

IDENTIFYING CRIME PATTERNS

Inductive and Deductive Approaches



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FAIRFAX COUNTY POLICE DEPARTMENT
Office of Data Analytics - Crime Analysis Unit
INFORMATION BULLETIN
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TOBACCO STORE BURGLARY SERIES

2023-1290048 - Rock used to shatter front glass door

2023-1390028 - Appears to be hammer strikes to the front glass door

Note - The City of Alexandria and City of Falls Church have had incidents with a similar MO

Incident	Date	Time	DOV	Crime	Address	Patrol Area	Vehicle/Business
2023-1290048	05/06/2023	23:00 - 05:00	Thursday	Auto Theft	9807 Sagel Cir	641	Kia Forte
2023-1290048	05/06/2023	05:00 - 06:00	Thursday	Burglary	2907 Jamieson Rd	625	Home Depot
2023-1390006	05/13/2023	02:00 - 05:30	Saturday	Auto Theft	7835 Lewis Chapel Cir	660	Hyundai Elantra
2023-1390008	05/13/2023	02:40	Saturday	Burglary	6640 Brandon Ave	630	Tobacco & Vape
2023-1390005	05/13/2023	02:30	Saturday	Auto Theft	7816 Woodloch Ct	660	Hyundai Elantra
2023-1390005	05/13/2023	Unknown (Overnight)	Saturday	Burglary	6370 Redlick Rd	630	Tobacco Plus

FCPD has had 3 recent incidents of Tobacco Store burglaries involving suspects arriving in a stolen vehicle. 2 Hyundai Elantras and 1 Kia Forte were stolen, all with the ignition punched and the right rear window shattered, consistent with the MO of the "TikTok Challenge". These stolen vehicles were subsequently driven to Tobacco Stores where the front glass window of the business was shattered and various vape products were taken. In two incidents, surveillance video shows suspects are a group of 4 males, likely juveniles. If you have any information or have similar incidents, please contact Crime Analyst Joanna Baranello.

Crime Analyst Joanna Baranello
6507 Courthouse Plk, Arlington VA, 22203
O: 703-333-3549
joanna.baranello@fairfaxcounty.gov

Created: May 17, 2023
Case Number: Multiple - see matrix

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Arlington Police Department / Crime Analysis Bulletin
Contact: Crime Analyst, East District CD
817-459-5810 / Email

Bulletin No. 2212-308-E
Issued: 12/8/2022

Attempt to ID: Asian Restaurant Burglaries

Beats 440 & 480

Five smash & grab burglaries with the same MO and suspect description occurred within a six-day span from 12/9-12/18 (Sat-Thru). The suspect has only targeted small independent Asian restaurants. All the burglaries had the front or side glass window smashed with a rock and the suspect took or attempted to take money from the cash registers.

Report	Date/Day	Time	Location	Contact
2022-09170094	12/9 (Sat)	0410-0411	1706 E Pioneer Pkwy #136, Saigon Cafe (440)	Det, Trish
2022-09400050	12/9 (Sat)	0224-0230	1901 E Ashman Ln #107, K Donuts (480)	Det, Trish
2022-09410095	12/7 (Wed)	0515-0517	2240 Browning Dr, Ba Le (440)	Det, Trish
2022-09420154	12/7 (Wed)	0153	1901 E Ashman Ln #111, Pham Thi Truc (480)	Det, Trish
2022-09420124	12/8 (Thu)	0145	1818 E Pioneer Pkwy #181, Mon Viet Cafe (440)	Det, Trish

Analysis:

- Occurring between 0100-0600 hours.
- The restaurants are located within one mile of each other.
- Suspect appears to be on foot, possibly homeless.

Patrol is asked to identify and close patrol Asian restaurants/cafes during the early morning hours.

Contact Det. Trish, Det. AlRimas or Crime Analyst with any information.

2022-03370084 2022-03400050 2022-03410085 (2 images) 2022-03410154 2022-03421024

Suspect: A/M (Vietnamese), tall, thin build with a thin mustache and low haircut. Primarily wears a gray North Face jacket over a gray hooded zippered jacket, a gray polo style shirt, plaid pants, and white sneakers (worn in most offenses). At Saigon Cafe he wore a blue pullover and dark pants; at Pham Thi Truc (PTT) he wore acid washed jeans. At Mon Viet he wore the same jacket, but sandals instead of the sneakers.

