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COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING

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COMMAND COLLEGE

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THE FUTURE OF CRIME ANALYSIS IN CALIFORNIA LAW  
ENFORCEMENT - YEAR 2000

A PROJECT DESIGNED TO EXPLORE  
THE FUTURE EXISTENCE OF CRIME ANALYSIS EFFORTS  
IN MUNICIPAL LAW ENFORCEMENT AGENCIES  
WITHIN THE STATE OF CALIFORNIA

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THE FUTURE OF CRIME ANALYSIS IN CALIFORNIA LAW  
ENFORCEMENT - YEAR 2000

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Chino, California

Provides a comprehensive overview of the Crime Analysis function within the law enforcement environment and describes the impact it will have on police operations to the year 2000. The work highlights the major reasons why crime analysis is vital to the effective and efficient management of patrol, investigative and other line and support personnel; describes the way it may be used to better facilitate executive decisions surrounding resource allocation and manpower issues; and discusses the many benefits that accrue to the department that implements a Crime Analysis Unit.

The study also asserts that crime analysis creates organizational change and devotes considerable attention to describing the manner in which change can be successfully managed to ensure positive outcomes. The use of automated systems to assist in the determination of crime series', patterns and trends is discussed and the text fully explores the concept of regionalizing crime analysis services for the benefit of all participating agencies.

A presentation of the information received from survey questionnaires sent to police chiefs, sheriffs and crime analysis practitioners throughout the United States is also included. The study was published as a Command College Independent Study Project for the State of California Commission On Peace Officer Standards and Training.

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Last, but not least, I am indeed thankful to my wife, Carole, for her support, encouragement, and understanding of the time spent in the Command College Program during the past two years.

As a result of the combined efforts of the people listed above, as well as others, it is my hope that this study will prove to be worthwhile as a contribution to the body of knowledge and practice of law enforcement.

## EXECUTIVE SUMMARY

Is the role of "Crime Analysis" a variable function in the future of new law enforcement in California?

In the decade of the fifties law enforcement saw the significant change from the two-officer patrol car to the single officer patrol car. For years it was thought that policing with only one officer in a patrol unit was unsafe and non-effective. We have since learned that the opposite is most probably true. During the sixties there emerged a new phenomenon of the "Community Relations Officer." By the end of the decade virtually every police agency had at least one (1) Community Relations Officer position. In the seventies we saw a trend of replacing sworn police officers with civilian personnel. Dispatchers, desk officers, and sworn report car officers were replaced with civilian counterparts. The change has allowed for a more effective deployment of sworn personnel, an acceleration of emergency response times and a substantial cost savings.

The trend of civilianization continued into the eighties and, as a result of special grant funding, crime analysis units were implemented in several California agencies. These units were usually commanded by sworn supervisors but staffed with civilian employees. The key person within the unit was the "Crime Analyst."

In answering the question about the future of crime analysis, it is suggested that not only will crime analysis continue to be a viable function, moreover, the crime analyst position will be the emerging trend for the decade of the nineties and on to the year 2000. Virtually every local law enforcement agency will have a person assigned to the Crime Analysis function.

There is probably nothing within this study that is totally new to California law enforcement experts or administrators. The purpose of this study is to look at the function of crime analysis in California municipal law enforcement and determine if it is a function that will continue to exist. Is so, what form will it most likely take and what direction should administrators pursue to make it effective?

This study will provide an assessment of the current existence of the crime analysis function and will provide some insight as to the future of that function.

California's law enforcement efforts have changed dramatically during the past several decades. Based upon the findings and conclusions within this study, change will continue to affect our efforts and that change will undoubtedly be somewhat controversial.

As a product of the Command College program, the primary goals of a futures study were to:

- . develop a future perspective of a law enforcement issue
- . enhance problem solving, decision making, and leadership capabilities
- . provide specific contributions to the body of knowledge and the practice of law enforcement

Certain methodologies were presented during the two year course of Command College instruction and incorporated into this research project.

Following is a brief outline of the Command College program:

- . Defining the Future (Forecasting)
- . Strategic Decision Making
- . Strategic Planning
- . Transition Management
- . Human Resource Management
- . Public Finance
- . High Technology
- . Research Methodology
- . Independent Research Project

As described in Section II, it is postulated that certain law enforcement related trends will continue:

- . Major crime categories as we presently know them will not significantly change by the year 2000.
- . Police Departments will have to provide service with fewer personnel.
- . Financial support from all sources will be diminished.
- . Personnel administration and the management of human resources will become more complex.
- . Fewer people will be available for the law enforcement job market.

Police administrators will continue to develop and utilize a host of strategies to provide law enforcement services to their communities. Crime analysis will become an inherent and integral part of most law

enforcement agencies and, most likely, will become a multijurisdictional effort.

The major objectives for this study, identified in Section III, are summarized as follows:

- . Specify principal strategic assumptions about the future of crime analysis and evaluate those assumptions.
- . Identify current and future expectations of law enforcement administration.
- . Prepare possible "scenarios" and select the "most probable future."
- . . . Produce a set of strategic planning assumptions and provide for implementation and transition management.

The methodologies utilized were varied and are described in Section IV. Of the methods used, the most significant was the questionnaire survey. The response represented 77 percent of all agencies surveyed and provided invaluable data for the final preparation of this study. Initially, over three hundred (300) pages of computer data were generated. After careful review, that amount was adjusted to approximately one hundred (100) pages which included frequency tables, percentages and cross-tabulations.

Collectively, the various research methods employed provided the data necessary to identify current and emerging trends and events that would most likely have an impact on the future of California law enforcement. The future considerations for law enforcement administrators

are discussed in Section V. Of special significance are the scenarios summarizing different approaches to crime analysis and finally the summation of the most "probable future."

Following is the establishment of a Strategic Plan, Section VI and the process of Implementation and Transition Management, Section VII. The necessity for change is reviewed and a "road map" for facilitating a "new concept" in crime analysis is discussed in detail.

Conclusions and assumptions are generic in nature and can be applied to any law enforcement agency.

It is hoped that the results of this study will stimulate further interest in the crime analysis function. The overriding conclusion of the study is that there is a need for more coordination of law enforcement efforts between local municipalities and that the regionalization of certain services, specifically crime analysis, will most likely prevail.

The crime analysis function will be alive and well in the future. It is up to our future administrators to decide what form it will take.

## I. INTRODUCTION

Although many articles, pamphlets, manuals, and a few books have been written that address the fundamental process of crime analysis, little attention has been directed towards the future existence of the crime analysis function in municipal law enforcement agencies.

The term "Crime Analysis" first appeared in 1963 in the second edition of O. W. Wilson's Police Administration. Several years later, the Law Enforcement Assistance Administration (LEAA), through its various programs and emphasis upon crime reduction and criminal apprehension, expanded upon Wilson's concepts and exerted great impact upon the development of formal crime analysis capabilities in police departments.

Informally, municipal police agencies have been performing crime analysis for several years. Now, with society changing as rapidly as it is in terms of population growth, mass rapid transit, and the "Age of Computers," law enforcement agencies recognize a continuing need to develop a means of staying abreast of technological developments in order to provide our respective communities with adequate police services.<sup>(1)</sup>

The amount of funding provided by LEAA typified the growing interest in crime analysis on a national scale. A "Prescriptive Package" entitled "Police Crime Analysis Unit Handbook" (73-TA-99-1000), developed in 1973, describes the benefits available to law enforcement agencies through the

establishment and operation of a Crime Analysis Unit and illustrates how such a unit can be developed.

In a later study, the Integrated Criminal Apprehension Program (ICAP), a major LEAA discretionary program initiated in 1976, relies on the idea that utilization of crime analysis information is a key element for directing police deployment and tactical operations and to increase the efficiency and effectiveness of police field activities.

Geographic Base Files (GBF) for law enforcement projects analyzed the major uses of geographic based data by law enforcement agencies and developed computer programs to assist with base file development. Crime analysis was one of the major areas studied and several valuable types of information were gathered. A section of the Geographic Base Files for Law Enforcement: Descriptive Report dealt with crime analysis activities in eight law enforcement agencies. This descriptive report discussed hardware and software use as well as department developmental approaches. The Geographic Base Files project along with other recent LEAA funded projects such as the Standardized Crime Reporting System (SCRS), has addressed data collection issues, and has underscored the importance of capturing and using good and reliable data as the basis for crime analysis activities.

The ICAP Crime Analysis Operations Manual indicates that there are five steps in the crime analysis process: (1) data collection; (2) data collation; (3) data analysis; (4) information dissemination,

and (5) feedback and evaluation between the users in an agency and the Crime Analysis Unit.<sup>(2)</sup>

Since 1978, the California State Office of Criminal Justice Planning has supported the crime analysis effort through the establishment of the Career Criminal Apprehension Program (CCAP).

CCAP was signed into law on September 28, 1978. By January 1, 1979, eight (8) California law enforcement agencies were awarded monetary grants to begin a pilot program combining three (3) effective law enforcement programs; Integrated Criminal Apprehension Program (ICAP), Managing Patrol Operations (MPO), and Managing Criminal Investigations (MCI).<sup>(3)</sup>

The principal philosophy of CCAP was designed to provide law enforcement with a management philosophy and model to improve an agency's overall efficiency and effectiveness. Within this framework of enhanced law enforcement are four program components stipulated in the enabling legislation (Chapter 1291, Statutes of 1982):

- . crime analysis
- . patrol management
- . investigations management
- . career criminal prosecution<sup>(4)</sup>

The Career Criminal Apprehension Program establishes a management philosophy which focuses on a structured approach to the management and integration of law enforcement services to increase the overall effectiveness and efficiency of the

organization. Crime analysis is the basis for this process.

Crime analysis is the most important step of the CCAP decision making model. It assists operational and administrative personnel in planning and deployment of resources for the prevention and suppression of criminal activities, aiding the investigative process and increasing apprehension of offenders and clearance of cases.

The capabilities of crime analysis must address the following objectives:

- . Identify evolving or existing crime patterns.
- . Provide investigative leads.
- . Identify geographical areas or population groups experiencing relative severe crime victimization in order to direct crime prevention efforts.
- . Provide management information for the effective deployment of law enforcement resources.<sup>(5)</sup>

The implementation of a Crime Analysis Unit requires the adoption of the above management philosophy and support of top management. Without a firm understanding and support of the necessary changes required to implement such a program, a Crime Analysis Unit will not succeed.<sup>(6)</sup>

During the initial research phase, an interview was conducted with Mr. Shel Arenberg, a nationally recognized consultant, who has had a great deal of experience with the subject of crime analysis. In fact, the definition of crime analysis used in this

study was originally authored by Mr. Arenberg and incorporated into the ICAP program in the seventies. It was later adopted by the California State Office of Criminal Justice Planning and today serves as the key concept which guides the Career Criminal Apprehension Program. In recognition thereof, any further reference to the term "crime analysis" throughout this study will be based upon the following definition:

Crime Analysis is: A set of systematic analytical processes directed toward predicting criminal behavior in both individual and aggregate situations for the purpose of reducing crime in a cost-effective manner.(7)

While discussing crime analysis in the interview with Mr. Arenberg, he dissected and analyzed this comprehensive definition and discussed its various components. The following is a summary of our conversation.

The term "systematic analytical processes" refers to the collection, organization, definition and reporting of specific information.

Crime analysis is a process which has four basic components. First, the data has to be collected. This means we have to design forms, train the officers, develop a process of collecting information and the like. Then we must determine what information should be collected. Should the crime analyst just get crime reports? Should he get juvenile reports? Should he get all the F.I. reports? If the answer is yes, then we must decide upon what information ought to be on those crime and F.I. reports.

The second step is organizing the information. Now before we had a computer, information was put into a file cabinet. Today, we organize it

in a computer with immediate cross reference and retrieval capability. In the past, all data was collected and filed manually. So if we were looking for a guy with gray hair, there was no way to find that information unless the records clerk or detective had a fantastic memory and could say, "That sounds like the burglary that took place three months ago" and knew exactly what case to go to. The computer goes around that by being able to sort through all cases. Now the data is collected and organized.

The third step is to give meaning and definition to that data. In other words, we must now make a prediction. What's going to happen? What seems to be going on? Can I project onward? Do I have a burglary problem? Do I have a serial crime problem? In other words, I have to identify patterns and series and distinguish between the two.

The fourth step, which I have found to be lacking, is the analyst does his work with series and pattern analysis, and sends out a report. It goes to management and now management has got to do something with it. Unless management implements it or deliberately doesn't do anything because of a management decision, then analysis up to the management is really an academic criminological study. What's going on in town, what's going to happen?, etc. Crime analysis includes application, implementation, and utility.(8)

During the discussion on "systematic process" it was agreed that a fifth step in the process should be included and would be termed the implementation phase. There must be a response from the data users and direction from management regarding the use of crime analysis information and its impact upon the allocation of resources.

In essence, Mr. Arenberg's process definition is very similar to the one published in the ICAP manual.

The terms "individual and aggregate situations" as viewed by Mr. Arenberg are defined as follows:

When we talk about individual situations, we are really looking for method of operation (MO) analysis. It's primarily detective oriented, it's investigative oriented, it's M.O. oriented. The aggregate situation is really patrol oriented. If we have a big burglary or traffic problem, then we have an aggregate problem in contrast to an individual committing a single crime. When I used the term "reducing crime," I had in mind that the role of a law enforcement agency is to reduce crime, not necessarily make arrests. That's only one way of reducing crime. If I could deploy officers in some fashion to deter it, then the Chief of that agency would have indeed accomplished his task, crime would have been reduced. "Cost effective" is simply a reflection of the fact that cost efficiency has always been a problem for law enforcement. As a Chief Executive, you're competitive with all other city departments for a budget and, because of the society we live in, we are not going to have officers on every street corner. So, you are going to have limited resources.

I tend to differentiate between the word effective and efficient. So I deliberately used the word effective. Effective to me is goal oriented, it is ends oriented. Efficiency is means oriented. What I mean by that is that I can accomplish the goal if I spend the gross national product. But that may not be a very efficient way of doing it. So there is a difference in my judgement between efficiency and effectiveness, and rather than confuse anybody, I got rid of the word efficient in this definition and used the word cost effective instead.(9)

I believe Mr. Arenberg's comments offer a summary overview of what "Crime Analysis" is and what the function of crime analysis entails. As for the future, Mr. Arenberg believes that the crime analysis function is absolutely necessary to insure the future success of our law enforcement efforts.

He also believes that the sharing of information between law enforcement agencies is essential.

While crime analysis may be divided into several independent components, it is not my intention to discuss each component in this study. The primary goal in conducting research for this project was to determine if the crime analysis process is one which should continue in California municipal law enforcement agencies in the future. Some of the issues arose from questions asked about the following: Can small agencies afford to allocate personnel to the function? Will crime analysts be sworn or civilian? Will law enforcement agencies share information? Will agencies combine personnel to conduct crime analysis? Will crime analysis be regionalized either by combined operations or computer networking?

In essence, the goal was to determine if the crime analysis effort would remain basically the same, flourish, diminish, or take on a totally different approach in the fight against crime on a local level.

Detailed in the material to follow are the findings on the future of crime analysis in California law enforcement. James Q. Wilson has publicly stated that crime, as we know it today, has not historically changed and will probably not change a great deal in the future, however, the manner in which we project and investigate crime must be reviewed continually. While some considerations suggested in this study may be controversial at present, the attitudes and opinions held by others towards them may change a great deal in the next

decade and on to the year 2000. Thus only time will tell what course law enforcement efforts will take in the future.

## II. STATEMENT OF NEED

During the past several years, a great amount of material has been written about crime analysis and crime analysis programs. Surprisingly, despite the availability of grant funds, only forty-one agencies have established state funded units in California. This figure represents approximately ten percent of local law enforcement agencies within the state.

Although federal and state monies have been generously given to municipalities for the purpose of analyzing crime, the amount of government funds left to continue this endeavor is steadily declining. It is questionable how many crime analysis units will be established, continue to be developed, exist and flourish in the future.

This situation exists as a result of cutback management programs which were necessarily implemented in California with the passage of Proposition 13.

Since then, other state bills and local initiatives and legislation, as well as federal measures, have imposed even more limitations on municipal revenues and expenditures.

For local law enforcement then, the primary question is, and will likely continue to be: What is our primary goal and how can it be accomplished efficiently and effectively?

For some police administrators caught in the fiscal crunch, it may appear that the independent function

of crime analysis may be a luxury that they cannot afford. To others it may be the tool they need to effectively do more with less.

For the benefit of those caught in this dilemma, this study will not only give insight to the importance of the crime analysis function, but will provide some recommendations on how units may be organized with specially trained personnel and furnished with technologically advanced equipment. Modern equipment will be designed to provide prompt and pertinent information for the reduction of crime, crime trend forecasting, and the apprehension of criminal offenders.

Compounding the changing demographics of our State, the ever increasing demand for service, and the diversity of criminal activity, is the fact that citizens are becoming more concerned about crime and their personal safety.

Additionally, it is believed that the following trends will continue:

- . Major crime categories as we presently know them will not significantly change by the year 2000.
- . Police Departments will have to provide service with fewer personnel.
- . Financial support from all sources will be diminished.
- . Personnel administration and the management of human resources will become more complex.

. Fewer people will be available for the law enforcement job market.

In light of the above then, what are our expectations for the future of municipal law enforcement? As far as management is concerned, present and future administrators will become more innovative. Police executives have developed and utilized a host of strategies to provide law enforcement services to the community in the past. It is believed that they will continue to do so in the years ahead.

I propose that crime analysis will survive and, with proper organization and management, will become the vehicle for coping with the future deployment of law enforcement personnel.

With the rapid improvements in technology, the ever increasing volume of information, the sharing of multijurisdictional data on a regional basis, and the support of top management, the philosophy eluded to by Wilson in 1963 will prevail.

Crime analysis will become an inherent part of law enforcement and will expand from a "reactive" force to one of forecasting future trends and events. It will assist us in our crime prevention efforts and may be the process necessary to bring the community closer to the police.

As stated, this study concentrates on municipal law enforcement (local police departments) and addresses not only the concerns of police and city management, but also considers the impact that politics, demographics, economics and technical advancements

will have on the efficient delivery of future municipal police services.

The present "basic" applications of crime analysis will be identified and, through the examination of projected trends and events, a prediction will be made relative to what form crime analysis may take in the future.

Based upon the findings of the research, the most probable scenarios or "possible futures" will be enumerated. From that, the most feasible scenario, designated as the "most probable future", will be identified. The most likely will then be examined and projected to the year 2000.

### III. STATEMENT OF OBJECTIVES

1. Specify the principal strategic assumptions and uncertainties facing the California law enforcement administrator regarding the future of crime analysis.
2. Evaluate the assumptions by comparing them with:
  - . Expectations of current police administrators.
  - . Expectations of current and future law enforcement employees.
  - . Identification of alternative futures for the use of crime analysis in municipal law enforcement within the State of California.
3. Identify the necessity of establishing and maintaining a crime analysis unit.
4. Select and describe the "most probable" future scenario.
5. Produce a set of strategic planning assumptions that may be better suited for the future delivery of crime analysis services.
6. Provide an implementation and transition plan for law enforcement administrators.
7. Prepare a publication of study findings to serve as a guideline for law enforcement practitioners who may wish to study the future feasibility of crime analysis.

#### IV. STUDY METHODOLOGY AND RESEARCH STRATEGY

The Future of Crime Analysis in California Law Enforcement - Year 2000 is the result of a multifaceted course of study in the State of California Command College. The first eighteen months consisted of instructional modules divided into four core workshops described as follows:

- Core 1 - . Defining the Future
  - . Strategic Decision Making
  - . Strategic Planning
  - . Transition Management
  
- Core 2 - . Human Resource Management
  - . Public Finance
  - . High Technology
  
- Core 3 - . Independent Research Project
  
- Core 4 - . Project Presentation

During Core 3, the Independent Research Module, several methods were used to collect, compile, discuss, and analyze data for presentation in a final project report.

The purpose of this study was to identify factors which would give insight into the future of the "Crime Analysis" function in California municipal law enforcement agencies.

As previously stated, this study concentrates on the aggregate function of crime analysis and does not

attempt to examine each independent element of the process itself.

The strategy used to collect and analyze data consisted of the following elements:

- A. Review of the Literature
- B. Individual Interviews
- C. Brainstorming Group Session
- D. Questionnaire Design, Distribution and Analysis
- E. Cross Impact Analysis
- F. STEEP Technique (Social, Technological, Economical, Environmental and Political) Trends
- G. SMEAC. (Situation, Mission, Execution, Administration, and Control) Planning Technique
- H. Site Visits
- I. Scenario Writing
- J. Critical Mass Identification
- K. Academic Review

. Review of the Literature

A comprehensive review of the literature was conducted in an effort to learn as much as possible about the subject within the time limitations of the study. The review included books, manuals, magazine articles, government studies, reports of meetings, conferences, police policies and training publications.

