

# Classifying & Categorizing Incidents

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Classification can be defined as the systematic arrangement of the components of a categorical subject into groups in accordance with specified criteria unique to the subject. In scientific usage, classification has its roots in the biological categories of plant and animal species; thus, virtually every field of science ending in *-ology*—such as zoology, entomology, toxicology—includes a major orientation to the classification, or sorting, of related but differing sub-types in accordance with defined criteria, be they plants, bugs, or poisonous substances.

The concept of classification can also be applied to a broad array of other topics, from baseball players (by positions played), to musical instruments (woodwinds, brass, percussion), to the physical elements found in the earth—and, of course, to crimes.

Crime analysts need to classify crime for two primary purposes:

1. To provide a full accounting of incidents and police activity in the jurisdiction for the purposes of tracking crime and call for service volume, and for reporting to the department, the community, and other sources (e.g., UCR)
2. To identify, analyze, and explain crime patterns and trends

We find that most analyst—indeed, most police departments—have given little thought to how they classify incidents, using instead variations of traditional schematics, state and local statutes, and Uniform Crime Reporting codes.

## Existing Classification Schemes

Analysts find, of course, that police departments already use several systems of classification. This may include<sup>1</sup>:

- **Call Type**, originally entered by the dispatcher, possibly—depending on the department and its records system—modified later by the reporting officer
- **Crime**, or statute violated, as established by the officer when taking a report or making an arrest
- **UCR or NIBRS Code**, as assigned by the officer, records clerk, analyst, or other employee responsible for crime reporting

Many analysts use one or more of these existing classification methods for their analysis purposes, but there are several problems with this approach:

1. *Call types are often not mutually exclusive.* One department codes motor vehicle accidents as “MVA No Injury,” “MVA Injury,” “MVA Hit & Run,” and “MVA Pedestrian.” How, then, do we code a hit-and-run pedestrian accident with injury?
2. *Statute codes serve a different purpose*—namely, to identify the chapter and section violated. Most states have larceny statutes based on the dollar value of the property stolen—“Larceny Over \$250,” “Larceny Under \$250.” This rarely helps crime analysts, who need classifications based on situation and *modus operandi* to identify patterns.

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<sup>1</sup> One classification scheme not mentioned here is found in *Crime Classification Manual* by John E. Douglas et. al., (Jossey -Bass, 1997). This book classifies incidents of murder, rape, and arson from the macro- to micro- level and uses many principles that could assist analysts in developing classifications for other crimes.

3. *No existing method is situation-specific enough.* An analyst holding a recent report of a carjacking, trying to determine if it is part of a recent pattern, should begin by searching for other recent carjackings, not for convenience store holdups—even though they would both be classified as “robbery” by their UCR and NIBRS codes.
4. *Existing methods may be coded by other people.* An analyst would be crazy to trust that five harried dispatchers, four hundred police officers of varying motivation, and a dozen low-paid records clerk would code each report consistently and logically.

Of the systems offered above, the NIBRS coding system comes closest to following the principles of classification given below. But a highly effective analyst develops his own classification scheme to help identify patterns and trends, analyze them, and explain their characteristics to his audience.

## Developing a Classification System

For the purposes of *crime* analysis, it may seem somewhat ironic that the application of the principles of classification best begins with a broader view of police work than just crime. Since the analyst is—or may be—concerned with any part of the array of police-related occurrences within the jurisdiction over time, it is best to start with the entire spectrum of subject matter about which calls for service, incidents, police reports, arrests, and other police *data* are concerned.

Most crime analysis units are called upon to provide data, or information concerning a wide variety of topics within the purview of police work - not just the serious crimes but also the “lesser” crimes, the disorder which annoys and diminishes the quality of life but may not “rise to the level” of crimes, as well as the many ways in which police provide services to the public. In such a context, classification begins with the assignment of subject matter, or *type* codes to incidents (or, if a distinction is made, to calls for service) which provide labels by which can begin to ascertain useful information concerning the nature and volume, as well as the times and locations, of various kinds of occurrences in the jurisdiction. Such occurrences include all manner of crimes, of course, but also matters such as missing persons, traffic accidents, abandoned motor vehicles, various kinds of emergency services, and numerous others.

