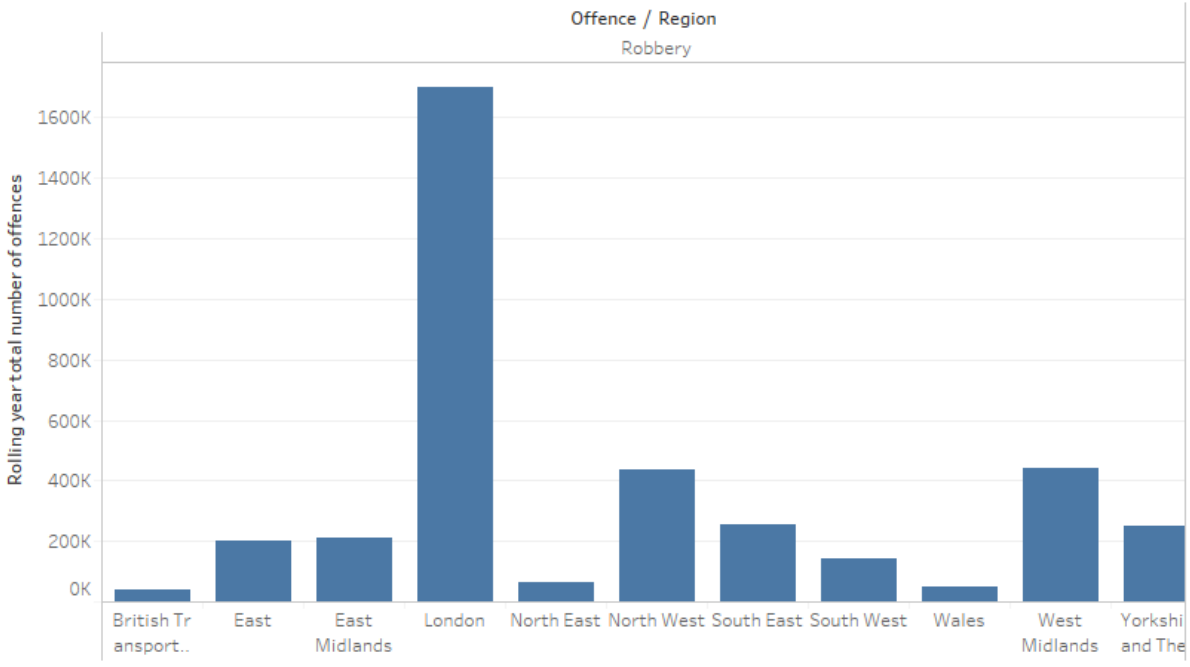
Interpretation:

From the above graph we can conclude that london has the highest number of offences in public order offences which is around 2000k followed by british transport police has the least number of offences around 500k.