Data was collected through manual and computer library searches (Criminal Justice Periodical Index) and materials possessed by the author

and practitioners of crime analysis. Publications were reviewed from 1963, when the term "Crime Analysis" was first used, to the present. Each provided unique perspectives about the function of crime analysis. This review, along with the personal experience of the author, formed the basis for the findings within this study. (See Bibliography)

. Individual Interviews

Several interviews were conducted with law enforcement officials who either manage or perform crime analysis functions. In addition, interviews were conducted with a national consultant and an educator, both of whom have studied crime analysis throughout the country. (See Appendix D - Personal Contacts).

. Brainstorming Group Sessions

A lengthy brainstorming group session was conducted to discuss the future of crime analysis and identify trends, events, values, and persons or groups which may have an affect on the crime analysis function. (See Appendix E - Group Contacts).

. Questionnaire Design, Distribution and Analysis

A pre-questionnaire letter was prepared and sent to thirty-two (32) crime analysis units throughout the state. The departments selected have either received or are presently receiving grant funding from the State Office of Criminal Justice Planning.

To solicit input from practitioners in the field, crime analysts were asked to submit questions regarding their concerns about the future of crime analysis and its impact on law enforcement. (See Appendix B - Pre-Questionnaire Letter of Inquiry and Appendix G - Questionnaire Response Analysis). As a result, over two hundred and twenty five (225) questions were received from eighteen (56%) of the solicited agencies.

Questions received from respondents were reviewed and divided into major topic groups to provide basic information about their agencies, their definitions of crime analysis, their management structures and philosophies, the perceptions of the role of the crime analyst, their concerns relative to personnel and training, technological advancements, and future considerations about the crime analysis function.

Once the original questions were categorically divided, a consultant academic advisor assisted in narrowing the responses to thirty (30) questions which ultimately comprised the final questionnaire. (See Appendix C - Questionnaire).

The questionnaire was mailed to one hundred and twenty-five (125) agencies in California and distributed to thirty-five (35) agencies outside the state. Approximately seventy-seven percent (77%) of the questionnaires were returned representing one hundred and twenty-three (123) agencies.

Additionally, a mini questionnaire was designed and distributed to fifteen (15) crime analysts at a regional crime analysis meeting. (See Appendix A - Pre-Questionnaire). This pre-questionnaire was designed to determine the current level of interest and commitment to the crime analysis function.

. Cross Impact Analysis

A cross impact analysis was also used on the identified trends and events to determine what effect one would have on the other.

Although not a true form of cross impact analysis, a cross tabulation method was used on selected questions from the questionnaire. A computer analysis of questionnaire returns was conducted at the California State Polytechnic University, Pomona. Several responses were cross tabulated with others to determine specific trends and identify how they may or may not relate to each other.

. STEEP Technique

Throughout the research phase an effort was made to monitor as many signals as possible in identifying trends and events. Included were the social, technological, economical, environmental, and political trends which serve as indicators of the future.

• SMEAC

An acronym for Situation, Mission, Execution, Administration, and Control. This method was used in developing a strategic plan for implementing the "Crime Analysis" unit of the future. The strategic plan, implementation plan and transition management plan was written based upon the scenario which represented the most likely future.

• Site Visits

In conducting research for the study, the author visited crime analysis sites which have a reputation for being well established, productive, and innovative. Among the California sites visited were: Sacramento, West Covina, Hawthorne, Ontario and Chino. In addition, sites were visited in Dallas, Texas and Las Vegas, Nevada. (See Appendix F - Site Visits).

• Scenarios

A series of three scenarios were prepared as a result of the data collected. Each scenario presents a method in which crime analysis may be implemented in the future, however, the most likely was selected because of the overwhelming support of the data.

. Critical Mass Identification

A method used to identify the participants who will have an impact on the commitment to the future of crime analysis.

. Academic Review

Several meetings were held with Professor George Hart, California State Polytechnic University, Pomona.

Professor Hart reviewed the initial project proposal and assisted in the compilation and analysis of the questionnaire. Several reviews were made of the study drafts and corrections and amendments were made where appropriate. Professor Hart reviewed the final draft for presentation to P.O.S.T.

## V. FUTURE CONSIDERATIONS

Looking at the future encourages us to think in precise and systematic terms about the range of future possibilities. We cannot predict with absolute confidence the future course of the criminal justice system because so much of the future depends upon the unforeseeable choices that people will make. The future is the product of our own decisions about what the future will be, it is not the result of some immutable law.<sup>(10)</sup>

Through individual interviews, questionnaire data and group discussions, a series of trends and events were analyzed. That information, coupled with other material, primarily provided through a computerized analysis of a comprehensive questionnaire, enabled the author to project possible scenarios for the future. By analyzing the possible scenarios about the future, we can at least develop a better understanding about possible outcomes of different choices we are about to make.<sup>(11)</sup>

### A. IDENTIFICATION OF CURRENT AND EMERGING ISSUES

#### 1. Identified Trends

The following trends have been identified as having a significant impact on the future of crime and crime analysis:

- . Demographics of the Future
- . Community Values
- . Caliber of Law Enforcement Employees
- . Political Values and Activity

- . Law Enforcement Leadership
- . Technology of the Future
- . Criminal Activity - Type of Crime
- . More Leisure Activities
- . Social Values
- . Citizen Demands for Law Enforcement Services
- . Education
- . Community Relations
- . Future Economy
- . Housing
- . Productivity
- . Budgeting Demands/Increased Cost of Municipal Government
- . Need for More Personnel
- . Greater News Coverage

To determine what trends were most important to the study, a diversified group of interested individuals was selected and asked to provide input.

A select group of eight (8) individuals consisted of police administrators, city department heads and staff members, law enforcement crime analysts and community leaders. As a result of a comprehensive meeting, the group met individually and collectively and identified specific trends and events that they felt would have an affect on the future of the crime analysis function. The group participated in brainstorming a series of ideas, including the redefining of the issue statement, that is, the future of crime analysis as a comprehensive and generic function.

The original issue statement tended to be more operational in nature, designed to satisfy current needs, and not so much oriented towards the future.

Once the issue was analyzed and restated, the group was ready to identify and develop emerging trends and future events that could produce forecasts and scenarios based on their analysis.

In addition to the above trends, the following events were identified and enumerated for future consideration.

## 2. Events and Potential Developments

- . Mandatory Public Service
- . Technical Communication
- . Cable Television
- . Economic Legislation
- . Increase in Crime (Major Change)
- . Decrease in Crime (Major Change)
- . Building of More Prisons
- . Closure of Prisons
- . More Sworn Officers
- . Fewer Sworn Officers
- . More Civilian Personnel in Law Enforcement
- . High Technology Crime
- . Establishment of Multi Jurisdictional Efforts
- . Consolidation of Law Enforcement Service
- . Sharing of Criminal Information
- . Elimination of Crime (Victimless)
- . Change in Criminal Law
- . Greater Citizen Awareness of Criminal Justice System

- . Mandatory Service Levels for Police
- . Demand for Ethnic Representation in the Work Force

B. FUTURE SIGNIFICANT ISSUES

From the total list of identified trends and projected events, the following were selected as having special significance to the future:

1. Demographics
2. Community Values and Needs
3. Caliber of Police Personnel
4. Political Activity
5. Law Enforcement Leadership
6. Technology
7. Criminal Activity and Role of Policing
8. Budget Considerations
9. Trend Probabilities

Following is a summary description of each major trend identified above:

. Demographics

Consideration was given to physical community characteristics, such as residential, commercial, industrial and agricultural, as well as age groups and ethnic characteristics.

In reviewing demographics one must also identify the profile indicators of the community such as racial makeup, zoning, population, schools, seniors, etc. Further, one must consider future trends

relative to the increase or decrease of those characteristics.

On the basis of demographics, what can be forecast for the next fifteen (15) years? It is anticipated that major population shifts will occur nationally and that most people will migrate from the northeast to the south and southwest sun belt areas, including California.

Major changes will occur in family structure, lifestyles, and household composition. A shrinking population in major cities will reduce the local tax base while demands for law enforcement services will continue to increase. Abandoned buildings will increase in central cities while their populations become more and more minority oriented. Hispanic and Asian immigration will continue at a high rate in most major population centers but particularly in areas which already have large concentrations of these groups. There will be increased unemployment among immigrants, the poor, and youth. There will be increases in youth gang violence and inter-minority race conflicts. Changing demographics will continue to have a major affect on crime, victims, and targets. Increased life expectancy means that greater numbers of senior citizens will become victims of criminal activity.

Profound social instability will result in a poor community perception of the criminal justice system in general and law enforcement in particular. In 1990 it is projected that people ages 15 to 24 will decline by 16% while ages 25 to 34 age group will grow by a similar amount. The number of persons ages 35 to 44 will increase 45%; and the over 65 year old population will expand by 20%.<sup>(12)</sup>

. Community Values and Needs

An examination of crime statistics, cultural groups and demographic information helps identify and predict future concerns based upon values, beliefs, and needs. In a group discussion, it was generally agreed that race, sex, and age statistics were extremely useful in determining significant differences concerning citizen perceptions of the police and the law enforcement role. Other trends focused around service demands, police interactions with citizens via participation in community relations and neighborhood watch groups, perception of police by the community and the level of community understanding relative to the police mission.

One forecast sees increased conflicts among separate groups and a lack of consensus about community values. Traditionalists will stress social order

while rejectionists will stress individual rights and, in addition, demand input into policy making and budget preparation. The criminal justice system will be called on more and more to mediate disputes over community values, which will remain fragmented and localized at the neighborhood level rather than at the "societal" level. (13)

. Caliber of Police Employee

It was suggested that if police personnel were better educated and trained there would be a willingness to participate and interact more openly with the community on a positive basis. Through this interaction a better understanding of the police mission would be established and the image and perception of the police within the community would be enhanced.

It is a safe assumption to say that the police employee will have to be better educated and must be able to cope with a myriad of issues which will face the law enforcement profession in the future.

For the next ten to fifteen years the American public will continue to demand accountability and productivity from government. Institutions will become more bureaucratic and rely more consistently on rules and regulations. Individual discretion will be minimized. Administrators may shift their objectives

from the qualitative to the quantitative, such that performance will be measured with numbers. The criminal justice system may likewise have to shift from the qualitative to the quantitative in the next few years as more emphasis is placed on accountability.

The high quality of American life has stabilized, and this phenomenon will affect our thinking about the future. Traditional thinking people currently manage and control public and private institutions, and many of their values are not understood by younger people. Traditionalists and younger people view productivity differently. Traditionalists are more concerned about productivity on the job.

Management initiated change in an organization is difficult and focuses on the attitudes of employees toward productivity. In the future more community involvement will take place in the budgetary process, especially in law enforcement.

Crime prevention is and will continue to be a major productivity goal of law enforcement. Law Enforcement managers must become more receptive to community and political participation in developing budgets, particularly for crime prevention.

Improved management and supervision of personnel and equipment will contribute to future productivity improvements.

Community involvement should take a larger role in helping develop law enforcement productivity goals and priorities. The trend will be favorable to the regionalization of efforts for productivity effectiveness.

There are dangers to the trend, observed in some cities, where police departments are asked to become revenue producers, when crime prevention should actually be their major goal.

In the future, law enforcement agencies will be asked to do even more with reduced resources. Success will require carefully defined goals, planning, effective management, risk taking, accountability, and creativity.

An increase in demands for improved employee productivity will lead to a greater number of labor/ management disputes. In response to community pressures for improved accountability law enforcement agencies will become more policy and rules oriented and lose flexibility and discretion. There will be little or no improvement in system networking because of continued diversion in the criminal justice system.<sup>(14)</sup>

. Political Activity

Political activity may include several politically related acts which could affect the criminal justice system. Such acts may occur as a result of shifting social values. In turn, this may cause a change in the law which would likely affect criminal policy and procedure.

The primary area to monitor, however, is the role that local politicians play within their respective communities. The level in which citizens are allowed to interact with local government will ultimately set the stage for interaction with local departments and specifically the police.

Law enforcement administrators must decide whether to maintain the traditional hands off policy as it relates to the political process which governs their agencies, or to become actively involved in shaping the future of law enforcement by direct political interaction.

The political system is driven by the political response to basic community problems. The law enforcement administrator must assume an active role in the community to minimize the public's growing fear of crime and, in concert with political efforts, enhance the image of law enforcement and its effectiveness in responding to community issues and needs.

. Law Enforcement Leadership

Next to political activity, an examination of the attitude held by law enforcement executives is extremely critical. The scenarios will explore the future of law enforcement agencies as they are directed by open minded and well educated administrators as opposed to their counterparts who operate from a reactive posture with a more conventional approach.

Top management will be expected to be well trained with advanced college degrees. They must have the qualifications to administer multi million dollar budgets and have the ability to deal effectively with a myriad of social and community issues.

There will continue to be a growing concern about the relationship between the community and the police. The law enforcement administrator will therefore have to be a true "professional" in his relationship with community members.

The law enforcement professional must recognize the need for self awareness, show a willingness to be accountable, demonstrate a concern for the individual and have a desire to give a genuine participative effort as a leader in the community.

. Technology

Technological research has skyrocketed during the past five years and is expected to escalate at a greater rate during the next decade. Even today, as stated in the article Silicon Street Blues, it is feasible to have computers handle all the paperwork while robots assist with routine tasks and a computerized machine can dispense one's coffee.

The article presents several implications for law enforcement management. This scenario can be set aside by labeling it "science fiction" and dismissing it without another thought. But that might be dangerous. Something like it may be a reality before the turn of the century -- and that is only 14 years away.

The technology to accomplish most of the tasks in the scenario exists today. Granted, much of this technology is not perfected to the point of being available commercially, but it does exist. (15)

The popularity of cable and closed circuit television will affect the way we interact with the community. Many communities presently televise council meetings to the citizens on a government channel and have the ability to conduct specialized programming. In the future it will undoubtedly be possible to have two-way

communication by means of the television set.

It will be possible for law enforcement agencies to make direct contact with thousands of residents through the use of their televisions and provide them with current information on a number of law enforcement related subjects.

Christopher Evans, in his book The Micro Millennium, mentions the idea of paper and coin money being replaced by electronic money. To those who do not believe that money is on the way out, he states, "...something very dramatic is about to happen to money, and to the financial mechanisms and institutions that go with it. The changes are already in motion, and have been for a decade or so, though their effects to date have been constrained and their full implications have not been widely grasped."

Evans also discusses other implications of technology as they relate to law enforcement in the future. He mentions:

- . property theft will initially increase, then decrease
- . illegal objects (drugs, stolen works of art, collections and so on) will become prime targets of criminal attack

- . sophisticated home security systems will appear
- . collision proof vehicles will appear
- . computers will reduce the need for people to move around as much from place to place
- . initial increase in civil disturbance --  
 "As the pace of change quickens and produces greater distortions in the fabric of society, the inevitability of conflict between the elements has to be accepted"
- . the computer will be used as a weapon against the police themselves to disrupt their occupation
- . computerized "personal chips" for identifying and locating people will be possible
- . antisocial groups (terrorists, anti-computer groups, and minor political parties) will become active and possibly destructive
- . use of robots for dangerous assignments and tasks will increase

Some of these changes and impacts are not that far off into the future -- possibly less than five years. Are police managers ready to respond effectively? Will

officers be able to cope with these changes? The very fabric of society is undergoing transition because of technology and police agencies must respond to, and keep abreast of, that transition.

Perhaps the most startling part of the Silicon Street Blues scenario is the way in which information is gathered and disseminated. Squad rooms will be empty. Instead of briefings, information will be transmitted directly to the field. Reports will be electronically transmitted instead of hand delivered. Supervisors will direct their subordinates without face-to-face or even voice-to-voice contact. Are these far fetched ideas? We think not.

First of all, information is a very important tool of policing. Officers in the field, supervisors in charge of budgeting, and chiefs all act on information. If enough accurate information is available at the proper time in the proper place, officers can better protect themselves and citizens they are sworn to protect; budget officers can better determine where the money should be spent; and chiefs can better direct their departments.

The world is changing and that change will sooner or later impact on policing. Some side issues ask how crime will change as

society changes and what will we do with, if we can find, those future criminals. Perhaps the most important question is: Should local agencies pay more attention to and utilize high-tech data processing methods, and what will happen if we don't?(16)

There is no doubt that the automated crime analysis function must become an integral part of our law enforcement and crime fighting efforts. Law enforcement administrators of the future can work in concert to develop centralized law enforcement information centers in favor of smaller "local" systems which exist today. Major changes in philosophy may not occur until the decade of the 90's. Local improvements in technology will largely continue to be mainly provincial in scope primarily because of a scarcity of funding and public apathy. Singularly, agencies will have a tendency to return to traditional approaches rather than relying on improved technology.

With an effort towards consolidation and multi jurisdictional agreements, it will be possible for agencies to purchase modern equipment and compete with the criminal element. (17)

#### Criminal Activity and the Role of Policing

Types of criminal activity will change in future years as emerging trends set our

style of living. The major trends discussed in this study all play a part in the future role of law enforcement. We may see a shift to privatization and specialized law enforcement. There may be a major change in criminal law. Many laws, which are currently on the books, were written in the late 19th century. As a result of changes in social values, pressure on legislators, and demands for reform, many acts which are classified as unlawful may be decriminalized. Change in this area may be slow but will be relative to other developing trends. To assist in the monitoring process, the following forecasts provide an imaginary look into the possible future. These forecasts are representative of group predictions and provide insight to the probable affects that certain trends may have on the future of crime analysis.

In his article on "Proactive Police Futures," published in The Future of the Criminal Justice System (18) Edward Thibault made the following comments about the role of policing:

In the preface of the Manual of Instructions (1829), written for the London Metropolitan Police Department (often cited as the first modern police department) Lieutenant Colonel Charles Rowan gave the major purpose of the police:

It should be understood at the outset that the principal object to be obtained is the Prevention of Crime (Reith, 1958, pp. 135-36).

Rowan emphasized this point and considered the catching of criminals after a crime had been committed to be a secondary purpose of policing:

...The security of person and property, the preservation of the public tranquility, and all the other objects of a Police Establishment, will thus be better effected than by the detection and punishment of the offender, after he has committed a crime....The absence of crime will be considered the best proof of the complete efficiency of the Police (Reith, pp. 135-36).

O. W. Wilson (1963) in his classic text on police management talked about the omnipresent police force and stressed crime prevention as the major purpose of policing:

The police do this by preserving the peace and protecting life and property against attacks by criminals and from injury by the careless and inadvertent offender (p. 4).

This is the proactive approach, a rejection of waiting for crime to happen and then apprehending criminals after citizens have been victimized. In contrast, current patrolling methods emphasize such items as random patrol along with two minute response times to all calls (Pate et al., 1976). It is becoming painfully obvious that this

reactive approach is costly, inefficient and not wanted by thinking citizens. No matter how efficient the crook catching may be after the citizen has been robbed, raped, or mugged, citizens do not like to be victimized and basically do not like police departments that allow criminal victimization to take place.

The Kansas City Study, with all of its methodological flaws and criticism indicated that the increase or decrease in patrol has little or no effect on the prevention of crime. This leads to what James Q. Wilson (1975) called the crime attack model of law enforcement:

...the 'crime attack' model...is based on the assumption that the best use of patrolmen is to place them as close as possible, not to citizens, but to the scene of a potential crime in ways that will enable them to apprehend the criminal in the act, or at least to cut short his crime almost as it begins (p.100).

This is the object of the proactive police model. The prevention of crime by actively creating an aggressive force and using the most modern technology to vigorously prevent crime. This means a technologically oriented force consisting of a highly professional, highly trained small group of well paid and well managed

experts in crime prevention, computer analysis, and criminal investigation. (19)

Given current trends, it is expected that law enforcement will be organized along the lines just described by the year 2000. Whether this will be more effective law enforcement, given the realities of a democratic republic, remains to be seen. However, law enforcement of the future will take advantage of the then existing technology, based upon its cost effective use. The major thrust for permanent change will be the demands made by a cost conscious local government, along with the wide array of services demanded by citizens.

. Budget Considerations

During the next decade, there will be increased demands made to inject more public input into law enforcement planning and budget preparations. Moreover, demands for cost accountability will focus law enforcements attention on form rather than substance, i.e. quantity in favor of quality of services. This demand for accountability will also cause organizations to adopt new goals which are more "measurable" than traditional ones.

There is likely to be increased political lobbying at state levels by special interest groups that will result in a disparity in criminal justice funding.