Prepared by: Katrina Hickman
Crime Analyst Unit-East
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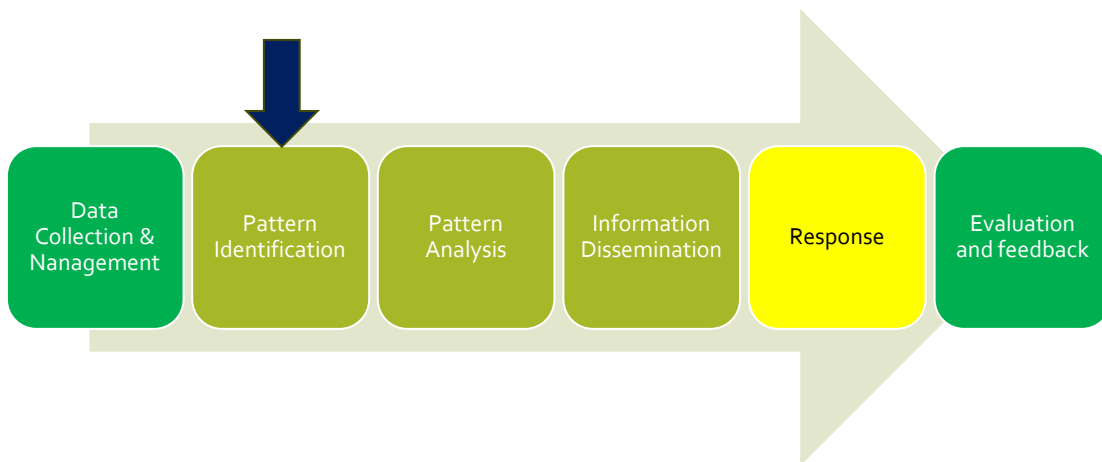
Tactical Crime Analysis

Tactical crime analysis is the analysis of police data directed towards the short-term development of patrol and investigative priorities and deployment of resources.

- Emerging and ongoing patterns
- Repeat incidents
- Wanted offenders
- Recently-stolen vehicles
- Officer safety issues
- Home or business checks
- Recent intelligence

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The Pattern Analysis Process



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Identifying Crime Patterns

Three Principles

- The analyst should be the one to identify patterns.
- Patterns should be identified as early in their existence as possible.
- All reports that the pattern comprises should be collected for subsequent analysis.

Methods

1. Report Review and Comparison
 - Manual
 - Automatic
2. Statistics/Threshold Analysis
3. Crime Mapping
4. Intelligence-Based Identification

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Three Lawn Ornament Thefts

Coincidence or pattern? Since August 13, three thefts of lawn ornaments have occurred from Danvers houses, including:

- Night of August 13: lawn jockey stolen from 16 Briarwood Drive
- August 24 @ 06:00: Assorted birds, bunnies, and windmills stolen from yard and porch of 11 Wayside Drive by a white female in her 30s.
- August 28, shortly after midnight: Cement statue of a lion stolen from the yard of 60 Pine Street

This type of theft, common around Christmas, has rarely produced a summertime pattern. There have only been two other lawn ornament thefts in Danvers so far this year, one in April (Easter bunny plucked from in front of an Andover Street house) and one in June (two sheep and a skunk from an Elliott Street house).



iPods Are This Summer's "Must Have" Theft Target

iPods aren't having a good year. Early last month, two Brooklyn teenagers robbed and killed another teen for one. In the U.K., gangs of robbers have admitted to targeting victims wearing the signature white headphones. And in Memphis in March, a woman was arrested after bludgeoning her boyfriend to death with an iPod. Wait...what?



Life is good when you don't have to pay for your iPod!

The trend took a while to hit Danvers. Our first iPod theft wasn't until October 16, 2004 (stolen from a car at Strike One). We had another in December at CompUSA. Then nothing for a while. But since March 2005, there have been seven iPod thefts, including four during a one-week period in June.

