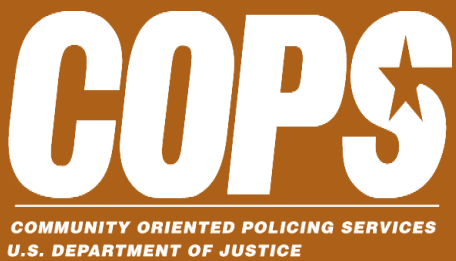
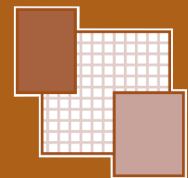


PROBLEM ANALYSIS IN POLICING



...the basic premise in problem-oriented policing is that the acquisition of knowledge informs practice.

–Herman Goldstein

PROBLEM ANALYSIS IN POLICING

**Rachel Boba, PhD
Director, Crime Mapping Laboratory
Police Foundation**

March 2003



The Police Foundation is a private, independent, nonprofit organization dedicated to supporting innovation and improvement in policing. Established in 1970, the foundation has conducted seminal research in police behavior, policy, and procedure, and works to transfer to local agencies the best information about practices for dealing effectively with a range of important police operational and administrative concerns. Motivating all of the foundation's efforts is the goal of efficient, humane policing that operates within the framework of democratic principles and the highest ideals of the nation. The Police Foundation's research findings are published as an information service.

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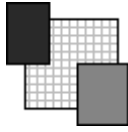


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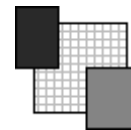
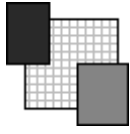


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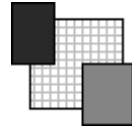


Foreword

Police departments have traditionally been responsible for crime control and prevention strategies. As crime problems have gotten more complex and expectations of the police have increased, traditional responses are becoming less adequate. The need to examine the characteristics and causes of crime and disorder problems prior to developing responses to them has been recognized by academics and practitioners alike. Because the business of police is public safety and not research methodology, data issues, and analytical techniques, agencies have struggled with conducting analysis themselves and have relied on partnering with academics experienced in this type of work. However, academics and practitioners often have different agendas for research and their partnerships have not always produced results that are valuable to both groups. Thus, in order to inform and specifically tailor crime control and prevention strategies, analysis of crime problems within the police agency by staff trained to do so is essential.

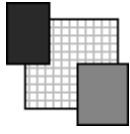
Problem analysis is the process of conducting in-depth, systematic analysis and assessment of crime problems at the local level. In a police agency, problem analysis is conducted by personnel either working within the organization or working very closely with it. Within the problem-solving context, police departments are not research subjects but are the initiators of action research.

On the inside cover of this report, Herman Goldstein is quoted: "...the basic premise in problem-oriented policing is that the acquisition of knowledge informs practice." Thus, problem analysis is the process of acquiring knowledge through review of existing work and analysis of a variety of data to examine the characteristics and causes of problems in the local context which in turn helps to inform the crime control and prevention activities. This report documents the issues, guidelines, and recommendations made by a group of distinguished academics,



practitioners, and policy makers convened by the Police Foundation in February 2002 to discuss problem analysis. We feel it will be a significant contribution to the fields of problem solving and police analysis as well as to the Police Foundation's mission to improve and enhance American policing through innovative research, technology, training, and communication.

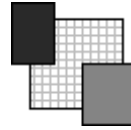
Hubert Williams
President
Police Foundation



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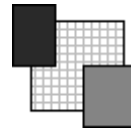
- Professor Ron Clarke, School of Criminal Justice
Rutgers University, Newark, NJ
- Pat Drummy, Director of Administrative Services
San Diego, CA, Police Department
- Professor John Eck, Division of Criminal Justice
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Savannah, GA



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Office of Community Oriented Policing Services
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- Mary Velasco, Research Associate
Police Foundation
- Erin Lane, Research Associate
Police Foundation
- Linda Yoskowitz, Administrative Assistant
Police Foundation

I would like to thank Mike Scott, in particular, for his assistance with the forum, lending his vast expertise in policing and problem solving, and Matthew Scheider for suggesting the forum and for his support. I would like to thank the participants for taking time to review the report and providing comments and criticism; however, the views presented here are my own. Lastly, I would like to thank Mary Velasco and Mary Malina of the Police Foundation for their impeccable editing skills.



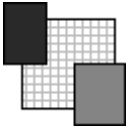
Overview

What are the purposes of this report?

The aims of this report are to introduce and define problem analysis and to provide guidance on how problem analysis can be integrated and institutionalized into modern policing practices. This report is not a “how to” guide on conducting problem analysis, but is a summary of ideas and recommendations about what problem analysis is, what skills and knowledge are necessary to conduct it, and how it can be advanced by the police community, academia, the federal government, and other institutions. The ideas and recommendations in this report come primarily from a two-day forum conducted in February 2002 by the Police Foundation and the United States Department of Justice’s Office of Community Oriented Policing Services (COPS Office) in which a group of academics, practitioners, and policy makers came together to discuss problem analysis and make recommendations for its progress. This report is a culmination of the concepts and ideas that were discussed in the forum and includes specific, relevant statements made by participants. Some of these statements are included as part of the body of the report, and some are included in the margins to accompany the text. Inclusion of these statements provides a voice to those who participated in the forum and also gives the reader a sense of the tone of the discussion.

This report assumes that the reader recognizes that problem-oriented policing and problem solving are valuable approaches in policing and that the reader knows the fundamental principles of these approaches. This report does not define and justify these ideas but discusses how they can be improved by the adoption and advancement of problem analysis. For a broader discussion of problem-oriented policing and specific problem-solving components and examples, please see the end of this report for a list of resources.

From the COPS Office perspective, this problem analysis forum is very important because it further intensifies our prior work and begins to link crime mapping, crime analysis, and problem solving in support of critical thinking in policing.
–Ellen Scrivner



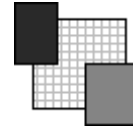
What is problem analysis?

In his book, *Problem-Oriented Policing* (1990, p. 49), Herman Goldstein states, “The problem-oriented approach calls for developing—preferably within the police agency—the skills, procedures, and research techniques to analyze problems and evaluate police effectiveness as an integral continuing part of management.” In this report, this approach is called problem analysis and is defined as:

An approach/method/process conducted within the police agency in which formal criminal justice theory, research methods, and comprehensive data collection and analysis procedures are used in a systematic way to conduct in-depth examination of, develop informed responses to, and evaluate crime and disorder problems.

One important point about Goldstein’s statement and this definition is that problem analysis is a process that occurs within the police agency. Ideally, problem analysis represents a method of providing police agencies with the capability to conduct in-depth, practical research. Yet, while the ideal is to develop a full problem-analysis capacity within every police agency, in reality, that may not be possible or practical. Many agencies, especially smaller ones, must draw on outside research skills to aid them in problem analysis, and even larger agencies may require some specialized expertise from external researchers. What is essential is that police agencies develop an internal capacity to use problem analysis to inform practice and that this type of research is conducted to examine crime and disorder problems, not the police agency itself. This means agencies must know when analysis is needed, what scope is needed, whether they can conduct the analysis or will need outside assistance, how to understand analytical results, and how to translate those findings into new practices.

If problem solving is going to be integrated effectively in a police department, it would help if academics approached their involvement as a way to mentor the people within the police department to do research themselves. What we currently see are academics who conduct research and leave only the results of the study, not the skills and knowledge for the agency to conduct research themselves.
–Rachel Boba



The following ideas are taken from the forum discussion of problem analysis to further clarify this concept:

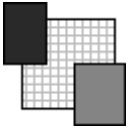
Problem analysis *is not* merely creating maps to see where crimes have occurred. It is not merely conducting statistical analysis on secondary data to compare levels of incidents over time. It is not merely identifying trends and patterns in the frequency or magnitude of crime or supporting the police function, but it is examining the underlying conditions of both the simple and complex problems police are tasked to solve. It is not only determining “who done it” or even “where done it,” but looking at the *why*. Problem analysis is not one-dimensional nor does it warrant only one type of analysis; it is complex and there are often several analytical paths that might lead to viable solutions. Finally, it is not a discrete or static process, but occurs within the problem-solving process and changes by the type of problem or needs of the organization.

Problem analysis *is* broader than crime analysis, as it is currently being practiced, in that it not only supports police activities but can drive them as well. It is action research in that it involves using formalized methods of study with a goal of arriving at practical solutions. It is interpretive, creative, and innovative as well as open-ended and inclusive. That is, it does not presuppose the answers to questions or use solely conventional methods and data to examine problems. It is theory-based and hypothesis-driven. This does not necessarily mean formalized, academic theory, but it can be based on common sense or practically informed theory about the way the world works. It uses hypotheses; that is, it takes a position on what will result from informed responses. It is neither entirely exploratory nor anecdotal, but includes the examination of underlying conditions of crime and disorder problems. It is solution- and prevention-oriented (i.e., not superficially

I think a central idea is that problem analysis is not one person sitting in a room in front of a computer conducting statistical analysis and having results magically appear, but rather that person and other groups of people coming together and analyzing problems with different expertise with respect to the problems.
–Matthew Scheider

Problem analysis is interpretive in the sense that you are divining meaning from information by talking to people and figuring out the underlying causes. It is thinking critically about a problem rather than just relying on what others say about it.
–Karin Schmerler

...problem analysis is really the building of knowledge about behaviors that the police are seeking to affect and about the value of alternative responses.
–Herman Goldstein

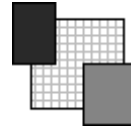


I would argue that the basic premise in problem-oriented policing is that the acquisition of knowledge informs practice. But some argue that we already have a lot of knowledge of use to the police. We gather intelligence about organized crime and about terrorism. We gather facts about crime. We gather statistics for traditional crime analysis and, in COMPSTAT, to achieve greater accountability. But none of these categories of knowledge is what we are trying to acquire with problem analysis....The difference is between knowledge about a crime or crimes and, much more broadly and in-depth, knowledge about a behavioral problem and effectiveness of various responses for dealing with it.
—Herman Goldstein

addressing an issue by analyzing a response after the fact). It is an iterative, dynamic process. It is not static, in that just one approach, one analysis, and/or one response is adequate; rather the process requires a triangulation of methods of analysis, response, adjustment of the response based on additional analysis, and so on. It is proactive and not reactive. It demands partnerships of various agencies and communities for analysis and assessment as well as response, specifically for access to additional data sources and knowledge about a particular problem. Finally, it is fundamental to strategic policing because of its larger scope and focus on formulating long-term solutions to problems.

