D'Anna (2024)

Strategic Crime Analysis

Corresponds with Boba Santos Chapters 7,12

Strategic Crime Analysis

• The study of crime and disorder problems and other police-related issues to determine long-term patterns of activity as well as to evaluate police responses and organizational procedures (Boba 2005).



Strategic "Problems"

- Problem: A recurring set of related harmful events in a community that the police must address
- Incident: One event in time
- Pattern: Group of events sharing a unique decision-making process
 - Similar characteristics, typically at the tactical level
 - o Multiple tactical patterns can create a strategic issue
- Problem Set
 - Related crime activities occurring over time
 - Multiple overlapping patterns & crime series
 - Potentially connected, likely independent of each other
 - Great complexity in any underlying relationships

Studying "Problems"



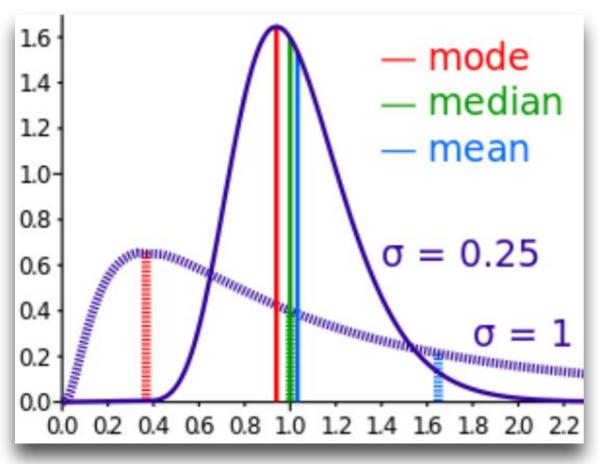
- The Scientific Method
- Hypotheses
 - Statements & questions about the problem
- Data
 - Source, type, accessibility & integrity
- Environment
 - Community & police agency
- Research
 - Literature reviews, information sharing

Tools and Methods

- Some of the *basic* quantitative tools for analysis...
 - Frequency
 - UK knife crime
 - Cross-tabulation
 - Violent crime in Kenya
 - Percentage & Percent Change
 - Fairfax County
 - <u>Percentile</u>
 - <u>80/20 example</u>
 - Rates
 - Across the U.S.
 - Mean & Standard Deviation
 - POP Center
 - Correlation
 - Crime and State IQ
 - Regression
 - Crime regression models