There isn't much of a pattern to the thefts. A couple have been stolen from owner's driveways overnight, one from

Two Nighttime Housebreaks on 08/22

Two Milton Road residences—11 and 13—were burglarized the night of Sunday-Monday, August 21-22, at around 01:40. In both cases, the suspect seems to have entered by cutting a screen window. He rifled purses in both houses, stealing \$100 from one and \$50 from another, and made his escape. A possible suspect vehicle is given as a newer-model black Mustang. The suspect was not seen.

Milton Road's proximity to Route 128 may have served as the reason for the street's selection. The two houses chosen are closest to the exit ramp.



Peabody Police made an arrest in a near-identical incident on the night of August 19-20 at 01:30. **Haywood Rogers** (09/20/1973) of Dorchester was caught by homeowners trying to remove a window screen from a Lowell Street residence, also near Route 128. He fled but was caught by police in a nearby yard. His location and status on the night of the Danvers burglaries is unknown.

Four Handicapped Placards Stolen

In the past two weeks, Danvers has seen an unusual increase in the theft of handicapped placards from cars, particularly off Endicott Street. Four placards have been taken from unlocked cars at Liberty Tree Medical, Dunkin' Donuts, BJ's, and the Sheraton Ferncroft, since October 28. No suspects have been seen in any of the thefts.

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Report Review

- Surest way to make sure all patterns are identified
- Time-consuming but necessary
- Five-step process

Step	Description
Access	Get plugged into a timely record of all crime reports taken in the last 72 hours.
Triage	Have an idea what crimes are most "patternable" and prioritize those for review and comparison.
Read and Extract	Read the report and mentally or physically summarize its narrative, identifying the most important factors
Search	Search your RMS or crime analysis database for any matching crimes
Filter and Finalize	Eliminate reports from your list of matches that are likely unrelated. Decide if in fact you have a pattern from the remainder.


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Cold Bay Police

Incident Report

2024-0000927



Print Date/Time: 02/16/2024 07:32
Login ID: BruceC
CaseNumber: 2024-0000927

Location: 240 Pacific Way
 Cold Bay, WA 98069 (Area 1)

Reporting Officer ID: 307 – Hagan
Scene Processed By: 210 – Cranney
Assigned Bureau: Patrol

Reported
02/15/2024 23:40

Incident Type: Commercial Robbery
Occurred From: 02/15/2024 23:35
Occurred To: 02/15/2024 23:35

Status: Active
Status Date: 02/16/2024

Cold Bay Police Department
ORI Number: WA0195700

Read and Extract:

Armed robbery
 Knife used
 Gas station/convenience store
 Area 1
 White male in his 30s or 40s
 Ordered clerk away from register
 Stole cash

Search:

All robberies lately:

- Involving knives
- In Area 1
- At gas stations, convenience stores, or similar locations
- With a WM30s-40s suspect

OR

Other incidents on that block of Pacific Avenue

Narratives

Officer Hagan (#307)

On the above date and time, I responded to the Getty station at 240 Pacific Way on a robbery that had just occurred. It was reported that the suspect was a white male in his 40s who fled on foot, so I first cruised up and down Pacific Way, looking for possible suspects. I found none. I then went to the station.

The clerk, Robert Ames, reported that at 23:35, the suspect—a white male in his late 30s or early 40s—entered the station and selected a soda from the cooler. He brought it to the counter where the clerk rang it up. The suspect handed him a \$5 bill, and the clerk opened the register to make change. The suspect then pulled a knife from his waistband, brandished it, and said, "Get away from the register! Get out of here!" The clerk ran into the "employees-only" area and called the police. When he returned to the front of the store, the register was empty. I had contained about \$450 in cash and change.

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ChatGPT 3.5 ▾

You
Search through all records of reported crime in New York City and see if you can find a pattern of armed street robberies.

ChatGPT
I can't access real-time data or databases, including crime records. However, historically, armed street robberies tend to show patterns in terms of locations, times, and methods. Typically, they occur more frequently in certain neighborhoods with higher crime rates and during hours of low visibility or when potential victims are likely to be vulnerable, such as late at night or in poorly lit areas.

To get current information on armed street robberies in New York City, you'd need to check with the New York City Police Department (NYPD) or official crime reporting agencies for the latest statistics and patterns. They often release crime reports and data that can help identify trends and patterns in criminal activity. Additionally, local news outlets may report on recent incidents and trends in crime.