Agencies with the strongest lobby groups will win the largest share of the available tax dollars. Federal funds will be allocated with an increased number of strings attached, and a continued year to year method for meting out state and federal subsidies will make long range budget planning virtually impossible. (20)

Eventually a dichotomy will exist. Public demands for increased service will continue despite a reduction in budgets. Ironically however, the criminal justice system will be unable to do more with less while mandated services will continue to increase, there will be limited funds available for their provision.

Emphasis must be placed on developing state and local funding agencies for the criminal justice system community if it is to avoid potential future federal involvement and the controls which accompany federal aid. Law enforcement agencies must identify alternative sources of funding, and justify dollar needs and cost benefits with hard data whenever possible. Agency policies and practices should be redirected and resources allocated in ways which are more reflective of contemporary community values.

During the budgetary process, there should be ongoing going public education efforts, and attempts made to find the means for

addressing the paradox presented by the issue of increased public demands for service on the one hand and public apathy on the other.

. Trend Probabilities

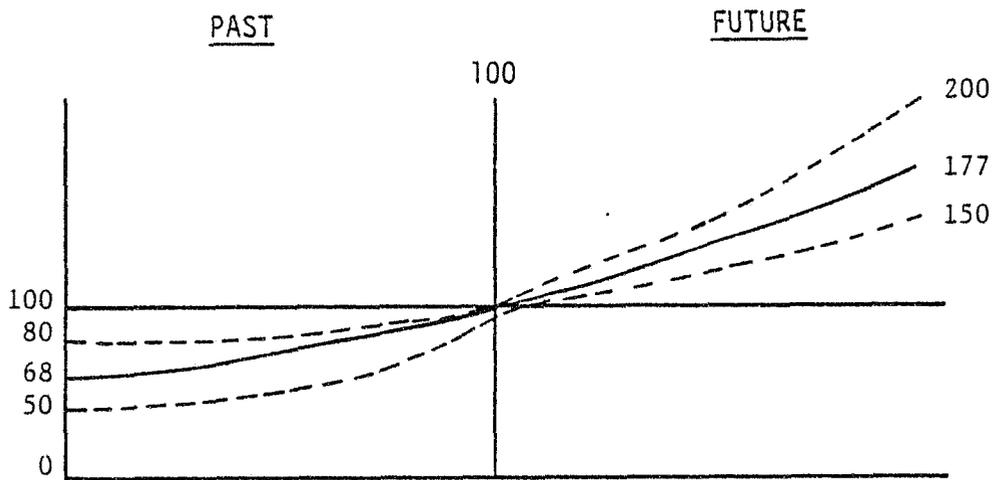
Following is a statistical and graphical display of identified trends.

As a result of a "brainstorming" session, a group of administrators, law enforcement practitioners, and community leaders conducted a statistical analysis on the predictability of these trends.

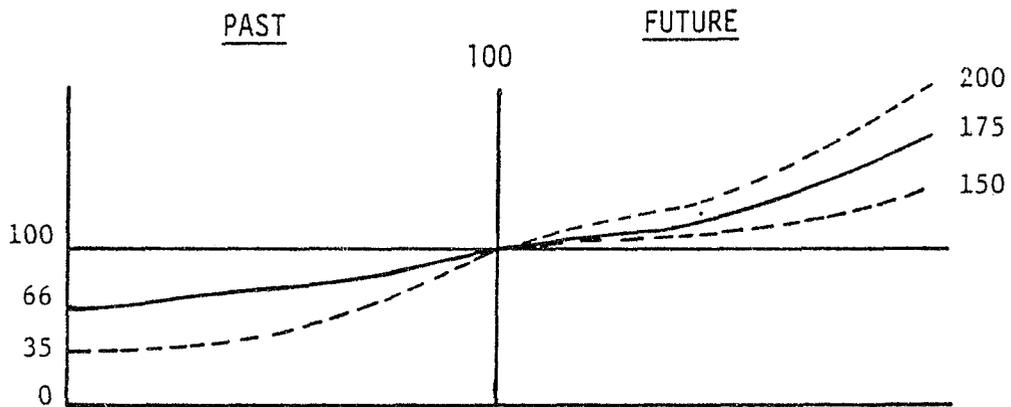
The forecasts on the trends illustrated are extremely useful to display expectations on how the trends may evolve in the future relative to the subject issue. These forecasts should be monitored closely to assist in the determination of priorities and policy.

The trend projection charts illustrate several things. The solid graphic line represents the average perspective of what can be expected in the future. The dotted lines represent the best/worst case projection. The horizontal and vertical lines, marked 100, are indicative of the present. The figures to the left represent the past and the figures to the right represent the future.

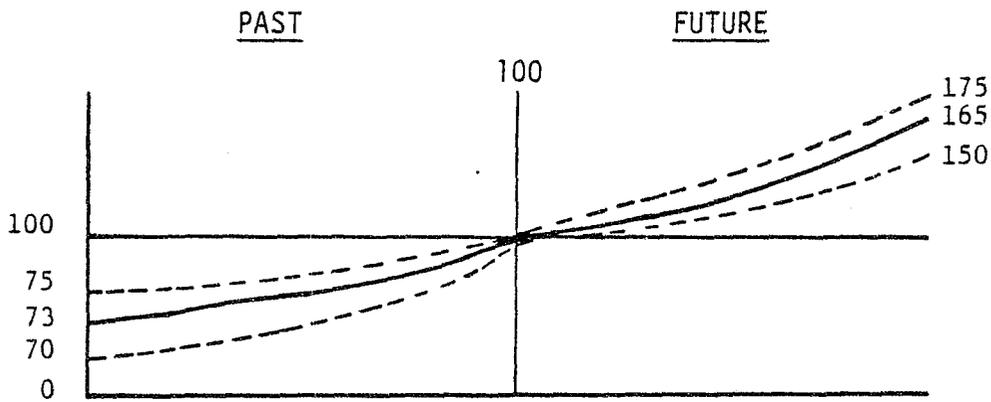
The policy maker must consider the entire range of probabilities when using this statistical method of projecting trends. The philosophy is, if one can agree on the past then agreement on the future will be more likely.



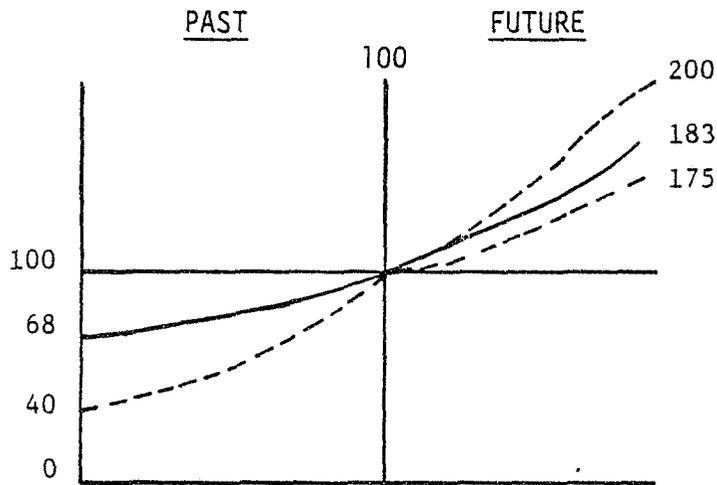
GRAPH 1.1 - DEMOGRAPHICS



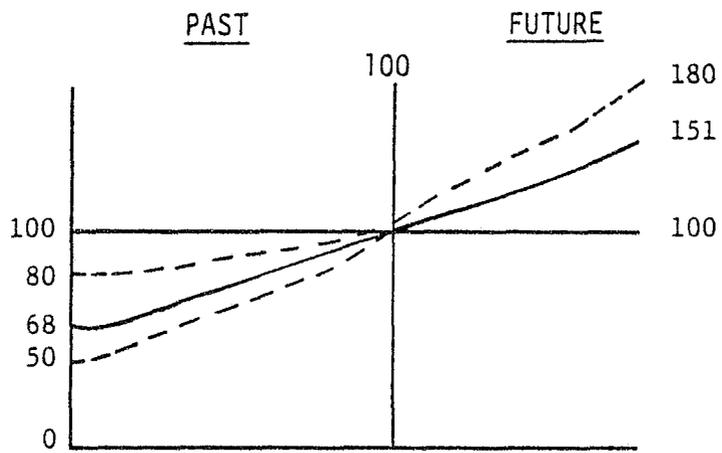
GRAPH 1.2 - COMMUNITY VALUES/NEEDS



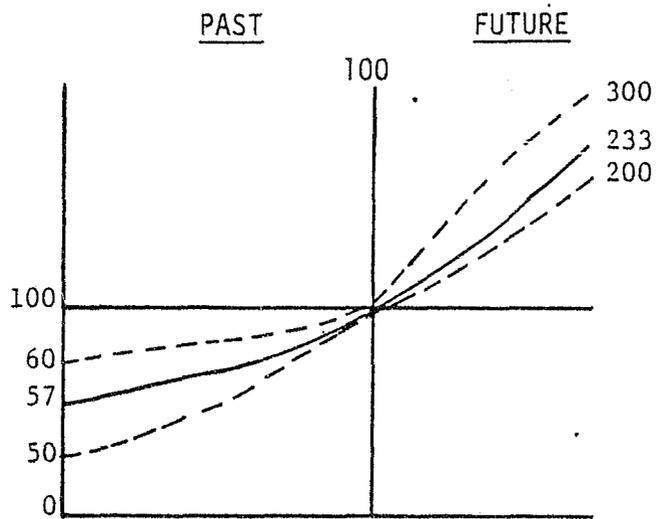
GRAPH 1.3 - CALIBER OF POLICE EMPLOYEE



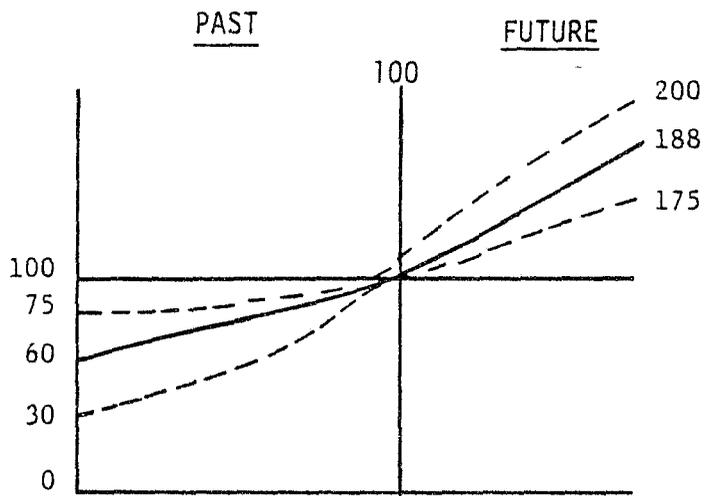
GRAPH 1.4 - POLITICAL ACTIVITY



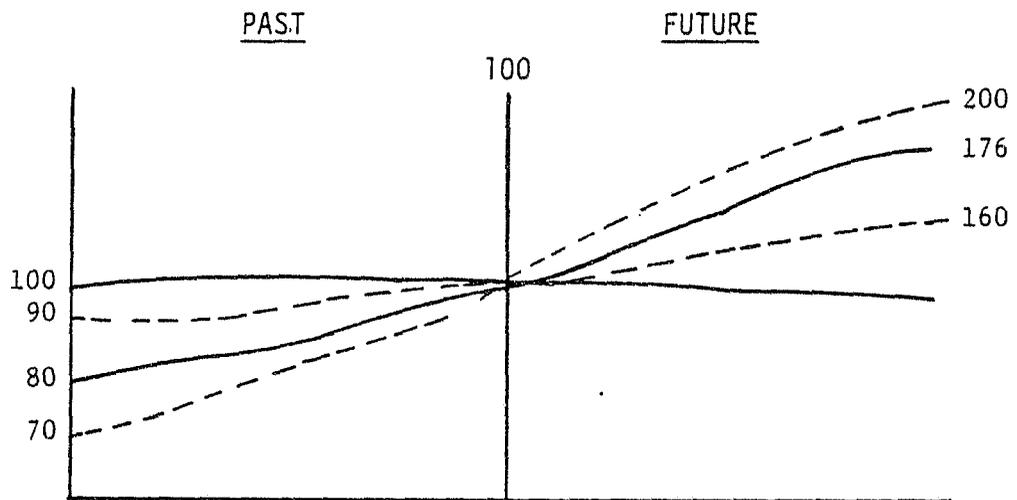
GRAPH 1.5 - LAW ENFORCEMENT LEADERSHIP



GRAPH 1.6 - TECHNOLOGY



GRAPH 1.7 - CRIMINAL ACTIVITY - ROLE OF POLICING



GRAPH 1.8 - BUDGET CONSIDERATIONS

C. PRECURSOR DEVELOPMENT/EVENTS:

Several events were identified in relation to the emerging trends. From the events listed previously in this chapter, the following are representative of the major events that would have an affect on the function of "Crime Analysis" in law enforcement in the future.

The discussion group assigned numerical values to the events and the following probability factors were derived.

Events and Probability Estimate

<u>Events</u>	<u>Probability by Year 1995-2000</u>	<u>Net Impact On Law Enforcement</u>
1. <u>Higher Population Density</u> - Type of housing and distribution of population.	.71 - .76	.74
2. <u>Consolidation of Service</u> - Demands for consolidated public safety services (Specifically crime analysis). Could be a fund saving activity.	.62 - .74	.71
3. <u>Political Activity</u> - Events that result in major policy changes, law reform and citizen participation with local governments.	.62 - .76	.70
4. <u>Change in Criminal Law</u> - Legislative change in law as a result of social values and public demand.	.47 - .52	.50
5. <u>High Tech Crime</u> - Increase in utilization of high tech equipment	.75 - .78	.76

## D. QUESTIONNAIRE ANALYSIS

### 1. Methodology

Questionnaires and surveys are very useful as research tools for several reasons. Primarily, they are used to obtain probability samplings and collect information that is not available from any other source.

There is always some information available on a given topic from what is written, what people say, from impressions or from official records. Whether or not additional information is worth the expense of a survey depends on the topic and the situation. Surveys have their strengths and provide the ability to obtain information which is not systematically available elsewhere.

As described previously in Section IV (Methodology), the questionnaire was sent to one hundred and twenty-five agencies in California and distributed to thirty-five agencies outside of the state.

The main goal in the preparation of the questionnaire was to make it brief and self-explanatory. Most questions were restricted to closed answers, however, some questions required a fill in answer. An attempt was made to categorize the questions and present them in an orderly and clear manner.

The major categories consisted of:

- . Agency Information
- . Crime Analysis Definition
- . Crime Analysis Management
- . The Crime Analyst
- . Training
- . Future Considerations

A total of two hundred and twenty (220) questions were reviewed and consolidated into thirty (30) for inclusion in the questionnaire.

Due to monetary and time constraints, the questionnaire was not pretested, however, as a result of preliminary review by several practitioners, modifications were made prior to finalization and distribution.

Questionnaires were distributed to municipal law enforcement agencies throughout the state on a random selection basis. Agencies were selected by category indicating number of personnel as listed in the publication Employment Data for California Law Enforcement, P.O.S.T., State of California, 1985, pp. 37-39. From the random selection process, it was felt that a representative cross section of opinion would be obtained from police chief executives throughout the state.

The questionnaire was addressed to the chief executive of each agency with a cover letter requesting that it be

completed by the chief executive personally.

Of the total return, 46.7 percent came from agencies with less than fifty (50) sworn personnel and 53.3 percent from agencies with over fifty (50) sworn personnel.

As seen in Appendix C, the questionnaire included a variety of categorized questions. A number of questions were asked about the background of the chief executive, their departments, and communities. The demographic portion of the questionnaire was followed by a series of questions regarding the definition and function of crime analysis.

Next, several questions were asked about management, human resources, and training. Finally, in the category of future considerations, the respondent was asked to check, rank order, and identify trends and events that would have an effect on crime analysis in the future.

Once the questionnaires were returned, the information was coded and entered into a computer for analysis. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data and provide several simple cross-tabulations on significant questions to determine cross-impacts. The majority of the

statistical analysis involved the use of simple frequencies and percentages.

The Statistical Package for the Social Sciences is an integrated system of computer programs designed for the analysis of social science data.

The following information has been derived from the analysis of selected sample questions from the questionnaire. They were selected because of their significance to the findings in this study and the future of the crime analysis function. Each question is accompanied by a brief explanation of the findings and a computer readout which provides a statistical analysis of the responses. A complete copy of the questionnaire and questionnaire analysis can be found in Appendix C and G of this study.

2. Sample Questions

. Agency Information

Question 1. Number of sworn personnel?

The number of sworn personnel is categorized with the frequency of responses indicated numerically and by percentage. As shown, the responses were very similar in number for those agencies below fifty (50) as well as fifty (50) and above.

Q1		NUMBER OF SWORN PERSONNEL				
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)	
1-10	1	9	7.3	7.4	7.4	
11-25	2	28	22.8	23.0	30.3	
26-50	3	20	16.3	16.4	46.7	
51-100	4	23	18.7	18.9	65.6	
100+	5	42	34.1	34.4	100.0	
NO RESPONSE	9	1	.8	MISSING		
	TOTAL	123	100.0	100.0		
VALID CASES	122	MISSING CASES	1			

TABLE 1.1 - SWORN PERSONNEL

Question 2. Number of civilian personnel?

The statistics for civilian personnel show a 74.2 percent response from agencies with fifty (50) or fewer civilians in contrast to 25.8 percent with fifty-one (51) or more.

Q2 CATEGORY LABEL	NUMBER OF CIVILIAN CODE	PERSONNEL			
		ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
1-10	1	41	33.3	34.2	34.2
11-25	2	30	24.4	25.0	59.2
26-50	3	18	14.6	15.0	74.2
51-100	4	16	13.0	13.3	87.5
100+	5	15	12.2	12.5	100.0
NO RESPONSE	0	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120	MISSING CASES	3		

TABLE 1.2 - CIVILIAN PERSONNEL

Question 3. Geographical location of agency?

The following is representative of the geographical locations of the respondents.

03		GEOGRAPHICAL LOCATION OF AGENCY			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NORTH CALIF	1	26	21.1	21.3	21.3
CENTRAL CALIF	2	17	13.8	13.9	35.2
SOUTH CALIF	3	54	43.9	44.3	79.5
	4	3	2.4	2.5	82.0
OTHER	8	22	17.9	18.0	100.0
NO RESPONSE	9	1	.8	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	122	MISSING CASES	1		

TABLE 1.3 - GEOGRAPHICAL LOCATION

The agencies noted in the "Other" category were out of state departments (including military police) which were represented at an IACP Crime Analysis Seminar conducted on February 18-21, 1986 in Las Vegas, Nevada. Responding were personnel from:

Detroit, Michigan	Tempe, Arizona
Kotzebue, Alaska	Tucson, Arizona
Lake Havasu, Arizona	Wailuki, Hawaii
Laramie, Wyoming	Whert Ridge, Colorado
Midwest City, Oklahoma	Yuma, Arizona
Pasadena, Texas	Camp Leisure, North Carolina
Portland, Oregon	Marine Corps Hdqrs., Wash, D.C.
Scottsdale, Arizona	
Shreveport, Louisiana	
Quantico, Virginia	

In addition, completed questionnaires were provided from Las Vegas, Nevada, and Dallas, Texas.

Question 6. Does your agency presently have a Crime Analyst or a Crime Analysis Unit?

The response to this question was statistically close with slightly more agencies indicating that they did not have an analyst or unit.

06A		HAVE CRIME ANALYST OR UNIT			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	51	41.5	42.1	42.1
NO	2	70	56.9	57.9	100.0
NO RESPONSE	9	2	1.6	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	121	MISSING CASES	2		

TABLE 1.4 - ANALYST OR UNIT

Question 7. Has your agency received funds for a CCAP "Grant" through OCJP?

The majority, more than 3 to 1, indicated no. A cross tabulation with department size would most likely indicate a majority of smaller agencies would not have been eligible for grant funding.

Q7		FUNDS FOR CCAP THRU OCJP			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	25	20.3	21.0	21.0
NO	2	94	76.4	79.0	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	119				
	MISSING CASES		4		

TABLE 1.5 - GRANT FUNDING

Question 8. Do you see a need for crime analysis in your agency?

Almost 90 percent of the respondents indicated that there is a need for crime analysis. The remaining 10+ percent who responded no included small agencies in low growth communities.

98            NEED FOR CRIME ANALYSIS IN AGENCY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	102	82.9	87.2	87.2
NO	2	15	12.2	12.8	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	117	MISSING CASES	6		

TABLE 1.6 - NEED FOR CRIME ANALYSIS

Question 9. Is your city in a high growth area?

