

CLASS ABSTRACTS

Monday, October 12, 2009

KEYNOTE PRESENTATION: Jack Ballentine – Phoenix Fire Department Investigations Director. Previously a Detective for the Phoenix Police Department.

PRESENTATION TBD

Calls for Service: Uses, Limitations, and the Case of the “Hoax Caller” (Jeri Fletcher / Constance Kostelac)

Calls for service data provide a core resource in the analyst's toolbox for measuring and assessing fundamental workload and service demand information for police agencies. This presentation provides a discussion of multiple uses, limitations, and variations across agencies in the collection, analysis, and dissemination of calls for service data. For instance, agencies often have differing definitions of “emergency calls,” response time information can be impacted by the definition and recording of times, and the basic understanding of what comprises a “call for service” can differ across agencies. During this discussion, sample reports will be demonstrated for the mapping and reporting of calls for service data to provide resources for other agencies. In addition, this presentation will also provide a case study of the recent “Hoax Caller” incidents in Phoenix. This will include an overview of the way call information was utilized to identify related calls, as well as the analysis that was conducted to provide resources for patrol and communications in an attempt to track and identify a caller placing multiple fake emergency calls.

Analyzing Missing Persons and Unidentified Persons Cases (Samantha Gwinn)

This session will include a general discussion of the major issues associated with missing and unidentified persons cases, and the challenges analysts face in this area. Numerous resources associated with missing and unidentified persons cases will be outlined, including ViCAP Web, NCIC, NamUS, and public internet web sites. The importance of dental chart information will be emphasized, including explanations of NCIC dental codes and how they can be used effectively. Coroner's reports will be discussed in relation to estimation of death date for unidentified remains. This session is geared toward analysts with little experience in analyzing these types of cases. Case examples will be included.

How to Develop a Successful Crime Analysis Unit - Round Table Discussion (Moderator: Lt. Ron Shreves)

Law Enforcement Analysis is a proven commodity, a tool responsive both to ever evolving criminal enterprise and the technology to combat it. The police agency that recognizes the potential of the discipline and adopts it in a comprehensive, cognitive manner is bound to see definitive results in that jurisdictions' Problem Oriented Policing effort. Although the crime analysis concept has been around for a long time, too few agencies have taken a thorough look at what it really is and can accomplish. Others employ analysis units not meeting their potential due to poor commitment, planning, training and management.

With an emphasis on gaining acceptance and respectability, this round table session will provide discussion on a comprehensive study of the planning, organization and implementation vital to a successful Crime Analysis effort. We will discuss the “Top Down” priority necessary for success and how to achieve it. Topics will include an overview of the crime analysis discipline, impediments to program success and details of the comprehensive planning process required for that success. Concepts are applicable to any size crime analysis program.

Dynamic Spatial Hot Spot Analysis Using Google Earth - Computer Lab (Sally Olterman)

Advances in mapping methods have brought us into the world of Google through the creation of Google Earth. It has been a useful tool for spatial projects; however Crime Analysis had struggled to bridge the gap between the spatial aspects of our crime data and cutting edge mapping techniques that are in place with Google Earth.

We now have the ability to create the KML files that are read by Google Earth, including Density Rasters. Time sliders can be built into the KML's which allow for points to appear and disappear based on their occurrence in time. We can also place

rasters into an animation to view the movement of density much like a moving weather system. This is particularly helpful when doing problem analysis, in the search to identify persistent problem areas.

This course is designed to demonstrate how crime data can be transformed into spatiotemporal information that we can more effectively use for advanced analysis.

Using Multi-Media Sources to Learn and Teach Law Enforcement Intelligence Analysis (David Grabelski)

What the public knows about the profession of crime and intelligence analysis likely comes from watching television shows and/or movies. Numerous studies indicate that the proliferation of the *CSI* television series negatively influenced how trial juries understand the reality of work done by forensic scientists working in crime labs. Television shows like *Numb3rs* and *Criminal Minds* depict the role of analysts within law enforcement. To my knowledge, no studies indicate a similar negative spillover, like the "CSI Effect," within the field of law enforcement analysis. I believe this may be due to the accuracy of the methodologies utilized in the television shows. If this hypothesis is correct, then can we use portions of selected episodes as training tools? Research supports the teaching case study methodology as an effective learning vehicle. I submit that the use of media-based case studies is a more effective way to learn law enforcement analytic techniques. The corollary would be we could also learn from the inaccurate portraying of crime analysis.

According to studies, students learn in a variety of ways, to include: auditory, visual, tactile, and kinesthetic learners. It is my opinion that by reinforcing the lecture portion of the class with a visual presentation, followed by an instructor-led discussion enhances the learning objective and speaks to the needs of all types of learners. Additionally, this method places the student in the role of an analyst applying the methodology, enhanced by the emotional experience of watching a crime incident.

My presentation will demonstrate the value of teaching crime and intelligence analysis utilizing multi-media sources. Attendees will leave with the knowledge and skills to begin using multi-media for learning and/or training purposes; furthermore, they will be able to apply this technique to in-service training, roll call training, or community presentations intended to educate on the role of law enforcement analysis.

Mathematical Modeling for Crime Analysis (Chris Bruce)

"Mathematical modeling" is a process by which researchers and analysts quantify different aspects of a system, and use this quantification to make decisions. As analysts, we use mathematical models every day in the form of simple statistics like averages and percentage changes. As we advance in our skills, however, we often find the need to develop our own models to explain things like the "solvability" of a case, who our top X offenders are, the likelihood that two or more incidents are related in a pattern, and so on. This session will introduce analysts to the concepts behind mathematical modeling and provide several real-world examples for crime analysis.

The Crime Assessment Center: Better Together (Elizabeth Rodriguez / Annie Mitchell)

Los Angeles County Sheriff's Department's Crime Assessment Center (CAC) is a new, state-of-the-art facility designed to support Countywide crime analysis efforts and crime reduction strategies. Eleven LASD crime analysts are the driving force behind the Crime Assessment Center. With its comprehensive "all crimes" approach, the Crime Analysts assigned to the CAC review all crime activity, regardless of its nature, to determine patterns or trends that impact the quality of life in our communities. Crime knows no boundaries, and, therefore, the mission of the CAC is to analyze crime throughout the entire Los Angeles County area, without regard to jurisdictional boundaries. The Crime Assessment Center's goal is to apply proactive, preventative Knowledge-Based Policing strategies to effectively address crime issues.

This presentation will take a case-study approach and discuss both the positive processes and the roadblocks and issues that the Crime Analysis Program has encountered. Discussion points include the process of launching a Crime Assessment Center; integrating the Center within the LASD community and with outside law enforcement agencies; creating positive relationships with crime analysts assigned to sub-stations and specialized units; and maintaining focus on the mission and goals of the Crime Assessment Center.

Keeping Your Crime Analysis Unit Viable During Tough Economic Times - Round Table Discussion (Moderator: Karen Goodman)

This round table discussion will be an information sharing session about how analysts can use technology and other strategies to attempt to keep the level of service as close as possible when units are being reduced and budgets are cut.