Why is problem analysis important?

The role of analysis in problem solving is vital because it involves the in-depth examination of underlying factors leading to crime and disorder problems for which effective responses can be developed and through which assessment can be conducted to determine the relevance and success of the responses. Public safety problems addressed by police agencies are both simple and small in scope as well as long-term and chronic. Although admittedly the police alone (or even as a lead) cannot provide solutions for major societal problems that lead to crime or social disorder, problem analysis can inform effective problem-solving practices through systematic, thoughtful analysis of all types of problems. This is the key to making a significant impact on public safety and disorder. Conversely, in a report entitled, *Using Analysis for Problem-Solving: A Guidebook for Law Enforcement*, Tim Bynum states that “responses based upon inadequate or incomplete analyses will not address the causes of the problem and are much less likely to produce the desired results” (2001, p. 18).



What is the current state of problem analysis within problem solving?

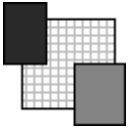
In a recent COPS-funded study that reviews the last twenty years of problem-oriented policing, author Michael Scott (2000, p. 7) discusses how analysis and evaluation within police agencies have been the slowest areas to develop, although problem solving and problem-oriented policing have blossomed in both concept and practice: “Problem analysis remains the aspect of [problem-oriented policing] most in need of improvement.” He sees the need for an increased focus on these areas to ensure that the problem-solving process is practiced effectively. He also states that police departments have become very creative and adept at developing and carrying out responses to problems, but internal knowledge and use of crime analysis and systematic research and evaluation have not paralleled this effort.

Similarly, the national assessment of the COPS-funded “Problem-Solving Partnership” program indicated that analysis was the weakest phase of the problem-solving process (Police Executive Research Forum, 2000). This same study found that police often have difficulty “clearly defining problems, properly using data sources, conducting comprehensive analysis, and implementing analysis-driven responses” (Bynum, 2001, p. 2). These observations from the field showed that police are generally good at identifying problems but experience difficulty with problem analysis (Bynum, 2001, p. 7).

Why is analysis so challenging?

The first and most obvious reason that problem analysis has lagged behind responding to problems is that, historically, catching the bad guys has been the primary focus of the police, rather than analyzing crime and disorder problems. Police officers and detectives are trained to respond to one call at a time or to investigate one crime at a time. A good detective may link a

If you ask cops, “Do you know about burglars? Do you know about robbers? Do you know about thieves?” They can say they know about burglars, they know about robbers, they know about thieves. The difference between that and problem analysis is whether they know about burglary, about robbery, about theft.
—Ron Glensor

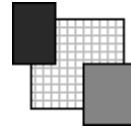


number of crimes together through a similar perpetrator and/or modus operandi but this is still examining the crime on an individual level. Thus, policing accumulates and values a different kind of knowledge, that is, experiential knowledge. Research knowledge has not been accumulated or valued as highly. The key is to blend these two types of knowledge as each improves the value of the other.

Conducting systematic analysis requires an additional perspective for policing—long-term data analysis from a variety of perspectives that is focused on discerning the causes/facilitators of specific crime problems, as well as short-term data analysis that is focused on immediate trends and series or individual cases. One example comes from a problem-solving project that analyzed auto theft in the Southwest United States. Both examination of longitudinal records management data as well as interviews of auto theft detectives were conducted. Detectives were convinced that stolen cars were being taken to Mexico. However, analysis of the five years of data showed that over eighty-five percent of the vehicles were recovered locally. Why were the perceptions of detectives not supported by the long-term data? The detectives received and investigated less than ten percent of all of the auto theft reports because of the lack of evidence on the other ninety percent of cases. Their assumptions were based on their investigations of individual cases and their personal experiences, rather than on all cases over the five-year period.

[The police] get it. They may not document it well, and they may not have a deep interest in being able to prove what they did worked. They just need to get it off their plate because they absolutely live in the now, as do their administrators, as do their short-tenured political leaders and their political environment.
—Ed Flynn

Until recently, police agencies had neither the data nor the technological resources to analyze large amounts of data. In fact, many still do not have crime reports or calls for service in an electronic or easily accessible format. This also has hindered the incorporation of analysis into policing. In addition, author Tim Bynum discussed many more impediments to analysis in police agencies in his report entitled, *Using Analysis for Problem-Solving: A Guidebook for Law Enforcement*. One of the impediments he lists is the emphasis by police on rapid response to

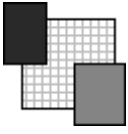


problems and the perception that in-depth analysis of these problems requires too much time or resources. He also notes the police perception that all the information needed has been collected and, in some cases, responses are based on hunches, experience, or traditional approaches. Lastly, he asserts that there is the perception that once analysis is complete, it cannot be revisited (Bynum, 2001, p. 15).

The report

The perspective this report takes is that analysis is crucial to problem solving and, more generally, to more effective policing. What follows is a discussion of:

- 1) the origin of this report, the Problem-Analysis Forum 2002;
- 2) the comparison of problem analysis, beat-level problem solving, and crime analysis;
- 3) the skills and knowledge needed to conduct problem analysis;
- 4) the roles that various institutions and agencies within the policing community can take to assist in the integration and advancement of problem analysis; and
- 5) an agenda for advancing problem analysis.



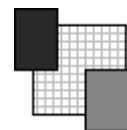
Problem-Analysis Forum 2002

On February 7 and 8, 2002, the Police Foundation's Crime Mapping Laboratory and the COPS Office hosted a Problem-Analysis Forum. The overall purpose of the forum was to begin a dialogue about problem analysis, develop ideas and recommendations that will be the basis of future work, and accelerate the advancement of problem analysis in the police community.

More specifically, the goals of the two-day forum were to examine how problem analysis can best be integrated and institutionalized by discussing problem analysis, problem solving, and crime analysis; developing recommendations about the skills and knowledge necessary to conduct problem analysis; and making suggestions on how various entities (e.g., academia and the federal government) can assist the advancement of problem analysis in policing.

The following people, with experience in academia, applied research, line-level policing, police management, and crime analysis, participated in the forum (for their biographies, see the end of the report):

- Dr. Rachel Boba, Director, Crime Mapping Laboratory, Police Foundation, Washington, DC
- Professor Ron Clarke, School of Criminal Justice, Rutgers University, Newark, NJ
- Pat Drummy, Director of Administrative Services, San Diego, CA, Police Department
- Professor John Eck, Division of Criminal Justice, University of Cincinnati, Cincinnati, OH
- Ed Flynn, Secretary of Public Safety, State of Massachusetts
- Ron Glensor, Deputy Chief, Reno, NV, Police Department



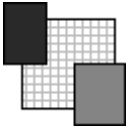
- Professor Herman Goldstein, University of Wisconsin Law School, Madison, WI
- Bob Heimberger, Sergeant, St. Louis, MO, Metropolitan Police Department
- Professor Gloria Laycock, The Jill Dando Institute, University College, London, UK
- Karin Schmerler, Research Analyst, Chula Vista, CA, Police Department
- Michael Scott, Police Consultant, Savannah, GA

Hubert Williams, President of the Police Foundation, and Dr. Ellen Scrivner, former deputy director of the COPS Office, introduced the forum and participated the first morning. Also representing the Police Foundation, the COPS Office, and the National Institute of Justice were:

- Dr. Matthew Scheider, Social Science Analyst, COPS Office
- Veh Bezdikian, former Social Science Analyst, COPS Office
- Nancy Leach, Social Science Analyst, COPS Office
- Debra Stoe, Acting Director of MAPS (Mapping and Analysis for Public Safety), National Institute of Justice
- Mary Velasco, Research Associate, Police Foundation
- Erin Lane, Research Associate, Police Foundation
- Linda Yoskowitz, Administrative Assistant, Police Foundation

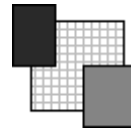
The group spent two days discussing many topics surrounding the integration of problem analysis in police agencies and the institutionalization of problem analysis throughout the police profession. The goal was to formulate concrete ideas and

The potential here is substantially beyond just another publication for the field. It could be the seeds for an array of developments that, taken together, are much larger, much greater, and much more valuable and productive than a single publication.
—Herman Goldstein



recommendations for the advancement of problem analysis. Specifically, the participants discussed:

- A working definition of problem analysis
- The distinction between problem analysis and crime analysis
- A model job description and ideal qualifications for a problem analyst
- The education and training that would best prepare an individual to conduct problem analysis
- The integration and institutionalization of a problem-analysis function within a police agency
- The role of academia in advancing problem analysis in policing
- The role of the federal government in advancing problem analysis in policing
- The role of other organizations in advancing problem analysis in policing
- An agenda for advancing problem analysis



Problem Analysis: Discussion and Debate

A working definition of problem analysis was developed by this author from the forum discussion:

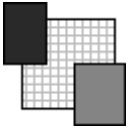
An approach/method/process conducted within the police agency in which formal criminal justice theory, research methods, and comprehensive data collection and analysis procedures are used in a systematic way to conduct in-depth examination of, develop informed responses to, and evaluate crime and disorder problems.

The following sections contrast problem analysis with beat-level problem solving and crime analysis as well as discuss more comprehensively what problem analysis is and, importantly, what it is not.