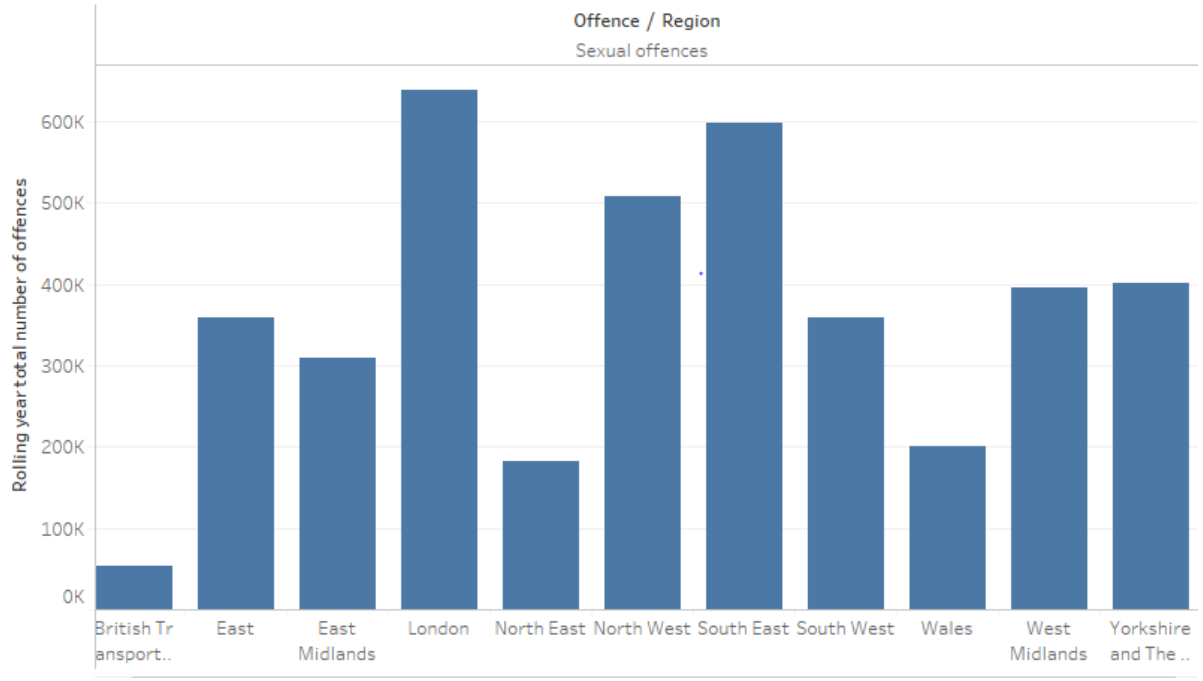
Interpretation:

From the above graph we can conclude that london has the highest number of offences in residental burglary which is around 300k followed by british transport police has the least which is zero crime recorded.



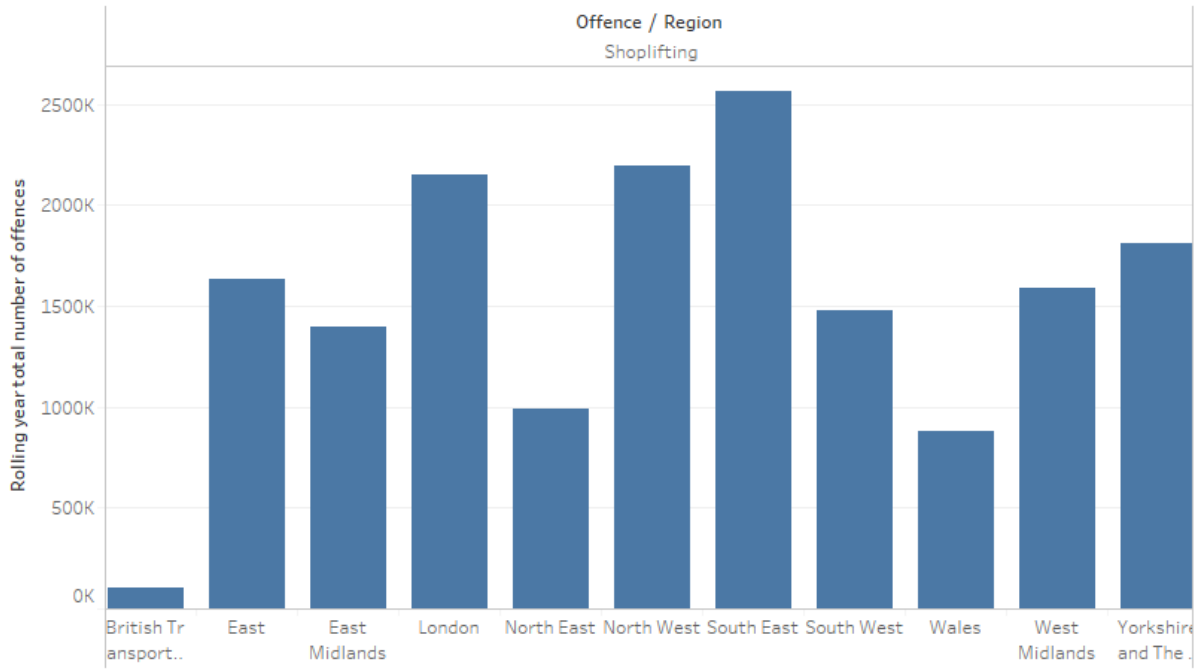
Interpretation:

From the above graph we can conclude that london has the highest number of offences in robbery which is around 1600k followed by british transport police has the least number of offences around 0.5k.