The majority of agencies indicated they were in a high growth area. The adjusted frequency for non-high growth responses was approximately the same as the number of agencies reporting which were 25 or under in sworn personnel.

The actual number of agencies under 25 sworn was 37 compared to 31 agencies in non-high growth areas.

09A CITY IN HIGH GROWTH AREA

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	81	65.9	72.3	72.3
NO	2	31	25.2	27.7	100.0
NO RESPONSE	9	10	8.1	MISSING	
OUT OF RANGE		1	.8	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	112				
		MISSING CASES	11		

TABLE 1.7 - DEMOGRAPHICS

. Crime Analysis Definition - Function

Question 13. Do you think Crime Analysis will be a valid function in future Law Enforcement efforts?

An overwhelming number of agencies, almost 96 percent, indicated yes. This definitely indicates an awareness of the future need for crime analysis.

013		CRIME ANALYSIS VALID IN LAW ENF			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	116	94.3	95.9	95.9
NO	2	5	4.1	4.1	100.0
NO RESPONSE	9	2	1.6	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	121		MISSING CASES	2	

TABLE 1.8 - VALIDITY OF CRIME ANALYSIS FUNCTION

Question 14. Do you think crime analysis units should be:

- A. Local agency controlled
- B. Multijurisdictional
- C. Coordinated by County Sheriff
- D. Combination of above \_\_\_\_\_ & \_\_\_\_\_

More than sixty percent (61.3%) of the agencies indicated an interest in the combination of multijurisdictional units, a majority of these (72.6%) wanted to maintain some measure of local control. Less than eleven percent of these agencies (10.9%) favored coordination by the County Sheriff.

Q14 CRIME ANALYSIS UNITS SHOULD BE					
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
A	1	33	26.8	27.7	27.7
B	2	20	16.3	16.8	44.5
C	3	5	4.1	4.2	48.7
A AND B	4	53	43.1	44.5	93.3
A AND C	5	2	1.6	1.7	95.0
B AND C	6	5	4.1	4.2	99.2
A AND B AND C	7	1	.8	.8	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	119		MISSING CASES	4	

TABLE 1.9 - FUNCTIONAL CONTROL

. Crime Analysis Management

Question 15. Financially, regionalization may be feasible in the future to share resources. Of the following, indicate which item would be best served on a regional basis.

- A. Sharing of criminal information
- B. . Sharing of personnel
- C. Sharing of costs personnel/training
- D. Purchase of equipment, i.e. computers, software
- E. Securing grant funds by combining resources, i.e. population base, crime trends
- F. Review of crime trends on regional basis
- G. Identity of offenders on a multijurisdictional basis

A high percentage of agencies favored sharing in all categories. The least likely area for sharing was personnel. Although this was a comparatively low area, the percentage of respondents were 60 percent in favor.

Tables 1.10 through 1.16 show a frequency and percentage per category:

Q15A SHARING OF CRIMINAL INFO

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	116	94.3	96.7	96.7
NO	2	3	2.4	2.5	99.2
	4	1	.8	.8	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120	MISSING CASES	3		

TABLE 1.10 - CRIMINAL INFORMATION

Q15B SHARING OF PERSONNEL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	66	53.7	60.0	60.0
NO	2	44	35.8	40.0	100.0
NO RESPONSE	9	13	10.6	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	110	MISSING CASES	13		

TABLE 1.11 - PERSONNEL

Q150 SHARING COST PERSONNEL TRAINING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	90	73.2	79.6	79.6
NO	2	23	18.7	20.4	100.0
NO RESPONSE	9	10	8.1	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	113	MISSING CASES	10		

TABLE 1.12 - TRAINING COSTS

Q150 PURCHASE OF EQUIPMENT I.E. COMPUTERS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	97	78.9	86.6	86.6
NO	2	15	12.2	13.4	100.0
NO RESPONSE	9	11	8.9	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	112	MISSING CASES	11		

TABLE 1.13 - EQUIPMENT PURCHASE

Q15E SECURING GRNT FUNDS BY COMB RESOURCES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	94	76.4	82.5	82.5
NO	2	20	16.3	17.5	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

TABLE 1.14 - GRANT FUNDS

Q15F REVIEW OF CRIME TRENDS ON REG

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	104	84.6	91.2	91.2
NO	2	10	8.1	8.8	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

TABLE 1.15 - REGIONAL CRIME TRENDS

015G ID OF OFFENDERS ON MULTI JURIS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	93.2	93.2
NO	2	8	6.5	6.8	100.0
NO RESPONSE	9	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	118				
		MISSING CASES	5		

TABLE 1.16 - OFFENDERS - MULTIJURISDICTIONAL EFFORT

Question 16. In your opinion, do you think smaller Law Enforcement agencies will be able to maintain the crime analysis function and keep up with modern technology on their own?

The agencies were relatively evenly split on this question and a cross tabulation analysis may show that the majority of small agencies reporting are of the opinion that they will be able to keep up with future technological advances.

016		SMALLER LAW ENF KEEP UP			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	55	44.7	48.2	48.2
NO	2	59	48.0	51.8	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	114				
		MISSING CASES	9		

TABLE 1.17 - SMALL AGENCIES

Question 19. Do you see a valid use for crime analysis in the following areas?

- A. Directed Patrol
- B. Managing Investigations
- C. Manpower Deployment
- D. Crime Prevention
- E. Community Crime Resistance
- F. Forecasting Crime

Of the six possible responses, an average of 94.9 percent of the agencies indicated that there was a valid use for crime analysis in all areas. The following tables show the statistical breakdown for each category:

- Q19A DIRECTED PATROL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	120	97.6	100.0	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120	MISSING CASES	3		

TABLE 1.18 - DIRECTED PATROL

0198 MANAGING INVEST

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	90.9	90.9
NO	2	11	8.9	9.1	100.0
NO RESPONSE	9	2	1.6	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	121	MISSING CASES	2		

TABLE 1.19 - MANAGING INVESTIGATIONS

019C MANPOWER DEPLOYMENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	115	93.5	95.8	95.8
NO	2	5	4.1	4.2	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120	MISSING CASES	3		

TABLE 1.20 - MANPOWER DEPLOYMENT

Q190 CRIME PREVENTION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	117	95.1	98.3	98.3
NO	2	2	1.6	1.7	100.0
NO RESPONSE	9	4	3.3	MISSING	
TOTAL		123	100.0	100.0	
VALID CASES	119	MISSING CASES		4	

TABLE 1.21 - CRIME PREVENTION

Q19E COMM CRIME RESISTANCE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	107	87.0	93.0	93.0
NO	2	8	6.5	7.0	100.0
NO RESPONSE	9	8	6.5	MISSING	
TOTAL		123	100.0	100.0	
VALID CASES	115	MISSING CASES		8	

TABLE 1.22 - COMMUNITY CRIME RESISTANCE

Q19F FORECASTING CRIME

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	109	88.6	91.6	91.6
NO	2	10	8.1	8.4	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	119				
		MISSING CASES	4		

TABLE 1.23 - FORECASTING CRIME

. Crime Analyst Criteria

Question 21. What criteria should be used in the selection of a crime analyst?

- A. Sworn; Non-Sworn
- B. College Degree? B.A. or M.A.

Almost 60 percent indicated that the crime analyst should be non-sworn with 75 percent listing a Bachelor's Degree as a minimal educational requirement.

Q21A CRIME ANALYST SHLD BE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
SWORN	1	34	27.6	31.2	31.2
NON SWORN	2	64	52.0	58.7	89.9
EITHER	3	8	6.5	7.3	97.2
OTHER	8	3	2.4	2.8	100.0
NO RESPONSE	9	14	11.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	109				
		MISSING CASES	14.		

TABLE 1.24 - SWORN/NON-SWORN

0210 COLL DEGREE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FPEC (PCT)
BA	1	63	51.2	75.0	75.0
MA	2	16	13.0	19.0	94.0
	3	1	.8	1.2	95.2
OTHER	9	4	3.3	4.8	100.0
NO RESPONSE	0	39	31.7	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	94	MISSING CASES	39		

TABLE 1.25 - EDUCATION

. Future Considerations

Question 25. Would you consider participating in the following multijurisdictional cost effective functions in the future if local control could be maintained?

- A. Regional Computer System
- B. Regional Data Center
- C. Networking of Computers
- D. Regional Computer Aided Dispatch Center
- E. Sharing of Criminal Records
- F. Regional Forecasting of Criminal Activity
- G. Regional Analysis and Identification of Criminals
- H. Purchase of high tech equipment, i.e. computers, mobile data terminals, vehicle locaters, software

The notion of regionalization and multijurisdictional programs has been suspect in the law enforcement community because of considerations and concerns about local control. It was surprising to see that in every category, except dispatch, the agencies voted yes for a multijurisdictional approach to activities ranging from a low of 84.2 percent (Purchase of Equipment) to a high of 99.2 percent (Regional Crime Analysis).

It was interesting to note that the question of local control was very evident for the dispatching function. Only 52.1 percent favored multi-regional dispatching compared to 47.9 percent who were against it. The processing and response to calls for service is very territorial and may well be one of the last functions to be regionalized for small and medium sized police agencies.

Categorically, the frequency and statistical analysis is as follows:

Q25A REG COMP SYS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	101	82.1	86.3	86.3
NO	2	16	13.0	13.7	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 117 MISSING CASES 6

TABLE 1.26 - REGIONAL COMPUTER SYSTEM

Q25B REG DAT CENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	100	81.3	87.7	87.7
NO	2	14	11.4	12.3	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

TABLE 1.27 - REGIONAL DATA CENTER

Q25C NETWORK COMP

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	93.2	93.2
NO	2	8	6.5	6.8	100.0
NO RESPONSE	9	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 118 MISSING CASES 5

TABLE 1.28 - NETWORKING OF COMPUTERS

Q25D REG COMP AID DISPATCH CFNT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	61	49.6	52.1	52.1
NO	2	56	45.5	47.9	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 117 MISSING CASES 6

TABLE 1.29 - REGIONAL COMPUTER AIDED DISPATCH

Q25E SHARING CRIM RECORDS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	92.4	92.4
NO	2	9	7.3	7.6	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

TABLE 1.30 - SHARING OF CRIMINAL RECORDS

Q25F REG FORECASTING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	109	88.6	91.6	91.6
NO	2	10	8.1	8.4	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

TABLE 1.31 - REGIONAL FORECASTING

Q25G REG ANALYSIS ID CRIM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	119	96.7	99.2	99.2
NO	2	1	.8	.8	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 120 MISSING CASES 3

TABLE 1.32 - REGIONAL ANALYSIS OF CRIMINAL OFFENDER

Q25H PURCHASE OF HIGH TECH EQUIP

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	96	78.0	84.2	84.2
NO	2	18	14.6	15.8	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

TABLE 1.33 - REGIONAL PURCHASE OF EQUIPMENT

Question 26. Do you think crime analysis will become totally automated?

The consensus was that total automation would still require the use of a human analyst to identify "the human element" of what is to be analyzed. One respondent indicated that total automation (robotics) for crime analysis would probably not be available during his lifetime (at least until after the year 2000).

026		CRM ANALYSIS TOTALLY AUTO			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	41	33.3	34.7	34.7
NO	2	77	62.6	65.3	100.0
NO RESPONSE	0	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	118	MISSING CASES	5		

TABLE 1.34 - TOTAL AUTOMATION

Question 27. Do you see more sharing between agencies in the future (resources and information)?

Only four (4) respondents indicated no with approximately 97 percent favoring more sharing among agencies in the future.

027 SHARING BETW AGENCIES					
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	116	94.3	96.7	96.7
NO	2	4	3.3	3.3	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120				
		MISSING CASES	3		

TABLE 1.35 - SHARING: RESOURCES AND INFORMATION

Question 29. What major problems do you see with a regional approach to crime analysis?

Over 70 percent and above indicated politics and local control to be the primary concerns for the regionalization of the crime analysis function.

Q29A		POLITICS			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	93	75.6	76.9	76.9
NOT CHECKED	2	28	22.8	23.1	100.0
	9	2	1.6	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	121	MISSING CASES	2		

TABLE 1.36 - POLITICS

Q29B		LOCAL CONTROL			
CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	87	70.7	72.5	72.5
NOT CHECKED	2	33	26.8	27.5	100.0
	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120	MISSING CASES	3		

TABLE 1.37 - LOCAL CONTROL

Question 30. Would you consider contracting for crime analysis services, i.e. records management, computer aided dispatch, data analysis and graphical analysis?

The agencies were evenly split on the contracting issue. A cross tab analysis may show what agencies tended to favor contracting for some services.

. 030 CONSIDER CONTRACTING CPM ANALYSIS SERV

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	59	48.0	50.0	50.0
NO	2	59	48.0	50.0	100.0
NO RESPONSE	9	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	118	MISSING CASES	5		

TABLE 1.38 - CONTRACTING

### 3. Cross Tabulation Analysis

After reviewing the simple distribution of frequencies and related percentages, select questions were cross tabulated with others to determine if there was a significant relationship.

The SPSS procedure, CROSSTABS, was selected to produce two-way cross tabulations of variables and illustrate them in the form of a table.

CROSSTABS produces a sequence of two-way tables displaying the joint frequency distribution of two variables. The frequency counts can be expressed as a percentage of the raw total, column total, table total, or any combination thereof.

The cross-tabulation table will indicate, statistically, the significance between the measured relationships. Using the chi-square test of statistical significance we learn what the probability is that the observed joint distribution of cases would have happened by chance.

Social scientist's typically accept as statistically significant those relationships which have only a .05, .01 or .001 probability of occurring by chance. A .05 significant level means that, if the same type of random sample were drawn from the population an infinite number of times, you would observe only 5

out of every 100 to have that strong or stronger a relationship when the variables are actually unrelated. That is to say that at a .05 significance level would mean that there is only 5 changes out of 100 that the relationship pattern occurred by chance.

On the following tables, the level of significance is noted directly below the table.

The following cross-tabulation tables have been selected for review because of their statistical level of significance in relationship to the validity of the responses.

Other tables can be found in Appendix G.

- . Question 6 (Crime Analyst or Unit) by Question 1 (Agency Size - Number of Sworn Personnel)

Of the 123 responses, only 2 failed to answer this question. The results showed a linear relationship to the number of sworn personnel within the agency and the existence of either a crime analyst or a crime analysis unit. That is to say, the larger the agency is in size, the greater the frequency is for having some form of crime analysis.

Agencies of 100+ showed a 69 percent yes response as having an analyst or a unit

compared to 11 percent of the agencies 10 or under.

As seen in the table, there was a straight line increase from smaller to larger agencies from 11 to 69 percent.

\*\*\*\*\* CONTINUATION OF \*\*\*\*\*

Q6A HAVE CRIME ANALYST OR UNIT  
BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1

Q6A	COL	COUNT					ROW TOTAL
		PCT	1-10	11-25	26-50	51-100	
1.	1.	11.1	17.9	24.0	50.0	69.0	51
2.	2.	88.9	82.1	75.0	50.0	31.0	70
		7.4	23.1	14.5	18.2	34.7	121

COLLAPSE TOTAL 7.4 23.1 14.5 18.2 34.7 121

PAW CHI SC = 25.76287 WITH 4 D.F., SIG. = .0000

MISSING OBSERVATIONS - 2

TABLE 2.1 - ANALYST OR UNIT

. Question 8 (Need for Crime Analysis in Agency by Question 1 (Agency Size - Number of Sworn Personnel)).

Even though smaller agencies indicated that they did not have a specific crime analysis function within their departments, they did indicate that there was a need for such a function.

The greatest response for the need of crime analysis came from the agencies with 51 - 100 sworn personnel (100%).

\*\*\*\*\* CROSS TABULATION OF \*\*\*\*\*  
 BY Q8 NEED FOR CRIME ANALYSIS IN AGENCY  
 BY Q1 NUMBER OF SWORN PERSONNEL  
 \*\*\*\*\* PAGE 1

		Q1					
		1-10	11-25	26-50	51-100	100+	ROW TOTAL
OR		1.	2.	3.	4.	5.	
YES	1.	4 62.5	21 77.8	17 89.5	21 100.0	38 92.7	102 87.9
NO	2.	3 37.5	6 22.2	2 10.5	0	3 7.3	14 12.1
COLUMN TOTAL		8 6.9	27 23.3	19 14.4	21 18.1	41 35.3	116 100.0

RAW CHI SQ = 11.29547 WITH 4 D.F., SIG. = .0234  
 MISSING OBSERVATIONS = 7

TABLE 2.2 - NEED FOR CRIME ANALYSIS

. Question 14 (Crime Analysis Unit Control) by Question 1 (Agency Size - Number of Sworn Personnel).

It's interesting to note that approximately 45 percent of all agencies chose a regional approach to crime analysis with some local control. Of the 45 percent who favored the combination of regionalization, 65 percent represented medium sized agencies, 51 - 100.

Smaller departments, 25 and under, indicated a stronger preference for the multijurisdictional approach compared to larger agencies.

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*  
 BY Q14 CRIME ANALYSIS UNITS SHOULD BE  
 BY Q1 NUMBER OF SWORN PERSONNEL  
 \*\*\*\*\* PAGE 1

Q14	COUNT COL PCT	Q1					ROW TOTAL
		1-10	11-25	26-50	51-100	100+	
A-LOCAL	1. 0	5	10.2	40.0	13.0	41.5	33
B-MULTI	2. 25.0	6	23.1	10.0	17.4	12.2	19
C-SHPP	3. 25.0	2	7.7	0	0	2.4	5
A & B	4. 12.5	11	42.3	45.0	65.2	41.5	53
A & C	5. 12.5	1	3.8	0	0	0	2
B & C	6. 25.0	2	7.7	5.0	4.3	0	5
A, B AND C	7. 0	0	0	0	0	2.4	1
COLUMN TOTAL	8	26	20	23	41	118	100.0

RAW CHI SQ = 45.11120 WITH 24 D.F., SIG. = .0057  
 MISSING OBSERVATIONS - 5

TABLE 2.3 - FUNCTIONAL CONTROL

. Question 15 (Types of Functions for Regionalization) by Question 1 (Agency Size - Number of Sworn Personnel).

The greatest emphasis for the sharing of information, personnel and expenses was in the area of grant funds, review of criminal activity and identification of criminal offenders (5, 6, and 7 on the table). The above questions received a yes response in 77.9 percent of the cases.

Smaller agencies, 25 and under, showed a strong preference for sharing costs and information on a regional basis.

\*\*\*\*\* C R O S S T A B U L A T I O N   O F   \*\*\*\*\*  
 DISCUSSION OF AREAS C.K. FOR REGIONALIZATION  
 BY Q1                    NUMBER OF SWORN PERSONNEL  
 \*\*\*\*\* PAGE 1

COUNT COL PCT	Q1					PCW TCTAL
	1-10	11-25	26-50	51-100	100+	
DISCOUNT	1.1	2.1	3.1	4.1	5.1	
C	0	0	1	0	1	2
	0	0	4.0	0	2.6	1.6
1.	0	0	0	3	2	5
	0	0	0	13.0	4.8	4.1
2.	0	0	0	0	2	2
	0	0	0	0	4.8	1.6
3.	0	1	0	3	3	7
	0	3.6	0	13.0	7.1	5.7
4.	0	0	2	1	8	11
	0	0	10.0	4.3	19.0	9.0
5.	1	10	1	2	4	18
	11.1	35.7	5.0	8.7	9.5	14.8
6.	5	4	6	5	11	31
	55.6	14.3	30.0	21.7	26.2	25.4
7.	3	13	10	9	11	46
	33.3	44.4	50.0	39.1	26.2	37.7
COLUMN TCTAL	9	28	20	23	42	122
	7.4	23.0	16.4	18.9	34.4	100.0

RAW CHI SC = 44.80259 WITH 28 D.F., SIG. = .0231  
 MISSING OBSERVATIONS - 1

TABLE 2.4 - REGIONAL SERVICES



. Question 30 (Contracting for Crime Analysis)  
by Question 14 (Agency Control).

Approximately 67 percent of the agencies who favored contracting also favored the multijurisdictional approach.

Not surprisingly, those agencies who responded no to contracting favored local control.

The significance level for the responses was .0039 or a probability of 4 out of 1,000 that the relationship was due to chance.