Problem analysis and beat-level problem solving

It is important to begin the discussion of problem analysis by distinguishing it from beat-level problem solving and the analysis that is used in that context. Problem analysis is different from beat-level, problem-solving analysis principally in scope and depth. In beat-level problem solving, officers typically work to identify and resolve small-scale problems. The use of analysis at the beat-level is fairly limited. Officers may use some crime counts or simple analysis of data but rarely need to conduct an in-depth examination of a problem or formally evaluate the response. Often the response may not warrant an assessment because the results are readily apparent. For example, after some analysis, an officer may determine that a trailer park is problematic because residents of two neighboring trailers have an ongoing dispute and call the police on a regular basis. If the officer responds to this issue successfully, the calls for service from the residents will decrease

I find in a lot of police initiatives and a lot of problem-solving projects, the analysis is really not much more than a description and a portrait of the state of the problem. There is not a great deal of going beyond that to really inquire what the underlying conditions are—forming a hypothesis about what is causing that problem.
—Mike Scott



as will the calls from the park itself. Determining whether or not this response was successful will be quite obvious.

In the minds of most police who I have worked with, and using the SARA model as an example, analysis is the most difficult thing for them to do, and they are very happy to get it over with at the second stage. They look at SARA as linear, and once it is done, they say, "Hey, I don't have to do that again. Let's get on with the business of fixing the problem."

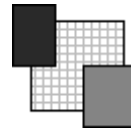
—Ron Glensor

If you consider the crux of our business is catching bad guys and will always be so, then clearly a core part of our business is always going to be analysts who can produce information and enable us to do something more effectively in a classic tactical sense. The difference then is that problem analysis very often has not much to do with individual crimes or series of crimes, but with public safety and disorder problems.

—Ed Flynn

In contrast, problem analysis takes a more general approach in which analysis is used to investigate, respond to, and assess the impact of responses on problems. This is not to say that the problems addressed by problem analysis are only large-scale, but rather that the analysis used to address complex problems needs to be systematic, in-depth, and evaluative. For example, there may be a small-scale, yet chronic, homeless problem in a particular neighborhood that requires a problem-analysis approach. Where beat-level, problem-solving analysis might include a basic analysis of calls for service relating to a few individuals, a problem-analysis approach might include interviews of the residents and even the homeless individuals, as well as data analysis. At the beat-level, the initiative may be evaluated by arrests and the apparent absence of homeless individuals. However, the problem-analysis approach may seek to evaluate residents' perceptions of the problem as well as learn where the homeless individuals relocated in order to determine whether they were simply displaced or if the homeless problem was, in fact, reduced.

To illustrate with a large-scale example, someone conducting beat-level problem solving may identify a graffiti problem in a particular neighborhood through analysis of criminal damage incidents, work with the community to remove the graffiti, and arrest the offenders. An approach using problem analysis would investigate a graffiti problem by collecting citywide or regional data over a long period of time to determine the various types of graffiti (e.g., tagging, gangland markings, etc.) as well as specific symbols and messages portrayed in the graffiti. The problem-analysis project may take much longer but would be much more comprehensive, addressing a longer-term, larger-scoped problem and seeking a long-term solution. Part of this solution may be identifying offenders and removing graffiti as the beat-level analysis showed to be successful. However, problem analysis may

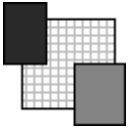


also reveal that, in the long term, other responses can be successful, such as increasing the natural observation of and limiting accessibility to graffiti-prone locations. Thus, the distinction in these two examples of beat-level, problem-solving analysis and problem analysis is both the scope of the problem as well as the level and systematic nature of the analysis and evaluation. In addition, a comprehensive problem analysis would uncover and/or point to effective responses based on criminological theories or disciplines, such as the rational choice theory or situational crime prevention.

Problem analysis and crime analysis

We assert that problem analysis is different than crime analysis in its current practice. In a recent COPS-funded study of 1,358 large and small police departments, O’Shea (1999) found that even though the departments conduct a wide range of crime analysis, the most common type of activity police agencies report is focused on short-term pattern and trend identification, or “tactical crime analysis,” while less time is spent on “strategic crime analysis” such as victim analysis, spatial analysis, program evaluation, and long-term, crime forecasting. These results suggest that departments are not focusing their crime analysis efforts on the problem-solving process or on action research, but have chosen to focus on analysis that supports traditional policing practices.

There was much debate over this topic in the forum; however, there was consensus that, even though crime analysis and problem analysis are interrelated and in an ideal world would be one in the same, the current focus of crime analysis warrants distinguishing it from problem analysis. Problem analysis is a proactive form of analysis in which formal theory, research methods, data collection, and statistics are used systematically to examine both simple and complex problems as well as to point the way to more strategic interventions that address and prevent a whole class of crimes or incidents.



The following statements represent various points of discussion in the forum.

There is much more of a proactive element to problem analysis and more of a reactive element in crime analysis.

–Herman Goldstein

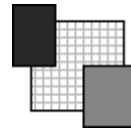
It just occurred to me that crime analysts right now are being urged to do more advanced kinds of analyses that are not necessarily consistent with problem-oriented policing principles, like advanced tactical predictive modeling to apprehend suspects. How does this fit into either a discussion to move a crime analyst away from that direction or to merge the responsibilities of a crime analyst with problem-oriented policing kinds of functions?

–Veh Bezdikian

Problem analysis is not only a process but also a partnership between the analyst and the police in which the analysis is genuinely part of the process, not just, “Tell us where the problem is and we will do something about it.”

–Ron Clarke

I think it is unfortunate that analysis has been associated with crime in this context because crime analysts are not actually analyzing crime, but creating crime stats. There is nothing wrong with the chief wanting to know how many burglaries there were this week, or asking for a graph of the robberies, but it is a very different function from problem analysis, and it is not “analysis,” it is “blobology.” Blobology is cool



Problem Analysis: Discussion and Debate

and people need blobology, but not to muddle the two; the problem analysts need the crime data as part of a larger process of analysis.

–Gloria Laycock

I think that problem analysis should be solution-oriented. It is not just describing the nature of the problem, but it is sequentially exploring various hypotheses about the problem, which is not normally the sort of analysis that crime analysts really do.

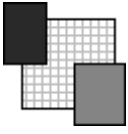
–Ron Clarke

Crime analysis has not addressed questions that problem analysis is centered on: “What did you mean by this problem? Why do you think it looks this way? Why are these solutions particularly useful? Even if they are useful, is there any reason to believe they would work for any length of time?”

–John Eck

There are a lot of pitfalls in separating problem analysis and crime analysis. I am not sure it is feasible or advisable to do this. But saying they are one and the same right now in most police departments is not accurate.

–Karin Schmerler



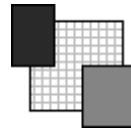
Integrating Problem Analysis into a Police Agency

One of the objectives of the forum and of this document is to provide guidance to police agencies on how to integrate problem analysis into their organizations. Because organizations differ, providing specific guidelines and job descriptions is not as important as providing themes and considerations for members of an agency to consider when thinking about integrating problem analysis. The following section presents a more practical discussion of bringing problem analysis into a police agency. It includes a discussion of the problem analyst, the knowledge and skills needed to conduct problem analysis, the role of problem analysis in everyday policing, where problem analysis should be based in the organization, and the support an organization can provide for problem analysis.

What is a problem analyst?

Problem analysis is an approach or a process and could be conducted by individuals in a variety of positions within a police agency (e.g., crime analysts, police planners, police officers, detectives, community service officers, or police managers and administrators). Ideally, a police agency would employ a problem analyst whose education and training has focused on action research and whose function it is to conduct problem analysis. However, most agencies in the United States are fairly small and do not employ any type of analyst, much less a problem analyst. While it is recommended that a specific individual be hired to conduct problem analysis, the following discussion applies also to external researchers or consultants hired to conduct problem analysis within a police agency or existing police personnel who have problem analysis as one of several work responsibilities.

If you have six, seven, or ten analysts, you can afford to have specialists—you will have your technical expert, your statistical expert. But, generally, if you have only one or two analysts, you are going to have to push for someone who has a good rounding of all those skills.
—Pat Drummy



What are the knowledge and skills necessary to conduct problem analysis?

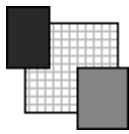
The following knowledge and skills are important for conducting problem analysis and combine both the operational perspective of a police agency as well as an analytical perspective. Ideally, an individual conducting problem analysis would possess *all* of these, but that is nearly impossible. Thus, what is listed and described here provides both a comprehensive picture of the requirements of the problem-analysis function as well as guidance to develop a job description for a problem analyst or new aspects of current police analyst positions. At the end of the report, there is a list of resources for the types of knowledge discussed here. It is by no means an exhaustive list but is intended to identify material particularly relevant to these topics.

Knowledge

Knowledge consists of the facts or ideas acquired by study, investigation, observation, or experience. To conduct problem analysis, it is recommended that the individual have knowledge of the following:

Criminological theory. The knowledge and use of criminological theory is important to examining and understanding crime and disorder problems. Problem analysis does not dictate that an individual know every criminological theory in-depth, but s/he should have a working knowledge of theories that have contributed the most to understanding the local crime and disorder problems police agencies face. Theories that focus on the criminal event and the opportunity for crime are preferable to theories that focus solely on the criminal. Many relevant theories are drawn from the specialized fields of environmental criminology and situational crime prevention (e.g., rational choice theory, routine activity

It ought to bring home to some people that you do not just get a cop off the street, call him an analyst, and say go do it. You know, there is a body of knowledge and understanding that is necessary to this process.
—Gloria Laycock

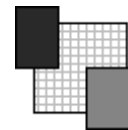


theory, crime pattern theory, deterrence theory). Especially relevant are theories that explain the clustering of crime—repeat victimization, repeat offending, and repeat locations (hot spots).

Literature. In a general sense, the problem analyst should be aware of both classic and current research literature related to problem-oriented policing, situational crime prevention, crime problems, action research, statistics, and research methods. However, even though the academic literature on policing is quite relevant, oftentimes it is inaccessible to practitioners, both in the sense that it is physically inaccessible as well as inaccessible in its written form (e.g., using research and academic rhetoric). Thus, it may require some translation to be useful for practitioners and that is an important skill of the problem analyst (see the Skills section for further discussion). In addition, many of the reports and case studies produced by the federal government are important for problem analysis as they provide practical examples and evaluations.

