

# **Crime rates in different parts of Salt Lake City**

## **Linear Algebra 2270-004 project outline**

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- Comparisons of crime rates to different variables:
  - Time of day
  - Day of week
  - Type of crime (ranges of crimes as categorized by the SLCPD)
  - Area in SLC
    - Police district or arbitrarily defined geographical area
  - Average income in Area
  - Homeless population
- Methodology
  - Explain the categories of crime and the types of crime within each
  - Show how areas are defined
  - Explain how linear algebra was used to construct regression lines for each variable
- Presentation
  - Graphs
    - Linear regression output for different variables
      - Possible non-linear regression to find best fit
  - Tables
    - Geographical area vs crime rate
  - Discuss possible correlation/causation between variables
    - Our interpretations of the results
- Sources
  - <https://opendata.utah.gov/salt-lake-city>