Lab: Computer Assisted Reporting

CSI 3305: Introduction to Computational Thinking

December 23, 2010

1 Introduction

Information for news stories comes from a variety of sources. Journalists will use their own observations to describe and interpret events. They may use archival records to provide background on current situations and to write historical articles. Interviews with first-hand sources like experts, victims and bystanders are used to provide both facts and interpretations. One source that is becoming more important as more data is available on computer networks is computer assisted reporting.

Journalists use computational tools to understand information in publicly available databases in order to inform their audiences. Examples of publicly available data include property tax information, census data, budgets, and school accountability test scores. In some cases, this information is available as the result of a Freedom of Information Act request, while in other cases, anyone using a particular web site can have easy access to the data. Some sites include analytical tools, while others provide the data and a code book only. In addition to typical journalist skills like understanding the audience, interviewing and synthesizing information from a variety of sources, using this information requires skill in understanding what is contained in databases and extracting appropriate information from them.

Here is an example of a Computer-Assisted Reporting (CAR) story: Why-nearly-50-of-all-Phoenix-murders-go-unsolved In this story, the journalist selected data from nationally reported crime statistics, made comparisons between his/her city and other similar cities, and found an area of difference that led to a story.

For the journalist, computational thinking is used to ask questions of the data, by deciding what variables would useful to select from the data available, and to decide how to aggregate and/or draw comparisons from the data in a way that provides useful conclusions. For many journalists, this would mean just comparing totals, but statistical tests of relationship and difference would be appropriate.

2 Problem Statement

How does the Waco Metropolitan Statistical Area compare with other similar MSAs in total crimes and crimes in various categories? Students will use data provided from the Uniform Crime Reports from the FBI to generate a proposal for a news story. The Uniform Crime Reports contain information about both violent and property crimes. Aggravated assault, forcible rape, murder, and robbery are classified as violent while arson, burglary, larceny-theft, and motor vehicle theft are classified as property crimes. Students will need to choose the appropriate variables and MSAs, come up with a method for comparing them across the MSAs, and then apply this information to suggest a news story.
3 Tools


4 Setup and Steps

1. Go to the Uniform Crime Reports website, given above, to locate records for Waco and other municipalities in Texas for 2009.
2. Using this data, analyze and compare the statistics for the Waco MSA with other similar MSAs.
3. Create a proposal for a news story based on your findings.

5 Questions

1. What was your news story proposal?
2. What other MSAs did you compare Waco to?
3. What criteria did you use as your metric for coming up with “similar” MSAs?
4. What other resources did you use in creating your news proposal?