The following subjects will be discussed:

- How to use technology as a force multiplier
- How to work regionally to get the benefit of economy of scale
- How to help detectives help themselves
- How to use grants to obtain needed technology and training
- How to find out which of our products are being used
- How to network with other regional crime and intelligence analysts to help detectives solve series crimes

Advanced Open Source Research With Firefox Portable - Computer Lab (Ludo Block)

The aim of this presentation / training is to learn how to configure a convenient and solid search environment for open source intelligence and how to search and evaluate open sources in practice. The training will be delivered through number of practical exercises on the computer and internet. The topics that will be covered and directly will be put into practice are:

- Configuring a portable search environment that makes searching and logging results effective and efficient. The basis for this will be the application Firefox portable, a number of useful plug-ins and some other applications. (NB: Only free and open source software will be used for this training);
- Setting up, organizing and maintaining a source (link) collection;
- Advanced searching by using the possibilities of Firefox plug-ins, Google and other search tools on the internet;
- How to log searches and document results in order to manage your work and keep the chain of evidence;
- Source evaluation: how to verify the identity and integrity of data sources;
- Issues regarding practical Law Enforcement internet and computer security will interlaced in the training. Participants should have an intermediate knowledge of the internet and MS Windows. They will be provided with pre-configured version of Firefox 3 and additional software, case examples and practical checklists. Participants would preferably bring an empty USB stick (512 MB or more) to be able to take home the provided files and their work. Participants are further encouraged to bring their data source link collections so the training could also serve as a sharing platform for online data and information sources.

Planning and Collection for Law Enforcement Intelligence Operations (Michael Lee)

Planning Intelligence operations is the start of the intelligence process and can make or break the project. It is at this stage Intelligence Analysts get a clearer understanding of what the decision maker wants. Importantly it is an opportunity for the Intelligence Analyst to inform the decision maker what they are likely to receive at the conclusion of the milestones or project.

Effective collection of information is critical to the success of the Intelligence Process. It is here the term 'garbage in – garbage out' relates to. Without timely tested information the Intelligence produced will have little or no value to the decision maker. In the second part of the presentation we will discuss different methods of collecting information and how this can be obtained.

By correctly using all or some of the tips and tools presented you as an Intelligence/Crime Analyst will be able to deliver a tailored product to the decision makers that *should* meet their needs. The planning process assists in dispelling some of the mystery of the Intelligence Process by allowing the decision maker involvement from the beginning their inclusion provides an avenue of trust between the decision makers and the Intelligence/Crime Analysis Unit.

Assessing Organized Crime Involvement in Financial Crime (Vanessa Guibord)

In 2005, recognizing the changing dynamics of organized crime and the need to highlight the types of criminal markets most favored by organized crime groups in Canada, CISC adopted a criminal market-based framework to assess organized crime. This framework provides the best approach to examine the roles that different criminal groups play, determine the magnitude (or size) of each criminal market and evaluate the threat that each group poses as a result of its activities in each market. The emphasis on criminal markets has brought increased awareness of organized crime's level of involvement in financial crime. In 2008, CISC identified financial crime as the 2nd most predominant aggregate criminal market (behind illicit drugs) in which organized crime is involved. Despite the significance of this criminal market, reporting on financial crime still remains limited and has created a challenge for the analysis of this form of criminality.

This presentation will briefly discuss CISC's market-based framework and its assessment of organized crime involvement in financial crime in Canada. It will also highlight some of the challenges in collecting and producing intelligence on organized crime involvement in this criminal market, with a focus on those encountered in the production of the aforementioned SIB. Also discussed will be the social and economic impact of this criminal activity and the importance of bringing financial crime to the forefront of strategic intelligence analysis.

Visual Detectives: Investigative Analysis (Steve Walter)

Visual investigative analysis is a powerful tool that can help overcome a variety of challenges, yet this type of analysis is often overlooked by police departments at the local level. These same departments struggle through investigations that are clouded by too much data, and are in constant need of something or someone to organize the details of the case and

facilitate the flow of information. With the right approach, investigative charting can become an integral part the investigative process, allowing officers and analysts to work together as visual detectives.

This presentation will explore the fundamentals of using visual analysis in a local law enforcement setting and how it can enhance the overall efficiency of an investigation. It will summarize real cases from the Oceanside Police Department and include examples of timelines, association charts, and telephone toll analysis. We will discuss how simple and practical methods can empower an agency to organize and present complex information in a visual format, identify links and associations to help see the big picture, and ultimately solve more cases through criminal intelligence analysis.

Information Sharing and Crime Analysis - Round Table Discussion (Moderator: Ericka Jackson)

This round table discussion will address various non-traditional resources that can be utilized in the course of a law enforcement analyst's (crime, intelligence, administrative) work day. Analysts will discuss how to establish contacts in various agencies to quickly acquire information that can assist in furthering investigations. Some of the resources discussed will be internet (web-based) resources which are not intended for law enforcement purposes, but can be used to address law enforcement concerns. The moderator encourages discussion during the session and would like analysts to share their experiences with information sharing in their agencies. Let's break down the barriers of territorialism and take advantage of how we can put information gained from non-traditional resources to use.

Administrative Analysis and GIS - Computer Lab (Carma Rollerson)

As law enforcement managers become more familiar with and accustomed to the abilities of crime analysis they are assigning and requesting tasks more of an administrative nature. One of these tasks involves the study of how police officers are staffed to tasks and teams. More often than not, an agency maintains a set number of officers to a task based on outdated staffing measures or because "that is how it has always been done." Those agencies with "one-man" analysis units as well as those with many analysts are finding themselves tasked with the analysis of how officers are deployed.

This presentation will review the steps required to analyze any crime time, convert the raw data to a spatial and temporal format using GIS. And through the systematic review of the results, to develop a strategic plan for presentation to management in assessing the effectiveness of existing staffing plans or if it is in their better interest to make a change in terms of the numbers of officers, duty hours or days off. All of which will be discussed, mapped and reduced to a visual format during this presentation.

CLASS ABSTRACTS

Tuesday, October 13, 2009

Data Treasures in Your City (Jason Elder)

In crime analysis, quality data are key in achieving the best outcomes. Crime analysts review mounds of data, looking for the one piece that will solve their problem. Analysts must have the ability to apply many sets of data to any situation. Given the advancement of technology to store data, analysts are overwhelmed with the number of resources. Crime analysts can only apply data that they are aware of.

This session will explore alternative sources of information to use in crime analysis. Crime analysts from the Cincinnati Police Department conducted a review of data collected on a regular basis by departments outside the police department and then evaluated the data for the relevancy to crime analysis. These departments included but were not limited to transportation, planning, parks, recreation, and water works. Data collected by local universities were also evaluated. Most of the data reviewed is applicable to every major city, and analysts can apply the knowledge gleaned from this session to their own situations. This session will also discuss how the newly evaluated data can be applied to various crime analysis situations.

A Long Term Evaluation of a Violence Impact Project: Was It Worth It? (Lenore Cerniglia)

In October of 2003, the Phoenix Police Department formed the Violence Impact Project (VIP) with the goal of reducing violent crime in a targeted area of the city. This program was designed to use focused enforcement by the police department and partnerships with other criminal justice agencies and the community to decrease violence and the perception of disorder and crime in the targeted area. Besides reducing violent crime, another goal of the VIP program was to build an enforcement effort that could be duplicated around the city to try to combat crime in other areas. The Phoenix Police Department's Crime Analysis and Research Unit was an integral part in the statistical background of the project and information sharing between units, departments, and agencies and also attended meetings, conducted surveys, and worked with evaluators. Now, 4 years later, the question is: Was it worth it? Did the program work and keep crime down and the community and other partnerships involved? Another question that arose is if this program should be duplicated somewhere else if it did work? In conjunction with Arizona State University, a long-term evaluation was conducted comparing crime, calls for service, and arrests in the VIP area, the city, a comparison area, and an area to account for displacement. This evaluation will help the police department and the criminal justice field to determine what works when it comes to reducing violence.