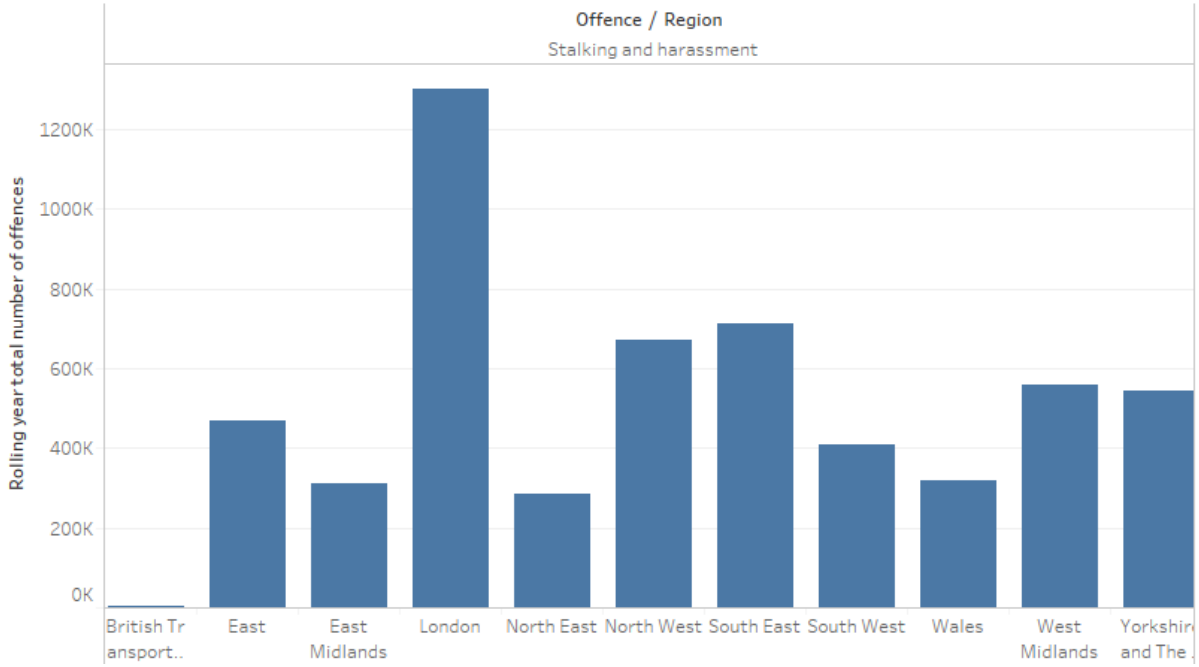
Interpretation:

From the above graph we can conclude that london has the highest number of offences in sexual offences which is around 600k followed by british transport police has the least number of offences around 50k.