Research methods. The problem analyst should have an understanding of basic research design, sampling methods, modes of observation (experiment, field research, surveying, evaluation), data collection and coding, process and impact evaluation, and ethics and politics of social research. In the context discussed here, the problem analyst is the expert in research methodology within the police agency. In addition, problem analysis encompasses more than just secondary data analysis, as it may be the case that primary data will be collected through surveys or observation.

Data and data integrity. The problem analyst must understand the basic types of data and databases as well as issues of reliability and validity surrounding data in general

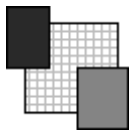


and those issues particular to police data. For example, one must know the difference between Uniform Crime Report frequencies (i.e., aggregate numbers coded hierarchically) reported to the FBI and crime report frequencies (i.e., records in a records management system of a police agency).

Technology. The problem analyst need not know how to fix a computer but should have basic knowledge about the advantages and limits of technology both for data collection and analysis.

Statistics. The problem analyst should have knowledge of measures of descriptive and inferential statistics as well as forecasting. A master's-level knowledge of social science statistics is appropriate (sufficient, for example, to understand concepts such as multiple regression analysis), and a particular knowledge of cross-sectional and time-series analysis is recommended.

Geographic information systems (GIS) and spatial analysis. Because of the importance of geography and crime and the focus of problem solving and crime prevention on "places," the problem analyst must have knowledge of geographic information systems technology as well as the nature of spatial data and analysis. One must understand how a GIS is used and the types of data that are necessary and that can potentially be analyzed. Knowledge of analysis techniques and their appropriateness and practicality in policing is also important. For example, single symbol maps are used often in policing. However, in a single symbol map, when two incidents occur at the same location, the symbols are placed exactly on top of one another and thus cannot be distinguished. On a single symbol map depicting burglaries, it would be impossible to determine the number of incidents (without a list of cases).



There needs to be an understanding of policing, of street policing, of crime problems, and how they operate on the street, which I think many civilian analysts who have not spent a lot of time either riding with police officers or serving as police officers lack. There are insights about problems that really only come from some kind of knowledge of what happens on the street on a daily basis.
—Mike Scott

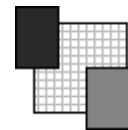
It is important to have familiarity with the dynamics of policing, its complexity, and the changing nature of the police function—what it is today and what we think it ought to be. It is important, too, to have an in-depth understanding of the police role within the criminal justice system, the extent to which they depend upon it, both the use and abuse they make of it, and what the consequences of all of these dynamics are...Because you are asking the analyst to look at a behavioral problem in relation to these dynamics and to be open to the notion that there are potentially more effective responses than just detection and arrest.
—Herman Goldstein

Using graduated symbols or more complex methods may be more appropriate. It is important for the problem analyst to be aware of the capabilities of the technology, the various types of spatial data and techniques, as well as their relevance and practicality to problem solving and police analysis.

History and current state of policing. It is important that a problem analyst working in a police agency understands the evolution of policing and its current state. Knowledge of policing history as it has evolved over the past century and a half is important. Major police research findings regarding the effectiveness or ineffectiveness of accepted practices such as preventive patrol and rapid response, for example, are of particular importance. Although problem analysts might not be intimately familiar with the wide range of issues that confront police executives and police scholars, they should have some general appreciation of how policing has evolved and the role of analysis within conventional expectations and practices.

Dynamics and nature of policing. The problem analyst should have knowledge of the nature of police organizations and police culture and, more specifically, the history and nature of the particular agency where s/he is employed. The analyst must understand the ways in which police officers, detectives, civilians, management, etc. interact with one another. In addition, they must understand the nature of street policing; that is, how crime and disorder are dealt with by line-level officers.

Policing and the criminal justice system. Related to the previous category, this includes a basic understanding—what might be taught in an introductory criminology course—of how police fit into the criminal justice system.



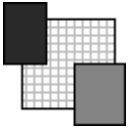
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Problem-oriented policing. Problem analysis is a result of Herman Goldstein's concepts of problem-oriented policing and problem solving. Thus, the problem analyst should have intricate knowledge of these concepts. In addition, the analyst should have knowledge of the practical application of these concepts including the successes and failures over the past twenty years.

Understanding crime problems. Problem analysis requires an understanding of crime, disorder, and public safety problems. This is not to say that the analyst understands all different types of problems. However, over time and through literature reviews and practical experience, the analyst would develop an understanding of the complexities of various public safety and crime problems as well as their context in his/her own jurisdiction.

Urban issues and policies/strategic planning. Because the problem analyst will be examining issues in a context much broader than policing, knowledge of general aspects of local government, such as urban and rural development policies, is important, as many crime problems and their responses are not just police-centered. The problem analyst is seen as a person with a "world view" in the police department, having the ability to ask the appropriate people outside policing the appropriate questions about a particular problem. More specifically, the problem analyst should have knowledge of strategic planning in a general sense and how it is practiced in his/her agency. It is important that the analyst *not* be the person responsible for strategic planning, but rather be informed about the process and contribute to its development in an agency. In an agency that is practicing problem-oriented policing, the problem analyst will be an important contributor to a strategic plan.

It is important that such a person have at least some understanding of urban issues, urban affairs, urban policies, forms of regulation, the responsibilities of different levels of government—all of which connect with the problem that they would be examining.
—Herman Goldstein



Skills

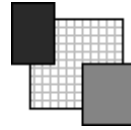
A skill is the ability to use one's own knowledge effectively in a particular situation. The following are skills important to any professional, but are described here by how they are important to the problem analyst:

The analysts are not the experts in street policing, officers are. The analysts are the experts in theory, research, and statistics, and each group can contribute to problem analysis by communicating with one another.

—Rachel Boba

Communication. There are several types of communication skills that are important to the problem analysis function. The first is interpersonal communication with a variety of people both within the police organization and outside of it. Inside the police organization, individuals with whom it is important to communicate range from officers and sergeants to commanders and chiefs, as well as civilian employees such as records clerks, volunteers, call takers, and dispatchers. This is an important skill for problem analysts in that it is often necessary to interview individuals to find out more about a problem or to work with them to obtain data sources or other information. Additionally, communication with others outside the police organization, such as citizens, victims of crime, offenders, representatives from other police agencies, and academics is also important. The individual conducting problem analysis is responsible not only for obtaining information but may also be responsible for being the intermediary between the police and academics or the federal government. While it may seem intuitive that analysts need to have these skills, they also need support from police management to conduct this type of communication. In the forum, Pat Drummy provided an example of how interpersonal communication is a challenge in a police organization:

We started the crime analysis unit with two analysts who we hired to do the work, and we also had two officers in the unit.



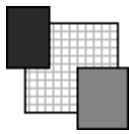
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Because we knew that the officers would not talk to analysts, the analysts would develop the information, hand it to the police officer in the unit, who would walk down the corridor into the investigator's office and say, "Here is the information," and the investigator would say, "Well, this is very, very interesting. Could you give me a little more information?" And the officer would say, "Just a second, I will get it for you." And go back to the analyst to get it.

The second type of communication is presentation skills. An individual conducting problem analysis must be able to present various types of information, such as analysis results or an overview of a project, to various types of audiences, including police personnel, city government officials, community groups, professional groups, etc. Developing and making presentations entails deciding what information to present and how, and often requires political, practical, and ethical considerations.

The third type of communication is writing skills. The problem analyst, more so than the traditional crime analyst, will be tasked with writing research proposals and comprehensive research reports that include a literature review, methodology, and statistical analysis. The analyst will also be responsible for executive summaries of the research work for particular audiences as well as for taking material (e.g., complex research by others) and interpreting it for the police audience.

Another type of communication skill is marketing. This includes being an advocate of problem analysis. The police community is not 100 percent supportive or knowledgeable



about problem solving and, even in a department that has hired an individual to conduct problem analysis, all members may not believe in it or understand it. Thus, the problem analyst must have marketing skills to explain and demonstrate how important problem analysis is and what it can do for the department and the community. The proactive aspect of marketing is probably the most important aspect of this skill, and the analyst should be motivated to seek out, talk to, and ask questions of these colleagues, rather than wait for them.

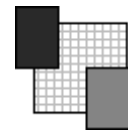
Another type of communication skill is facilitation. In the context of developing a problem-solving project, a problem analyst may be tasked with bringing a group of relevant individuals together to outline the process or discuss an issue. Facilitation skills are important in this task and include organizing the meeting, being objective, keeping the group on task, obtaining consensus on concrete outcomes from the meeting, and making sure everyone participates and is heard.

Lastly, one of the most important communication skills is listening. It is not enough to examine data, collect new data, and conduct a literature review for a project; asking and listening to officers, civilian employees, and the community about their experiences and perceptions of a particular problem or set of problems is important. Much of the knowledge that exists in police departments is based on experience and can often be anecdotal. However, it is the responsibility of the problem analyst to take in a variety of experiences and use that information to contribute to a comprehensive picture of a problem.

Literature review skills. An important aspect of problem analysis is learning from others' successes and failures and presenting that information to make an argument or to

I think that, speaking on behalf of analysts, there is such a pressure on us to get out solutions that we tend to go through a linear process as quick as we can just to produce analysis so the officers can respond. We forget the creativity that comes from brainstorming and critical analysis.

—Pat Drummy



Integrating Problem Analysis into a Police Agency

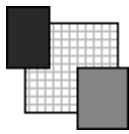
inform a research project. Thus, problem analysts need to have the ability to synthesize relevant literature about a topic for various audiences that might include police management, federal government grantors, journals, media, and community groups. The problem analyst should also have the skills to obtain the relevant literature (e.g., through the Internet or through searches of criminal justice periodicals databases).

Critical thinking. Critical thinking is one of the most important skills in conducting problem analysis. Critical thinking is not knowledge about a problem but is a skill of examining and thinking about a problem. It begins with questioning what others believe to be fact and realizing that there is more than one way of examining a problem. Much of what we think about crime problems in policing is based on what we know from personal experiences and what we find from examining secondary data. Taking such information as fact and as representing the problem can be flawed. Thus, it is crucial that the problem analyst look at everything with a critical and questioning eye.