Using Grids to Determine Hot Spots (Roy Haskins / Sgt. Steve Armon)

The Dallas Police Department, Crime Analysis Unit was tasked to identify new violent crime high density areas (Hot Spots). We opted not to use traditional geo-spatial references like reporting areas, beats, and sectors. Instead, we decided to use grids. These uniformed (1/16th square mile) grids eliminated varying size and shape discrepancies. A choropleth map was used to obtain a general view of the overall spatial distribution of crime. This showed the relative density or amount of crime for each grid by assigning graduated or varying shades of colors across a range of offense counts. The size of the Hot Spots was no less than ½ square mile and did not exceed 2 square miles (8-32 grids). An additional gauge in the form of a Kernel density layer was also used in preparation because it is based on distribution of crime with no geographic boundaries. Twenty six hot spots were identified, accounting for approximately 22 square miles of the city's 384 square miles and 38 percent of the violent crime. Constant evaluations of the grids show movement within the hot spots and if there is displacement of crime to grids outside the hot spots. Also, by keeping an individual grid offense count, we were able to observe hot spots within the hot spots. These areas have become known by the acronym TAAG, Target Action Area Grids.

This process is updated weekly and provided to the patrol divisions to help maximize their use of limited resources for more effective, proactive and preventative strategies to reduce violent crimes in the City of Dallas.

This presentation will illustrate, using ArcView, how to determine hot spots for deployment of police resources. After a brief overview attendees will be shown how to do the following:

- Create a continuous surface 1/16 square mile grid over the city.
- Spatially join crime points to the grid shape.
- Summarize the crime by count and create a choropleth map.
- Create a Kernel density layer.
- Identify Hot Spot areas with a minimum of 8 grids and no more than 32 grids

This presentation is designed for attendees with prior experience in ArcView. Step by step instructions will be given so that attendees can replicate this process utilizing their own data.

Information and Advice for New Analysts - Roundtable Discussion (Moderator: Susan Smith)

With budget cuts threatening crime analysis units around the world, it's more important than ever that new analysts—especially those working in single-analyst agencies—make a strong impression during their first years of work. Unfortunately, most analysts are overwhelmed during their first years, struggling to comprehend the intricacies of CAD and RMS systems, learn their jurisdictions, figure out what administrators want, and establish legitimacy with operations personnel. In this session, both new and experienced analysts talk about what a first-year analyst's "to do" list should look like, what goals they should set, and what resources are available.

Social Networking Research for Investigators - Computer Lab Part I & II (Det. Sam Palmer / Det. Debra Wooten)

The Social Networking Research for Investigators training is a 2 hour interactive class on social networking sites and how these sites can be used to locate criminals and help solve crimes. Students will gain practical tips for making the best use of social networking information, for preventing investigations from being detected by criminals using the social networking sites, and for adhering to appropriate legal processes for acquiring and using information posted on the sites.

The Analyst's Role in Cold Case Investigations (Jamie Whiteway)

Because of new developments in forensic science, agencies are taking a new look at cold cases. The term cold case usually refers to a homicide, rape, missing person case, or case of unidentified remains in which there has been no activity, such as new leads, in over a year. Cold cases and the investigations surrounding them have become a focus of media attention, to include reality-based television shows, justice-themed interview shows, and segments on the local news. Much of this attention has come as a result of increased concentration on investigating cold cases by local agencies. Problems arise, however, when examining cases years, or decades, after the crime has occurred. For instance, witnesses and suspects may have moved, or died, and evidence and/or records may have been lost or destroyed.

This presentation will discuss the importance of including an analyst in cold case investigations. Agencies that have assigned personnel to investigate cold cases generally select seasoned detectives or retired investigators; however, the critical thinking abilities and organizational skills of an analyst, along with their training and expertise, make them a perfect fit for aiding in the investigation of a cold case. Each case is investigated individually, often using many of the skills and tools a "traditional" crime analyst has. This presentation will highlight those skills and tools and discuss how to apply them to cold case investigations, including how to apply an analyst's organizational skills to manage case files. This presentation will also discuss the roadblocks faced when investigating cold cases and how an analyst can help break down those barriers. In addition, this presentation will touch on how an analyst can help with evidence analysis, to include modern developments in forensic science and resources available to the analyst, which may prove useful in cold case investigations.

Bridging the Gap Between Crime Analysis and Patrol (Det. Debra Wooten / Rene Brugman)

The role of a precinct support analyst is daunting when faced with supporting more than 1200 first responders and more than 350 specialty patrol officers. In 2008, the Crime Analysis and Research Unit (CARU) [Phoenix PD, AZ] restructured and assigned two positions dedicated to supporting first-line officers and supervisors. Thus began a journey of discovery...

The approach is a team effort with both analysts attending supervisory retreats, specialty unit briefings, and patrol briefings – all shifts – covering 6 precincts and 2 auxiliary stations, together. Officers now recognize the analysts as they come and go to various precincts and officers initiate conversations about problems, including crime suppression issues as well as communication and technology issues. Taking the time to listen to first-line officers and having the ability to share information quickly has created a level of trust. The analysts find that the two-way sharing of information leads to creative problem solving. On-site field work is now part of the performance duties of the precinct analysts with support from CARU management.

This presentation includes lessons learned in communicating with first-line officers and supervisors, discovering field processes that influence the data, creating reports the officers will read, and responding to requests for information that is current (real-time data) in a timely manner.

In addition to providing information, the analysts take the time to show officers how to access information available to them in the patrol cars and at the stations. Valuable time has been saved by sharing simple tips and tools on researching, compiling,

and reporting. The new demand for information has also led to better practices in utilizing technology to allow accessibility to information, resulting in less 'reporting' from the analysts and more 'problem solving'. This journey of discovery transformed the status quo into an expansion of possibilities, out of the dark ages of counting and reporting, and into proactive approaches to crime suppression driven by the first responders.

Call for Service Analysis Using GIS Technology (Matthew Harris)

The Sonoma county Sheriff's Department has taken a new and unique method for identifying problem areas within our jurisdiction. This method is a data-driven approach that relies upon comparison of two data sets stored within our CAD database (1. Calls for service and 2. Self Initiated Events). The comparison of these data sets allows the Sheriff's Department to identify areas where we are often called to respond; however, rarely self-initiate activity. The results of this comparison allows supervisors and patrol deputies to identify areas of the community currently underserved by proactive law enforcement.

This presentation demonstrates the concepts and methods of comparing the data sets and displaying the results via the department intranet. Through the use of ESRI's ARC Map software and free extensions available through ESRI's website, crime analysts can replicate this process without the necessity of purchasing specialized software.

Methods used to compare data include:

- Creating Kernel Density layers
- Performing a Raster minus
- Converting Raster data to Contour data
- Converting Contour data to Polygon data
- Performing Spatial Joins
- Exporting data to .kml files

Once the methods have been presented, a demonstration of the application will be presented to show how supervisors and deputies can view the data. Problem areas will be shown with sample solutions to resolve those problems. Questions regarding the development and general comments will be fielded from the audience.