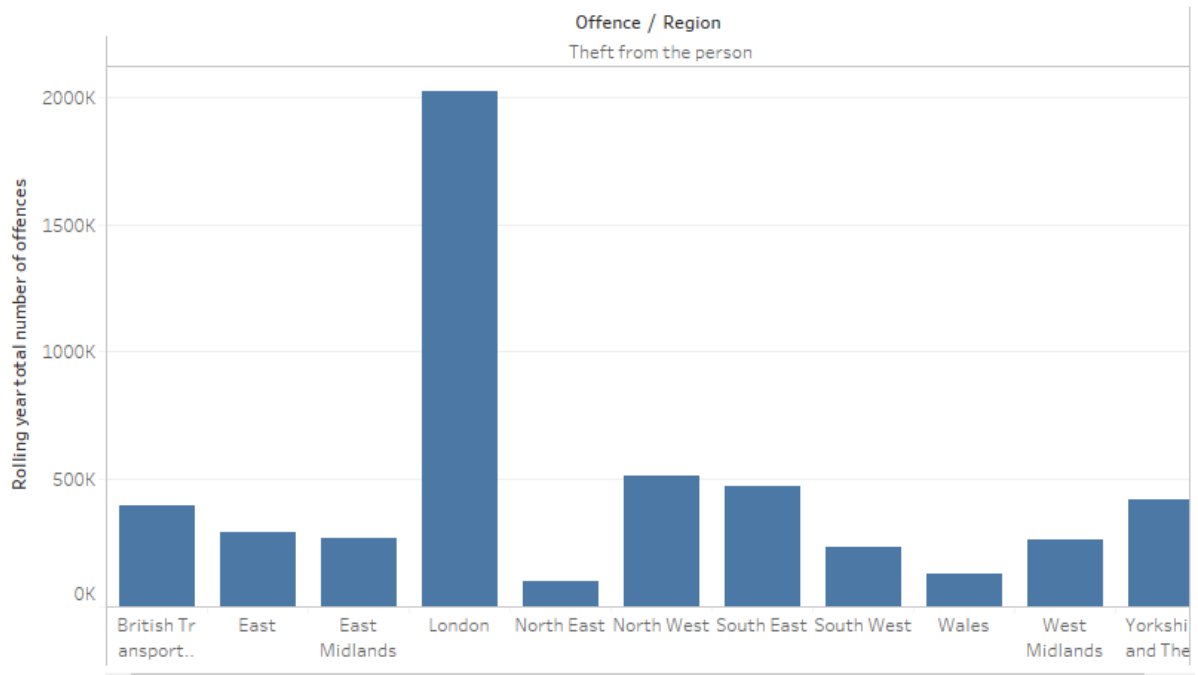
Interpretation:

From the above graph we can conclude that south east has the highest number of offences in shoplifting which is around 2500k followed by british transport police has the least number of offences around 0.5k.



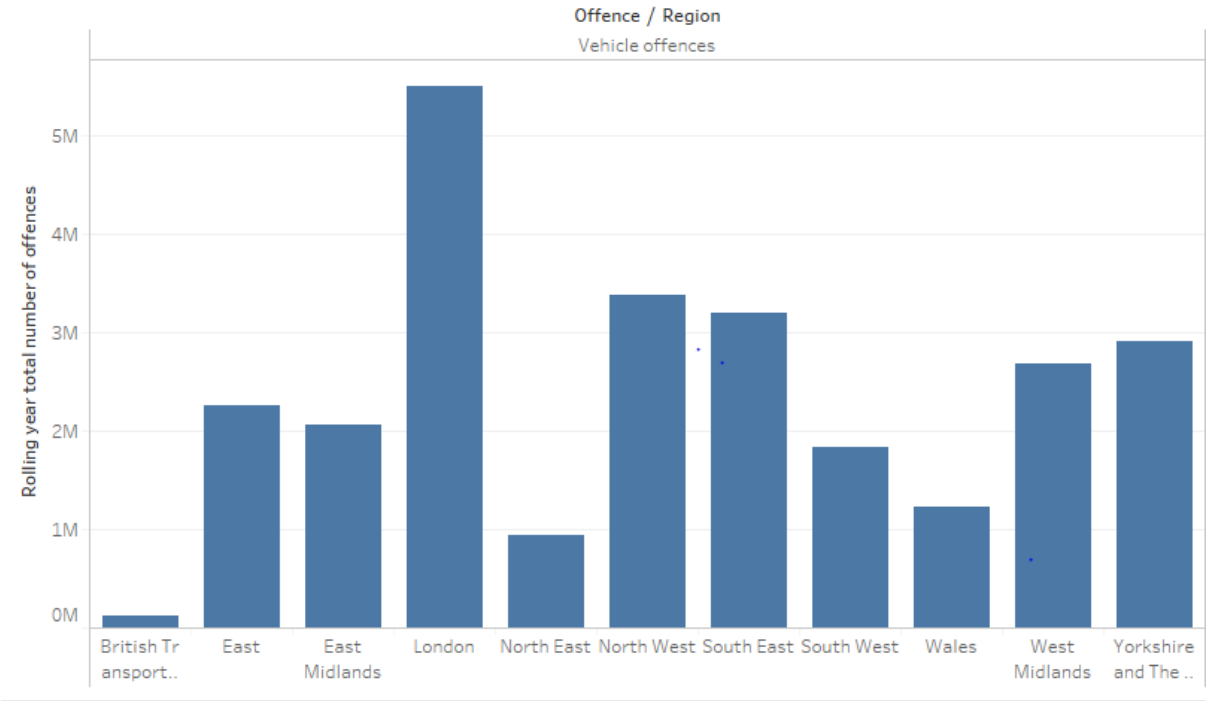
Interpretation:

From the above graph we can conclude that london has the highest number of offences in stalking and harassment which is around 1300k followed by british transport police has the least number of offences around 0.5k.



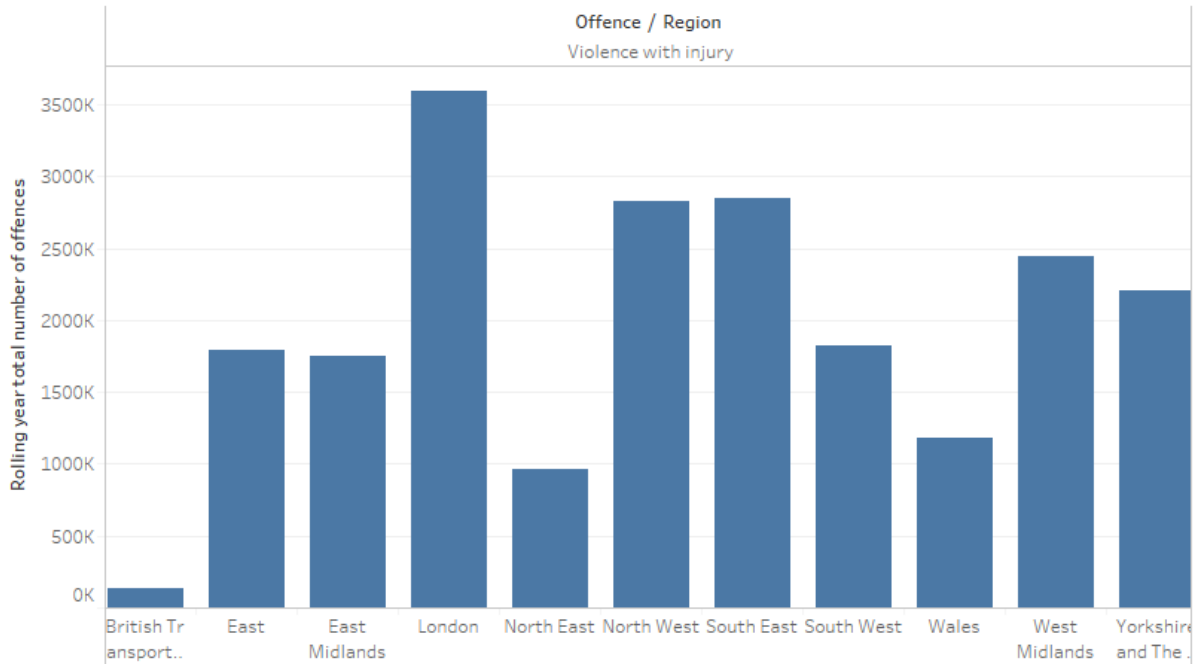
Interpretation:

From the above graph we can conclude that london has the highest number of offences in theft from the person which is around 2000k followed by north east has the least number of offences around 100k.