Research skills. The problem analyst must have basic research skills which include generating hypotheses and developing a research methodology to test the hypotheses, that is, developing ideas that need testing about a particular problem and constructing research and analysis to test them appropriately. Knowing the various types of research and their components is one thing; applying them appropriately is another. This is particularly important because problem analysis occurs in a practical context, and much of what is learned in formal research methodology courses may need to be altered as it may not be realistic or practical.

Use of technology. Conducting problem analysis requires rigorous use of various types of software to collect, code,

It is not just sitting there expecting something to hit you in the eye. It's actually proactively milking that data...having some thoughts in your head about what you're looking for.
—Gloria Laycock

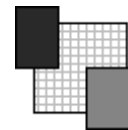


and manipulate data as well as conduct analysis. The problem analyst should have technical skills and experience using word processing, database, and mapping software. The problem analyst will not only need these skills in order to analyze and present data, but may also be called upon to analyze future technology needs of the problem-analysis function or the agency as a whole.

Data. The problem analyst will be working with many different types of data sources and data formats. As noted earlier, the analyst should have knowledge of the various databases and issues of data integrity. In addition, the problem analyst should have data manipulation skills which include the ability to collect and code primary data, create databases, and work with secondary data (e.g., recoding, computing and combining variables, and constructing data queries).

Project management. Problem-analysis endeavors can be fairly large, complex projects; thus, the problem analyst should have organization, time management, and supervisory skills to oversee and successfully implement these projects. Project management may include organizing problem-solving partners, collecting and managing large amounts of data, organizing and facilitating meetings, and preparing interim and final reports. These tasks can quickly become overwhelming if the problem analyst is not skilled in project management.

There are many specific skills and types of knowledge important to problem analysis. An overview such as this informs the assertion that problem analysis is a more in-depth form of crime analysis as it is being practiced today. Although it may be difficult to find one person who has all of these skills and knowledge, an individual can be hired with some of the skills and knowledge and can work to obtain more over time. For example, an agency may hire an



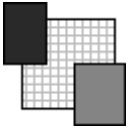
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individual with a degree who has formal research and statistical training but not practical experience. The knowledge of police organizations, crime problems, and police data would be obtained once the person began working, provided that person had a proactive approach towards being involved, listening, and learning. One of the most important skills in this and any case is the person's curiosity and critical thinking ability as these are the skills that put the analyst in the position to obtain knowledge they may not have and provide the police agency with an alternative perspective.

Overall, it is recommended that a problem analyst come into a position with a master's degree or equivalent level of skills, knowledge, and experience, particularly about criminology/social science theory, research methods, and statistics. The individual's knowledge and skills should be sufficiently advanced to permit him/her to be proficient in performing the basic tasks essential to problem analysis. For example, if the extent of an analyst's knowledge is mean and standard deviation, s/he is not going to be able to apply these statistics easily. However, if s/he knows much more advanced statistics, s/he will know mean and standard deviation very well and be able to apply it appropriately. If the analyst attempts to apply limited knowledge, it would be difficult to determine its proper use and appropriateness to the situation without outside assistance.

An agency could avoid this problem by requiring either a master's degree or a bachelor's degree with a certain number of years of experience. A minimum requirement of a bachelor's degree is recommended. This would help to assure, but may not guarantee, that the problem analyst has experience conducting literature reviews, constructing and implementing research projects, and has adequate theoretical training. Additional testing and a thorough interview process for such a position should be combined with these minimum requirements. It may be the case that a police agency does not have personnel adequate to judge the skills and

To be an effective problem analyst, it is necessary to be academically and scientifically curious, to always be wondering why things are the way they are and how they might be made different.
—Mike Scott



knowledge of a potential problem analyst, in which case academics and researchers can assist in the selection process.

What is the role of problem analysis in a police agency?

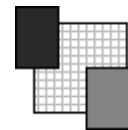
Interestingly, there are already positions in policing that require many of the skills, knowledge, and organizational support described thus far. However, many of these individuals are responsible for crime analysis, evaluation and research, strategic planning, or grant writing. The problem analyst is distinguished from these types of positions in that the problem analyst is linked directly to the problem-solving process and the operations of the department.

The fundamental purpose of the problem analyst is to participate in the problem-solving activities in the department. Much of what a problem analyst does would overlap with many of the duties of other positions in a police agency. Ideally, these duties would not be included as the primary responsibilities of a problem analyst because they would detract from the problem-solving process. For example, one may argue that resource allocation should be a responsibility of a problem analyst, since often a response to a particular problem involves directed patrol. However, it might be useful for a problem analyst to help construct a staffing plan that would address a particular problem and be part of a response in a problem-solving context. It would not be advisable for a problem analyst to conduct the resource allocation analysis for the entire department, as this duty is not directly relevant to the problem-solving process.

Where should problem analysis be placed within the police organization?

Based on the necessary skills and knowledge, once an individual is selected to conduct problem analysis, where does s/he fit in the police organization? There are two considerations in placement.

The person conducting problem analysis should participate in weekly staff meetings as well as other operations activities. Because when we're talking policy, when we are talking operations, we want that person sitting there as the expert to be able to ask the tough questions: "How should we be thinking about this problem?" "What does this relate to?"
—Ron Glensor

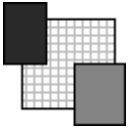


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The first is where to place the problem-analysis function within the organizational chart/chain of command, and the second is the physical location of the office(s) of the person conducting problem analysis. Generally, the problem-analysis function should have a relatively prominent position in the organization in both contexts.

Organizational placement. There was some debate on the issue of organizational placement by participants in the forum. Some felt that the problem analyst should be independent of the chief executive in order to have an independent perspective on problems in the community and not be tasked with meeting all of the special information needs of the chief's office. Others felt it was critical that the function report directly to the chief to give the position legitimacy and status, similar to how the chief budget officer and the internal affairs commander report directly to the chief. This would also provide the problem analyst access to the entire police department and the influence necessary for making meaningful suggestions to the chief. Still others felt that it would not be necessary for the problem analyst to report to the chief—only that the analyst be able to have periodic contact with the chief, command staff, managers, supervisors, patrol officers, crime analysts, and other departmental staff.

It is important that the problem-analysis function have prestige within the organization but also have a neutral placement. This would prevent problem analysis from being focused on one particular area of the department or another (e.g., patrol vs. investigations). That is, if this function is supervised by a specific division, it may become less neutral by doing work for that division only, since the person conducting problem analysis reports to the head of that division.



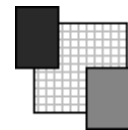
Physical placement. The placement of an individual conducting problem analysis in a particular office also warrants consideration. It is recommended that the office provide reasonable access to all areas of the department. Access to the chief and upper management as well as to the line-level staff is important, although this is when the proactive nature of the problem analyst comes into play. This person must make an effort to be seen by and work with officers, detectives, dispatchers, records clerks, and the crime analysts, which means leaving the office and approaching them. This will encourage interaction, which in time will build a rapport for collaborative research.

The placement of an individual conducting problem analysis will vary by size of an agency. What is appropriate in a smaller agency employing one problem analyst might be different in a larger agency with a team of problem analysts. For example, a senior-level problem analyst might supervise a number of problem analysts who are placed in decentralized locations. The supervising analyst would then be located at central headquarters and assume more administrative and managerial tasks. The importance here is that the problem-analysis function, however it is operationalized, is accessible to senior-level police personnel.

There was much discussion about whether the problem analyst should be in the same office as the crime analyst or police planner. It is recommended that the problem analyst be located separately (i.e., in a different office) but close to these individuals (e.g., on the same floor or in the same building). This recommendation stems from the concern that the problem analyst would be drawn into doing tactical crime analysis and day-to-day planning work. It is important that the problem analyst be free from this type of work, but s/he should have a working relationship with the

It might be helpful to think in terms of having two offices—one office having a label on the door that says “Problem Analysis” and the other office having a label on the door that says “Crime Analysis,” with an understanding that if the people in Problem Analysis want something from the Crime Analysis people, they can go down the hall and get it to use in their analysis and vice versa.

—Herman Goldstein



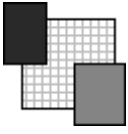
crime analyst and/or police planner since they may need information from one another and are both in the analysis business.

What does a problem analyst need from the organization?

As discussed above, the problem-analysis function should have access to all levels of the department and requires a high level of skills and knowledge. Thus, a problem-analysis position demands a salary that is comparable to other professional staff salaries in the police agency. Obviously, the actual salary would depend on the size and location of the police agency within the United States.

In addition to hiring an individual with appropriate skills and knowledge and paying them an appropriate salary, there are many more things a police organization can do to support problem analysis. Because problem analysis has not been part of everyday police activities, a police organization must make a conscious effort to support its integration and acceptance. Most importantly, the problem-analysis function must be supported by the management of the organization. This support is manifested in many ways, but it is grounded in the attitude of the management staff and how problem analysis is addressed throughout the organization. The problem-analysis function must be spoken of with respect and an emphasis on legitimacy and, as discussed above, placed in a prominent position in the department. In the forum, John Eck goes so far as to say that support by management is much more important than placement:

Where [the problem-analysis function] is located in the organization is less important than the unambiguous support from the top for the notion that it is a viable way of dealing with police business. If you have that, it does not matter if the

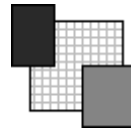


problem analyst reports directly to the chief or other executives.

The management of a police organization can support problem analysis with resources and access. One type of resource that the problem-analysis function requires is time. This means time to conduct problem analysis free from day-to-day crime analysis duties (e.g., preparation of crime counts and monthly reports), administrative analysis (e.g., resource allocation), strategic planning, and grant writing for the entire police department (i.e., writing grants for additional officers). In addition, not only must there be time in the day to conduct problem-analysis activities, there must be time to analyze, to respond, and to assess. In other words, organizations must be *patient* with problem solving and problem analysis. Problem analysis requires thoughtful, often multifaceted, analysis of more than Part I crime statistics and may even warrant primary data collection, which can take time. In addition, time must be allowed for a response to be implemented before it is evaluated. Evaluating a response after one, two, or even six months can be unproductive depending on the response, since it had little time to take effect. With many responses, there is an implementation effect and if enough time is not allowed before evaluation, the assessment is of the implementation, not of the response.