In considering the design of a classification system, analysts should keep in mind the following principles of classification:

1. *Your classification scheme must include categorizations for everything that will be necessary, useful, or desirable to report.* Thus, if you may be called upon to report on the number of bicycle thefts in the jurisdiction (or a part of it) during the past year, you will need a classification scheme that is up to the task. The same may be said for weather-related emergencies, hazardous material incidents, personal injury accidents, restraining orders served, or violated, as well as robberies, burglaries, or other major crimes.
2. *Your classification scheme should be multivariate,* including two or more “layers” of classification. The primary classification should be fairly broad without being too broad; the secondary classifications specific without going into minutiae. For instance, the following list of primary classifications is probably too specific, though at least one “call type” list we viewed included all of them (using abbreviations like “B&E RES,” “B&E BUS,” etc.).

- House Burglary
- Apartment Burglary
- Business Burglary
- School Burglary
- Government Building Burglary

A multivariate scheme would re-arrange this to accommodate:

Burglary  
  Residential  
    House  
    Apartment  
    Condominium  
    Group Home  
    Other  
  Commercial/Institutional  
    Retail  
    Office  
    School  
    Government  
    Religious

Some agencies might argue that the tertiary level is superfluous (or too specific), because the type of location could be obtained from other fields within the records management system. But in the end, this gives the analyst the ability to report quickly on the status of all burglaries, provide more detailed information based on the general type of location burglarized, and search for patterns based on the specific type of location burglarized.

3. *Primary Classifications should be as mutually exclusive as possible.* A system that includes separate codes for "Rape" and "Sexual Assault" is making things needlessly confusing for the people that have to enter data. Likewise with "Suspicious Person" and "Suspicious Activity," "Fraud" and "Con Game" and so on. Use a multivariate scheme to remove such overlapping categorizations.

4. *You should allow multiple classifications per incident.* The NIBRS reporting system recognizes this and allows up to 99 different offense types per crime, such as in the often-cited case in which a man rapes and murders a woman and steals her car.

5. *The final classification should be based on what the officer found at the scene, not what was originally reported to the dispatcher.* Many agencies make little or no effort to change their "call type" after the original dispatch. We find murders coded as "Shots Fired," burglaries as "Check Business," and aggravated assaults as "Disturbance."

## Implementing Classification

When talking to analysts about designing a multivariate classification scheme with mutually exclusive primary classifications, multiple classifications per incident, and final codes based on the officer's findings, the most common complaint will be: "My records management system doesn't support these things! I can't use this!"

Here are some suggestions for implementing these principles of classification:

1. *Use the principles to review and re-design your existing codes,* if your agency gives you the latitude.
2. *Stress these principles of classification with your RMS vendor,* and perhaps in a future release, your vendor will offer a multivariate, multiple-code system that you can easily edit.

3. *Design your classification system in a different application*, like Microsoft Access. Code each report as you see fit and *link* your table to your records management system as outlined in our separate article on managing data.

Whatever your obstacles, *knowing* good principles of classification will hopefully assist you in further development of your data management capabilities, even if you can't implement the principles immediately.

## Example of a Classification System

The following annotated system of classifying incidents was developed by the authors as an *example* of a good classification system. It may not fit well with every agency. It includes most police activities and situations to which police officers respond. Analysts may wish to tweak this schematic to suit their own uses. Footnotes explain why we chose certain paths.

