Lecture 2a: Tuesday, January 22, Lorlene Hoyt

Part I of Lecture 2: INTRODUCTION TO DATABASE MANAGEMENT TOOLS

Crime Case Study

Overview

> The Philadelphia Police Department *(as an example)*
> Too Much Data?
> Business Improvement Districts
> Research Design *(that relies on MS Access and ArcView)*
> Spatio-temporal Method of Crime Analysis
> Findings

Spatial Analyses

> Questions (hypotheses)
> GIS to conduct an analysis of crime patterns in business improvement districts (BIDs)
> GIS to create a new spatio-temporal method of analysis
> Regression to control for socio-economic variation (U.S. Census Data)
> **Findings that support the effectiveness of BID security patrols**

Professional Skill & Information Infrastructure

> Importance of running queries in large databases
> Advantages (and disadvantages) of combining data from different sources
> A GIS depends on the data "behind the scenes"
> The value of analyzing the spatio-temporal nature of data