# 2019 Crime Survey for the West Midlands

## TEAM MEMBERS

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## PROJECT DESCRIPTION/OUTLINE

## Multiple datasets have been combined to test the following hypothesis.

## Within the West Midlands during 2019 did the Index of Multiple Deprivation (IMD) Score of an area influence the exposure to certain crimes in that area.

## 

## RESEARCH QUESTIONS

1. Does the crime data sourced from the West Midlands Police database correlate with the Index of Multiple Deprivation (IMD) score?
2. Which district and Lower Layer Super Output Areas (LLSOAs) have higher rates of crime?
3. What type of crime might you be exposed to in certain LLSOAs?
4. Where is the safest place to park your bike?

## DATASETS

1. West Midlands Crime Data 2019 by month
2. Local Income Deprivation Data
3. Lower Layer Super Output Areas December 2011 Boundaries

## BREAKDOWN OF TASKS

1. Identify and obtain data as csv or excel files
2. Studied/discussed
3. Exploring and cleaning of data
4. Lists questions / choose questions that will be used
5. Plan visualizations
6. Allocate tasks to group members
7. Coding
8. Create charts
9. Summarization/conclusion
10. Preparing the presentation

**Notes**

1. IMD – indicators
2. Scatter plot crime rate vs IMD
   1. Coding
   2. Outliers
3. Bar charts – district level overview
   1. Potentially independent mean?
4. Plot heatmap
   1. Coding
   2. Groupby
   3. Further analysis where we find interesting things – e.g. bike theft Warwick University
      1. Go deeper and let readers know exactly where not to leave your bike!