Developing and Promoting Consistency Within a Crime Analysis Unit - Round Table Discussion (Moderator: Jim Mallard)

This roundtable session will delve into the topic of consistency within a crime analysis unit. Specifically, we will discuss the balance between consistency and creativity as it relates to the processes used and products that are disseminated. How important are standardized templates for bulletins and/or maps? What are the implications of not enforcing consistency? What are the challenges of applying standardization to decentralized analysts? Does inconsistent formatting convey the intended message? This roundtable will seek to identify best practices regarding standardization, with the goal of assisting new and established crime analysts communicate effectively within their organizations.

HOSTED LUNCHEON

Speaker #1: Mike Watkiss, Journalist

Speaker #2: GIS and Web 2.0 Technology: Helping Criminal Investigators and Analysts (ESRI Representative, Mike King)

This presentation will highlight a serial killer investigation- one that touched hundreds of communities across the United States and explores how a complete Geographic Information System (GIS) can integrate data, analyze information and disseminate actionable intelligence across jurisdictions as a part of the investigative process. Through visualization, case related data comes to life and can help drive the investigative process in developing further leads. This presentation will demonstrate methods of using the geospatial environment during the investigation to manage data and develop analyses that can identify "probabilities," rather than merely, "possibilities." Whether intelligence is viewed on a desktop, web or mobile client, tactical and strategic responses can be tested as part of the decision making process. The use and value of situational/operational awareness dashboards in major investigations will be discussed with a live demonstration of one built for this particular serial killer case.

The Role of the Analyst in a Terrorist Incident (Steve French)

This presentation will provide analysts, researchers and law enforcement professionals with an overview of how a terrorist incident unfolds. It will look at a terrorist incident that occurred on Thursday 22nd May 2008, in the small Devon city of Exeter and the way that analysis helped to unravel the actions of the Exeter Nail Bomber. The talk will show images from the incident and look at the reasons why this incident occurred.

The presentation will demonstrate how a terrorist cell forms, how they operate and how the analyst is crucial in any investigation into terrorist incidents. The talk will examine the role that the analysts of Devon and Cornwall Police played in the investigation and in the wider intelligence cell. In addition, it will illustrate the types of analytical products that are required, how quickly they are needed, and how some of the products will be different to standard types of analysis.

As well as looking at the incident itself, some of the key lessons that have been learnt from the incident will be discussed. These lessons include the cultural hurdles that had to be overcome in order to make progress in the investigation, and how this helped develop a wider understanding of the incident as a whole. The presentation will consider the effect of the incident on both the local community and the wider community served by the Force. Another key issue that will be explored is radicalization and how this can change the direction of the investigation in a short period of time.

Awareness, Analysis, and Critical Infrastructure (Ryan Heethius)

This presentation will show the strategies the Jacksonville Sheriff's Office have implemented to ensure awareness, analysis, and investigation relating to anything at, near, or in anyway referencing critical infrastructure (CI) - or the tools, methods, and people with potential do harm them. This more holistic approach covers automated reporting covering anything occurring at or near CI through automated GIS techniques as well as through concept bank searching for anything referencing the various locations by terms, name or address across our entire records management system and beyond. Further, CI are at risk from certain individuals, means and methods of attack; the analysis approach mines for these people and issues regardless of reference to a CI to maximize the odds that important events that might help the agency prevent attacks are known, analyzed, and investigated.

CrimeStat III and Journey to Crime Testing for Serial Offenders in Glendale, AZ (Bryan Hill)

Many people are intimidated by the functions and features of CrimeStat III, however the analytical assistance this program can provide is well worth the time and effort to learn. This presentation will discuss research with Glendale's serial offenders in relation to the journey to crime, Bayesian journey to crime, mean center, and center of minimum distance accuracy found with serial criminals in Glendale. The presentation will touch on topics of how to setup your data for using this various spatial functions in CrimeStat III and what the accuracy was for several serial offender's crimes and the ability of the software to estimate the likely home address of the offender based on Glendale records of these crimes.

Key discussion topics will be how to setup the data for CrimeStat III®, what the accuracy rate was for predicting the offender's home address with 4 different methods in CrimeStat III, definition and usage suggestions for the peak profile area, and any suggested insights found on when a JTC analysis will assist an investigation and ways to utilize it to assist investigations.

Critical Issues Facing CAU Managers - Round Table Discussion (Moderator: Noah Fritz)

With the advancement of Crime Analysis both nationally and internationally, as well as its popularity in medium to large size agency; the needs and concerns of CAU Managers can today become more prevalent. Agencies are creating units that have multi-variant responsibilities and functions: crime series analysis, problem analysis, intelligence gathering, COMPSTAT, threat assessments, fusion centers, and a number of levels of security clearance and knowledge of 28 CFR, part 23. Supervisors now face recruitment and retention issues, personnel and compensation policies and procedures. Given the growth of CAU units and different types and levels of analysts, this panel will look at and facilitate a much needed dialog about Managing a CAU. As an advanced topic this panel will also look at and consider the need for data sharing, data integrity and the systemic nature of police information systems in a modern progressive police agency. This paper/panel will offer recommendations for standardizing CAU policies and management principles to promote and enhance the profession and ensure continuous improvement.

ArcGIS101: Getting the Dots on the Map - Computer Lab (Sally Olterman)

This course covers basic crime mapping. It starts with a complete blank screen (literally), and introduces users to spatial data, geocoding, map elements & basic GIS functionalities. By the end of the course, users should be able to work through the exercise(s) to create spatial data from tabular data, analyze the spatial components of the data, and create a basic map

that is useful for its intended audience. This course is designed for new, first-time users, and walks users through the process step-by-step.

ATTACKing Auto Theft: Success Through Analysis and Partnerships (Craig Werre / Lt. Doug Shepard)

In 2003, plagued by a rising number of auto thefts and car prowls, the Redmond Police Department began to look at strategies to impact these crimes. The **Auto Theft Tactical Analysis Center of King County (ATTACK)**, a regional analysis center created by Redmond's Police Chief Steven Harris, was formed based on the national fusion center concept. The ATTACK Center serves as a coordination, analysis, and intelligence clearinghouse for over 60 law enforcement agencies across three counties, with over 280 e-mail partners involved in the identification, apprehension, and prosecution of vehicle crime suspects. Partnerships between the investigative, analytical, and prosecution components are the backbone of the program

After three years of analysis, the results are remarkable. The auto theft rate in Redmond declined 55% from 2005 to 2008. The auto theft rate in King County has declined 53% in the same timeframe. Several high-profile auto thieves have received sentences of five to eight years in prison, a sentence unheard of just three years ago. ATTACK was named as a finalist for the 2008 IACP Webber Seavey Award for Quality in Law Enforcement. The Car Theft Initiative has been an unmitigated success with the ATTACK model becoming the standard for effective crime fighting in the region.

Cold Case Analysis (Mark Dobbs)

Cold cases such as homicides, missing persons and unidentified deceased persons can be extremely frustrating for investigators. Every day brings fresh cases with fresh leads, and new hopes of solving crimes. But even while these new cases accumulate, the cold cases still remain on the shelf, constantly reminding detectives that more work needs to be done. Most investigators have no idea that their crime analysts can be of great assistance in rejuvenating the seemingly dead case. There are many critical tasks that the analyst is better qualified to take on. In this session we will discuss the role that the analyst can play in investigating these cold cases. We will also show that the analyst has a unique skill set that can prove invaluable in such investigations. Attendees to this session will leave with valuable tools that will give them the ability to make a significant impact on the investigation of cold cases.

