Crime in Portland, Oregon, 2004-2014: A summary of trends

1. Introduction: Overview of purpose and motivation, summary of findings
   1. An example of some research that has been done around crime in an attempt to find an explanation for varying crime rates: Higher Crime Rate Linked To Low Wages And Unemployment, Study Finds. (n.d.)
2. Summary of available literature and journal articles, as well as various media contributions to the public understanding of crime in Portland. Items from bibliography follow:
   1. Methods for calculating crime indices: Cahill, M. E., & Mulligan, G. F. (2003).
   2. Nationwide crime trends: Johnson, C. (2016, September 19).
   3. Examining crime rates vs. economic opportunities: Gould, E. D., Weinberg, B. A., & Mustard, D. B. (2002).
   4. Robbery rates and racial segregation: O’Flaherty, B., & Sethi, R. (2007). Also Akins, S. (2003).
   5. The “Ferguson Effect”: Pyrooz, D. C., Decker, S. H., Wolfe, S. E., & Shjarback, J. A. (2016).
   6. Importance of locality in predicting crime trends: Cahill, M. E. (2004).
   7. FBI Releases Crime Statistics for Oregon and Washington.
   8. Violent crime in Portland, including geographic information: Cahill, M., & Mulligan, G. (2007).
   9. Korn, P. (2013, October 31). The Rose City's homicide drought.
3. Report of findings from data sources, highlighting major trends over time and by location.
   1. Disclose sources of data used:
      1. <http://www.civicapps.org/datasets>
      2. <https://www.portlandoregon.gov/bps/62635>
      3. <https://www.pdx.edu/crime-data/>
   2. Crime in total, then broken into broad categories: property crime vs. violent crime
      1. Scatter plots:
         1. Total reported Portland crime 2004-2014
         2. Reported property crime 2004-2014
         3. Reported violent crime 2004-2014
   3. Further scrutiny of specific types of crime in question: robbery, burglary, etc. versus assault, homicide, etc. Is it possible to determine how much of this crime was committed by repeat offenders?
      1. Bar charts, stacked bar charts:
         1. Property and violent crime 2004-2014
         2. Property crime alone, including subcategories: Shoener, N. (2017, March 21).
         3. Violent crime alone, including subcategories: Shoener, N. (2017, March 21).
      2. Possibility of identifying repeat offenders? How would this be done given the data available?
   4. Trends in various types of crime over time: has there been an increase or decrease in residential burglary, for example? Can these trends be correlated to any economic markers? Was there any particular spike after the events in Ferguson, Missouri?
      1. Scatter plots:
         1. Trends in various types of crime, 2004-2014. It may be possible to do this with a single graphic, however, using several might improve readability.
         2. Look for a relationship between any economic markers and crime rates: how are crime rates related to major economic trends? Where could data on these economic trends be located?
         3. Look for any unusual activity immediately after Ferguson (after August 9, 2014): this is toward the end of the available data, any change may not be apparent.
   5. Trends in various types of crime over geographic location.
      1. At first this may be limited to which precinct was involved in the various crimes, but depending on availability of information it may be possible to actually represent crime data on a city map and look for general patterns and areas of interest.
      2. Sub-maps may be an option here as well. Can these trends by location be correlated to any economic markers? For example, average house sale price in the neighborhood?
4. Comparison of Portland data to that reported in the summary of the literature above. Does the data from Portland agree with the findings from the studies done by those authors, for example? Is the local media in Portland giving an accurate picture of crime in the city?
5. Conclusion and summary of major results or findings. Possible avenues for further investigation, or other data that might inform future research.