

Exploring Data Sources

Analysis begins with data. Data is to an analyst like marble is to a sculptor, or like words are to a writer. It is our material, or commodity, our freight. Like a master potter crafts a beautiful ewer out of disparate pieces of clay, we take scattered pieces of data and turn them into information and analysis.

A crime analyst must become a connoisseur of several different types of data:

1. Data about **incidents** that occur within the analyst's jurisdiction. These are your primary data. Such data might include crime reports, arrest reports, call for service records, and accident reports.
2. Data from **other agencies** that might help you identify cross-jurisdictional phenomena. These include NLETS teletypes, postings in police Internet discussion groups, other agencies' bulletins and reports, oral information from meetings, and news stories
3. Data about your **jurisdiction** that might help explain or predict crime phenomena. These types of data include demographic statistics, business profiles, political information, and news reports.
4. Data about **persons and businesses** to identify and learn about offenders, and to analyze their activity. These include traditional intelligence analysis data—intelligence reports, financial information, phone records, property deeds, and so on—as well as more mundane sources of information as telephone books, voting registries, criminal histories, parole release notices, sex offender registries, and pawn reports.
5. Data on **police activity**, including calls for service (above), but also activity logs, patrol rosters, citation records, directed patrol schedules, and similar logs.
6. **GIS data**, which can span all of these categories and is the subject of a separate article.

You'll review each of these data types on a regular basis, but some more frequently than others:

Incident Data—daily, to find crime phenomena as they happen

Other Agency Data—daily (or as often as you can obtain it), to compare with your own jurisdiction's data

Jurisdictional Data—review as you receive it, file or store in a database for later reference; consult as needed to analyze any patterns or trends

Person & Business Data—generally, you will seek this data for a specific purpose (e.g., to identify possible suspects in a pattern)

Police Activity Data—sought specifically for operations analysis reports

There are four factors that can influence the quality of your data and, therefore, the way you handle and use it:

1. **Accuracy.** How accurate is your data? Do your crime data always record the actual locations of incidents, or do they sometimes only show the locations from which a call for service was received? Do the people entering the data spell things correctly? Are the reports coded correctly? Are the address ranges in your street files correct? There are opportunities to spoil data accuracy with every type of data.
2. **Reliability.** How reliable is the source of the data? Is it logical that the source would know what it purports to know? What is the source's reputation for data quality? What sort of history does the source have for data quality?

3. **Completeness.** Does the data contain all of the information you need? Are there fields missing? Has the source neglected to provide important facts?

4. **Timeliness.** Is the data current, or is it obsolete?

CAD records entered by overwhelmed dispatchers may suffer from accuracy problems. You might question the reliability of newspaper articles from frankly partisan sources. Pawn reports from indifferent pawnshops may plague you with their incompleteness. Crime bulletins that you receive at monthly meetings can be of dubious value because of timeliness problems. In a bad department, crime reports filled out by harried police officers and entered by frustrated, bored records clerks may suffer from all of these issues.

Intelligence analysts might give each piece of intelligence a numerical ranking for each of these factors, but for most crime analysts, it's usually enough to simply know the answers to these questions—and to do your best to fix any problems.

Listed below are many sources of data that a crime analyst might want to obtain. Sources preceded by an asterisk (*) are used by almost all crime analysts and should be considered essential. You will find further descriptions of many of these sources in Part VII.

Analysts in different agencies will obtain these various data types for different sources. Ask around to find out who has custody of a type of data to which you don't already have access.

Primary Sources—Incident Reports

- ***Crime Reports**, from your records management system (RMS) or from paper copies. Read every day and compare to past incidents.
- ***Arrest Reports**, which may be indistinguishable from crime reports, depending on the policies of your department.
- ***Call for Service Records** (a term generally used to describe non-crime police incidents, such as noise complaints, disturbances, disputes, and so on)—again, in some departments, these are kept in the same system as crime and arrest reports.
- Accident Reports**, for the analysis of traffic accident causes and hot spots.

Other Agency Data

- ***Teletypes**, received from the antiquated but venerable NLETS system. Most departments have at least one terminal and printer in the dispatch center, and perhaps another in the investigative section.
- ***Bulletins and Reports**, issued by crime analysts in your surrounding cities and towns.
- ***Regional Newspapers** that cover your area. Many newspapers now offer their articles on the Internet. Look for articles on crime with cross-jurisdictional potential, such as commercial robbery, fraud, and commercial burglary.
- Meetings** of analysts, detectives, administrators, or other groups in which intelligence information is shared.
- Online Bulletin Boards & Discussion Groups** for law enforcement officers. Unfortunately, many of them restrict access to officers only—civilian analysts cannot access them.

- ❑ **E-Mail Discussion Lists:** You may find e-mail lists set up for officers or analysts in your area. These lists allow analysts to exchange general information on patterns and trends, though most of them are not secured, making it impossible to exchange more detailed or specific information.
- ❑ **Regional Crime Analysis Network:** Various regional crime analysis information-sharing networks have been established in various parts of the country, allowing agencies to search and map incidents in other jurisdictions.
- ❑ **Police Magazines, Newsletters, and Journals** can sometimes provide information on crimes, patterns, and trends. Subscribe to the bulletin published by your local RIS agency, to *Police Chief* magazine, and to criminology journals.
- ❑ **Web Sites** maintained by other police departments may contain notices and alerts on current crime phenomena.