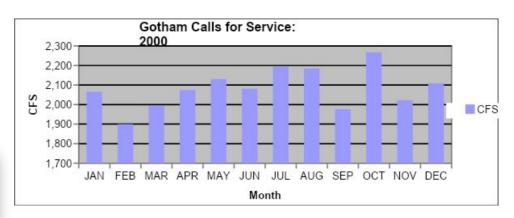


Charts: Central Tendency



Negative Skew Positive Skew

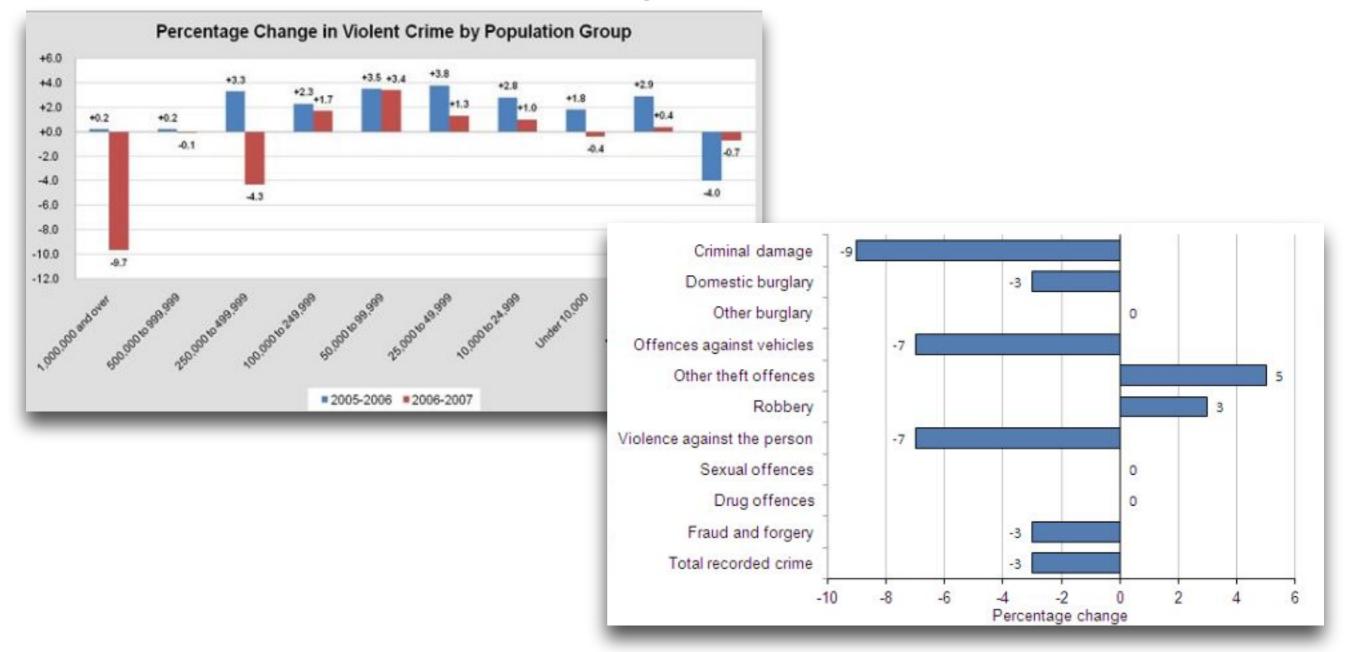
- Mean
- Standard Deviation
- Skewness





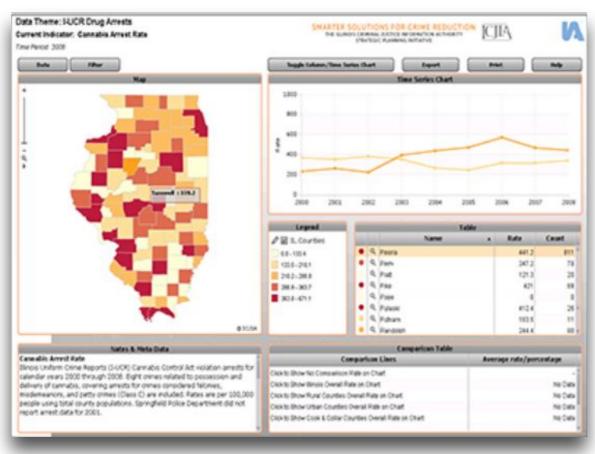
Charts: Percent Change & Rates

Percent Change & Rates

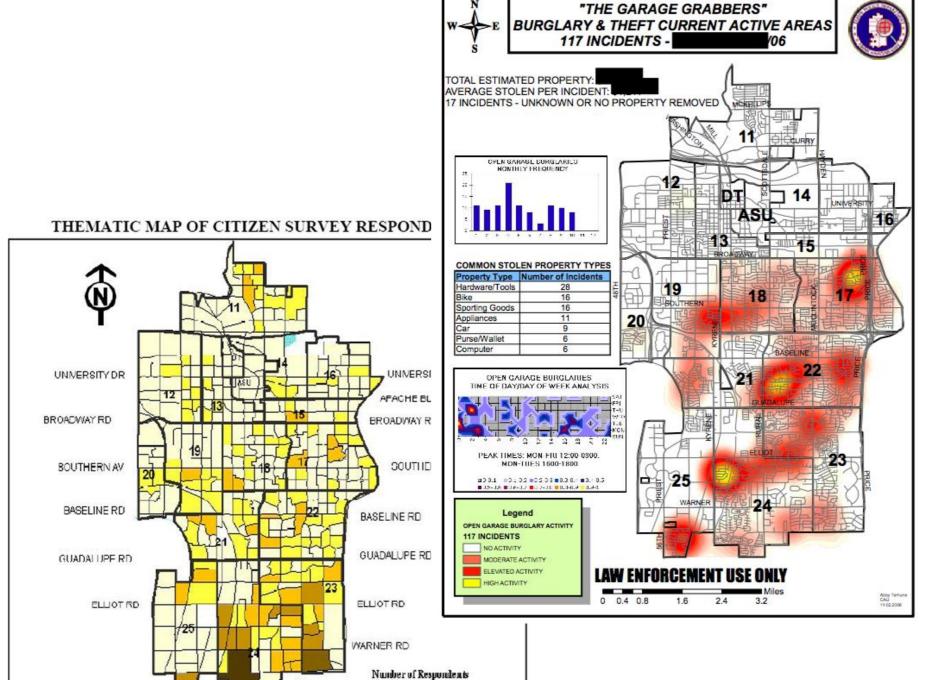


Strategic Spatial Analysis

- Graduated color mapping
 - Spatial Joins of points to polygons
 - Breaks schemes
 - Natural
 - Changes for each data set
 - Equal Interval
 - Equal breaks in data
 - Quantile
 - Equal amounts of data in each break
 - Standard deviation
 - Uses mean & SD to break
 - Manual
 - User defined



"Hot Spot" Mapping



50 to 100 20 to 50 10 to 20

RAYRD

- Manual
 - Naked eye analysis
- Graduated Color
 - Choropleth
- Grids
 - Map overlays
- Ellipses
 - Circular; based on standard
 - deviations
- Density
 - Identifies clusters through statistical measures

Strategic Products

- Memos
- Regular reports & maps
 - Weekly, quarterly, annually, etc.
- Requests
 - Interagency, intra-agency, media, public
- Problem Analysis
 - Proactive research

