

RESEARCH ASSESSMENT 5: CRIME MAPPING

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SOURCES:

1. "Mapping and Analysis for Public Safety." National Institute of Justice. Office of Justice Programs, n.d. Web. 04 Nov. 2016.
2. "At Esri, the Future of Smart Is Here." About Esri. Esri, n.d. Web. 04 Nov. 2016.

ANALYSIS:

Through various other research, I have come across the term crime mapping a few times. Crime mapping is a fairly new technique that is utilized by law enforcement agencies in order to analyze crime patterns and better prevent them. By mapping where and when crime takes place in a region, analysts can identify crime hotspots and respond to those hotspots with patrolling, etc. Nowadays, crime mapping is used to reduce crimes and prevent crimes before they happen rather than responding to crimes that have already taken place or are in progression. Crime mapping is based on the fact that geography influences crime greatly due to various factors, such as amount of foot traffic, open spaces, number of alleys, and location of bars. Currently, there are seventy-six grants that award a grand total of \$32,292,639 to crime mapping and geospatial analysis projects.

So how does it work? Well, crime mapping combines geographic data, such as the ones mentioned above, and police report data. This information is then displayed on a map of the region which allows law enforcement to more easily determine when, where, why and how crime occur. Interestingly enough, according to the National Institute of Justice, "analysts map where crime occurs, combine the resulting visual display with other geographic data (such as location of schools, parks and industrial complexes), analyze and investigate the causes of crime, and develop responses." I found this especially interesting because it highlights how there are numerous factors that go into this process and are seriously considered. These crime reports may not even be only used by law enforcement. For example, a Independent School District may consider these when building a new school. The ISD wouldn't build a school with a bar nearby because crime rates are likely elevated around them.

A large part of crime mapping are geographic information systems, otherwise known as GIS, which are desktop computing and software programs that capture, store, analyze, and display spatial data. Such programs can be used to analyze more than just crime and can analyze traffic safety, home foreclosures, urban planning, resource management, environmental impact, emergency services, and marketing. GIS are

used for all of these subjects because they make visualizing and interpreting geographic data much easier. Software corporations, such as Esri, describe GIS as something that is "becoming essential to understanding what is happening and what will happen in geographic space. Once we understand, we can prescribe action." Esri is a corporation that build ArcGIS, a mapping software used around the globe. Some of their customers include the government, Starbucks, Seneca Energy and the City of Minneapolis. According to their website, "ArcGIS connects people with maps, data, and apps through geographic information systems (GIS). It is a location platform that's accessible to anyone, anywhere, anytime." It is beneficial to know about specific software so that I can later use this knowledge to conduct my project of mapping Liberty High School.

Another interesting fact I learned was that there are multiple archives that store data that is free and available to the public. Some examples of sources for criminal justice analysis include the National Archive of Criminal Justice Data (NACJD), US Census Bureau, and HUD USER. The following table includes important vocabulary and helps clarify certain topics.

| Term | Definition |
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| GIS | Stands for Geographic Information Systems. They are desktop computing and software programs that capture, store, analyze, and display spatial data. |
| Hotspots | Small and specific regions on a map that have high crime intensity and concentration. |
| HUD USER | Department of Housing and Urban Development's Office of Policy Development and Research. Provides data on housing and economic development in the United States. |
| NACJD | National Archive of Criminal Justice Data |
| Place | A geographic area that consists of various social, economic and ecological similarities yet has subtle and distinct differences. |