\*\*\*\*\* C O N S I D E R A T I O N O F \*\*\*\*\*  
 Q30 CONSIDER CONTRACTING FOR ANALYSIS SERV  
 BY Q14 CRIME ANALYSTS UNITS SHOULD BE  
 \*\*\*\*\* PAGE 1

		Q14					
Q30	COUNT COL PCT	1-A-LOCAL AGENCY	2-MULTI JURIS	3-SMDC	4-A & B	5-A & C	ROW TOTAL
YES	1.	12 24.2	37 64.7	7 60.0	26 53.1	2 100.0	56 49.6
NO	2.	25 75.8	6 33.3	7 40.0	23 46.9	0 0	57 50.4
	COLUMN TOTAL	37 29.2	43 15.9	14 4.4	49 43.4	2 1.9	113 100.0

		Q14		
Q30	COUNT COL PCT	6-B & C	7-A & B AND C	ROW TOTAL
YES	1.	5 100.0	0 0	56 49.6
NO	2.	0 0	1 100.0	57 50.4
	COLUMN TOTAL	5 4.4	1 .9	113 100.0

PAW CHI SQ = 19.13390 WITH 6 D.F., SIG. = .0039  
 MISSING OBSERVATIONS = 10

TABLE 2.6 - CONTRACTING - FUNCTIONAL CONTROL

Other cross tabulation tables may be found in  
 Appendix G - Cross-Tabulation Analysis.

E. FUTURE SCENARIOS FOR THE DEVELOPMENT AND IMPLEMENTATION OF CRIME ANALYSIS PROGRAMS

The results of the research conducted to complete this study indicated that, while most police administrators felt some form of crime analysis activity would be beneficial to their operations, a wide divergence of opinion existed relative to what degree was necessary to significantly impact crime in any given jurisdiction. Furthermore, and not surprisingly, a respondent's attitude toward the crime analysis concept as a whole tended to form the basis for any feelings he or she may have held regarding such things as:

- . purchasing computers for automating crime analysis processes,
- . hiring full-time personnel for the expressed purpose of analyzing crime,
- . networking formally or informally with other agencies to share information, or
- . forming not only regionalized, but also shared cost programs to examine crime on a multijurisdictional and regionalized basis.

Perhaps all men are created equal, but all law enforcement agencies are not. Some are large, some are small, some have adequate budgets and others are just getting by. Crime rates differ widely throughout California and staffing levels run the gamut from less than ten people

in smaller departments to well into the thousands in the larger agencies.

Each of these factors impacts upon the decision making process of the police administrator, and each is considered every time a decision is made to retain or service an existing program or to develop and implement a new one. And, of course, this is as true for the crime analysis program as it is for any other type of law enforcement intervention.

The following three scenarios deal with the central theme of crime analysis and its role in law enforcement. Based on the research, it is hypothesize that the manner in which the crime analysis program is implemented and the degree to which it becomes significantly involved in police operations will be markedly different from one jurisdiction to another.

. Scenario #1 - The Status Quo Phenomenon

The majority of survey respondents representing smaller police agencies indicated that they do not presently have any formalized units which analyze crime nor do they foresee a need for such units in the future. Curiously, however, they admit to the benefits which can accrue to the department which establishes a crime analysis unit and utilizes its services.

This seeming contradiction in rationale may stem from the fact that human beings,

especially in their professional lives, want to at least display their awareness of any passing parade whether they decide to join its ranks or not. In light of the great body of opinion which supports the implementation of a crime analysis program, it is therefore not unlikely that one would find certain individuals who would verbally accord it some worth and yet, for various reasons, fail to operationalize it in their own departments.

These are the timid administrators. They can display a familiarity with the program to their contemporaries and thus not be censured for any lack of knowledge about it. On the other hand, having stated that they have studied it with "due deliberation," they can safely retreat back to their comfort zones and avoid the risks that come with the implementation of change.

Of course, to say that all police administrators who fail to develop and implement crime analysis programs are timid or weak would be to unfairly malign many of the chief administrators who head the smaller agencies in the state. Quite frankly, full blown crime analysis programs in municipalities served by their agencies are neither warranted nor desired. Their citizens would be well served by a more simplified approach to the analysis of crime.

For the administrator who is basically an isolationist, it is unlikely that any attempt to start a crime analysis unit will be made either now or in the future. The status quo will be maintained, officers will respond to calls on a "first come, first served" basis, and random patrols will continue to be the method of choice for achieving crime suppression and prevention goals.

The more enlightened administrator may likewise fail to develop and implement a formalized crime analysis unit, but for different reasons. Personnel limitations, budget constraints and so on may indeed preclude his ability to do so. Nevertheless, this chief will at least try to do "something" to heighten the effectiveness of his patrol and investigative forces.

As this attempt at "doing something" relates to crime analysis, the smaller agency of the future will most probably maintain dot maps to visually depict crime patterns; will use hand methods to collect, tally, and disseminate crime statistical information; and will remain largely reactive in nature. If any crime analysis work is done at all, it will most probably be done by a clerk, low ranking sworn officer, or by individual supervisors or investigators who take the initiative to utilize analytical methods to help them solve problems or cases.

A police administrator may choose to purchase a small personal computer for the department, but its use will likely be limited to tracking such administrative concerns as numbers of arrests made, citations written, or reports taken. Given the lack of proprietary software developed specifically for law enforcement and use of personal computers, smaller agencies will be forced to use software designed primarily for business applications. This may improve current records keeping procedures but is unlikely to provide anything remarkable insofar as crime analysis is concerned.

Today's modern principles, associated with the Management of Patrol Operations, were born out of the concept that the patrol force can proactively act upon crime problems identified by the crime analysis unit. Without a unit to identify such problems, the patrol complement is hampered in its efforts to locate crime and apprehend its perpetrators.

The Management of Criminal Investigations also presupposes a close link with the crime analysis unit to ensure that the assignment of cases is made on scientific data such as solvability factors as opposed to other less precise methodologies. No longer can most agencies assign all cases to their investigators with the expectation that all cases will be solved. Manpower

limitations dictate the unreasonableness of this expectation. Thus, investigative managers must determine, both now and in the future, on what basis some cases will be assigned and on what basis others will remain unassigned and be classified as "inactive." The crime analysis unit can be extremely helpful in defining the criteria necessary to make both determinations.

Because of a lack of personnel and financial resources, many law enforcement agencies in the future will continue to patrol their jurisdictions randomly, and will probably be unable to implement MPO or MCI programs to any appreciable degree. Without the ability or the willingness to develop a crime analysis unit first, the successful implementation of these other interventions is a difficult if not impossible task since their success depends upon the creation of a unit which is never created! As such, most attempts by these agencies to implement any MPO or MCI program devoid of crime analysis support will most likely fail. Projections are that these departments will therefore stay with the more traditional methods of policing and will avoid experimenting with newer crime reduction approaches until they can afford to do so with less risk. In the meantime, it will be "business as usual" for these agencies. Their policies and procedures will remain static, they will share little

information with their outlying jurisdictions, and they will primarily operate as islands unto themselves with very little operational change within the next decade.

. Scenario #2 - The Unilateral Growth Phenomenon

As implied by the scenario title, this philosophy will be held by those administrators who seek to promote growth within their own organizations. They will be willing to implement internal changes but will hesitate to freely link themselves to the outside world around them. Thus, the growth of such organizations is unilateral and proprietarily internalized.

Although many small to medium agency administrators are isolationists, some, particularly those who have been able to overcome fiscal and personnel constraints, have become unilateralists.

These agencies are characterized by progressive, innovative, and creative risk takers who are receptive to change. They willingly take uncharted courses, are not afraid of failure and seek new ways to solve old problems.

A serious side effect is almost universally exhibited by unilateralists - seldom, if ever, will they ever share

information, personnel or equipment with others. All efforts go into the growth and promotion of their own departments.

The isolationist rarely gets involved with anything new. The unilateralist gets involved in everything that comes along and tends to parade it past his peers.

Departments which continue to operate from this type of attitudinal base are engaging in what psychologists call "watch me" behavior and it is and will continue to be detrimental to the law enforcement function as a whole. By refusing to share information with others, the unilateral agencies leave their neighboring jurisdictions to fend for themselves. This is counterproductive given the fact that criminals cross jurisdictional boundaries. The problems of one agency are likely to be the problems of another.

Over the past few years, many of the large and medium sized law enforcement agencies in California have been awarded state grants to develop sophisticated crime analysis units. During the decade of the eighties, over \$12.5 million has been allocated to California law enforcement agencies. With funds in hand, some departments have purchased personnel, computer hardware and software and have created stellar pockets within their agencies that truly are impressive. Those agencies among them which cooperate with

their neighbors report greater success than those which operate independently of them. For each type of agency, however, the future should prove interesting to the professional student of change.

Technologically, research suggests that some small and most medium sized agencies will have either micro or minicomputer systems while others may have both. The bulk of a department's information will be deposited in the mini computer and the micro will be utilized for special applications such as word processing, spread sheet analyses and so on. It is expected that law enforcement will continue to enlist the services of private consultants to evaluate both automation needs and to help the administrator select the vendor with the most attractive package.

As far as computer hardware is concerned, micro computers will carry law enforcement automation to the year 2000. The bulk of the future computer software market for law enforcement will likely be captured by private vendors. Private vendors, in concert with police officials, will continue to design software programs that will address the needs for each user of their systems.

When police agencies originally began to consider the installation of computers in the work place, vendors offered to design

systems to meet the needs of customers on a proprietary basis. Feeling that the needs of department A would not necessarily be those of department B, they configured systems on an individual basis.

Initially this seemed to be a logical approach. However, what agencies failed to realize was that any down line changes or modifications to their systems would likewise have to be made on an individual basis. Today, those administrators who bought proprietary systems are faced with tremendous programming costs, some of which cannot be avoided.

For example, most law enforcement records management systems are programmed to generate the State's Bureau of Crime Statistics (BCS) report each month. Until recently, the format of the report has remained basically unchanged for years. Now, however, the state requires that law enforcement agencies report all crimes associated with domestic violence. Proprietary systems were not designed to capture and generate this information. As a result, those systems must now have their programs rewritten to conform to the state's revised reporting requirements. This, of course, is not done without cost.

Then too, with the passage of time has come the discomfoting realization that most agencies now have automated needs which were not immediately identified at

the time their systems were purchased. Unfortunately, however, unless the agency can pay for the changes it desires - and they don't come cheap - it is left with a computer system that may only marginally meet its needs.

The future of automation in law enforcement will likely see a departure from the proprietary installation and a move toward what we will call "global" systems. Originally developed for the private sector, global systems are gaining increased acceptance within the criminal justice community.

A global automated system is based on the premise that there are certain computer needs which are shared by all members of a particular industry. As far as law enforcement is concerned, all agencies need to be able to generate a BCS report; maintain name, address and property records; and have the ability to extract certain other bits of information from data base files.

As more agencies adopt global systems, they will come to the conclusion that the advantages far outweigh those of proprietary systems. Granted, the latter system is preferable if one is opposed or slow to react to organizational change. The computer is designed to fit the operation instead of the other way around. However, except in the most unusual cases,

the cost involved in establishing such a system can rarely be justified. For this reason, the future may dictate that an increasing number of departments will avail themselves of the global approach to automation.

With the automated capabilities we have today, it would seem logical to assume that law enforcement agencies would be eager to share information with each other. And yet, a dichotomy exists. The survey questionnaire revealed that the majority of respondents felt that information should be shared, computers should be shared, and that even personnel could be shared to accomplish the task of analyzing crime among neighboring jurisdictions. However, the reality of the situation is that for all the rhetoric expressed, little has been done to facilitate the operationalization of the sharing process.

Those agencies which exhibit the "watch me" behavior mentioned earlier are the most reluctant to give of themselves to others. However, if the present is indicative of the future, they may be forced to interact with others as a matter of survival. Until law enforcement agencies establish effective good communications with their neighbors, they will be unable to determine where crime is coming from or be effective in combating it.

For those agencies which are philosophically more progressive, the future looks a little brighter. Small and medium sized departments falling into this category will likely have micro and mini computers, will share data and may even go so far as to consider networking computer systems. This would represent a tremendous step forward in California law enforcement.

Although the accomplishment of these objectives would be a good start, it is unlikely that even these agencies will advance beyond this point by the year 2000. Based on the research, it is doubtful that they would contract for regional services themselves or form a joint powers agreement to cooperatively create any type of multijurisdictional crime analysis unit. As such, though they will share information to a greater degree, it will be on an informal basis. Thus, the primary emphasis will still be on local control.

Should this trend continue, it is envisioned that agencies will not be willing to share personnel for the purpose of forming crime analysis units to study crime on a regionalized basis. Further, even if they had the desire to do so, it is probable that they would be impeded in their efforts because of political and budgetary constraints. Personnel and equipment do not come cheap. Therefore,

any attempts to combine resources and create a regionalized unit would be dependent upon the funds available to undertake such an endeavor.

. Scenario #3 - The Bilateral Growth Phenomenon

Bilateral organizations are characterized by law enforcement administrators who not only seek to promote growth within their own departments, but who willingly associate with others for the achievement of mutual goals. Bilateralists themselves, are quick to recognize that by helping one's neighboring agencies, one can accrue a goodly number of benefits to himself and the agency he administrates. This can be especially true insofar as crime analysis is concerned.

Law enforcement agencies which operate in accord with the principles inherent in bilateralism will likely seek to formally regionalize their crime analysis function in the future. This will be accomplished as a result of the multijurisdictional efforts directed towards the purchase of computer systems necessary to create and implement a specialized unit, whose single objective will be to monitor crime trends on a local as well as a regional basis. Related personnel costs will be shared.

To achieve its objective, the crime analysis unit of the future will maintain automated data bases which will be

networked with other computerized local, state, and federal systems. Furthermore, the unit will be linked to the records management and computer aided dispatch systems of each agency it serves.

In monitoring the overall crime trends of the region, the unit will also become proficient in identifying the emergence of individual crime patterns. Through the use of software developed specifically for this purpose, unit members will also be able to statistically forecast future crime occurrences. This information will then be passed on to patrol forces for their immediate and proactive action. The utilization of automated mapping systems to track crime incidents will become commonplace and this data will be used to deploy officers on a scientific rather than a random basis.

Police officers themselves will have direct access to computer information both in and out of the station. Terminals will be made available to them when they are in the station. When away, they will be able to access the computer via mobile digital terminals which will be installed in their patrol units.

To accomplish all of the above, it is likely that some police agencies will form joint powers agreements and assume dual responsibility for creating the regionalized crime analysis function.

Once created, the regionalized unit may then offer its services to surrounding agencies on a contract basis. This, of course, is beneficial to all participants. Each receives personnel and automated services which it could most likely never afford alone. Each agency will receive crime information far in excess of what it could have obtained as an independent entity.

The crime analysis unit of the future will house personnel to staff a regional center. It will also provide crime analysts to serve within each participating jurisdiction. Complicated, time consuming or labor intensive analyses will be conducted by centralized staff. The less technical work for each agency will be done by the on-site analysts. Continual communication between on-site to central staff members will ensure that the crime analysis needs of each agency are met expediently.

Truly progressive organizations of the future may well form joint powers agencies to combine some aspects of police and fire operations. For example, a crime analysis unit could give valuable arson information to fire personnel. This could easily be done on a contract basis. In fact, depending on the size of the jurisdictions involved, it is entirely possible that one analyst could be permanently assigned to fire and arson related investigations.

The possibilities of a combined effort are virtually limitless.

For the most part, the crime analysts of today are civilian personnel. Most have baccalaureate degrees and some supervisory analysts are considered a part of management. Typically, they report to a sworn staff member who is responsible for the daily direction of unit activities. This sworn manager, however, usually lacks the crime analysis expertise to truly advance the unit. He/she may know about police work but usually have limited analytical or computer skills. This creates frustration for both the analyst and the supervisor. Often one does not understand the other. It is recognized, however, that the sworn manager is effective in maintaining a level of credibility between the crime analysis unit and the users of crime analysis information.

In the joint powers agency of the future, the director of the crime analysis function will likely report directly to the chief administrator of the participating jurisdictions. He/she may be a sworn or civilian staff member. In any event, this individual will have a thorough knowledge of police work, possess analytical and computer skills, know the principles of social science research and have the ability to supervise others.

Most likely, the crime analysis director will possess a Master's degree or higher.

Crime analysts will probably be required to have a bachelor's degree and will likely continue to be civilians, at least in California. In time, more schools will be developed to teach analysts about law enforcement and their role in the criminal justice process. This is something which is terribly lacking today.

This scenario presupposes a cooperative spirit among administrators to attack common problems. Given their willingness to overcome territorial concerns, this scenario can become a reality. Survey research indicates that while many are drawn toward the regionalized concept, they still fear losing some local control. This concern is therefore preventing them from developing crime analysis units that could well serve their communities far into the future.

F. MOST PROBABLE FUTURE (By Year 2000)

The nature of expectations versus future reality will change depending on specific environments. The following is representative of scenario number three (3) which depicts the most probable future.

The cross-tabulation results were strongly indicative of regionalization and the sharing of information, personnel, and equipment for the purpose of performing crime analysis. Most law enforcement administrators are cognizant of budgetary constraints and recognize that the cost of conducting business will become the primary motivating factor for change during the next decade. Police agencies will continue to operate in localized geographic zones with centralized services and communication systems.

In his article "Proactive Police Futures," published in The Future of Criminal Justice, Edward Thibault makes the following observations about the future of law enforcement services:

Central services will provide a record keeping system based on time sharing with local computer facilities, data bases for scheduling, along with time/energy/production factoring for schedule justification and experts in labor management and contract negotiation.

Occasional interzonal task forces will be created to deal with some particular

problems, such as an energy bootleg operations or an energy coupon forgery team. Metropolitan police financial experts, who will be civilians, will provide a basic budget and will work with other centralized planners in projecting police activities for future years (National Advisory Committee, 1976).

Another approach that law enforcement might take will also involve the metropolitan team approach but will be more decentralized. This will be the service-contract law enforcement system. Towns and villages will contract for certain municipal services with a major metropolitan area.

Workload will be based upon an analysis of a computer generated map of the zone. The computer chip revolution of the 1970's will continue and accelerate, bringing with land based laser lines and microwave information bursts, linked through satellites.

Each metropolitan police force will have a computer map of its area. Zone teams would have access to similar maps. The map could be keyed to show a great variety of characteristics in order to facilitate planning. Some would be:

- . street and map response time grid
- . modus vivendi grid related to

demographic characteristics and time  
of crime commitment

- . time, place and nature of crimes shows  
by number and also color coded for easy  
identification, from white for crime  
free areas going to red and black for  
areas of violent crimes against the  
person. Burglary, robbery, traffic  
deaths, juvenile crimes, and other grids  
would be available at the punch of a  
button
- . demographic variables: e.g. population  
density, race, age of population,  
mobility of population
- . trend analysis grid for traffic control,  
civilian disasters, energy blackouts,  
available for planners and called up  
from storage if the disaster or traffic  
stoppage occurred

The officer will be able to type in an  
analysis on how a crime was committed and  
receive a list of suspects. With a bit  
more analysis and data, the computer will  
also give a probability of various  
suspects committing that particular crime  
at that particular place.

All homes and businesses will be linked to  
a central dispatch system in a police  
approved, computer-based, remote linkage  
system. This will combine burglar and  
fire alarms operating through land lines

and cable television circuits. If the citizen or business does not wish to become part of the system, they will be denied any burglary, home or fire insurance. In addition, this system will be linked electronically through microcircuits to the dirigible surveillance system. The system capabilities were available in the 1970's; however, it will take until the 1990's for the computer chip revolution to make the system financially possible. (21)

It is suggested that the regional approach to crime will become the key law enforcement issue for the next decade. During the fifties the major change for many police agencies was the abandonment of the two-man patrol car in favor of fielding more one-man units. In the sixties, it was the emergence of the sworn community relations officer. Every police agency in the country had an officer designated to work community relations. The seventies saw a trend towards civilianization, specifically for police dispatchers. Non-sworn community service officers provided non-emergency services to the community and provided more time to sworn officers to respond to emergency situations.

In the eighties we saw the beginning of the crime analysis phenomenon. The crime analyst, like the examples cited above, will become the fixture of the nineties. By the turn of the century, most California law enforcement

agencies will have a crime analyst as an integral part of their operations.

The crime analysis function of the future will be multijurisdictional, highly technological and able to predict the occurrence of crime on a regional basis.

Science fiction? Not really. Will it happen in just this way? Maybe not. However, it will happen and it will happen close to this hypothetical scenario. Citizens want protection before they are victimized. The only police agency capable of such citizen protection will be one based on the proactive police force with a philosophy of aggressive crime prevention through targeted action and professional crime analysis.

## VI. STRATEGIC PLANNING

Strategic planning identifies the important thrusts that an organization should pursue to put it on the glide path towards the image of the future.

As a result of all the data which has been collected and reviewed the question has to be asked, "What do we want (or need) to do in the future?" Crime analysis has been identified as a key role for all law enforcement agencies and the trends point towards the regionalization of that effort.

The following strategic plan is designed to take the law enforcement organization, which chooses to implement change, from the present to the future with the least amount of difficulty and the planning essentials necessary for success.