Smart Police Deployment: Using AVL & GIS Technology in Policing (Greg Jones)

This presentation will describe a project funded by the National Institute of Justice to evaluate the use of automated vehicle technology (AVL) in policing. It will describe the methodology, processes, and tests involved in order to understand the utility of AVL as a field deployment tool, the use of geospatial technology (GIS) to quantify police presence, and how police activity patterns can impact crime and inform new deployment strategies. The first key point regarding this study is recognizing the importance of crime and place research and how crime tends to be geographically focused at micro places. Prior hot spots research and recent research on crime and place has shown that even by examining crime over a relatively extended period of time there tends to be distinct developmental patterns of crime at places. This presentation will discuss some the specific details of current crime and place research and the importance of these and other findings to the current project. A second key area is for police researchers practitioners, and analysts to realize the lack of information we know about police presence using the current indicators that are available at most agencies including calls for service, crimes, arrests, etc. In other words these indicators only provide a snapshot about actual police presence but not the whole picture. Automated Vehicle Locator (AVL) technology can provide substantial insight about police presence to help fill in these gaps about police presence. The third key point addresses the various protocols, issues, and challenges faced when working with AVL data as well as formatting issues that must be considered in order to conduct further analyses. Fourth, it is essential to establish the most appropriate geographic unit of analysis and develop a comprehensive understanding of that unit from a historical perspective and to relate this with the overall crime analysis work. The presentation will describe the in-depth research and analysis used to obtain a more comprehensive understanding of our unit of analysis as well as crime, which both play an important part in developing an optimal deployment strategy. Fifth, in order to fully utilize AVL data and relevant analyses, the use of trajectory and joint-trajectory analysis is a necessary technique that must be incorporated. A brief overview of the purpose and utility of this technique will be described. Finally, the presentation will provide a description about the randomized experimental design that will be implemented as part of this study to assess the implementation of optimal patrol deployment strategies developed jointly with the participating police agency.

Finding Time to Do Crime Analysis in a CompStat Setting - Round Table Session (Moderator: Joe Ryan)

As more police departments shift towards a CompStat model, crime analysis units are struggling with the increased burden of CompStat reports, PowerPoint presentations, live GIS, and prepping commanders for the meetings. In some cases, units that had the correct vision (i.e., pattern/series analysis, problem solving, etc.) are now forced to shift their focus towards CompStat preparation. What implications does this have for crime analysts? Does the credibility of the profession suffer?

How can you find time to do the “real analysis”? Is your unit becoming reactionary? What role can the IACA play in educating police administrators? These questions and more will be covered in this roundtable. The goal of the roundtable is to develop some solid strategies for analysts and supervisors in departments that view CompStat preparation as the most important job of the crime analyst.

ArcGIS Tips and Tricks (Sally Olterman)

This course covers basic tips, tricks and skills associated with ArcMap 9x. This course is designed for new and beginning users of crime mapping, and users with a version of ArcMap without any extensions. Some of these skills include choropleth maps & spatial joins, buffers, graduated points, selections by location, and selections by attributes.

Crime Free Housing: Keeping Criminals Out of Rental Properties (Tamrin Olden)

Do multi-family rental housing complexes seem to be the hub of criminal activity in your city? It's not a secret that apartment complexes, mobile home communities, hotels and government housing projects represent the highest frequency of calls for service and crime rates, but what is your agency doing to address these issues? Chino Police Department - Crime Prevention Specialist, Tamrin Zich will discuss proactive and effective methods of holding property owners and tenants accountable for the criminal activity of the lessees and their guests. Programs and tools include: Crime Free Housing Programs, Operation HUD Fraud (geared towards government subsidized housing), implementation of a hotel-motel registration log municipal code and on-site training for staff. These methods have proved to be effective in reduction of calls for service and crime rates, in addition to the numerous evictions and application denials based on criminal history. Through careful analysis and tracking of problematic properties and a partnership with property managers, you can reduce crime in your rental housing communities.

Understanding Cybercrime: The New Age of Virtual Crime (Magda Marczak)

Cybercrime has become a significant challenge for many law enforcement agencies as many traditional policing theories have become obsolete in the cyber-world. Computers have become a feeding ground for viruses, Identity theft, web jacking, and theft of computer systems. This presentation will discuss some of the varying definitions of cybercrime and how cybercrime has become a new form of illicit activity because the cyberspace environment permits multiple user connectivity, anonymity and plasticity of online identity. Cybercrime has no borders and countries have varying laws with respect to cybercrime, thus making it difficult to prosecute. Next, the presentation will illustrate how organized sophisticated groups are now using the Internet for extortion, fraud, money laundering, and theft. The challenges that the law enforcement agencies face with respect to cybercrime will also be discussed. Finally the presentation will reveal McAfee's and Cisco's cybercrime threat predictions for 2009 and the estimated costs of cybercrime.

Modeling Victim Time-Space Paths: Street Robbery Model (John Morgan)

Time geography (Hägerstrand 1970) offers a rich framework for representing individual space-time paths in this increasingly mobile world (Kwan & Lee 2004; Miller 2005b; Parkes & Thrift 1980; Pred 1977). The fundamental tenet underlying time geography is that all activities have both spatial and temporal dimensions and these cannot be meaningfully separated. Individual mobility in these dimensions is recognized as being bounded by certain space and time constraints. The basic visual tool of time geography is the individual's space-time path, which can be illustrated on a two-dimensional plane, with a third dimension as a vertical axis representing time. An individual's activities and trips in a day can be represented as a daily space-time path within a three dimensional cube limited by certain constraints (Burns 1979; Hägerstrand 1970; Kwan & Lee 2004; Lenntorp 1976; Parkes & Thrift 1980).

The concept of space-time constraints will be utilized and considered during the development of the time-geographic map models. By applying the visual semantic tools of time geography (e.g. lifelines, bundles, prisms, etc.) to predefined constraints, accessibility, conceptualized as potential paths, can be utilized to model potential individual path spaces based on spatial and temporal constraints (Janelle 1995). These constraints will be applied both spatially and temporally as limits to accessibility. For instance, in the case of a pick pocketing, the victim and offender must come together at a certain point during their paths. This necessity would be considered a coupling constraint. Or, in the case of identity theft, the offender must have access, a capability constraint, to the victim's identity information.

Street robbery has been studied extensively in the crime mapping literature (Cornish & Clarke 1986; Groff & McEwen 2007; Walsh 1986) and scholars have found that street robbery has certain associated activities, such as journey paths, which take on certain rhythms, timings, trends, and cycles (Cohen & Felson 1979; Georges-Abeyie & Harries 1980; Hawley 1950). Typically, pick pocketings occur in crowded public places, where numerous individuals' space-time paths converge. Victims of pick pocketings generally become aware of the situation only when they realize that they have lost their personal property. But, by that time the offender will have moved on. Therefore the space-time path in this scenario will be defined as the victim's path of movement leading up to the discovery of the crime incidence. This path could be recounted by the victim, or based on time/location information of purchases made while he or she was shopping, leading up to the discovery of the crime event.

IACA Certification (Michele Kennedy)

The IACA Certification Commission will be presenting on the purpose, prerequisites, requirements, and testing process that designates applicants as Certified Law Enforcement Analysts (CLEAs). The newly developed study guide will also be disseminated to attendees; however, the focus of this workshop will be on the requirements and testing process and will not be an exam study session. Attendees will be encouraged to ask questions at the open discussion at the end of the workshop.