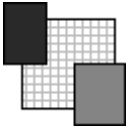
An important point is access to data. We assume that the analysts get data, but it is not true in all organizations. Three of the agencies around my jurisdiction refused to participate with us when we sat down with them. The reason they refused is their people didn't have the data. We assumed that a lot of these agencies are computerized or that data is already compiled. It is simply not. It is on 3-x-5 cards stored somewhere in shoe boxes that somebody is going to have to go through and pull out what they want.
—Bob Heimberger

Another type of support problem analysis requires is adequate funding for expenses such as citizen surveys, statistical software, short-term consultants to assist with difficult or large projects or analyses, or interns/students for data collection. Yet, it is not enough to provide the funding for technology or interns as problem analysis requires adequate secondary data (i.e., data already collected by the agency) and access to it. This does not mean just having data available but making a commitment to providing reliable, valid data in a timely manner which can require additional training and resources. Problem analysts should be provided support through access to all levels of the department. This is



Integrating Problem Analysis into a Police Agency

necessary to approach personnel for interviews for primary data collection, to clarify issues, to conduct ride-a-longs, as well as to have access to all data and potential data in the department. There is often a barrier for civilian analysts when it comes to intelligence data, and it is important that the problem analyst also be provided with more sensitive data as necessary. This is an example of when it may be important for problem analysis to be conducted by a member of the police organization, as sharing sensitive data may be easier with an employee than with an external researcher.



The Advancement of Problem Analysis

Because high-level problem analysis is not being routinely practiced by most police agencies, there are not many examples to demonstrate its relevance and worth or to use as models for integration. Most police agencies do not yet view problem analysis as a necessity to police business and they need to be convinced.

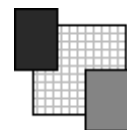
Thus, one of the conclusions by participants of the forum was that problem analysis will not be adopted quickly or easily and that a collective, concerted effort by various institutions with vested interests is necessary. The discussion here focuses on specific ways that police, academia, the federal government, nonprofit organizations, city government, and the community can contribute to the advancement of problem analysis.

Role of local police

The previous section discusses how individual agencies can hire and support problem analysts within their organizations. More generally, local police agencies can contribute to advancing problem analysis by adopting problem solving (i.e., begin analyzing and assessing problems in addition to responding to them) and giving problem analysis a chance to be successful. As an endeavor that is new to policing, problem analysis can be demanding, may deal with complex issues, and may not prove to be immediately successful. Like problem solving and community policing more generally, problem analysis is a change in perspective that focuses on learning more about a problem from what others have done and from spending some time and resources investigating it before responding. Hopefully, with the assistance of other organizations (discussed below), integrating problem analysis into a local police agency will be made easier. These organizations can help to provide funding, training, guidance, a forum for communication, political support, etc. Ultimately,

This is one of those chicken-and-egg problems; we do not have the problem analysts because no one has ever demanded them.
—John Eck

I am increasingly convinced if police agencies are left to their own devices, they are not going to do problem analysis to any great extent...they depend very much on external pressure.
—Mike Scott



however, it is the role of the local police agencies to allow and encourage it to happen.

Role of academia

Academia can assist in the advancement of problem analysis in many ways. The primary roles it can play are as a place for problem-analysis training, for conducting and providing guidance for problem-analysis projects, and for the development of a body of problem-analysis literature.

Academic institutions, specifically criminology, criminal justice, and public policy departments, can offer classes at both the undergraduate and graduate levels that focus on problem solving and particularly problem analysis. These classes would be taught from a practical perspective in that concepts would be defined and exemplified through practical examples. They might also include a combination of traditional students and police professionals so that they might learn from one another. Academic programs could provide and encourage fellowships and internships in problem analysis, which would provide students the opportunity to apply their formal research skills in a practical setting in a limited, supervised manner. A partnership between a university and a police department in which students work for free to conduct a specific research project would benefit all involved—the students, the police agency, as well as the university.

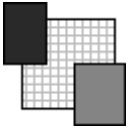
Academics can also advance problem analysis by conducting high quality action-research evaluations of problem-solving efforts, partnering with agencies to support problem-analysis projects, and making presentations of methodology and findings at *both* academic and practitioner-oriented conferences. On an individual level, academics can serve as mentors to undergraduate and graduate students as well as to practitioners by assisting with problem-analysis activities. They can offer ad hoc/free advice to problem analysts working in the field as part of their community

Internships are very important for both police and students. The police departments bring in graduate or undergraduate students who work fairly inexpensively and have skills in statistics and research. On the other hand, internships give students practical experience and show them that law enforcement analysis is a potentially rewarding career.

–Rachel Boba

If you look at the big academic organizations, like the ASC and the ACJS and their conference panels, publications in *Criminology* and *Justice Quarterly*, they are not going to be about problem analysis. If you want to write something in this area and you want to get it published, where are you going to do it?

–John Eck



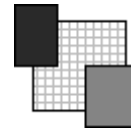
service requirements. Academics conducting evaluations and assisting problem analysts can also publish their work in journals or other forums (e.g., government publications or as Internet documents) and encourage and help practitioners publish their own work. The academic community can contribute by supporting a new journal dedicated to problem solving and by encouraging current journals to be more receptive to problem-analysis (more practically) focused articles.

Regrettably, because problem analysis is somewhat of a new concept, even many academics are not aware of its importance to policing and its relevance to degree programs. As a result, the role of academia is currently limited by the small number of academics qualified to instruct problem-analysis classes, oversee internships, and conduct evaluations. Thus, another task of current problem-solving/analysis academics is to encourage other academics to learn more about and participate in problem-solving and problem-analysis activities.

Role of the federal government

Various agencies within the United States federal government can assist in the advancement of problem analysis by challenging the police community, encouraging problem analysis, providing funding and training, publishing case studies and research, and providing examples of innovation. Some of these federal agencies relevant to this discussion include components of the Department of Justice, such as the Office of Community Oriented Policing Services (COPS), National Institute of Justice (NIJ), NIJ's Mapping and Analysis for Public Safety (MAPS) program, NIJ's National Law Enforcement and Corrections Technology Center (NLECTC) program, Bureau of Justice Assistance (BJA), Bureau of Justice Statistics (BJS), National Criminal Justice Reference Service (NCJRS), Justice Technology Information Network (JUSTNET), and the Partnership Against Violence Network (PAVNET).

Discussions of the relationship between practitioners and academics often start with the notion that there is a big body of expertise out there in academia that is capable of being immediately helpful to the police. The reality is that relatively few academics—a good number around this table—have developed the capacity to analyze problems the police confront in that way. We need a much larger representation in academia who are committed to this work. The challenge is how to increase that number.
—Herman Goldstein



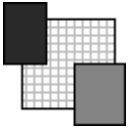
Federal agencies can challenge the police community to conduct problem analysis at all levels. This would be operationalized through informal conversations, formal presentations, funding opportunities, provisions for technical assistance, as well as incorporating problem analysis into a variety of federal programs. The federal government could provide funding for a variety of endeavors supporting problem analysis. One example is bringing together experts in the field to develop a problem-analysis training curriculum that would be available for use by nonprofit organizations, membership organizations, and academia to train current and future problem analysts. In addition, the government could conduct such training through some of its established training facilities (e.g., Regional Community Policing Institutes).

There needs to be a body of knowledge that these problem-solver crime analysts can go to for a little summary of everything we need to do.
—Ron Clarke

Another method of advancement is providing funding for the publication of problem-analysis activities. Whether it is through a series similar to the *Problem-Oriented Guides for Police Series* published by the COPS Office or through the *Research in Brief* series published by NIJ, the federal government could help to create a library of literature on problem-analysis guidelines and examples of research. Important here is synthesizing information that is being created by various parties and feeding it back to the problem-analysis community. Herman Goldstein addressed this point in the forum:

I think a major role that the federal government could play in this is trying to organize this material. Essentially, it is a sophisticated library function, but it is also a synthesis function.
—John Eck

If one is really committed to reforming police in this country, then acquiring and synthesizing the type of knowledge we are seeking and disseminating it to police departments are a high priority. Doing so would enable the police to act more intelligently with regard to specific problems. It would enable the police to be in a better position to describe to the public what they can and cannot do. That would equip both the police and the public to redefine the whole police

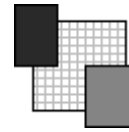


operation in a way that makes what now often seems impossible possible. Being able to act honestly and intelligently, based on carefully developed knowledge, could help attract more people into the field that are challenged by the fact that this is a very complicated business; that policies and practices are based upon a body of knowledge and information that drives decisions.

In the first two or three years that we [MAPS] were in existence, four or five or six of us spent two or three trips a month out in the field making presentations, talking to officers. We created a Web page and started the "crimemap" listserv. So we spent a lot of time getting the message out, "Hey, this is a tool that you could use," and teaching people how to use it, making it affordable, creating crime-mapping packages that were free. We paid attention to what the practitioners were asking for, and, as for the researchers, we brought them to the table as well.
—Debra Stoe

Government agencies have historically provided successful case studies for others to learn from. Just as important, however, is the publication of unsuccessful case studies from which much could be gleaned. It is important not only to understand "what works" but what does not work and to understand under what conditions things do and do not work.