The plan is written to provide direction in the establishment of a regionalized multijurisdictional crime analysis unit. It is designed to be generic in that it may serve as a guideline to any law enforcement agency. To articulate the strategic plan for change, a five section format referred to a SMEAC (Situation, Mission, Execution, Administration, and Control Planning System).

### A. SITUATION

This section includes the components of environmental, resource, and stakeholder analysis.

## 1. Environmental Analysis

An analysis must be made of interested communities within a designated geographical area. Such information such as square miles, demographics, and type of governmental services provided are critical. An example would be the analysis of communities A & B.

Community A is a city encompassed in a 24 square mile area with a population of 110,000 persons. Community B spans 18 square miles and has a population of 50,000 persons. Both communities offer full service government capabilities including independent law enforcement agencies. Each community has a combination of residential, commercial, industrial, and agricultural entities. The heritage and environment have brought together a diversity of individuals who are concerned about law enforcement and the presence of criminal activity within the community.

Both communities have expressed an active interest in law enforcement services and are receptive to positive change.

## 2. Resource Analysis

Individuals within each governmental entity must be identified who will play an

active role in the implementation of the plan. Selected individuals must be able to articulate the needs of the communities and understand the concept of regionalization.

### 3. Stakeholder Demands

In order to successfully plan and implement a regionalized crime analysis unit, one must first identify individuals or groups that will, or may, have an affect on the proposed plan. Members of the community must understand the problem at hand and the necessity for change.

Through group discussions, several key individuals and groups - referred to as stakeholders - can be identified and may include the following:

- . City Manager(s)
- . Police Administrators
- . Police Associations or unions
- . Police Reserve Officers
- . Police Employees (Civilian)
- . Volunteers
- . Social Service Agencies
- . Media
- . Professional organizations
- . Chamber of Commerce
- . Students
- . Service Clubs
- . Property owners
- . Renters
- . Disadvantaged persons
- . Seniors
- . Real estate/developers
- . Hospitals
- . Local Politicians
- . Special interest/vested interest groups
- . Labor organizations

- . Business owners/merchants
- . Criminal Justice representatives
- . Industrialists
- . Local government representatives
- . Minority groups
- . Minority leaders

Of the stakeholders identified, certain ones may be considered to be especially critical to the successful implementation of the plan. They may appear to be in favor of the change but have reservations about it. These stakeholders are referred to as snaildarters and could include the following:

- . City Manager(s)
- . Police Administrators
- . Media
- . Local politicians
- . Special interest/vested interest groups
- . Labor organizations
- . Business owners/merchants
- . Criminal justice representatives
- . Industrialists
- . Local government representatives
- . Minority leaders
- . Minority Groups
- . Police reserves
- . Police associations or unions
- . Chamber of Commerce

The stakeholders and snaildarters may be plotted graphically to determine how certain their involvement may be or how critical they are to the plan. They may be classified as most important, least important or very certain and uncertain.

Of the stakeholders identified, the following could be classified, in varying degrees, as very certain and most important:

- . City Manager(s)

- . Police Administrators
- . Local Politicians
- . Media
- . Police Personnel - Civilian
- . Police Associations or unions
- . Property owners

B. MISSION

The mission statement is critical in stating what the organization wants to do. The statement must be clear and provide the following:

1. Appropriate Law Enforcement Mission

The purpose of a municipal law enforcement agency is to provide for the protection of persons and property through the effective and efficient delivery of law enforcement services. Sworn police officers are deployed systematically throughout geographical areas of a community to respond to emergency calls for service in the least amount of time and to respond to citizens in a timely manner in non-emergency situations. Officers in specialized positions encourage the involvement of individuals and community groups in crime prevention, follow-up on crime reports, arrest of criminal offenders and support of line unit officers in their role to provide a feeling of security within the community.

An emerging trend in law enforcement is the function of crime analysis. It has become an integral part of many local

police agencies and will continue to play a key role in the future of law enforcement.

## 2. Desired Mission

The primary objective of law enforcement continues to be the reduction of crime through effective utilization of manpower and innovative programs, which enhance the role of crime resistance, criminal apprehension and the analysis of crime data. The most desired goal is to improve the crime analysis aspect of the law enforcement mission in order to continue to provide the mandated and necessary services to the community. The local approach to suppressing crime is ineffective when compared to a much broader regional approach. Through the combined effort of local law enforcement, a regional approach to crime analysis will have a much greater affect on criminal activity.

Through appropriate training programs within individual departments as well as community announcements, the concept of regionalization can become a very successful tool in the fight against crime.

An independent joint powers agency may be developed and charged with provided crime analysis information to the participating agencies. The goals and objectives of the

JPA must be enumerated within the mission statement.

C. EXECUTION

1. Alternate Courses of Action

Three alternative strategies may be considered for the implementation of a multijurisdictional crime analysis unit on a regional level:

a. Sharing Criminal Information

Departments can maintain independent crime analysis units and share information with other agencies. Criminal records can be shared along with crime analysis bulletins to enhance the crime analysis effort in a large geographical area.

Those agencies who have computers can strive to link or network the systems to form a multijurisdictional computer network. Although, independent crime analysis will be conducted, this course of action would be the first step to a regional system.

b. Contracting for Crime Analysis

This alternative is an excellent one for those smaller agencies who do not have a computerized records system or

data base. The contracting agency can retain local control of records and yet share critical criminal activity information on a regional basis.

c. Establishment of a Joint Powers Agency

This is an excellent alternative for those agencies who have determined that the interests of the citizens within their jurisdictions can best be served by the coordinated efforts of crime suppression and criminal apprehension. The establishment of an independent Joint Powers Agency will have the mutual benefit of the operation of a centralized system and the provision of crime analysis operations on a regional basis. Participating agencies will collectively direct the management policies and operational practices of the centralized system.

2. Recommended Course of Action

The recommended course of action for the future success of crime analysis is the establishment of a regionalized crime analysis organization to serve a multijurisdictional area.

The Joint Powers Agency would provide many benefits to the communities served and the

suppression of criminal activity. The police regional crime analysis system (PRECAS) would serve as a cooperative association voluntarily established by its members pursuant to the Joint Power Act of the Government Code of the State of California. It would provide a joint centralized police crime analysis system for the mutual benefit of the members of the agency and, upon request, could provide such services on a contract basis to other police agencies. Additionally, the operation and maintenance of a regional approach to crime analysis would be more efficient and cost effective to the taxpayers who support law enforcement efforts.

### 3. Strategy

Once the decision has been made to establish a Joint Powers Agency for the delivery of crime analysis services, the following strategy, in the form of a written agreement, is recommended for its successful implementation:

#### a. Establishment of the Agency (JPA)

Pursuant to the joint powers authorization of the California Government Code, member agencies shall federate together in a cooperative agency for the joint and mutual operation of a centralized crime analysis program, to be known as the "Police Regional Crime

Analysis System (hereinafter designated as "PRECAS"). The JPA will be referred to herein as the "Agency" and shall consist of all of the public departments signatory hereto and those public departments which may hereafter become signatory hereto. Said Agency shall be a public entity separate from the parties to the Agreement.

b. Purpose of Agreement

The purpose of this Agreement shall be as set forth in the recitals previously stated and articles of the By-Laws. Said purpose shall be accomplished and carried out in the manner set forth in said By-Laws.

c. Formulation of By-Laws

The Agency shall be subject to, and governed by specific By-Laws together with any amendments which may be made to said By-Laws in the manner and means set forth in the agreement.

d. Administration

PRECAS, as established by this Agreement and as governed by such By-Laws, shall be referred to as "Agency" to administer this Agreement, pursuant to joint powers provisions of the Government Code of the State of California.

e. Agency Members

Each public department signatory to this Agreement, and each additional public department eligible for membership pursuant to the provisions of said By-Laws, which may hereafter sign said Agreement, is a member of said Agency and is entitled to all the rights and privileges and is subject to the obligations of membership, all as provided in said By-Laws.

f. Withdrawal of Membership

The Agreement shall remain in full force and effect to all member agencies for a minimum of three (3) years from and after the effective date hereof. Thereafter, any party to this Agreement may cease to be a party hereto and may withdraw from membership in the Agency by the adoption by its legislative body of a resolution of intention to withdraw and the giving of written notice thereof to the Chairman of the Board of Directors and to each of the other public agencies signatory to this Agreement at least one hundred eighty (180) days prior to the end of the then current fiscal year. Said withdrawal shall be effective at midnight of the last day of said current fiscal year.

g. Powers of the Authority

The Agency shall have the power, in its own name, to; make contracts, employ agents and employees, acquire, hold and dispose of property, real and personal; sue and be sued in its own name, and incur debts, liabilities or obligations necessary for the accomplishments of the purposes of this Agreement. However, the debts, liabilities and obligations of the Agency shall not constitute any debt, liability or obligation to any of the individual public agencies which are signatory to this Agreement. The Agency shall not have the power of eminent domain nor the power to levy taxes.

h. Amendment

The Agreement may not be amended, except by written agreement of all the then parties to it, provided, however, that the established By-Laws may be amended from time to time by the method and means provided therein.

i. Duration of Agreement

The Agreement shall continue in effect until terminated by unanimous consent of the then parties to it or until dissolution of the Agency in the manner provided in said By-Laws. Upon such termination, or dissolution, the assets remaining,

including any surplus money, shall be disposed of in the manner set forth in said By-Laws. Any state grant funded assets shall be disposed of in accordance with federal and state regulations and instructions.

j. Enforcement

The Agency is hereby given the power to enforce this Agreement. If a lawsuit is necessary to enforce any of the provisions hereof, including any provision of the By-Laws, the defaulting member shall pay reasonable attorney fees to the Agency as adjudicated and determined by the Court.

k. Authorization

Prior to execution of this Agreement, each members shall deliver to the Agency a certified copy of a suitable ordinance or resolution authorizing and directing the execution of this Agreement.

l. Establishment and Selection of a Board of Directors

There is hereby established for this Agency a Board of Directors which shall consist of the Mayor or one Councilperson of each member agency designated by the Mayor. The Mayor of each member government shall designate in writing to PRECAS the primary and alternate members to

serve on the Board of Directors. At its annual meeting, the Board of Directors shall select one of its members to serve as Chairperson of the Board until the next annual meeting. The chairpersonship of the Board of Directors shall rotate annually in a fixed sequence among the members.

The Board of Directors shall have the responsibility for the appointment of auditors, approval of the acceptance of new members, and approval of the annual budget and assessment schedule of the Agency.

Each public department which is a member of this Agency shall be entitled to one (1) seat on the Board of Directors and shall be entitled to one (1) vote thereon. Such one vote may be cast only by the municipality's principal or designated alternate representative in attendance.

- m. Registration of Agreement  
The Agreement shall be registered with the Secretary of State.
  
- n. Effective Date of Agreement  
The Agreement shall become effective upon its execution by the participating governmental entities.

o. Signatures of Participants and Witnesses

The Agreement shall be signed by the Mayors and City Managers of the participating cities and witnessed by the respective City Clerks.

D. ADMINISTRATION AND LOGISTICS

In developing the strategic plan for the establishment of a Police Regional Crime Analysis System (PRECAS), one must take into account the resources available and the administration and logistics necessary to carry it out. Local politicians, city managers, police administrators, and crime analysis practitioners may be drawn upon to make decisions on the administration and operation of the JPA. (See "Critical Mass", Section VII of this study).

Logistically, the municipal governments of the participating agencies must provide the work place, equipment, personnel, and operating support necessary to carry out the regional function.

E. CONTROL-PLANNING SYSTEM

The JPA (PRECAS) will be commanded by a Director. The Director will be responsible to the Administrative Committee comprised of the Police Chiefs of the participating agencies. The Administrative Committee will be answerable to the Board of Directors comprised of Council representatives from each participating city.

(See Implementation Plan and Transition Management, Section VII of this study).

The Director will be responsible for operations and on-going planning which will be concurrent with Agency structure and organization.

A discussion group participated in determining the planning system to utilize during the formation, establishment, and probationary period of the Agency.

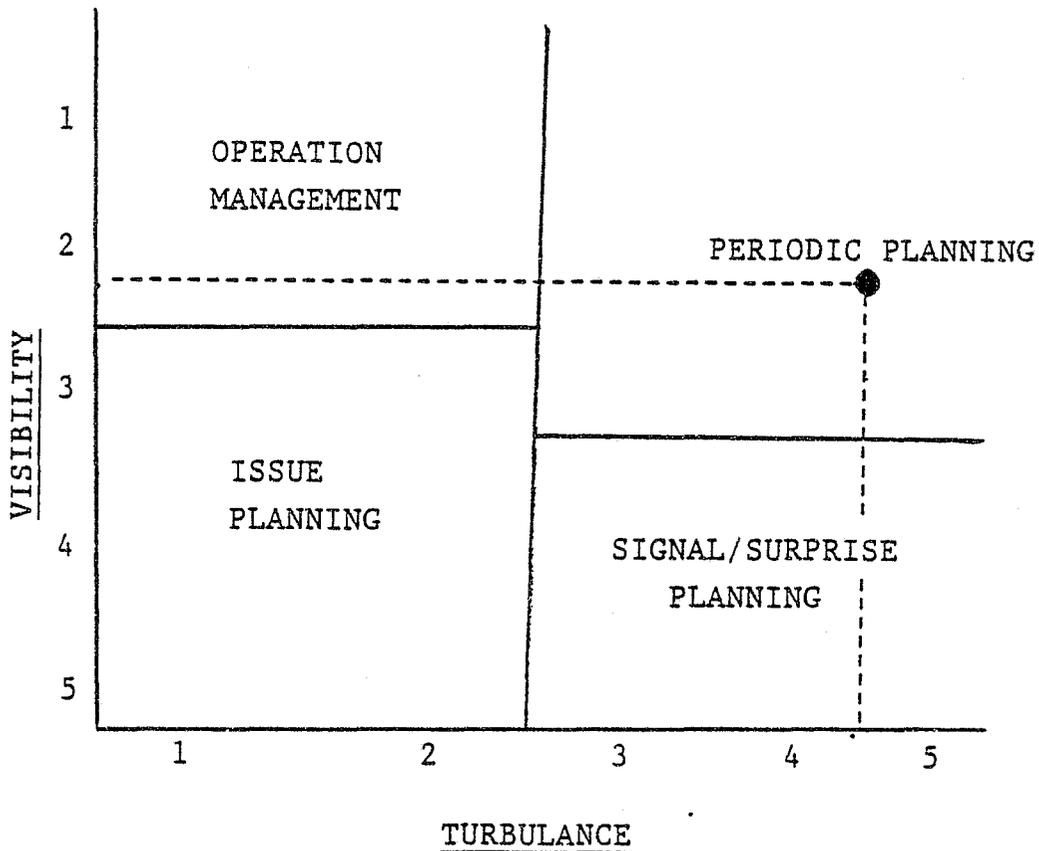
The following two dimensions were used to ascertain the environment of the Agency and determine the most likely planning system:

<u>Turbulence</u> (Number of Changes)	<u>Visibility</u> (Of the Future)	<u>Point Value</u>
. No Changes	Recurring	1
. Few/Occasional Changes	Forecast by Extrapolation Trends	2
. Changes on Regular Basis	Predictable Threats and Opportunities	3
. Many Changes	Partially Predictable Weak Signals	4
. Almost Continuous Change	Unpredictable Surprises	5

After considerable discussion, each member of the group assigned a value (1 through 5) to each variable in the above dimensions and determined the appropriate system to be the Periodic Planning System.

The planning systems used for comparison were identified as; operation management, issue planning, periodic planning, and signal/surprise planning.

The average group score for environment was 2.6 for visibility and 4.2 for turbulence as depicted on the chart below:



It was determined that Periodic Planning may be frequent initially and the system may change as the Agency is established.

## VII. IMPLEMENTATION PLAN AND TRANSITION MANAGEMENT

Change is an inevitable consequence of societal progression. Virtually every person and every institution is susceptible to its influence and law enforcement is certainly no exception.

To change means to leave the present world of the familiar, to remove oneself from one's comfort zone and to venture into the world of the unknown, something which is perceived as threatening by many people. As a result, applied behavioral scientists concluded long ago that the vast majority of men and women exhibit a marked resistance to change. This is not so much because they are categorically opposed to change, but because they wish to preclude the discomfort which is often associated with it.

The administrator who wishes to make complex changes within an organization must not fail to consider the impact such changes will have on employees; nor should the possibility that resistance will be met along the implementation path be ignored. In and of itself, this is to be expected. As Fred Luthans, in his book on organizational behavior put it, "Human resistance to change is part of the dynamics of change. Resistance to change is a fact of organizational life..."(22)

### A. THE NECESSITY FOR CHANGE

Why do humans resist change? In his classical analysis, Paul Lawrence pointed out that while technological factors were often cited as fundamental reasons for resistance, many human

and social factors also contributed to this phenomenon. Some of the more common reasons people resist change are noted below:

- . Insecurity - This is a very obvious reason why humans resist change. They are generally comfortable with the status quo and view change as a threat to their security.
  
- . Economics - A very practical reason why people, especially in the lower levels of an organization, oppose change is that they are afraid of possible economic loss. The fear of being replaced by a machine has become a real threat to many workers. Today, with the increased utilization of computers, many middle managers are also beginning to experience the same fear. Whether this fear is real or imagined is of little consequence. The fact that it exists at all, for whatever reason, is the issue that must be addressed by chief executives.
  
- . Sociopsychological - Although insecurity and economics are partly sociopsychological in nature, people also erect perceptual, emotional and cultural barriers to change. Perceptually incorrect interpretations of change may lead to resistance. Some people may react emotionally to change by bringing fears and prejudices to the surface. Others facing organizational change may be influenced by their cultural

values which they bring to the situation with them. (23)

In examining these issues, it becomes apparent that institutions are caught in a dilemma. According to Donnelly, Gibson, and Ivancevich, the highly competitive marketplace in the private and public sectors of the economy; the tremendously accelerating rate of technological advancements; and the highly volatile changes that are occurring in both the physical and social environment, are but three of many forces bombarding the organization and which thus make change inevitable. (24) Neither private nor public organizations can compete in today's world by standing still or going backward. At the same time, however, it must be recognized that resistance to change, if left unsatisfactorily resolved, will ultimately preclude either the actual implementation or the desired results of any change effort.

To extricate their organizations from this dilemma, administrators will have to reconsider how they view change and the resistance of people to it. As far as change itself is concerned, to view it as anything but inevitable is to go the way of the ostrich. As early as 540 B.C., Heraclitus told us that "There is nothing permanent except change." We may therefore conclude that change is, has been, and will always be with us.

Although we may not be able to forestall organizational change, we may be able to more effectively minimize employee resistance to it.

The start of this process begins with an attitudinal shift.

Despite the widespread resistance to change found at all levels of the modern organization, it should not be automatically assumed that participants will resist all change, or if they do resist, that it is inherently bad for the organization. As indicated above, resistance will occur when the change is viewed as a threat or barrier. If the change is not seen as endangering the person's security or economic position and does not erect sociopsychological barriers, there may be no resistance. In fact, change may be welcomed by a person because it may remove a threat or barrier. It is possible for both the individual and the organization to benefit from resistance. In most cases, however, an attempt should be made to overcome the resistance through the effective management of change.

When properly managed, change can be a healthy force for good. When improperly managed, it can create chaos, confusion, and a host of other damaging side effects. Thus, when change is at hand, the primary task of the change agent is to draft an implementation plan which encourages the former outcome and avoids the latter. Unfortunately, however, this step in the change process, the development of an implementation plan, is often overlooked.

According to Beckhard and Harris, one of the biggest traps for large system change efforts is the failure of organizational leaders to

resist the temptation to rush through the planning process to get to the "action" stage. Although the pressures for results are often due to a need to eliminate the acute negative consequences of a problem, a great portion of large system change efforts failed because of a lack of understanding on the part of the organizational leadership of what the process of intervention and change involves. When the manager lacks an appreciation for and understanding of the complexity of the intervention process, it is predictable that the emphasis will be on "action" or results. Management must gain a basic understanding of the whats, hows, and whys of the intervention process and be able to recognize its developmental and interdependent nature as a necessary condition for success in planned change efforts. (25)

One of the most important developments in the area of planned change is the conceptualizing of how to work with large systems to initiate and sustain change over time. If we recognize the errors which occur when we move too quickly to the action stage, then it becomes clear that a smoother and more orderly course must be charted for the organization which is progressing from something old to something new. This "smoother and more orderly course" results from a process known as "transition management," and it is considered the key to the successful implementation of change.