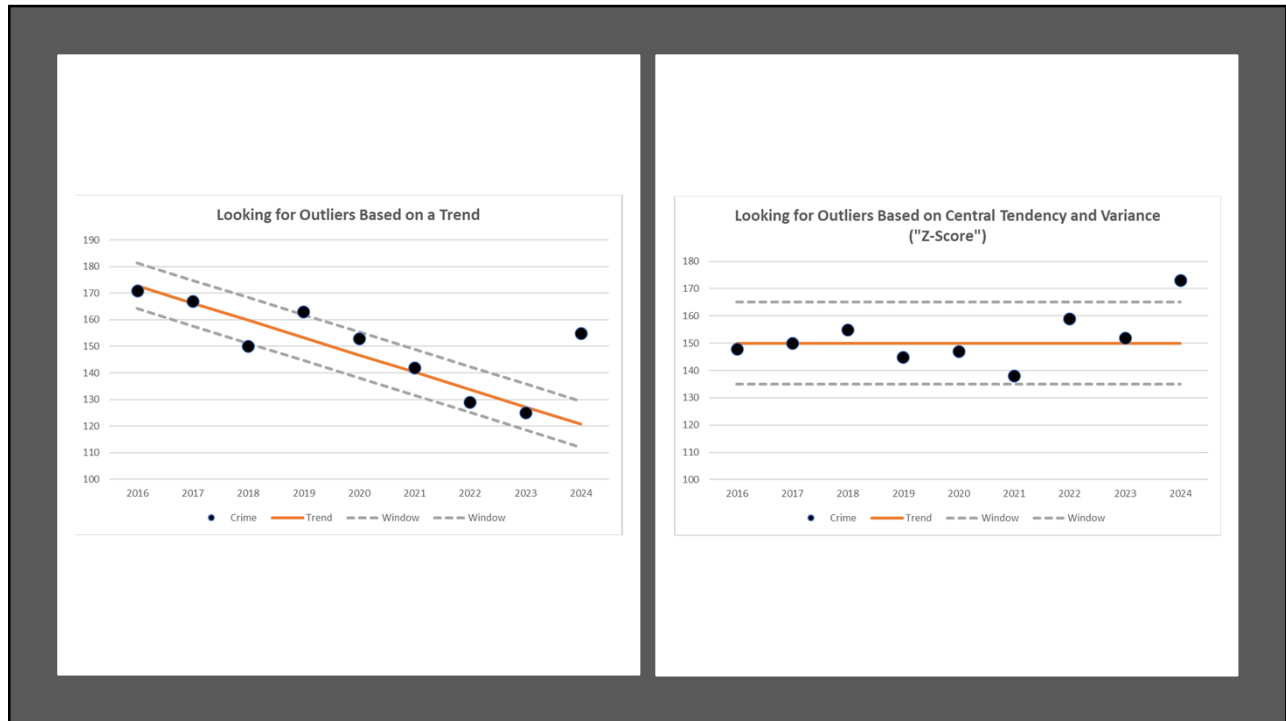
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Threshold Analysis

- Backup to report review
- By beat, shift, incident type, or any combination thereof
- Applies statistics
 - Central tendency and variance
 - Standard deviation or percent change
- Asks:
 - What is normal?
 - What's happening now?
 - How does what's happening now compare to what's normal?