Crime Analysis and Mapping Using Google Earth (David Martin)

This presentation will cover the current capabilities of Google Earth mapping software, in tandem with mainstream CAD and records management systems, to provide a powerful and provocative crime mapping and analysis system. Dr. Martin will provide several examples of using Google Earth (assisted by ODBC and middleware) to accomplish the following crime analysis tasks:

1. Real-time, crime incident and calls for service mapping – in 3-D!
2. Mapping of parolees, probationers and sex offenders,
3. Dynamic, grid cell and areal unit analysis of crime, calls for service, and community indicator data (e.g., home vacancy rates),
4. Animation of crime, patterns, and crime trends in a community, and
5. Other "hidden" features in Google Earth that support crime analysis and data-driven policing.

This presentation will also discuss the uses of Google Earth for problem-oriented policing and community development and will provide examples that have been implemented in Weed and Seed sites.

CLASS ABSTRACTS

Wednesday, October 14, 2009

GENERAL SESSION SPEAKERS

Terry Blair Serial Killer Investigation (Sgt. Doug Niemeier)

The investigation of 8 women in Kansas City Missouri took place in August 2004. Officers discovered two female victims in a garage that appeared to have been murdered at different times. The investigation began as any other homicide investigation, but changed quickly when the killer began to call the 911 operator with clues to locate additional bodies. Detectives received two phone calls from the killer over the next few days leading them to an additional four victims. The investigation lasted for 12 days before investigators were able to identify the suspect and arrest him. The suspect was ultimately charged with eight counts of first degree murder and found guilty in 2008.

The presentation is an overview of the entire investigation that includes crime scene photos, calls from the killer, dealing with local and national media, and investigative strategies used by the investigators. The presentation begins with the original crime scene and follows the case on a day by day account of events. I also include how we went from having one squad of homicide detectives working the case to transition into a task force and dealing with command staff. This transition included law enforcement, civilian staffing, crime analyst, and prosecution.

Heating Up Cold Cases (Allison Dubois)

Which Cases Are Related and How? (Shawn Fisher, Omaha Police Department – Winner of the Corona Solutions Innovations in Crime Analysis Award)

When working with a complex crime series, it often becomes difficult to determine which cases are related. Some of the incidents may have all of the identified linkage factors and some may only have a few. This presentation will demonstrate a simple way to chart the crime series linkage factors and easily see the relationships between cases.

Immigration and Crime Reduction: Migration of the Hispanic Community, Building Bridges to Reduce Violent Crime Through Community-Based Partnerships (Michele Delafuente-Snow)

This presentation will explore the implications for problem-oriented policing between the overlap of repeat victimization and hot spot locations. We will examine how repeat victimization of Hispanics reflects their suitability as targets, their lack of capable guardians, and how we can build bridges to successfully impact this community. The City of Jacksonville has seen a significant increase, nearly 58% growth in the Hispanic population since the 2000 Census. With the current political climate and the increasing drug related violence growing along the Mexico border, the threat for an increase of violence in our neighborhoods becomes imminent.

There has been an increase in violent crime, particularly individual robberies and aggravated battery both in high crime areas and hot spot locations. This victim population is heavily concentrated within approximately 2 square miles of Jacksonville's 840 square mile area making them easily identifiable by the offender. Addressing hardening the target through education and collaboration we theorize a violent crime reduction. Through the creation of capable guardians and a decrease in the target suitability, this population may be able to decrease their likelihood of becoming victims.

Utilizing Crime Analysis in Urban Planning Decisions (Dr. Derek Paulsen)

Crime, like all social phenomena, is not evenly distributed across geographic space. Within all cities there are general areas where crime is more highly concentrated, with research showing these areas to have higher levels of economic disadvantage, social inequality and neighborhood disorder. However, within these general areas of high crime, crime is not uniformly distributed but is clustered within specific areas where opportunities for crime are best. Importantly, these areas of

concentrated crime are largely the result of the way in which the built environment facilitates opportunities for crime. Through the process of zoning, urban planning, and neighborhood development, uneven development patterns produce certain locations within the built environment that offer attractive advantages for offenders to commit crimes. However, despite the impact that urban planning has on crime patterns and resulting police activities, police have largely failed to get involved with planning decisions. This presentation provides a discussion of how police in general, and crime analysts in particular, can provide guidance on urban planning decisions in order to minimize opportunities for crime resulting from how development occurs within a community. In addition to a discussion of practical techniques used in the process, a case study of how this process has been implemented within a medium sized city will be presented.

Project TKO – Tracking Known Offenders (Kurt Smith)

Project TKO - Tracking Known Offenders - was implemented at the San Diego Sheriff's Department to organize and streamline various pieces and parts of mapping offender information that was occurring across eight stations. While the importance of place in analyzing crime cannot be understated, offender proximity is analyzed to ensure the obvious is not overlooked. In collaboration with various agencies, parole, probation, registrant, and local jail release information has been compiled into a common geodatabase for use within, and sharing by the department. *Sounds easy enough...* Improved mapping and analysis have resulted from this effort, crooks have been put in jail, and operations are now designed around it, but what else can and should be done? Strategies to start a similar effort, a suggested process to handle and improve data, and initial lessons learned will be shared. Bring your experiences and ideas on offender mapping to add to this ongoing effort.

GOING FROM “BLAH, BLAH, BLAH...” TO “LISTEN TO ME!” – EFFECTIVE PRESENTING IN LAW ENFORCEMENT (Susan Smith)

Do you have to present daily, weekly or monthly to other members of your department? Other city/country/state agencies? City councils? Civic groups? This class will take your presentations from "blah" to "brilliant"! By integrating Jerry (Ratcliffe)'s Top Ten Presentation and Top Ten Powerpoint skills with additional presentation techniques and PowerPoint hints and tricks, the instructor will present practical steps to giving effective presentations, speeches and talks in your role as a crime/intelligence analyst. Getting their attention, keeping it and sending them away with the intended message will be the common goal. This is one class you will definitely remember and will be able to use every time you stand up and deliver important crime/intelligence analysis information.

Advanced Analytical Techniques Using Microsoft Excel - Computer Lab (Leonard Leedy)

This class will stress the analytical tools of Excel formulae, functions, sorting, auto filters, pivot tables, macros, etc. The student's level of experience will determine the complexity of the instruction. The primary goal is to have the students understand the powerful analytical functions of Microsoft Excel and to be able to utilize them. Some of the topics covered will include: creating and formatting a spreadsheet, using formulas for calculation, data entry shortcuts, using analytical tools, charting, sorting, auto filters, pivot tables, concatenating cells, use of macros, etc.

Illegal Immigration and Crime: The Challenge of Data Collection and Analysis (Constance Kostelac)

The connection between illegal immigration and crime is a controversial and dynamic topic. Recent efforts have started to provide a focus on ways to capture and analyze information related to illegal immigration from a research standpoint. For analysts however, the source of information is typically data collected by the agency, either as part of routine report writing or through particular efforts implemented to understand immigration related-issues within the jurisdiction. The purpose of this presentation is to explore the approaches and complexities to understanding illegal immigration from an analyst's perspective. The data utilized for this analysis are based on recent policy changes in a large southwestern police department. In addition, the discussion will also cover the related issues of kidnapping and home invasion incidents and the role of crime analysis in understanding the impact of illegal immigration on these violent crimes, particularly for border states.