The success of the Mapping and Analysis for Public Safety (MAPS) program (formerly called the Crime Mapping Research Center) in advancing crime mapping serves as an excellent example for problem analysis. One could imagine a center for problem analysis in which a staff of professionals speaks the problem-analysis word, sponsors projects, and oversees research and reports. Keith Harries' (1999) book, *Mapping Crime: Principle and Practice*, funded by the National Institute of Justice, is an excellent example of a significant contribution to the crime-mapping field. While costly to write and publish, it is seen as a must read in the crime-mapping community. Putting this much funding and commitment towards the advancement of problem analysis would jumpstart the movement. The success of the annual crime-mapping conference is another example of advancing a cause in that it has been successful at bringing together practitioners and researchers interested in a common issue. An annual conference on problem analysis (or a track within the Problem-Oriented Policing Conference co-sponsored by the Police Executive Research Forum and the San Diego Police Department) in which practitioners and researchers come together to talk about



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analysis and assessment techniques and practical examples in which problem analysis was used (not just focusing on responses) would be invaluable in advancing problem analysis.

Lastly, there was much discussion about thinking creatively about how the federal government can contribute to the advancement of problem solving and problem analysis. A suggestion made by Gloria Laycock and Ron Clarke seeks to elevate the responsibility of the federal government within the problem-solving process by advocating a proactive role to address criminogenic products. To quote Gloria Laycock:

...In other words, that cars have proper locks. I know there is nothing the police can do about dud car locks and there is nothing the police can do or the community for that matter about mobile phones that are designed so that they still work if they pinch them. The federal government's got to take some responsibility for that because they have let contracts to these great international corporations to market goods which are frankly going to cause crime...It is problem solving for federal governments.

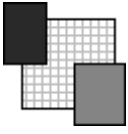
Role of other organizations

Other organizations that can assist in the advancement of problem analysis include nonprofit institutions such as the Police Foundation, the Institute for Law and Justice, and the Vera Institute, and membership organizations such as the International Association of Crime Analysts, the Police Executive Research Forum, the National Sheriffs' Association, and the International Association of Chiefs of Police.

Nonprofit and membership organizations can advance problem analysis by encouraging problem analysis and promoting problem

The Police Foundation is trying to get police departments up-to-speed so that designated personnel can perform problem analysis effectively and conduct a level of research that will be meaningful.
—Hubert Williams

We need to stimulate interest from within the crime analysis community itself. There has not been a lot of focus on getting them on board with this whole notion of problem analysis. Right now, crime analysts think differently about their jobs because greater value is being placed in the tactical predictive area as opposed to helping solve problems.
—Veh Bezdikian



One of the first pieces I ever wrote on the subject of discretion stemmed from a lesson I learned when I was working with a city manager. He was being harassed by a member of the city council to do more about expired parking meters. The council member came to the city manager's office every day with a list of all the meters that he had noted were expired and would say, "Do something about this."

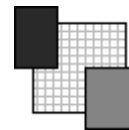
Pressured by the same council member at a meeting of the council, the city manager offered this response, "I can have a police force in which we'll have one person assigned to each meter (provided we can develop a system in which we can keep that person awake) so that when a flag goes up, that car will get a ticket."

The city manager was drawing attention to the relationship between enforcement and capacity. It is rare for a city administrator or a police chief to tell a legislative body that they have enacted a law that cannot, for various reasons, be enforced. A chief is reluctant to say, "I'm not going to do what the legislature told me to do." But if an administrator is committed to analyzing the problem, the results of that analysis can be used to explain more fully the impossibility of being committed to full enforcement.
—Herman Goldstein

analysis through conferences, presentations, research, and literature. For example, a membership organization can have several slots for problem-analysis workshops, presentations, or even an entire track in an annual or regional conference. These organizations can also present at national conferences or in local jurisdictions. With links to practitioners, professionals, and academics, they can serve as an intermediary to bring these groups together on problem analysis, fostering communication and information/data sharing. They can include problem-analysis concepts and articles in their own publications and newsletters and assist the government in collecting, synthesizing, and disseminating current information.

A current example is the creation of a new Center for Problem-Oriented Policing, the startup for which is being funded by the COPS Office. The Center for Problem-Oriented Policing is headed by Michael Scott, one of the forum participants, in collaboration with Rutgers University, the University at Albany, and the COPS Office. Its objectives are to (1) translate research into useful information that informs police practice; (2) educate police practitioners and researchers in the principles and methods of problem-oriented policing; and (3) make knowledge acquisition about problem-oriented policing more efficient.

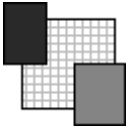
Other organizations might provide problem-analysis fellowships and internships for practitioners as well as for academics who have little practical experience. They could assist the federal government with implementing its programs, such as the development and implementation of problem-analysis training as well as conducting evaluations of problem-analysis efforts. Nonprofit research and membership organizations can also stake out a problem-specific research area which would enable them to contribute new and useful knowledge about the effectiveness of specific crime problem interventions and also become the experts on a particular topic of great concern to the police community.



Finally, because the work of problem analysis and crime analysis is so interrelated, the International Association of Crime Analysts (IACA) can contribute significantly to this effort. This organization, along with others, can seek to set and make public standards for problem analysis by expecting more from their constituency and by including advanced topics in training classes, conferences, articles, etc. The issue of certification of analysts is a significant one and this organization can promote certification of problem analysts. Looking to the adoption of crime mapping as a model, the IACA and its annual conference could be an ideal place to bring practitioners and researchers together.

Role of city government

City governments can advance problem analysis by participating in the problem-solving process and taking a holistic approach to public safety, instead of holding the police exclusively responsible for addressing public safety problems. The city government can provide resources for personnel to conduct problem analysis (e.g., a problem-analysis position), and encourage analysis and accountability of all the parties involved. City governments can also encourage and provide resources for data sharing and data integration to enable problem analysis to integrate various data sources (both qualitative and quantitative) to examine a problem from a variety of perspectives. Three jurisdictions, Seattle, WA, Milwaukee, WI, and East Valley, CA, serve as examples through their participation in the National Institute of Justice program, Community Mapping, Planning, and Analysis for Safety Strategies (COMPASS), in which they have instituted a data infrastructure and analysis capability for addressing community safety problems at the city-level. For more information about the COMPASS program, go to the Web site at www.ojp.usdoj.gov/nij/compass.

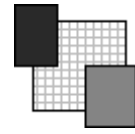


Role of the community

The role of the community and community groups is two-fold. On the one hand, they can apply pressure to city governments and police departments by demanding information about crime problems as well as asking them to be smarter, proactive, and less reactive to community safety issues. Communities are beginning to expect city governments and police agencies to provide public safety information to them. By asking thoughtful questions of the police, they will facilitate police efforts to develop thoughtful answers to which problem analysis is a natural link. The media, too, can request, analyze, and publish useful information for their constituencies.

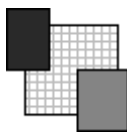
Many police agencies have begun to provide information to the community over the Internet; however, much is lacking in that it is simple and incomplete. It is not enough to provide “raw data” to individuals who may not understand the nuances of crime data; a level of definitions and analysis must also be provided to the community. For example, the St. Louis, MO, Metropolitan Police Department now provides information to its residents over the Internet and, in addition to crime data, it provides a historical analysis that allows the citizens to view the data in a smarter and more useful way.

On the other hand, the community can assist in the advancement of problem analysis by contributing information through community databases and cooperation with the police and problem analysts. Individual citizens, as well as community groups, have begun to partner with police agencies to respond to various types of problems through the problem-solving process. They can also partner to assist in data collection (e.g., citizen surveys about safety, crime prevention and victimization, pathways children take to school, location of drug markets, better reporting). By



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partnering, the community can help the police collect relevant data that inform the problem-solving process, and, in turn, the agency can provide the analysis results back to the community so they both can work together towards a solution.



An Agenda for Advancing Problem Analysis

It is striking how similar the issues are here and in the United Kingdom in relation to crime analysts. Our work in this area is partly driven by a couple of particular chief constables that we have who are really keen on intelligence-led policing. They are calling it something different than problem analysis, but essentially it comes down to how you use analysts.

—Gloria Laycock

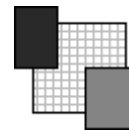
If you start out with the notion that you are going to try to reach the whole police establishment in this country in its current form and convert it, you are incredibly naïve. Rather, police must be given the opportunity, on their own initiative, to engage in an advanced effort in analyzing problems. They should be encouraged to do so. Those who take up the opportunity and succeed can then, as a cluster of either individuals or agencies, take the work forward, ultimately influencing their own organization as well as others.

—Herman Goldstein

As noted throughout this report, there is work being done to advance problem analysis, though much of what is happening is on an ad hoc basis. Fully implementing all of these recommendations is an ambitious goal. However, if there is a grassroots movement of academics, government officials, and analysts interested and willing to fulfill these recommendations, we may see a significant change in American policing over the next five to ten years. Interestingly, the United Kingdom is going through a similar phenomenon in that a fairly small group of people are seeking to implement new types of analysis in policing. Even though some of the issues of policing are different between the two countries, if we can look to each other for assistance and cooperation, we may be able to have a greater impact.

Most notably, the COPS Office has begun a comprehensive approach towards problem analysis with its publication of the *Problem-Oriented Guides for Police Series*, funding of the Center for Problem-Oriented Policing and the 2002 Problem-Analysis Forum, as well as other work advancing problem analysis. The future of problem analysis lies in the continued and increasing support of the COPS Office and in the collaborative work of individuals and organizations in this area who promote the idea, conduct problem analysis, and advance this emerging discipline.

An approach that was recommended by the group is that the advancement of problem analysis should target police agencies and individuals that are predisposed to problem analysis, that is, organizations and individuals that are forward-thinking, that value research and analysis, and that believe in problem solving as a valuable approach to policing. If problem-analysis efforts are focused on these agencies and successful examples result, they can make up a critical mass of problem-analysis practitioners who can



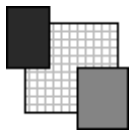
An Agenda for Advancing Problem Analysis

demonstrate the value of using problem analysis and serve as role models for further integration. A particularly successful agency that is a model of problem-analysis integration, as the New York City Police Department was to COMPSTAT, can encourage others to adopt problem analysis.