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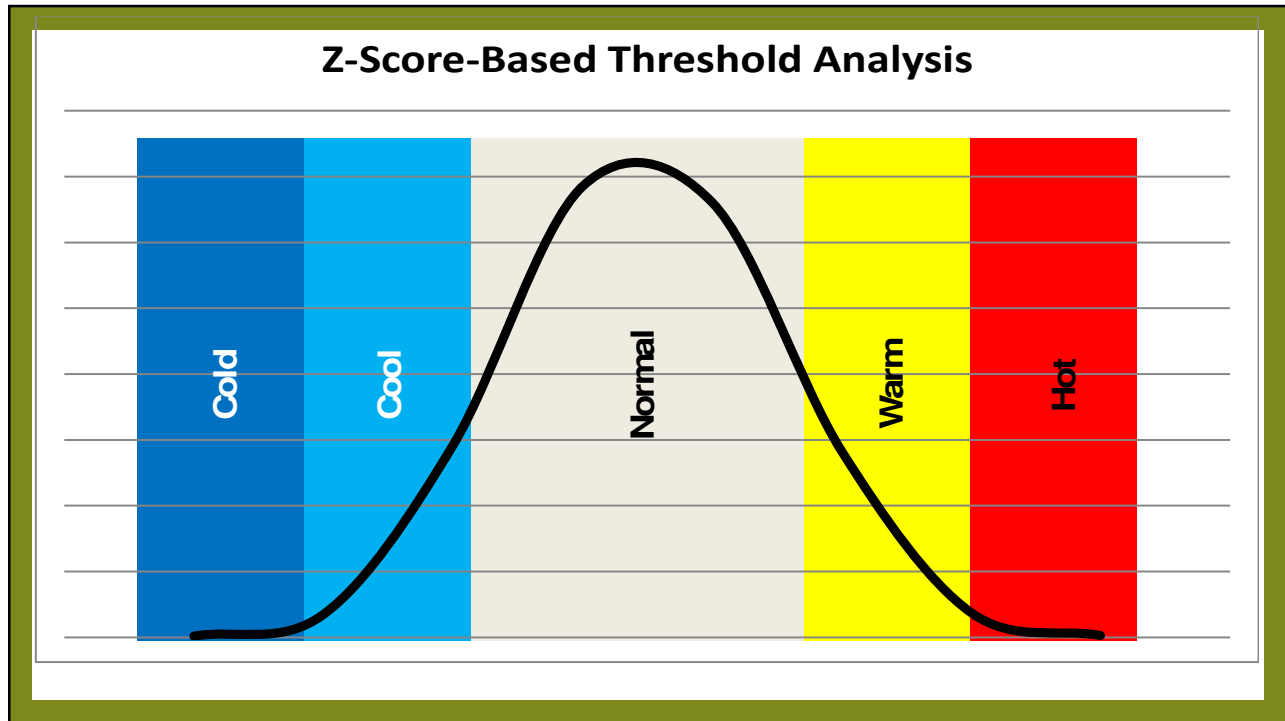


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More on Threshold Analysis

- Works best when automated, allowing user multiple combinations of crime type, location type, and other variables.
- Try to use comparable time periods divisible by 7.
- Misses small patterns.
- Is prone to false positives.
- Need at least 5 years of past data.
- Not limited to crime type—try it with location types, property types, victim types, and others.

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Spatial Identification

- Identifies
 - Patterns in close proximity
- Misses
 - Patterns with no spatial relationship
- Plot
 - By crime type
- Scan
 - Visually identify clusters or network patterns
- Analyze
 - Read the reports to determine whether there is more than just a spatial relationship

The map shows a geographical area around Chicago, Illinois, with several colored pins indicating crime locations. The pins are scattered across various neighborhoods, including River Forest, Oak Park, Berwyn, Cicero, and Little Village. The pins are color-coded, likely representing different crime types as mentioned in the text. The map also shows major roads and the city of Chicago.

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Intel-Based Identification

- “Reverse” pattern identification
 - Rather than identifying a suspect based on crimes...
 - ...you identify the crimes based on the suspect
- Intel may come from
 - Arrest interview
 - Parole/Probation officers
 - School officials
 - Recovered stolen property
 - “Word on the street”

Danvers Police Department
Weekly Crime Review

Thursday, August 29, 2002

Chief of Police
Sgt. Robert Chase

Christopher W. Smith (978) 875-1213
E-Mail: Chris.Smith@danvers-ma.org
For an electronic distribution only.

TrendMeter™
July 29 to August 28

Incident Type	Aug. 2002	Notes
Forgery	4	14
Forgery from ATM	15	26
Arson	0	0
Other Larceny	34	22
Threats	11	3
Occupied MW's	27	34

Sudden spike in check and credit card forgery
Most likely computer access at the ATM
Chronic cocaine and heroin users
Have doubt that the occasional rob can throw off a town's Part I crime stats for the year
Thiefs from buildings, pocketpicking both slow
People are being nicer to each other
20% decrease from average, possibly due to good weather.

Arson Pattern Ends in Arrest

Steven Parziale, 31, of 107 Locust Street, has been arrested and charged with the first Danvers arson series in memory, including the conflagration that consumed the Danvers Butchery on August 12.