Crime Analysis in a Prosecutor's Office (Julie Wartell)

This session will highlight the use of crime analysis in a Prosecutor's Office. The San Diego District Attorney appreciates the value of crime analysis for research, evaluation and problem solving. Crime analysis has been used to evaluate trends, understand prosecutorial caseload, support prosecutors and law enforcement agencies, as well as provide a means to coordinate data and efforts across law enforcement agencies and others involved in public safety throughout the County. A variety of examples will be discussed, and experiences and input are welcomed from the audience.

Brazil and Crime Analysis Policy (Anderson Nakamura)

This session addresses the Crime Analysis policy adopted in Brazil and Latin America in a joint effort to create an academic and professional culture dedicated to crime analysis in Brazil. Some issues to be considered are Brazilian social and political organizations, the subject in its laws, the police department's organization and an explanation of their tasks within a social and public safety context. Brazil has adopted a unique strategy in trying to deal with problems related to public safety. Brazil is a country that has a significant number of miles of shared borders with other countries, and we are continually making efforts to address issues related to border security. All of these issues will be discussed, as well as our efforts to address our issues of border security and public safety on a local and national level.

Law Enforcement Online (James Sheehan)

Law Enforcement Online is a secure internet system, supported and maintained by the Federal Bureau of Investigations, which is provided "free of charge" to all agencies associated with the criminal justice system, intelligence community, military personnel, and Federal, state, county, and municipal governments, whose mission involves the protection of infrastructure of the United States.

Using Model Builder and Other Tools to Increase Efficiency - Computer Lab (Joe Ryan)

Most GIS processes that the analyst finds themselves doing over and over again in ArcGIS can be automated. Model Builder is the interface that allows an analyst to automate those tasks. This session will provide hands-on instruction for an analyst to start automating processes with the ArcGIS Model Builder tool. The presentation will begin with an overview of Model Builder and students will build models with sample data. The models range from basic selections of data and creating new shapefiles to more sophisticated spatial processes. The session ends with some tips and tricks to increase efficiency with the ArcGIS software where helpful extensions will be introduced. Analysts in this session should be intermediate ArcGIS users.

CLASS ABSTRACTS

Thursday, October 15, 2009

Gang Tracking in a Mid-Sized American City (Marie Balfour)

Mid-sized cities in the United States face a unique gang problem, setting them apart from chronically gang involved cities such as New York City, Chicago, and Los Angeles. This presentation will focus on the tactics and strategies adopted by the police department of a mid-sized city in Upstate New York for identifying, tracking, and suppressing the activities of street gangs, as well as identifying and tracking current and emerging gangs within the city. The various tools and resources currently in use will be identified and their uses will be explained. The multiple tools and strategies used by the crime analysts to identify and track gang members will be useful information for any jurisdiction facing similar emergent gang problems.

Integrating Crime Analysis into Patrol Work (Nicole Scalisi)

As crime analysts, we know that patrol officers have a unique connection to crime. They are held accountable for their districts and take pride in making their community safes. But have you ever wondered if the information that you are producing has an impact on the day-to-day operations of patrol officers? This session will answer some of the questions you might have asked yourself. *Integrating Crime Analysis into Patrol Work*, a session presented by Nicole Scalisi, Social Science Analyst, of the COPS office, will present the results of a national survey of law enforcement agencies (LEAs) to assess their current use of crime analysis/mapping and its integration with patrol, including promising practices and barriers to overcome. I will also discuss our selection process for using the survey results to identify agencies that have successfully integrated crime analysis with patrol work to participate in focus groups. Next, I will discuss our plan to form working groups to assess the analysis needs of patrol, identify the gaps in the current system of crime analysis, and suggest solutions to address these gaps. I will also discuss our plan to conduct case studies with law enforcement agencies that have been successful at integration in this area.

C3PO to the Rescue! Using Crime Theory, CrimeView, and Crystal Reports to Prioritize Offenders (Det. Ben Vermillion / Karen Kontak)

If you have ever had a serial offender in your city and have wondered what you can do in addition to identifying the next likely date, time and area the offender is likely to hit, this presentation is for you! Different types of elevated risk areas will be discussed briefly, but the main focus will be on using Crime theory, CrimeView, and Crystal Reports to prioritize the list of offenders that are found in the elevated risk area you identify. Based on theory, you will identify and utilize weights in your Crystal Report so that out of your whole list of possible investigative leads, the offenders that are most likely to be associated with that crime series rise to the top of your list.

Cartography – Enhancing Your Cartographic Products - Computer Lab (Joe Ryan)

In a Crime Analysis setting, maps are designed to communicate information about crime and disorder problems. Far too often, maps are produced without adhering to sound cartographic principles, which limit the map's effectiveness. This hands-on session will take students through building a cartographically sound map from start to finish. Concepts such as scale, color, layout, and map elements will be covered. In addition, students will learn how to develop an effective "working base map" or template. Hands-on participants in this session should currently use ArcGIS software. Analysts with little GIS experience or those that are using a different software package are welcome to double up with experienced ArcGIS users for the training.

Problem Solving: Alarming Levels of Car Thefts at Malls (Karen Lancaster-Ellis / William Skeete)

Over the past ten (10) years, in Trinidad and Tobago we have seen greater commercial activity at shopping malls, all of them expanding within the last five (5) years to accommodate an increase in shoppers. Concomitant with shopping activity, the Trinidad and Tobago Police Service (TTPS) has seen an increase in reports of Larceny Motor Vehicle from these malls. To counter this problem the Trinidad and Tobago Police Service embarked upon a campaign of public awareness, through press conferences, where they highlighted the problem at the malls. Whilst the mall, where there was the highest incidence of Larceny Motor Vehicle tried dealing with the problem by implementing an elevated guard outpost (Eye in the Sky), security officers at the entrance and exit issuing cards and closed circuit televisions (CCTV) and were fairly effective, management at the mall quickly reverted to the old way of doing things but the other malls took absolutely no action. One of the malls which were affected but which had the least amount of larceny of motor vehicles continued to employ the ticketing method and their roving security officers. However, it was clear that at all malls offenders were targeting Nissan vehicles but nothing in particular was done to address this issue. The presentation proposes to analyze the Hot Target (the Malls) and the Hot Product (Nissan vehicles) in developing a target hardening approach. It is expected that the findings of this research would

aid in increasing public awareness, reducing the levels of Larceny Motor Vehicle reports and increase confidence in the TTPS.

Crime Analysis in Sexual Assault Cases (Timothy Hardiman / Amanda Green)

Sexual Assaults of strangers tend to be serial crimes. The presenters will demonstrate how basing patterns or case inclusion solely on a perpetrator's description can lead to incorrect inclusion or exclusion or even inaccurate pattern identification. It is more effective to use the perpetrator's behavior to identify these patterns than physical description. The presenters will use actual cases they participated in to demonstrate the value of this technique. They will show how the "Behavioral interview" can elicit more accurate information from a victim about a perpetrator's behavior than traditional interviews. They will discuss training issues for officers/investigators so that analysts will have valid information on which to base their analysis. Finally they will explain how to present this information to other people who may pressure analysts to incorrectly form patterns or include cases in existing patterns.