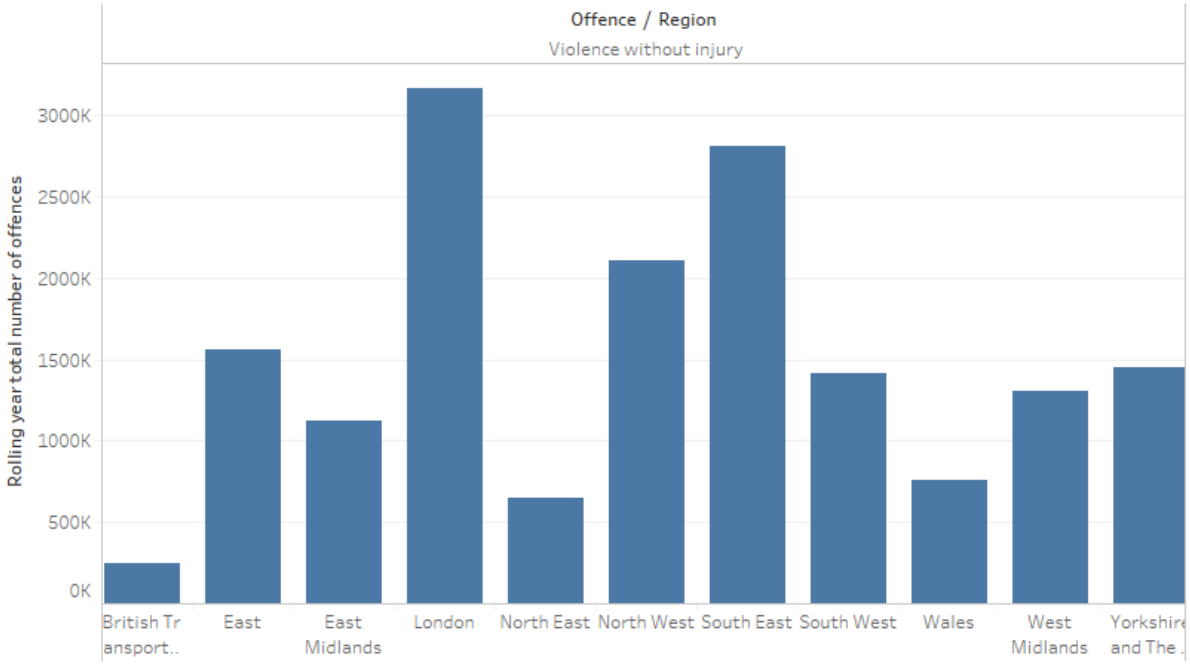
Interpretation:

From the above graph we can conclude that london has the highest number of offences in vehicle offences which is around 6 million followed by british transport police has the least number of offences around 0.5 million.



Interpretation:

From the above graph we can conclude that london has the highest number of offences in violence with injury which is around 3500k followed by british transport police has the least number of offences around 0.5k.



Interpretation:

From the above graph we can conclude that london has the highest number of offences in violence with injury which is around 3000k followed by british transport police has the least number of offences around 200k.

CHAPTER-3

Findings:

- London has the most number of crimes committed.
- British transport police has the least number of offences recorded.
- Criminal damage and arson is the most committed crime.
- Non residential burlglary is the least committed crime.
- Sexual offense is one of the crime which is increasing at a brisk rate.
- North west has the highest number of offences in Non-domestic burglary.
- North east has the lowest number of offences recorded in theft from person.
- South east has the highest number of offences recorded in shoplifting.
- British transport police also recorded zero number of offences in some particular crimes like residential burglary, domestic burglary.

Suggestions:

- It would have been more helpful if tableau can encrypt and decrypt any given data.
- If it has backup option to save it anywhere in cloud would be more helpful.
- There should be strict laws so that criminals will think twice before committing a crime.
- There should be crime awarness in public places like schools, colleges, job centers.

Conclusion:

This project has been an excellent experience for me. I have learnt a new software called tableau which helped me analyzing the secondary data. With Tableau, anyone can visualize and understand data without the need for any advanced skills in data science. The dataset was quite big and this software helped me a lot in analysing the data in an easy and comfortable way.

The report highlighted that at the national level an estimated 4 in 5 (81%) offences that were brought to the attention of the police and should have been recorded as crimes, were actually recorded for specific offence types as follows:

- criminal damage and arson – 89%
- sexual offences – 86%
- burglary – 82%
- robbery – 80%
- sexual offences – 74%
- violence with or without injury – 67%

So, by this I conclude saying that crime rate in England and Wales is increasing and this is an area of concern.

CHAPTER-4

BIBLIOGRAPHY:

- Kaggle
- M.S Excel
- Tableau Software