FREQUENTLY ASKED QUESTIONS OF CRIME ANALYSIS AND MAPPING

Frequently Asked Questions

Crime Mapping Laboratory
Police Foundation

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Introduction

Over the past four years, the Police Foundation's Crime Mapping Laboratory has become a valuable resource for individuals seeking technical assistance and information about crime analysis and crime mapping. As a service to the law enforcement community, the Crime Mapping Laboratory is dedicated to providing technical assistance via telephone, fax, e-mail, and personal contacts with individuals engaged in crime analysis and crime mapping. Requests for assistance come from a variety of individuals, including law enforcement practitioners and criminal justice researchers, and cover a variety of topics, ranging from simple requests for copies of Crime Mapping Laboratory publications to questions about a specific application of crime analysis or crime mapping technology. We also respond to both general and specific questions that individuals post on both the CrimeMap and LEAnalyst listservs. This assistance is often accomplished with a quick e-mail or phone call.

During the 2000-2001 grant period, Dr. Rachel Boba, Director of the Police Foundation's Crime Mapping Laboratory, Mary Velasco, a Research Associate, and Jim Griffin, Graduate Research Intern in the Crime Mapping Laboratory, recorded 270 requests for assistance. These contacts can be broken down into four general categories of assistance: (1) technical assistance, (2) requests for training information, (3) *Crime Mapping News* or other publication requests, and (4) general requests. Even though all of these categories are referred to as technical assistance, the first category refers to specific questions about technology. A review of our technical assistance contacts over the last year reveals several common themes in the types of assistance that crime analysis and mapping professionals typically request. Based on these themes, we have compiled the following list of frequently asked questions and answers to reach a wider audience than those reached by our technical assistance contacts. Thus, these questions and answers should be posted on the COPS and Police Foundation Web sites and will be provided on the Crime Mapping Laboratory Resources CD. The answers to each of the five questions include links to other crime analysis and mapping resources, such as publications and Web pages that provide useful and comprehensive information about that particular topic.

Questions

1. **My department would like to begin posting crime analysis and crime mapping on the Web. Do guidelines exist as to the content and types of information that can be posted on the Internet?**

While there are no official guidelines concerning the content and format of crime analysis and mapping information that is posted to the Web, several "rules of thumb" have emerged as law enforcement agencies around the country have increasingly made use of this information dissemination mechanism. The most common types of information that is posted to the Web are (1) crime, (2) calls for service, (3) arrests, and (4) traffic information. Rather than creating reports specifically for the Internet, many agencies modify reports that are already produced for department personnel or community members. It is important, however, to ensure that sensitive and/or confidential information such as addresses or victim names are removed from the report prior to posting it on the Internet.

In addition to specific law enforcement data, analysts also post information such as:

- Definitions of terms
- Frequently asked questions
- Demographic information
- Information request policies and procedures
- Publications/articles
- Contact information
- Relevant links
- Suggestions/feedback mechanism

It is important to include supplemental information such as definitions of terms that may not be familiar to the general public (e.g., calls for service or Part I crime), a compilation of frequently asked questions to help users navigate the page, contact information (telephone numbers and/or e-mail addresses) for members of the Crime Analysis Unit, and links to the Web pages of other law enforcement agencies or crime analysis units.

Formatting guidelines are also a consideration when posting crime analysis and mapping information to the Web. The following is a list of key issues to consider:

- Privacy issues
- Appropriate/necessary information
- Presentation and content standards
- Editing/internal review of information
- Timeliness of data and updates
- Misinterpretation
- Use of disclaimers
- Political and ethical concerns

Privacy issues refer to the removal of confidential or sensitive information, such as case numbers or victim names, from crime analysis reports and maps prior to posting them to the Internet. Another important consideration is address specificity. In the preparation of crime or calls for service reports, many analysts replace specific addresses with the hundred-block. Additionally, if single symbol maps are posted to the Web, analysts will generally use a smaller zoom level so that individual addresses are not discernible. The appropriate use of disclaimers is also an important consideration. For example, a disclaimer such as, "Calls for service do not necessarily indicate the occurrence of a crime," will reduce misinterpretation of information on the page.

This is a very general overview of content and formatting issues to consider when posting crime analysis and mapping information to the Web. Members of the Crime Mapping Laboratory have made presentations on this topic at both the International Association of Crime Analysts (IACA) and Crime Mapping Research Center (CMRC) Conferences. For copies of these presentations or a list of Web resources, please contact the Crime Mapping Laboratory at (202) 833-1460 or pfmaplab@policefoundation.org.

2. Can you suggest resources for low-cost/free local or Web-based crime mapping training opportunities?

Our assistance contacts indicate that a lack of training funds is the most common obstacle faced by law enforcement professionals in the search for crime analysis and crime mapping training. Through our partnership with the COPS Office, the Police Foundation's Crime Mapping Laboratory offers free crime analysis mapping and problem solving training at our headquarters in Washington, DC. The training is conducted in a classroom setting and stresses conceptual issues, analytical techniques, and participant interaction. Two introductory and two intermediate courses are typically offered in the Spring and Summer each year. These courses are for law

enforcement personnel only, and the ten training slots in each course are filled on a first-come basis. For more information, please contact the Crime Mapping Laboratory at (202) 833-1460 or pfmaplab@policefoundation.org.