Another approach being implemented by the Police Foundation through funding from the COPS Office is the development and implementation of a problem-analysis pilot training program. Ten analysts from agencies already conducting problem solving will be chosen to participate in the pilot training which will be developed by the Police Foundation with help from experts in the field. These analysts would participate in the training, provide feedback, and seek to apply it in their respective agencies. The goal of this project is not only to create problem-analysis training curricula that can be used by academics and practitioners around the country, but also to create a group of motivated analysts who will discuss the concepts and issues of problem analysis as well as provide successful examples from which others can learn and see its value.

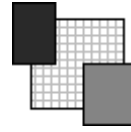
As I said at the POP conference when I spoke about this, I hope that ten or fifteen years from now, the first guidelines to appear will look obsolete, will look elementary, will look simplistic. But those first guidelines constitute a gigantic beginning.
—Herman Goldstein

Advancing problem analysis in policing is challenged by the reactive nature of policing and the difficulty of convincing practitioners that problem analysis is a worthwhile effort. However, with a possible increase of crime rates on the horizon, the shift of focus to homeland security, and the fierce competition for resources, it may be an opportune time to assert and adopt the notion of policing “smarter” instead of policing “more.”



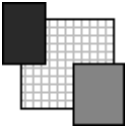
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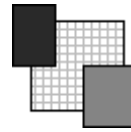


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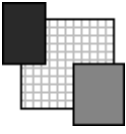


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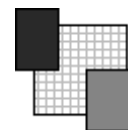
Biographies

Dr. Rachel Boba
Director of the Police Foundation Crime Mapping Laboratory

Dr. Boba was a senior level crime analyst at the Tempe, Arizona, Police Department for five years before joining the Police Foundation in Washington, DC. She currently directs the work of the Crime Mapping Laboratory that includes crime analysis, crime mapping, and problem-analysis training and technical assistance, as well as the publication of the quarterly newsletter, *Crime Mapping News*. In addition, she has managed many projects at the Police Foundation and is currently the project director for both a school safety mapping project as well as the East Valley COMPASS research partner project. She teaches two graduate courses on crime mapping and applied data analysis at the University of Maryland at College Park. She holds a PhD and an MA in sociology from Arizona State University and a BA magna cum laude from California Lutheran University.

Professor Ron Clarke
School of Criminal Justice, Rutgers University

Professor Clarke was Dean of the School of Criminal Justice at Rutgers University for more than ten years, and before that was head of the Home Office Research and Planning Unit (the British government's criminological department). While at the Home Office, he played a significant part in the development of situational crime prevention and in the launching of the British Crime Survey. He is editor of *Crime Prevention Studies* and the author of more than 160 books and articles. His most recent book is *Situational Crime Prevention: Successful Case Studies*; the second edition was published in 1997.

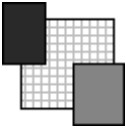


Pat Drummy
Director of Administrative Services, San Diego, CA,
Police Department

Mr. Drummy has been with the San Diego, CA, Police Department since 1975. He began his tenure as an administrative analyst in the Research and Analysis Unit. He has advanced to hold positions as a senior administrative analyst, supervising management analyst, and the Police 911 manager. He has worked in the Crime Analysis Unit as well as supervised it. He has overseen numerous grants and currently directs operations related to police personnel, 911, crime analysis, and information services and grants. He has published *Crime Analysis in a Community Policing Environment* (1996) through the COPS Office and *Information Management and Crime Analysis* (1997) through the Police Executive Research Forum. He has a BS in finance from San Diego State University.

Professor John Eck
Division of Criminal Justice, University of Cincinnati

Professor Eck has conducted research into police operations since 1977 and served as the Research Director for the Police Executive Research Forum (PERF). At PERF, he spearheaded the development of problem-oriented policing throughout the U.S. He was also the Evaluation Coordinator for Law Enforcement at the Washington/Baltimore High Intensity Drug Trafficking Area, and a consultant to the London Metropolitan Police, Royal Canadian Mounted Police, Police Foundation, and other organizations. Dr. Eck has written on criminal investigations, drug markets and control, crime mapping, and crime places. He is a member of the National Academy of Science panel assessing police research and policy. He teaches police effectiveness, research methods, and policy analysis. Professor Eck earned a PhD in criminology from the University of Maryland in 1994.



Ed Flynn

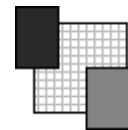
Secretary of Public Safety, State of Massachusetts

Secretary Flynn, formerly chief of police in Arlington County VA, began his career in the Jersey City Police Department, where he was promoted from patrol officer through the ranks to sergeant, lieutenant, captain, and inspector. He has been the chief of police in Braintree, MA, where he was credited with modernizing the department and Chelsea, MA, where he helped lead the city out of state-imposed receivership to designation as an “All American City.” Chief Flynn is a member of the board of directors for the Police Executive Research Forum and the national bipartisan anti-crime organization, Fight Crime: Invest in Kids. He is also a member of the Administration of Justice Advisory Committee at George Mason University. Chief Flynn holds a BA in history from LaSalle University in Philadelphia, a master’s degree in criminal justice from John Jay College of Criminal Justice in New York; and he has completed all course work in the PhD program in criminal justice from the City University of New York. He is a graduate of the FBI National Academy and the National Executive Institute and was a National Institute of Justice Pickett Fellow at Harvard’s Kennedy School of Government.

Ron Glensor

Deputy Chief, Reno, NV, Police Department

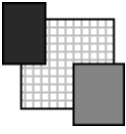
Chief Glensor has commanded the department’s patrol, administration, and detective divisions. He is recognized internationally for his work in community policing and has provided assistance to more than 500 agencies throughout the United States, Canada, Australia, and the United Kingdom. He is a featured speaker at conferences on the implementation of community-oriented policing, strategic planning, customer service, crime prevention, and research. In 1994, he was awarded a fellowship at the Police Executive Research Forum in Washington, DC, where he was responsible for the development of training in community policing. He has coauthored the books, *Community Policing and Problem Solving: Strategies and Practices*, *Police*



Supervision, and Policing Communities: Understanding Crime and Solving Problems. His awards include the Alumni Association's Outstanding Achievement Award from the University of Nevada and the Police Executive Research Forum's Gary P. Hayes Leadership Award. He has a master's in public administration and a doctorate in political science from the University of Nevada, Reno.

Professor Herman Goldstein University of Wisconsin Law School

Professor Goldstein's work has focused primarily on the challenge in trying to develop a form of policing that is effective but also committed to maintaining and extending democratic values. He set out in 1954 working in city management but was subsequently drawn into policing when he spent two years observing the on-the-street operations of the police in Wisconsin and Michigan as a researcher with the American Bar Foundation Survey of the Administration of Criminal Justice. From 1960 to 1964, he was executive assistant to O.W. Wilson, the architect of the professional model of policing. His earliest writings explored the discretion exercised by the police, the policymaking role of police administrators, and the political accountability of the police. He has also written on the police function, police relationships with minorities, the control of police conduct, and police corruption. He is the author of *Problem-Oriented Policing* (1990) which spelled out a radically new way of conceptualizing the police function that is designed to increase police effectiveness while at the same time refining the use of police authority. The concept has been adopted, in various forms, in a large number of police agencies in the United States and abroad. His most recent publications have dealt with development of the concept and relating it to other contemporary developments, such as community policing. Goldstein has been a consultant to numerous national and local groups, including the President's Commission on Law Enforcement and Administration of Justice, the National Advisory Commission on Civil Disorders, the National Institute of Justice,

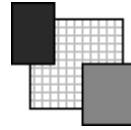


New York City's Knapp Commission, the Police Foundation, and the Police Executive Research Forum. He has also worked with numerous police agencies on specific problems and in developing innovative programs, including police in the United Kingdom, Chile, Israel, The Netherlands, and Australia.

Bob Heimberger
Sergeant, St. Louis, MO, Metropolitan Police Department
Biography not available.

Professor Gloria Laycock
The Jill Dando Institute, University College London, UK
Professor Laycock has worked in the Home Office for over 30 years, of which almost 20 years has been spent on research and development in the policing and crime prevention fields. She established and headed the Home Office Police Research Group and edited its publications on policing and crime prevention for seven years. She has extensive experience in the United States and has acted as a consultant on policing and crime prevention in North America, Australia, Israel, South Africa, and Europe. Most recently, she was awarded an International Visiting Fellowship by the U.S. Department of Justice. She returned in April 2001 from a four-month consultancy at the Australian Institute of Criminology in Canberra to become Director of the Jill Dando Institute of Crime Science at the University College London (UCL). She graduated in psychology from UCL in 1968 and completed her PhD at UCL in 1977.

Karin Schmerler
Research Analyst, Chula Vista, CA, Police Department
Ms. Schmerler has worked on several citywide problem-solving projects, including initiatives on auto theft, budget motels, traffic collisions, and beer theft at convenience stores. She was a social science analyst at the COPS Office and a research associate at the Police Executive Research Forum. She is an author of *Problem-Solving Tips: A Guide to Reducing Crime and Disorder through*



Problem-Solving Partnerships, and a coauthor of *Primary Data Collection: A Problem Solving Necessity*. She received her BA in public policy studies from Duke University in 1986.

Michael Scott
Police Consultant, Savannah, GA

Mr. Scott is a principal member of the project team developing the *Problem Oriented Guides for Police* series published by the COPS Office and is co-founding the Center for Problem-Oriented Policing. He was chief of police in Lauderhill, FL; special assistant to the chief of police in the St. Louis Metropolitan, MO, Police Department; director of administration in the Ft. Pierce, FL, Police Department; and legal assistant to the police commissioner in the New York City Police Department; and was a police officer in the Madison, WI, Police Department. He was a senior researcher at the Police Executive Research Forum and is a judge for the Herman Goldstein Award for Excellence in Problem-Oriented Policing. He has written *Problem-Oriented Policing: Reflections on the First 20 Years*; several of the *Problem-Oriented Guides for Police*; and has co-authored, with Rana Sampson, *Tackling Crime and other Public-Safety Problems: Case Studies in Problem Solving*; and co-authored, with William Geller, *Deadly Force: What We Know. A Practitioner's Desk Reference to Police-Involved Shootings in the United States*. He has a bachelor's degree from the University of Wisconsin-Madison and a law degree from Harvard Law School.



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