Macro-Level <sup>2</sup>	Primary Level	Secondary Level <sup>3</sup>	Tertiary Level <sup>4</sup>
Violent Crime	Accosting		
	Assault	Murder <sup>5</sup> Aggravated Simple	Domestic <sup>6</sup> Juvenile Acquaintance Stranger Gang Drug/Alcohol Road Rage Workplace On Police Officer Psychotic Revenge Contract
	Intimidation	Threatening Bomb Threat Stalking Restraining Order Violation	
	Kidnapping	Parental Stranger	
	Sexual	Rape Indecent Assault	Blitz Contact Domestic Acquaintance Home Invasion
Theft	Auto Theft		

<sup>2</sup>The "Macro-Level" is a broad categorization of incidents that many analysts will find unnecessary. Most analysts will probably want to start coding on the "Primary Level." In most cases, the Macro-Level is based on the primary intent of the offender.

<sup>3</sup>We have not offered a "misc" or "other" category in secondary and tertiary levels, even though most lists should probably include it.

<sup>4</sup>The Tertiary Level is a fairly detailed categorization based on any number of factors, including relationships, *modus operandi* and property targeted—different *dimensions of classification*. The Tertiary Level is used to help explain incidents and identify patterns and trends. This level of categorization is the most mutable between agencies. We have declined to offer a tertiary level for most incidents in the interest of saving space.

<sup>5</sup>Many might object to including "Murder" as a type of assault rather than as its own category, but most of the motivations behind murder are also motivations behind assault—murder is just assault carried to its highest level.

<sup>6</sup>It may be important for the analyst to include a "Domestic" and "Acquaintance" classification for *any* crime type—through some sort of check box or relationship field. Crimes involving people related to, or acquainted with, victims should almost always be screened out when searching for crime patterns and series. There is a low probability that such crimes would recur elsewhere.



Macro-Level <sup>2</sup>	Primary Level	Secondary Level <sup>3</sup>	Tertiary Level <sup>4</sup>
Societal		Public Motor Vehicle	Egging Denting/Damaging Tire Slashing
	Drugs	Possession Sale Trafficking	Cocaine Crack Marijuana Opium Heroin Prescription Designer
	Gambling	Bookmaking Street Carnival Illegal House	
	Indecent Exposure		
	Liquor	Possession Sale Public Drinking	
	Pornography		
	Prostitution	Streetwalking Solicitation Escort	
Disorder	Weapons	Manufacture Possession Sale	Firearms Knives Chemicals Studded Clothing Blunt Objects
	Animal Disorderly Conduct		
	Dispute	Domestic Non-Domestic	Retail/Patron Road Rage Landlord/Tenant
	Gunshots Harassment		
	Noise	Party Construction Fireworks Music Vehicular	
	Peeping Tom		
	Phone Calls	Harassing Obscene	
	Suspicious	Vehicle Person Package	
	Trespassing Vagrancy Youth Complaints		
	Traffic	Abandoned MV Accidents	Auto v. Auto <sup>9</sup>

<sup>9</sup> Analysts who would like to conduct accident analysis will find a plethora of ways of classifying accidents. Our choices are arbitrary; we could have classified them based on level of injury, type of location, or cause, to name a few.

Macro-Level <sup>2</sup>	Primary Level	Secondary Level <sup>3</sup>	Tertiary Level <sup>4</sup>
		Auto v. Bicycle Auto v. Pedestrian Auto v. Fixed Object Rollover	Hit and Run Fatal
	Complaint	Moving Parking	
	Disabled MV		
	MV Offenses	Drunk Driving Speeding Stops/Signals License Registration Inspection Lanes/Curbs	
	Recovered Stolen MV		
Fire/Medical	Death	Suicide Overdose Accidental Medical	
	Fire	Residential Commercial Outdoor Motor Vehicle	
	Medical	Injury Illness Overdose Psychological Attempted Suicide	
Operations	Administrative Checks Directed Patrol Investigation Notification Prisoner Transport Selective Enforcement Serve Papers Warrants		
Service	911 Errors		
	Alarm	Burglar Panic Robbery	
	Assist Other Agency City/Town Service Found Property Keep the Peace Lost Property		
	Missing Person	Runaway Non-Runaway	
	Public Service Returned Person Road Conditions		