

## E45 Evaluating Violent Crime Trends of Five Ohio Cities to Enhance Law Enforcement's Understanding of the Communities They Serve

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After attending this presentation, attendees will understand the importance of utilizing all available data, regardless of how simplistic, to continually analyze the effectiveness of law enforcement's role within the communities they serve. This will be emphasized by examining five northeast Ohio cities in detail.

This presentation will impact the forensic science community by demonstrating that a meaningful analysis of local, state, and federal law enforcement's impact on the communities they serve does not have to be complicated; rather, it can be achieved very easily. In many cases, a firm understanding of the dynamics of these communities and the trends of violent crimes occurring in each can suggest the success of a wide array of law enforcement initiatives and can push forensic professionals to implement the most up-to-date testing methods to accommodate the common evidence being submitted to area laboratories. Simplistic methods of analysis, such as the one examined here, are far from groundbreaking; however, this research stresses the importance of conclusions that can be drawn concerning the achievements or shortcomings of law enforcement agencies in a particular area, using very straightforward means. The conclusions achieved from these analyses may even serve as the motivation to continue with current practices or be catalyst to reform these approaches by law enforcement to better serve the needs of their communities.

In this research, the violent crime trends for five northeast Ohio cities were evaluated. Cleveland, Lorain, Salem, Warren, and Youngstown were assessed due to their proximity to each other. Each represents the largest city in their respective counties, and each falls within similar federal jurisdictions. Additionally, each of these cities reported violent crime data to the Federal Bureau of Investigation's (FBI) Uniform Crime Reports faithfully over the course of 20 years, from 1995 to 2014.

Each of these cities falls under the jurisdiction of the Cleveland Division of the FBI. Therefore, this was seen as a unifying factor of these cities. As a result, the data reported by the FBI was used to map the violent crime trends for each of these cities in order to maintain continuity. Thus, keeping true to these reports, murder/non-negligent manslaughter, forcible rape, burglary, and aggravated assault were considered for trend analysis. Using a variety of statistical analyses, these local trends were then compared to the city's population to generate overall insight to the city's current crime rates and to determine if the trends were expressing the overall decrease over the 20 year period, with a slight increase in crime rates in recent years, as was expected. Once the local trends were compiled, they were compared to state trends and national trends. By drawing these broader conclusions, local trends were evaluated for similarities and differences to state and national data.

Through observation and after working with local and federal law enforcement, it became clear that efforts to combat crime took on a more proactive approach, rather than a reactive one. By implementing a variety of initiatives addressing specific components of crime, law enforcement began to target potential precursors to violent crimes instead of reacting to these crimes after they occur. One of the most threatening precursors was drug use. To

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observe the correlation of drug use and violent crime occurrence, data representing each was collected for the state of Ohio and analyzed to determine whether significant correlations could be drawn between the two, and how the use of drugs ultimately affects violent crime rates, if at all.

This presentation, although very simplistic in nature, enlightens individuals to the issues that plague five Ohio cities and clarifies how these struggles relate to other communities throughout Ohio and the nation. Through the straightforward analysis of these violent crime trends, law enforcement can access current practices to determine if the current needs of the community are being met. At the same time, forensics professionals can continue to improve their methods of analysis as they anticipate the cases and evidence that are most commonly worked. Finally, in addition to local success, analyses such as these can initiate conversation among different local law enforcement agencies from various cities in an attempt to continue to improve state and federal practices.

## Reference(s):

1. Crime in the United States. Uniform Crime Reports. Federal Bureau of Investigation. 1995-2014.

Violent Crime, Crime Trends, Law Enforcement