Previously convicted of arson for two 1990 building fires in Melrose—which injured two firefighters—Parziale was released from prison earlier this year. When he started missing meetings with his probation officer and failed to attend court-ordered counseling, Parziale's PO issued a warrant in July. Hearing about the Danvers Butchery fire and knowing that Parziale had once by, the officer called Chief Chase and mentioned him as a possible suspect.

Detective Gennaro and Trooper Paul Morgan located Parziale at the Cheaton Farmcroft on August 23. Parziale accompanied them voluntarily to the Fire Investigation Unit office in Reading, where Parziale admitted to setting six fires and was vague on whether he might have set a seventh. Later, he took investigators on a tour of his fire career in Danvers. As a result, investigators obtained a warrant for his arrest. Parziale turned himself in on August 25.

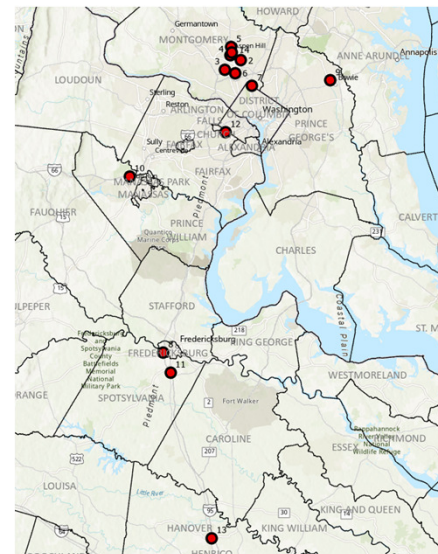
The six fires include the Danvers Butchery on August 12, a dumpster fire on School Street the same night, two outdoor fires on Cabot Road earlier in the month, and the Chery Street Fish Market on August 20. Parziale blames his fire-setting on childhood sexual abuse.

Parziale is now held without bail at the Middleton Jail awaiting evaluation from an independent psychiatrist. He is due in court on September 20.

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Regional Identification

- Basic process is the same, but accessing all the data is harder
- “Target Crimes” concept must generally be applied
- Data sources
 - Teletypes
 - E-mail distribution
 - Newspapers /TV
 - Bulletin Boards
 - Phone Calls
 - Agency web sites
 - Regional records management/CAD
 - Regional analysis system
- Someone must take responsibility



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Automating Identification

Existing attempts

- Cambridge/MIT "Series Finder"
- New York City Police Department's "Patternizer"
- Various commercial cluster analysis tools
- No widely accepted and disseminated system

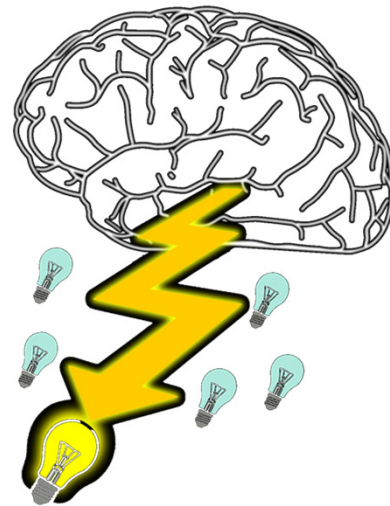
Variables

- Normal level of crime in area
- Matches among key variables
 - Requires accurate, well-structure data
 - Cannot involve just exact matches
- Temporal distance weights
- Spatial distance weights

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After Identification

- Collect all incidents from your agency
- Collect all incidents from other agencies
- Search for related incidents
 - Other ways the crime might have been reported
 - Suspicious activity
 - Other related calls for service
 - Field interviews
 - Parking and moving violations



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Time to analyze!

- **What?** Crime type and meta variables
- **Who?** Victim and offender variables
- **When?** Temporal variables
- **Where?** Geographic variables
- **How?** *Modus operandi*
- **So what?** Key commonalities, implications
- **Now what?** Recommendations for action

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Thank you!

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*Trainer and consultant in crime analysis
and crime reduction*

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Crime analysis	Hot spot policing
Data access	DDACTS
Data management	COMPSTAT
Crime mapping	Pattern intervention
Crime statistics	Problem-solving

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