Beckhard and Harris state that for an effective change strategy to be developed, it is first

essential to adequately diagnose the need for change. A second prerequisite for developing a change strategy is to set clear and explicit descriptions of the desired state of affairs after the change. A third necessity is to have a clear picture of the present state of affairs as related to the change goals. The picture, or diagnosis, of the organization's present state needs to include an identification of those subsystems that are primarily involved in the change, the attitudes of those systems and their leaders toward the change, their readiness to commit themselves to the change, and an objective assessment of their capability to do it. In addition, it is helpful to look at the types of change problems that will be involved in developing the strategy.

The period of time and the state of affairs that exists between an identification of need and the achievement of a desired future state can be thought of as the transition state.<sup>(26)</sup> This state, during which change takes place, has a unique set of conditions, extends over time in large system change, and requires separate management and governance structure. These structures may or may not be the same as those used for managing future operations.<sup>(27)</sup> In any case, however, this transition period is managed in accord with a systematic plan which delineates not only those activities that need to occur in order to introduce the change, but to minimize any confusion caused by the change itself.

These administrative principles, were instrumental in the Chino and Ontario Police Departments recent efforts to develop a joint powers agreement that would formally establish a regionalized crime analysis unit. A discussion of the need for the unit and the transitional management plan created for it is presented in the following pages. While the plan relates to these two agencies in particular, it is essentially generic in nature. It may therefore be used by any organization seeking to make a similar change.

B. ESTABLISHMENT OF THE REGIONALIZED CRIME ANALYSIS UNIT CONCEPT

With the utilization of state and federal funds given them in 1976, the cities of Chino and Ontario formed a Joint Powers Agency (JPA) which created a new governmental entity named PRECOM (Police Regional Communications System). The objective of the JPA in establishing PRECOM was to establish a centralized regional computer-aided communications system to best serve the needs of all citizens residing in the two jurisdictions.

The Joint Powers Agency remains intact today and both the Chino and Ontario Police Departments administer the affairs of PRECOM. Council members from each city comprise the JPA's Board of Directors, the police chiefs of both departments sit on the Agency's Administrative Committee and their representatives preside over the Agency's Technical Committee. The Director of PRECOM

reports directly to the chiefs of both police departments and is responsible for the daily accomplishment of Agency goals and objectives.

For nearly ten (10) years, Ontario and Chino have worked closely together as evidenced by their harmonious administration of the JPA which still governs the operations of PRECOM. Yet something was missing. For all the information shared relative to such things as calls for service, response time frequency and so on, no data was exchanged relative to the actual crime which occurred in each jurisdiction.

Upon examining the operations of other departments, this was found to be a common phenomenon. In the years prior to the establishment of the Law Enforcement Assistance Administration (LEAA), police agencies were characteristically isolationists by nature. While they maintained liaisons with state governments to provide training and with the Federal Bureau of Investigation to provide forensic services, they seldom interfaced with neighboring city and county agencies in any significant attempt to identify or collectively ameliorate region wide crime problems. While it was true that, in noteworthy cases, individual investigators occasionally joined forces to find a particular criminal, police agencies as a group conducted day to day business in a vacuum, taking little heed of what was occurring outside of their sphere of influence.

The continued maintenance of this position is not only detrimental to the suppression of crime, but it is also expensive in terms of the costs associated with the provision of police services. This conclusion surfaced time and time again as projects funded by LEAA began to strikingly prove and markedly demonstrate that true cooperation between local law enforcement agencies frequently resulted in a reduction of crime, a more efficient utilization of resources, the elimination of needless duplication of efforts, and hence a heightened level of service at a lower level of cost.

Although LEAA is no longer a funding source, various programs which emanated as a result of its efforts continue to be selectively implemented by state government throughout the country.

One such program in California, as previously discussed, is the Career Criminal Apprehension Program (CCAP). Administered by the State Office of Criminal Justice Planning, its objectives include the establishment of crime analysis units to analyze crime, identification of emerging crime patterns, and the creative utilization of manpower resources to proactively anticipate the movements of the criminal element. While excellent in theory, several practices exist which detract from the success that the program could obtain. These are as follows:

1. Knowing that criminals have historically crossed geographical boundaries, many

police officials have failed to seriously recognize that the problems of one agency are nearly always those of neighboring jurisdiction(s) as well. Remaining territorial, they thus fail to join together to resolve mutual crime problems. As a result, the problems continue to manifest themselves throughout the region.

2. Frequent failure of police personnel to share strategic or tactical information or to advise other agencies of emerging crime problems.
3. Failure of police investigators to coordinate cases with other agencies or to proactively seek out those prosecutors who have knowledge of other pending cases which involve the same suspect.
4. Failure of the police to share - to any appreciable degree - the personnel and materiel necessary to combat area wide problems.

It is true that police agencies have banded together from time to time to suppress particular crime problems. Unfortunately, however, the weakness in these programs is that they are inherently of short duration, are conceived by design to focus on but one particular crime problem, and are of little assistance to the patrol officer who, on a daily basis, is charged with the responsibility of identifying and eradicating the crime which occurs in his or her city.

The cities of Chino, Ontario, Montclair, and Upland comprise the West End of San Bernardino County and, as of January 1, 1986, collectively serve a population of over 240,000 people. The criminals of one jurisdiction commonly traverse the boundaries of the other three, and the efforts of these agencies to pursue and apprehend them often serve to merely push them into a neighboring city.

Chino and Ontario have crime analysis units and use a shared computer system as the repository for data. The problem, however, is that each unit analyzes the crime data of its own city making the immediate identification of region wide crime trends impossible. Furthermore, devoid of crime analysis units, no information is coming from Upland or Montclair. As a result, we continue to force criminals out of one jurisdiction only to have them "ride the circuit" before returning home again.

The Chiefs of the Chino and Ontario Police Departments agreed that this practice could not be allowed to continue and wanted to develop a program to effectively and decisively suppress the criminal activity of the region. They proposed to extend the scope of the existing Joint Powers Agency to include the centralization of crime analysis services. It was believed that by formally combining both personnel and materiel resources, the crime analysis unit so created could immediately identify emerging crime patterns for each jurisdiction individually as well as the region as a whole, provide for the unification of

computer resources, facilitate case coordination for investigators, and promote a heightened level of cooperation between the police and other members of the criminal justice community.

Though a noble and achievable goal, it was recognized that many issues would have to be addressed before the regionalization of crime analysis services could become a reality. Since each department had units operating independently of each other, it was obvious that any change would heavily impact upon each governmental system. Emotional questions would likely be asked: Who will head the new unit? In which city will it be located? How will the cost of the service to each agency be determined? How much local control over the unit will each agency have?

The deeper issues associated with these questions had to be considered by executive managers as potential barriers to change. The transition plan developed to remove these barriers is discussed in the following section.

C. CRITICAL MASS IDENTIFICATION, SELECTION AND TASK ASSIGNMENT

Since any attempts to regionalize a crime analysis effort can significantly affect each city in general and the personnel assigned to that function in particular, it is imperative that persons representing varying interests be given the opportunity to provide input into the change process.

This process is begun initially by the two Chiefs who wish to form a JPA to centralize crime analysis services. After conferring with individuals, both internal and external to their organization, they will draft the implementation plan. Contained within its design will be a listing of key players and/or key groups which will comprise the "critical mass." Their commitment will be necessary to provide the energy for the change to occur. Indeed, it will be their active support that will ensure that change takes place.

For the purposes of the regionalization effort, the following members of the critical mass group should be included in the implementation team. To the right of each group is listed the interest it represents:

1. City Council representative from each participating city - Political Constituency
2. Participating Police Chiefs - JPA Administration
3. Participating Patrol Commanders - Patrol Administration
4. Participating Investigative Commanders - Detective Bureau Administration
5. Participating Support Services Commanders - Support Services Administration
6. Director, Crime Analysis Services - Unit Personnel, Budget and Procedures
7. Crime Analysis and Support Staff - Product Development and Distribution

The Chiefs of police may appropriately serve as the Project Directors of the team. At their first meeting they should advise all

participants of the change which is being considered and solicit their reactions to the new proposal. Following a period of deliberation they should reassess the need for change and then either proceed with its implementation or abandon the undertaking.

If the decision is made to continue with the project, the Chiefs will instruct team members to complete the following general tasks:

- . Communicate effectively with the members of each department to inform them of the changes which are contemplated.
- . Schedule regular meetings to obtain employee input.
- . Legitimize the uncertainty of conflict and reduce resistance to change by stressing that the traditional turbulence within the organization will only be temporary.
- . Establish a mechanism for feedback.
- . Identify levels of commitment and "sell" the plan to their employees.

In addition to these general tasks, team members should also be given specific assignments. Following is a summary of the tasks which may be given to critical mass members.

. City Council Representatives

Task: Serve as the liaison between the police agencies and the political constituency. Inform Chiefs of the support which may or may not be given them by the Councils of each city. A statement of non support may prompt a decision to abandon the project or to revise its goals to make it more acceptable to political interests. When this has been accomplished, the process of implementing the transition plan can once again proceed.

. Chiefs of Police

Task: With the support of participating City Councils, will serve as Project Directors and Advisors to the implementation team. Responsible to City Managers and Council members for the implementation and administration of the Joint Powers Agency which will regulate the operations of the regionalized crime analysis unit.

. Patrol, Investigative, and Support Services Commanders

Task: Serve as Co-Chairmen of the implementation team and reporting officers to the Chiefs of Police. Each will be charged with the responsibility of determining the impact that the proposed change will have on the people employed in their areas of influence. They will schedule meetings for all personnel likely

to be affected by the change, will present the transition plan in a positive manner, and will attempt in every way possible to obtain willing compliance with new directives.

. Director, Crime Analysis Services

Task: The logistics of implementation. Will be required to inform Chiefs of the number of analysts needed to accomplish project goals and to recommend their eventual placement in either centralized or satellite offices. Will set criteria for the determination of such placement. Will be responsible for creating the budget necessary to operate the unit and forward it to the Chiefs for their approval. Will identify computer and other equipment needs and establish procedures for the equitable exchange of information between all project participants.

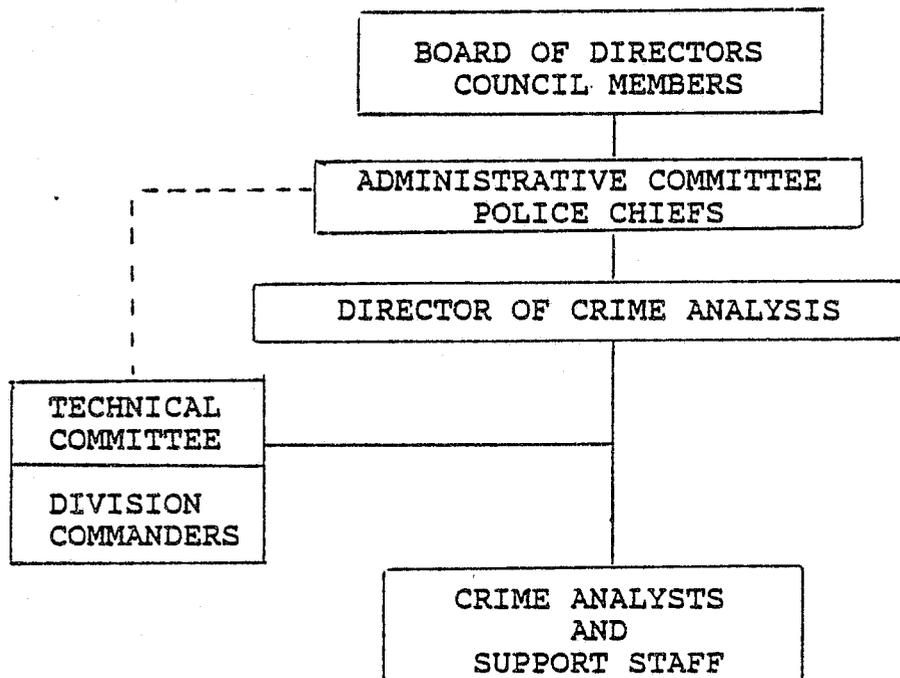
. Crime Analysts and Support Staff

Task: Under the supervision of the Director of Crime Analysis Services, will be responsible for the development and dissemination of unit products. Based upon input from potential user groups, will develop a client base to determine informational needs. Will also design a system to capture feedback information from users to ensure continued meeting of their needs.

Change, of course, usually has its critics. The members of this transition team may not even be positively in agreement with it. However, without their support the enterprise will most likely fail. For this reason, critical mass members must be kept continually informed of the progress which is being made so that they, in turn, can keep their subordinates apprised of the organization's status. Further, by making team members an integral part of the change process, they are more likely to feel a sense of "ownership" with it. This may well serve to keep them in harmony with executive desires and ensure that they themselves do not become impediments to the change process. In short, the objective is to obtain commitment from the critical mass such that a positive "make it happen" attitude is obtained from all participants.

#### D. MANAGEMENT STRUCTURE

The management structure utilized during the transitional stage of establishing a regionalized crime analysis unit can consist of several variables. Because of the way in which most police agencies are organizationally designed, a quite natural structure is the hierarchical one. In this framework, top management and staff identify the critical mass from a hierarchical point of view and then select a cross-section of representation from the entire organization.



Once the hierarchy has been established, other management structures can be designed within that hierarchy to facilitate the transition period. For example, one may wish to create a new position in the form of a Project Manager. While the Chiefs may serve as Project Directors and thus have final responsibility for implementing change, they may appoint a Project Manager to function as their representative to handle the daily business of change. One caveat, however, must be observed. When placing any person in this position, he/she must be given the responsibility, authority, and power to manage. Without it one will likely be ineffective in one's efforts to carry out the duties assigned by the executive.

Another substructure which may be utilized within the context of the larger hierarchical

framework is the diagonal slice. Use of the diagonal slice enables the administrator to obtain input from different levels and functions within the organization. Individuals representing these levels and functions may also be included as members of the critical mass. This can be an especially beneficial tactic to use when persons who hold informal power within an organization are in a position to block change. By using the diagonal slice to solicit their cooperation, one may later avoid any negative effects that these people could exert on the change process.

In summary, the Chiefs of Police should review the types of management structures available, define the transition state, set up a management structure system using the principles of the Hierarchy, Project Manager, and Diagonal Slice methods, and communicate the system to the members of the transition implementation team.

If one "overall" structure is to be used, it should most probably be the "Project Manager." The existence of a motivator and program integrator tends to keep the team members on track and focuses responsibility on one person for getting the job done.

#### E. SUPPORT TECHNOLOGIES

The Facilitation of Meetings, Force Field Analysis and Responsibility Charting methodologies may be used as support technologies in managing the transition period

which precedes the actual implementation of a regionalized crime analysis program. Their utility is defined below.

. Meetings

It is generally agreed that effective communication is particularly critical during the transitional period. To facilitate communication, meetings should be held with departmental staff members to discuss the change and to identify and select key personnel to manage the transition. Shortly thereafter, a second meeting should be convened with the now designated members of the critical mass.

The following three objectives should be accomplished during this most important meeting:

1. The Chiefs should explain to their participants the "management structure" which has been developed to support the transitional plan.
2. A command officer should be appointed to manage the change.
3. Tasks and responsibilities should be assigned to individual members.

The transition team should meet regularly and frequently. At subsequent meetings, the use of Force Field Analysis and Responsibility Charting technologies may be helpful in assisting team members to identify potential problem areas and assign them additional areas of responsibility.

. Force Field Analysis

Implementation of a Regional Program

Positive Forces

- . Leadership
- . Support
- . Communications
- . Cost effective
- . Improves Service to Community
  
- . Personnel Commitment
- . Line Support
- . Motivation for Patrol/Investigations
- . Proactive Orientation
- . Demonstrated Need
- . Community Support

Negative Forces

- . Lack of Direction
- . Non-support from staff/  
line personnel
- . Lack of understanding
- . Extra personnel,  
equipment
- . Poor Communication
- . Resistance to Change
- . Confusion
- . Lack of Training
- . Poor Planning
- . Public Apathy

Positive (Key) Forces

- . Leadership
  
- . Commitment Support
- . Communication
- . Adequate Planning

Negative (Key) Forces

- . Little or no Staff  
Support
- . Lack of Support
- . Poor Planning
- . Limited Communication

. Responsibility Charting

With the use of responsibility charting, tasks can be defined for each transition team member and their level of participation identified.

<u>Participant</u>	<u>Tasks</u>	<u>Participant Role</u>
1. Police Chiefs	Project Directors, Leaders	Responsibility
2. Chiefs Designate	Project Manager Admin concerns, Scheduling Coordinator, liaison between all entities	Responsibility
3. Commanders	Subcommittee Co-Chairpersons Leaders, Motivators	Responsibility
4. Director, Crime Analysis Services	Logistics, Personnel Equipment, liaison between departments	Responsibility
5. Crime Analysts	Liaison with line and staff personnel, communicate needs, identify change proponents/critics	Inform
6. Support Staff	Develop localized procedures to facilitate the change process	Inform/ Support

Once critical mass members have been given their assignments, the actual transition period begins. Meetings should continue on a regular basis to ensure that the change process is proceeding on schedule and in the manner desired. Open lines of communication now become of ever increasing importance. Therefore, all participants of the management team should

be particularly attuned to comments made by personnel during this critical time. Those remarks which are negative in nature should be immediately addressed and issues indicative of dissatisfaction should be brought before the team for consideration. Those persons who disfavor the change should be sympathetically and patiently counseled. At this stage, using a heavy handed approach to force compliance could prove detrimental to the entire change process.

#### F. TRANSITION SUMMARY

People, like organizations, must be given time to change. They must be given the latitude to openly express their fears and apprehensions and to reflect upon how change will affect them both individually and as collective working groups.

This section began with a discussion of change and the resistance many have to it. We concluded that change is inevitable and alluded to the fact that since it cannot be stopped, the only sensible thing to do is to manage it. The intelligent management of change therefore dictates that we not only recognize the resistance people have to change, but that we view it as a natural phenomenon. Fortunately, when appropriately dealt with, the resistance is usually overcome.

In the final analysis, this then becomes the key to the successful infusion of change into

the organization - appropriately dealing with individual resistance to change. Administrators with a well developed transitional plan will recognize this as a major problem to be addressed, and will incorporate into their designs those methodologies by which it may find resolution.

VIII. CONCLUSION

Participating for the past two years in the Command College process has provided the professional training and tools necessary to methodically look into the future.

With law enforcement being government's number one responsibility, it is imperative that law enforcement administrators anticipate, interpret and confront the issues of law enforcement in a positive, proactive manner.

Several methodologies have been utilized in the preparation of this study to look at the past and present issues which have confronted law enforcement.

Most importantly, the projection of major trends and events which will most likely have an affect on law enforcement through the next decade and to the year 2000.

This study is primarily intended to look at the function of "Crime Analysis" in the California law enforcement community.

Hopefully, as a result of the research, police administrators will have a better understanding of what crime analysis entails and will be able to develop strategies in an effort to respond to the future challenges of law enforcement.

The purpose of this study was to look at the crime analysis function, project that

(function) into the future and identify some alternatives for consideration.

We all recognize that social situations in contemporary California are extremely changeable. The mobility of our citizens, rapid changes in technology, increasing demand for police services and the (tightening) economy will all affect the way administrators will carry out their managerial responsibilities.

This being so, future administrators will have to anticipate and make allowances for change.

One of the most significant contributions to this study was the overwhelming response to the crime analysis survey. Many of the conclusions and recommendations contained within this report are a direct result of that input. Over one hundred and twenty (120) police administrators contributed to the findings which formulated the "most probable scenario" for the future of crime analysis.

The concept of regionalization is not a new one, but the reality of mutual cooperation and coordination of efforts between municipal law enforcement agencies remains limited.

While "regionalized crime analysis services" should not be considered a "quick fix" for future law enforcement problems, the concept should be viewed as an intrinsically sound approach to combating crime. It makes sense, in a time of reduced budgets, to create an

atmosphere of sharing. The mutual sharing of personnel, materiel and information can be accomplished by administrators who are willing to take some calculated risks and venture into something new.

The future effectiveness of municipal law enforcement depends on decisions that are made at the present. Once California sets the direction, other states will most likely follow suit. Now is the time to set that direction.

It is important to note that no claim is made about the total comprehensiveness of this study. It is suggested, however, that its findings will provide the reader with information and conclusions to look at the effectiveness of municipal law enforcement presently and facilitate additional questions and inquiry about the future of our profession.