Another resource for free training is the Crime Mapping and Analysis Program (CMAP) at the National Law Enforcement and Corrections Technology Center (NLECTC) in Denver, Colorado. CMAP offers hands-on introductory and advanced crime mapping training to law enforcement personnel. For more information, contact CMAP at (800) 416-8086 or visit their Web site at www.nlectc.org/cmap/cmaptrain.html.

3. My agency would like to implement a crime analysis and/or mapping function. Can you recommend introductory resources and training opportunities for someone who is just starting out?

This request mirrors the concerns of many new analysts who are faced with the challenge of implementing their agency's analytical or mapping function. Fortunately, the Crime Mapping Laboratory publication, *Guidelines to Implement and Evaluate Crime Analysis and Mapping*, addresses many of these concerns. This document is meant to serve as a guide for the processes of implementing and evaluating crime analysis and mapping for law enforcement agencies that do not currently have the function in place as well as those that are looking to reevaluate and restructure their current crime analysis and mapping functions. It provides a general outline for 1) developing a needs assessment; 2) creating an action plan based on the assessment; and 3) conducting an evaluation of crime analysis and mapping.

Two other useful resources for beginning analysts is *the Manual of Crime Analysis Map Production* and the *Introductory Guide to Crime Analysis and Mapping* (forthcoming). Through discussion and comprehensive examples, these manual provides guidelines for introductory-level crime analysis and mapping for use in a law enforcement environment. Lastly, the Crime Mapping Laboratory's quarterly newsletter, *Crime Mapping News,* is a valuable resource for beginning analysts. Each issue of the newsletter addresses a particular topic; previous topics include tactical crime analysis, implementing a crime mapping system, and analysis using non-traditional data sources. Back issues of the *Crime Mapping News* (13 issues as of December 2001) are available in the COPS Office Web site in Adobe® .pdf format by clicking on the above link. If you would like to be added to the mailing list for the Crime Mapping News, please contact the Crime Mapping Laboratory at (202) 833-1460 or pfmaplab@policefounation.org for instructions. Please note that new hard copy subscriptions are limited to law enforcement personnel only; non-law enforcement subscribers will receive a copy of the newsletter in .pdf format.

4. **Several jurisdictions in my area would like to create a regional crime analysis information sharing system. Can you suggest resources that will assist us in this venture?**

Law enforcement practitioners and researchers have long been aware of the fact that crime patterns and criminal activity are not limited by city, county, or even state boundaries. Therefore, the development of partnerships to enhance information sharing across jurisdictional boundaries is essential to effective crime analysis and crime mapping efforts. There are a variety of resources available for information about regional (cross-jurisdictional) data-sharing initiatives. The theme of Volume 2 Issue 3 of the *Crime Mapping News* is regional data sharing and crime mapping. The articles in this issue cover topics including 1) a statewide crime analysis and mapping project among police agencies in Massachusetts that use NIBRS reporting guidelines, 2) a data exchange and regional crime mapping initiative in Sussex, UK, and 3) an example of a proposal for a multi-jurisdictional crime mapping initiative sponsored by police departments and other government agencies in the metropolitan Kansas City area.

Additional resources for inquiries about regional crime analysis and mapping systems are the LEAnalyst and CrimeMap listservs. These e-mail discussion groups provide a forum for law enforcement analysts and others to pose general or technical questions to their colleagues. To avoid "reinventing the wheel," it may be a good idea to question other analysts about the successes and challenges they faced in their regional crime analysis and mapping efforts. Information about the LEAnalyst listserv is available at www.inteltec.com/leanalyst/, and information about joining the CrimeMap listserv can be found at http://www.ojp.usdoj.gov/cmrc/faq/listserv_faq.html.

5. **In the preparation of monthly calls for service and crime reports for my department, most of my time is spent with repetitive data-cleaning tasks rather than data analysis. The source of the problem is typically addresses—call data often include the name of the address in place of or in addition to the street address, and crime data often include incomplete or abbreviated addresses. Can you provide suggestions for eliminating this monthly problem?**

Successful geocoding depends not only on the quality of the geographic reference layer, but also the tabular data to be mapped. For any crime mapping application to be effective, basic reporting procedures need to be uniform and consistent. Address errors in calls for service, crime, or accident data are often the source of much of the woes of geocoding in law enforcement and can be categorized into five common types: (1) incorrect street numbers, (2) street name errors, (3) direction errors, (4)

incorrect intersections (in the case of intersection geocoding), and (5) discrepancy errors.

The best way to correct data is to fix it at the source; in other words, bring the errors to the attention of those administering the computer aided dispatch system, to those maintaining the street centerline file, to the officers writing the reports, or to the clerks entering the data. However, this may not always be a realistic or a fast enough solution. In small projects or where a large number of cases share the same few mistakes, manual correction may be possible. Large datasets can often be corrected more efficiently when imported into a database or spreadsheet program (for example, Excel or Access) which has a "search and replace" utility. In addition, specialized software programs, referred to as "scrubbers" can be useful for large projects, and in instances where data are regularly imported.

For more information about data-cleaning suggestions and the geocoding procedure, you may wish to review the Crime Mapping Laboratory's publication, *Geocoding in Law Enforcement*.