Jurisdictional Data

- ❑ ***Demographic Data**, published by the U.S. Census Bureau every ten years. Your local government may update demographic statistics in between censuses. Since some data is available on the block level, you can create demographic profiles of your police beats by aggregating the blocks that the beats encompass.
- ❑ ***Local Newspapers** provide you with information on demographic, social, economic, political, and physical changes in your jurisdiction, which influence crime trends.
- ❑ **Business Listings** allow you to identify the different types of commercial establishments in your jurisdiction to help explain hot spots and other phenomena.
- ❑ **Assessor's Information** provides economic information on the value of residences and businesses.
- ❑ **Government Web Sites** variously provide news, political information, statistics, and other information about the jurisdiction that help explain its crime profile.

Persons & Businesses

- ❑ ***Field Interview Reports** provide information about current activity, much of it suspicious.
- ❑ ***Intelligence Reports**, received from informants and various other sources give more data about criminal or potential criminal activity.¹
- ❑ ***Parole Release Notices** from your local corrections agency alert you to known offenders being released to your city or town.
- ❑ ***Criminal Histories** outline the past activity of offenders
- ❑ ***Known Offender Files** can provide more detailed information than criminal histories, including data on the offenders' *modus operandi*.
- ❑ ***Motor Vehicle Registration & Licensing Data** can give you physical descriptions, vehicle descriptions, and addresses of individuals.

¹ Intelligence reports are not available to crime analysts in every agency —some agencies have specialized units or officers to conduct intelligence gathering and analysis.

- ❑ **Deeds and Assessor's Data** let you know who owns what properties, and how much those properties are worth.
- ❑ **Telephone Directories** let you look up names, addresses, and numbers of persons and businesses quickly. There are several directories—including “reverse directories”—available on-line; vendors provide more accurate information directly to law enforcement.
- ❑ **City or Town Registers** give information on people and their occupations.
- ❑ **Pawn Data:** most cities and towns have an ordinance requiring local pawnshops to submit data to police departments on individuals pawning property. Reviewing this data allows analysts to watch for known offenders possibly pawning stolen goods.
- ❑ **Sex Offender Registries** contain detailed information on known sex crimes offenders.

(There are innumerable other sources of information on people and businesses, some of which can only be obtained with a court order; don't overlook any potential source of information.)

Police Activity Data

- ❑ ***Call Records** tell you how many calls your agency has received, at what times, which officers and units responded, the times they responded, and how they handled the call.
- ❑ ***Arrest Records** show how many arrests your department has made, of what kind of people, and for what crimes.
- ❑ **Patrol Rosters** show which units and areas were staffed on each shift.
- ❑ **Case Histories** identify which detectives are assigned to investigate each case, how long the investigation took, and what the final outcome was.
- ❑ **Citation Records** provide information on traffic and parking offenses, including when, where, and why they were issued.
- ❑ **Directed Patrol Records** show when and where officers concentrate their preventive patrol resources.
- ❑ **Budgets** show where your agency allocates its financial resources.

Data Sources Checklist

	Source	Where to Obtain	When to Review
?	Crime Reports	Physical or RMS	At least daily
?	Arrest Reports	Physical or RMS	At least daily
?	Call for Service Records	CAD/RMS	Daily (if part of the analyst's focus)
?	Accident Reports	Physical or RMS	When analyzing accidents
?	Teletypes	Dispatchers or investigators	Daily

	Source	Where to Obtain	When to Review
?	Other Agencies' Bulletins and Reports	From neighboring police agencies	As available
?	Regional Newspapers	Physical or Internet	As available
?	Meeting Information	Detectives & regional crime analysis assoc.	As held
?	Online Bulletin Boards / Discussion Groups	Good list at http://www.officer.com	Daily
?	Regional Crime Analysis Network	Internet or dial-up; consult local analysts	At least weekly
?	Magazines, Newsletters, Journals	Various	As available
?	Other Agency's Web Sites	Good list at http://www.officer.com	At least weekly (surrounding agencies)
?	Demographic Data	U.S. Census Bureau or local community development office	As needed (when analyzing phenomena)
?	Business Listings	Local assessor, licensing board, TK	As needed
?	Assessor's Information	Local assessor's office	As needed
?	Government Web Sites	Internet	As needed
?	Field Interview Reports	Physical or RMS	At least daily
?	Intelligence Reports	Various	As available
?	Parole Release Notices	State & federal corrections agencies	As available
?	Criminal Histories	State criminal history boards, via terminals in most agencies TK	As needed
?	Known Offender Files	Known offender database	As needed
?	Motor vehicle & licensing data	State motor vehicle registry	As needed
?	Assessor's Data	Local assessor's office	As needed
?	Telephone Directories	Various. Good one at www.whowhere.com	As needed
?	City or town registers	Local register of voters TK	As needed
?	Pawn Data	Local pawnshops – probably already sent to investigators	As available
?	Sex Offender Registries	Sex offender database	As needed
?	Patrol Rosters	Patrol unit or in RMS	As needed
?	Case Histories	Investigative unit or in RMS	As needed
?	Citation Records	Physical or RMS	As needed
?	Directed Patrol Records	Depends on agency	As needed
?	Budgets	Budget officer or planner	As needed