Automation Techniques for Crime Analysts (Jim Mallard)

This session will present many time-saving techniques for automating routine crime analysis processes. We will discuss DSNs, batch files, task scheduler, macros, ModelBuilder (for ArcGIS users), and data linking between Microsoft Office applications. Many of these techniques can be combined to create a robust automation scheme. Leveraging the automation tools you likely already have will not only improve your efficiency as an analyst, but will also provide you more time to do qualitative analysis. Attendees will be provided step-by-step instructions for each technique as well as sample files containing the material presented during the session.

Advanced Analytical Techniques Using Microsoft Excel - Computer Lab – REPEAT SESSION (Leonard Leedy)

This class will stress the analytical tools of Excel formulae, functions, sorting, auto filters, pivot tables, macros, etc. The student's level of experience will determine the complexity of the instruction. The primary goal is to have the students understand the powerful analytical functions of Microsoft Excel and to be able to utilize them. Some of the topics covered will include: creating and formatting a spreadsheet, using formulas for calculation, data entry shortcuts, using analytical tools, charting, sorting, auto filters, pivot tables, concatenating cells, use of macros, etc.

Analyzing Information (Michael Lee)

This session will provide valuable insight and tools into effective analysis of information in support of a Law Enforcement operation or project. The second part of the presentation will focus on the 'heart' of the intelligence process, analysis. It is here that raw data is analyzed and used to provide insight. Without analyzing information raw data collected is next to useless but once value has been added to it the 'jig saw puzzle' that you are dealing with becomes clearer. It is from here you as an Intelligence Analyst are able to provide insight and recommendations to the decision makers.

In this session we will explore the different types of analysis as well as different analytical tools and how to use them, including: SWOT, PESTLE, Competing Hypothesis, and Target Identification

Human Smuggling and Kidnapping Trends (Det. Al Richard)

The presentation will cover the current trends in human smuggling and kidnapping in relation to illegal immigration across the U.S. / Mexican border. The presentation will include the influence of the current narcotics trafficking war in Mexico in relation to human smuggling cells and kidnapping groups and the spill over effect into the Phoenix metro area. A case synopsis and suspect profile of several adjudicated cases would also be presented.

A Knowledgebase: What if Everyone in My Unit Knew What I Knew? (Gregory Robison / Jack Bowman)

We all have our specialties – those things for which we have a special knowledge or background that would be lost if we weren't around. What happens in your unit when an urgent or important request comes in on a day in which the person with the necessary knowledge is not in? What happens when someone retires or takes a new position outside of the crime analysis unit? In each situation, having a method for the transfer of knowledge to bridge the gap is critical. Otherwise, a lot of time is wasted reinventing the wheel. After years of relying on individuals and on random files and Word documents stored on the network, the Phoenix Police Department's Crime Analysis and Research Unit set out to develop a knowledgebase – a centralized location to store and retrieve information on everything from how we do recurring jobs and how we have solved issues to who are our contacts for certain subjects and to discussions on topics related to our jobs.

Regardless of the size of your agency, we all need information that is easily accessible to make our jobs easier. In this presentation, we will discuss what goes into the design, development and deployment of a knowledgebase.

Conceptual Data Mining Using Progressive Methodology and Techniques - Computer Lab (Sally Olterman)

Crime Analysis data comes in many forms including Police Reports, FI cards, UCR data, jail records, etc. The usefulness of this valuable data is determined by the ability to mine the details back out of these various formats and structures. Often times, even within the format of a report, the details get lost in a narrative or synopsis, instead of existing in the pre determined fields. Using the programming language called Regular Expressions, we can supersede the limitations of formats, structure, and arrangement of data. It also brings us the ability to search for conceptual data, proximities of words, and numerous permutations that are impossible in the world of SQL. By following a progressive pattern finding methodology, and using this powerful data mining technique, we can be free of the world of bad data!

Missing / Abducted Children – The Analyst’s Role (Sgt. Don Bellendier)

The U.S. Department of Justice reports that over 2,100 children are reported missing each day. Many of these are family abductions that do not make the media headlines. It is the much smaller number of stranger abductions that top the headlines and are the worst fear of law enforcement. This presentation examines a number of high profile child abductions (e.g., Samantha Runnion, Jessica Lundsford) and reviews the management of these incidents. Both the positive and negative aspects of the investigations are discussed. Being prepared to respond to such an incident is critical due to the time sensitivity of these types of cases. The role of the analyst in the investigation will be discussed.

The Shady Bandit Case Study – Solving a Robbery Series (Brian Napolitano)

“The Shady Bandit” was a month-long robbery series that occurred in the cities of Tempe and Phoenix, Arizona, during the autumn of 2008. The suspect committed a total of nine robberies before being identified and arrested. The presentation will provide a walkthrough of the robbery series, as well as exemplify how tactical analysis was utilized as the series progressed. An important part of the analysis involved crime mapping. The presenter will provide a live, step-by-step demonstration on the process used to create a detailed map which helped to forecast future related incidents in the series by creating a geographic “hotspot.” Additionally, the importance of networking and maintaining communication will be discussed, as they were imperative to solving the case.

Information Management of High Profile Criminal Incidents (Leonard Leedy)

Is your agency prepared to handle the hundreds of leads that could be generated daily by a single High Profile Criminal Incident? Examples are Child Kidnappings, Homicides, Terrorism events, etc. Leonard W. Leedy III, retired detective, now working with ACISS Systems will discuss the procedures involved in managing and disseminating incoming information, from receipt of the initial tip, through distribution, analysis, assignment, response, and case management.

High Profile Criminal Incidents are those loathsome crimes that generate citizen outrage, fear, and apprehension, and a sense of community vulnerability. These crimes usually receive widespread media attention by their nature or celebrity status. These type incidents place a high expectation and demand that law enforcement solve these crimes quickly with arrest and prosecution. Typically law enforcement seeks assistance through the media and citizens for information that can generate a tremendous volume of tips. This information needs to be managed and will task agency resources.

Attendees will receive a Draft of a "Information Management of High Profile Criminal Incidents Action Plan" that could be tailored into an SOP for their agency.

ArcGIS – An Invaluable Tool in Law Enforcement - Computer Lab (Dr. Herb Kuehne)

Desktop GIS has become an invaluable tool for many functions of government. Law enforcement has always mapped crime distributions, often with pin maps on a wall. But desktop GIS has revolutionized how police departments (and especially their crime analysts) are factoring location into their work. This session will demonstrate a number of ways that ArcMap is being used to analyze crime patterns and to alert officers to trends calling for attention.

The demonstration will show several different types of maps that a GIS can produce, but the session will focus on tips and tricks about the processes to generate those products for crime analysis. Topics will include: 1. preparing data for a GIS; 2. issues around geocoding and using xy coordinates; 3. issues with map projections; 4. different ways to show frequencies using points, polygons and various data-joining functions; 5. use of buffers for dealing with sex offenders and drug dealers, etc.; 6. use of the linking function of the Space extension to track auto theft; 7. use of statistical tools for identifying “hot spots” and trends; and 8. use of a districting extension to help define patrol districts.

Several well known software companies offer mapping packages that do many of the functions that will be demonstrated in this presentation. This session, however, will show how a department that does not have any of those resources can use a basic GIS program to accomplish many of the same functions, sometimes even, with greater flexibility than the commercial packages can offer. The goal of the presentation will be to suggest how GIS needs to be part of a crime analyst's tool kit. The demonstration will inevitably show techniques for working with a popular GIS product. Additionally, comments will also describe issues about maps for different audiences as well as about matters of privacy and liability.