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## APPENDICES

- A. Pre-Questionnaire
- B. Crime Analysis - Letter of Inquiry
- C. Questionnaire
- D. Personal Contacts
- E. Group Contacts
- F. Site Visits
- G. Questionnaire Analysis
  - 1. Frequency and Percentage Tables
  - 2. Cross Tabulation Analysis

**Appendix A**

POLICE Department  
JAMES E. ANTHONY  
CHIEF OF POLICE



LARRY WALKER  
MAYOR  
FRED AGUIAR  
MAYOR PRO TEM  
DANIEL BRIGGS  
BILL JAHN  
EUNICE ULLOA  
COUNCIL MEMBERS

## CITY of CHINO

November 13, 1985

TO: All CCAP Sites  
FROM: James Anthony, Chino Police Department  
SUBJECT: Structure of Crime Analysis Units

There seems to be little standardization throughout the State relative to the ways in which Crime Analysis Units are structured. These units are housed in a variety of divisions, are administrated by people holding different titles and are staffed by sworn and/or nonsworn personnel.

This questionnaire is circulated in an attempt to determine the current structure of our CAU's and to provide a base for further discussion of this topic. Please answer each question below:

1. Your agency \_\_\_\_\_

In the CCAP program the Project Director is usually the Chief or Sheriff. The Project Manager generally oversees the operation of the program. This person most often a Sergeant, Lieutenant or higher, may have other responsibilities within the Department besides the CCAP program. Some agencies may have a Project Coordinator. This individual directly supervises the Crime Analyst(s) and any clerical personnel the unit may have. This person, sworn or civilian, devotes his or her time solely to CAU activities. He or she may not only supervise the unit but may also do some analysis work. Crime Analysts may be sworn or nonsworn personnel. They have the task of analyzing crime, collecting information and disseminating it throughout the Department.

2. Is your Project Director the Chief or Sheriff? Yes No.  
If no, who is the Director (i.e. Captain of Support Services Division, Patrol Division Commander, etc.) \_\_\_\_\_

3. The Project Manager is \_\_\_\_\_ sworn \_\_\_\_\_ nonsworn.
- a. If sworn, what is his or her rank? \_\_\_\_\_
  - b. If nonsworn, what is his or her City/County title? \_\_\_\_\_  
\_\_\_\_\_
  - c. If nonsworn, what is his or her title within the CAU or CCAP program. \_\_\_\_\_
  - d. Does this person have job responsibilities besides the general overseeing of the CAU? \_\_\_\_\_ Yes \_\_\_\_\_ No. If yes, briefly describe them \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  - e. How many persons in the CAU are supervised by the Project Manager \_\_\_\_\_

4. We \_\_\_\_\_ Do \_\_\_\_\_ Do Not have a Project Coordinator.

For the agencies which do have a Project Coordinator:

This person is \_\_\_\_\_ Sworn \_\_\_\_\_ Nonsworn.

- a. If sworn, what is his or her rank? \_\_\_\_\_
- b. If nonsworn, what is his or her City/County title? \_\_\_\_\_  
\_\_\_\_\_
- c. If nonsworn, what is his or her title within the CAU or CCAP Program. \_\_\_\_\_
- d. How many persons in the CAU are supervised by this person? \_\_\_\_\_
- e. What persons in the CAU are supervised by this person? \_\_\_\_\_
- f. Does this person have job responsibilities besides supervising the CAU? \_\_\_\_\_ Yes \_\_\_\_\_ No. If yes, briefly describe them. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. The Crime Analyst(s) is/are \_\_\_\_\_ Sworn \_\_\_\_\_ Nonsworn.
- a. If sworn what is his or her rank? \_\_\_\_\_
  - b. If nonsworn, what is his/her City/County title? \_\_\_\_\_  
\_\_\_\_\_
  - c. If nonsworn, what is his/her title within the CAU or the CCAP program \_\_\_\_\_
  - d. Does the Crime Analyst supervise other CAU personnel? \_\_\_\_\_ Yes \_\_\_\_\_ No
  - e. If yes, how many? \_\_\_\_\_  
If yes, what persons? \_\_\_\_\_
6. What title is given to clerical personnel? \_\_\_\_\_  
\_\_\_\_\_
7. Please provide the breakdown of personnel which comprise your CAU.
- No. of Project Managers \_\_\_\_\_
- No. of Project Coordinators \_\_\_\_\_
- No. of Crime Analysts \_\_\_\_\_
- No. of Clerical Personnel \_\_\_\_\_
- Other personnel (identify position)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
8. Our CAU is under the (name the Division - i.e. Patrol, Investigations, Administrative, Support Services, etc.) \_\_\_\_\_

9. Does your agency have a defined career path for Crime Analysts?  
 Yes \_\_\_\_\_ No. If yes, please describe (i.e. enters  
 as a Crime Analyst I, can advance to Crime Analyst II and  
 so on) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

10. Please check which of the following are given to the Project  
 Manager, Project Coordinator, Crime Analyst and Clerical  
 Personnel of your agency:

	Mgmt. Position	Non-Mgmt. Position	Full Salary & Benefits Pkg.	Pay Only No Bene.	Other *
Project Manager	_____	_____	_____	_____	_____
Project Coordinator	_____	_____	_____	_____	_____
Crime Analyst(s)	_____	_____	_____	_____	_____
Clerical personnel	_____	_____	_____	_____	_____
Additional _____	_____	_____	_____	_____	_____
Additional _____	_____	_____	_____	_____	_____
Additional _____	_____	_____	_____	_____	_____

\* Other could be persons hired on a contractual year to year basis.  
 Their positions usually are not permanent and must be renegotiated  
 periodically with the hiring agency. They may be salaried or hourly  
 employees, may or may not receive benefits and may or may not be  
 considered a part of management. Do any of your CAU personnel fall  
 into this category? Yes \_\_\_\_\_ No.

If yes, which (Project Coordinator, Crime Analyst(s), Clerical  
 Personnel?) \_\_\_\_\_

What is the compensation arrangement for this person or these people  
 (i.e. salaried, management, contract renegotiation after (1) year,  
 temporary position; or hourly, nonmanagement, full benefits,  
 temporary, etc.) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

11. Your name \_\_\_\_\_  
 Your CCAP Program Title \_\_\_\_\_  
 Your City/County Title \_\_\_\_\_

**Appendix B**

DEPARTMENT OF JUSTICE

JOHN K. VAN DE KAMP, Attorney General

**COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING**4949 BROADWAY  
P.O. BOX 20145  
SACRAMENTO 95820-0145EXECUTIVE OFFICE  
(916) 739-5328

## BUREAUS

*Administrative Services*  
(916) 739-5354*Compliance and Certificates*  
(916) 739-5377*Information Services*  
(916) 739-5340*Management Counseling*  
(916) 322-3492*Standards and Evaluation*  
(916) 322-3492*Training Delivery Services*  
(916) 739-5394*Training Program Services*  
(916) 739-5372*Course Control*  
(916) 739-5399*Professional Certificates*  
(916) 739-5391*Reimbursements*  
(916) 739-5367*Resource Library*  
(916) 739-5353*Center for Executive  
Development*  
(916) 739-5328**To Whom It May Concern:**

This is to introduce Chief James E. Anthony of the Chino Police Department, Chino, California. Chief Anthony is conducting law enforcement research. He is a member of the Command College, a program for future law enforcement leaders sponsored by the California Commission on Peace Officer Standards and Training (POST). Independent research is an integral part of the program and is a requirement for graduation.

Assistance provided toward the research project will benefit law enforcement in general. The final research product produced by each member of the Command College will be made available through POST.

If you have any questions, you may contact me at (916) 739-5336. This letter of introduction expires on May 1, 1986.

Your assistance is greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads 'Doug Thomas'.

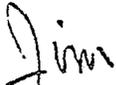
DOUG THOMAS  
Senior Consultant  
Center for Executive Development

October 25, 1985  
Page Two

Thanks so much for your help. It is tremendously appreciated. I value your assistance and will send you a copy of the results of our research upon its completion. Please return your questions to me in the envelope provided for your convenience.

I look forward to talking to you soon.

Sincerely,

  
James E. Anthony  
Chief of Police  
Chino Police Department

JEA:SLG:tmp

Enclosures



POLICE Department

JAMES E. ANTHONY  
CHIEF OF POLICE

AREA CODE (714) 627-7577

## CITY of CHINO

October 25, 1985

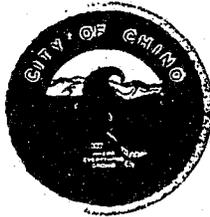
Dear

I am presently conducting some research for Command College on the topic of "The Future of Crime Analysis in California Law Enforcement - Year 2000." Knowing of your affiliation with the law enforcement community, I am sure that you have certain opinions as to not only how a crime analysis program should be run today, but what the future of crime analysis is likely to be in the years to come.

I would very much appreciate it if you would think about this topic and then write down some questions which you may have about the future of crime analysis and what its impact may be on law enforcement. Examples of questions might be: Will more CAU's be run by civilians or sworn personnel? Will the need for crime analysis units (CAU's) increase? Decrease? Will police agencies band together to share information to a greater or lesser degree? As I say, these are merely examples. Let your imagination run wild and just jot down any question which comes to mind. All replies will be held in strict confidence and will be used to compile a master questionnaire which will later be sent to sites for their evaluation and response. Answers to the questionnaire will then be used for formulate issues which we need to address if we are to determine the future of crime analysis fifteen years from now.

I would like to receive your questions as soon as possible, preferably by November 8. Remember, they need not be anything fancy - this is a brainstorming exercise so anything goes. At this point, questions which just pop into your head are as valid as those which have been pondered for hours.

**Appendix C**



CITY of CHINO

February 19, 1986

Dear

I have enclosed a questionnaire regarding the topic of Crime Analysis in California Law Enforcement.

It has been designed to be completed by the Chief Executive of a municipal law enforcement agency and I would appreciate it if you could take a few moments and complete it for me.

As you can see by the cover letter, this questionnaire is part of my project for the Command College. My time frame is very tight and I would like to have the questionnaire returned no later than Monday, March 3, 1986.

Thank you in advance for your assistance.

Sincerely,

*James E. Anthony*  
James E. Anthony  
Chief of Police  
Chino Police Department

JEA:tp

Enclosures

THE FUTURE OF CRIME ANALYSIS IN  
CALIFORNIA LAW ENFORCEMENT

Questionnaire

This questionnaire is designed to obtain your opinion on several issues pertaining to the present and future existence of Crime Analysis in California Law enforcement.

Your participation as a Chief Executive in completing this questionnaire is an important contribution to the completion of this project.

AGENCY INFORMATION

1. Number of sworn personnel?  
1-10 ( ) 11-25 ( ) 26-50 ( ) 51-100 ( ) 100+ ( )
2. Number of civilian personnel?  
1-10 ( ) 11-25 ( ) 26-50 ( ) 51-100 ( ) 100+ ( )
3. Geographical location of agency?  
No. Calif. ( ) Central Calif. ( ) So. Calif. ( )
4. Total years employed as a peace officer?  
5-10 ( ) 11-20 ( ) 21+ ( )
5. Total years as a Chief Executive?  
1-5 ( ) 6-10 ( ) 11-15 ( ) 16+ ( )
6. Does your agency presently have a Crime Analyst or a Crime Analysis Unit? Yes ( ) Indicate which \_\_\_\_\_  
No ( )
7. Has your agency received funds for a CCAP "Grant" through OCJP?  
Yes ( ) When completed? \_\_\_\_\_  
No ( )
8. Do you see a need for crime analysis in your agency?  
Yes ( ) No ( )
9. Is your city in a high growth area? Yes ( )  
Population? \_\_\_\_\_  
Estimated population by 2000 \_\_\_\_\_
10. Does your agency: A. Contract for any services:  
Yes ( ) Explain \_\_\_\_\_  
No ( )  
B. Use computers: Yes ( ) No ( ): For CAD ( ), Records Management ( ) or Crime Analysis ( ).

CRIME ANALYSIS DEFINITION

As a point of clarification, the following definition is being used to define the term "Crime Analysis": "A set of systematic analytical processes directed toward predicting criminal behavior in both individual and aggregate situations for the purpose of reducing crime in a cost-effective manner."

11. In your own words, what is your definition of crime analysis? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
12. What should the role of a Crime Analyst be? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
13. Do you think Crime Analysis will be a valid function in future Law Enforcement efforts? Yes ( ) No ( )
14. Do you think crime analysis units should be:  
A. Local agency controlled  
B. Multi-jurisdictional  
C. Coordinated by County Sheriff  
D. Combination of above \_\_\_\_\_ & \_\_\_\_\_.

CRIME ANALYSIS MANAGEMENT

15. Financially, regionalization may be feasible in the future to share resources. Of the following, indicate which item would be best served on a regional basis.

Item	YES	NO
A. Sharing of criminal information	( )	( )
B. Sharing of personnel	( )	( )
C. Sharing of costs personnel-training	( )	( )
D. Purchase of equipment, i.e. computers, software	( )	( )
E. Securing grant funds by combining resources, i.e. population base, crime trends	( )	( )
F. Review of crime trends on regional basis	( )	( )
G. Identity of offenders on a multi-jurisdictional basis	( )	( )

16. In your opinion, do you think smaller Law Enforcement agencies will be able to maintain the crime analysis function and keep up with modern technology on their own? Yes ( ) No ( )
17. Do you see crime analysis as an effective tool for management of Department resources? Yes ( ) No ( )
18. At what level? 

	<u>Yes</u>	<u>No</u>
A. Line Units	( )	( )
B. Supervision	( )	( )
C. Mid-Management	( )	( )
D. Command	( )	( )
19. Do you see a valid use for crime analysis in the following areas? 

	<u>YES</u>	<u>NO</u>
A. Directed Patrol	( )	( )
B. Managing Investigations	( )	( )
C. Manpower Deployment	( )	( )
D. Crime Prevention	( )	( )
E. Community Crime Resistance	( )	( )
F. Forecasting Crime	( )	( )
20. Who should the crime analyst (individual or unit) report to? 

A. Chief's Office	( )
B. Division Commander	( )
C. Unit Commander	( )

THE CRIME ANALYST

21. What criteria should be used in the selection of a crime analyst? 

A. Sworn ( )	Non-sworn ( )
B. Management ( )	Non-management ( )
C. Rank _____	or Title _____
D. College Degree? B.A. ( )	M.A. ( )

TRAINING

22. Please rank/order the following training elements for effective crime analysis. 

A. Analyst Training	( )
B. Officer Training (Patrol)	( )
C. Investigator Training (D.B.)	( )
D. Other Personnel	( )
E. Chief Executive	( )
F. Community Awareness	( )
23. Should concept training be provided in future police academy recruit classes for crime analysis? Yes ( ) No ( )
24. What training should a Crime Analyst have? 

A. Law Enforcement	<u>YES</u>	<u>NO</u>
B. Statistics	( )	( )
C. Computer	( )	( )
D. Report Writing	( )	( )
E. All Above	( )	( )

FUTURE CONSIDERATIONS

25. Would you consider participating in the following multi-jurisdictional cost effective functions in the future if local control could be maintained? 

<u>Function</u>	<u>YES</u>	<u>NO</u>
A. Regional Computer System	( )	( )
B. Regional Data Center	( )	( )
C. Networking of computers	( )	( )
D. Regional Computer Aided Dispatch Center	( )	( )
E. Sharing of criminal records	( )	( )
F. Regional forecasting of criminal activity	( )	( )
G. Regional analysis and identification of criminals	( )	( )
H. Purchase of high tech equipment, i.e. computers, mobile data terminals, vehicle locaters, software	( )	( )
26. Do you think crime analysis will become totally automated? Yes ( ) No ( )
27. Do you see more sharing between agencies in the future (resources and information)? Yes ( ) No ( )
28. What trends and events do you see that will have an effect on crime analysis in the next 15 years? 

A.	_____
B.	_____
C.	_____
D.	_____
E.	_____
29. What major problems do you see with a regional approach to Crime Analysis? 

A. Politics	( )
B. Local Control	( )
C. Sharing of Records	( )
D. Other _____	( )
30. Would you consider contracting for Crime Analysis services, i.e. records management, computer aided dispatch, data analysis and graphical analysis? Yes ( ) No ( )

**Appendix D**

APPENDIX D - Personal Contacts and Interviews

Arenberg, Sheldon. National Consultant and Authority on Crime Analysis, Santa Monica, California, December 30, 1985.

Bush, Lowell E. Systems Analyst, Dallas Police Department, Dallas, Texas, March 14, 1986.

Caldwell, Gregory. Chief of Police, Montclair Police Department, Montclair, California. Periodic meetings - 1985/86.

Cavagnaro, William. Police Sergeant, Las Vegas Metropolitan Police Department, Las Vegas, Nevada, February 11, 1986.

Cobb, J. B. Police Corporal-Crime Analyst, Dallas Police Department, Dallas, Texas, March 14, 1986.

Coe, Barbara. Crime Analysis Supervisor, Anaheim Police Department, Anaheim, California, March 19, 1986.

Covington, Tom H. Police Corporal-Crime Analyst, Dallas Police Department, Dallas, Texas, March 14, 1986.

Gottlieb, Steven. Supervising Crime Analyst, City of Chino Police Department, Chino, California. Several meetings - 1985/86.

Howenstein, Jr., G. Albert. Executive Director,  
California State Office of Criminal Justice  
Planning, Sacramento, California, February 6,  
1986.

Kolbrek, Lee. Chief of Police, Ontario Police  
Department, Ontario, California. Several  
meetings - 1985/86.

Miller, Bill. Sergeant, Program Manager-Career  
Criminal Apprehension Program, Los Angeles  
County Sheriff's Department-Norwalk Station,  
Norwalk, California, March 19, 1986.

O'Neal, Judy A. Program Evaluator, California State  
Office of Criminal Justice Planning,  
Sacramento, California, March 19, 1986.

Pearson, Allen L. President of Pearson Enterprises  
in Charles Town, West Virginia and Crime  
Analysis Instructor for the International  
Association of Chief's of Police, February 21,  
1986.

Prince, Billy. Chief of Police, Dallas Police  
Department, Dallas, Texas, March 14, 1986.

Ramage, Jerry R. Police Lieutenant, Planning and  
Research Division, Dallas Police Department,  
Dallas, Texas, March 14, 1986.

Seivertson, Allen E. Police Sergeant, Office of  
Operations, Sacramento Police Department,  
Sacramento, California, March 19, 1986.

Stone, Rick. Police Captain, Planning and Research  
Division, Dallas Police Department, Dallas,  
Texas, March 14, 1986.

Todd, Larry. Police Captain, City of Pleasanton  
Police Department, Pleasanton, California,  
February, 5, 1986.

Whitney, William. Program Manager, Career Criminal  
Apprehension Program, California State Office  
of Criminal Justice Planning, Sacramento,  
California, March 26, 1986.

# Appendix E

APPENDIX E. - Group Contacts and Meetings

Meetings Attended:

State of California Career Criminal  
Apprehension Program, Steering Committee  
Meeting, Sacramento, California, March 26,  
1986. (Author is a member of the Steering  
Committee).

California Crime Analyst's Association.  
Representing Southern California Police  
and Sheriff Departments.

October 16, 1985,  
Chino, California

December 4, 1985,  
Chino, California

February 11, 1986,  
West Covina, California

Crime Analysis Training Program. A seminar  
with Crime Analysts representing sixteen  
(16) states from Alaska, Hawaii and  
California to Virginia, Louisiana and  
Washington, D.C.,  
Las Vegas, Nevada,  
February 21, 1986.

Group Discussion Meetings (Brainstorming):

- . Group Discussion on Current/Emerging Trends and Events

Included representatives from law enforcement and municipal government:

- . Jim Hart, Personnel Director, Chino
- . Glen Rojas, Parks & Recreation Director, Chino
- . Captain John Ingrao, Chino Police
- . Paula Fint, Administrative Officer, Chino Police
- . Ron Ashworth, Purchasing Officer, Chino
- . Alan Parkes, Technical Services Manager, Chino Police
- . Steve Gottlieb, Supervising Crime Analyst, Chino Police
- . Alan Bediamol, Crime Analyst, Ontario Police

Meeting conducted in Chino, California on October 21, 1985.

- . Group Discussion on Strategic Plan and Transition Management:

Representatives included:

- |   |   |
|---|---|
| . Lee Kolbrek<br>Chief of Police<br>Ontario | . Katie Roberts<br>Police Sergeant<br>Ontario           |
| . Jim Grundy<br>Police Captain<br>Ontario   | . Steve Gottlieb<br>Supervising Crime<br>Analyst, Chino |

John Ingrao  
. Police Captain  
Chino

Alan Bediamol  
. Crime Analyst  
Ontario

Harry Tooley  
. Police Lieutenant  
Chino

Lorie Hudmon  
. Clerk-Typist  
Chino

Carrie Gaglio  
. Clerk-Typist  
Ontario

# Appendix F

APPENDIX F. - Site Visits

- . Chino Police Department
  - Crime Analysis Unit
  - Lieutenant Harry Tooley, Administration
  - Steve Gottlieb, Supervisor
  
- . Dallas Police Department
  - Crime Analysis Unit
  - Captain Rick Stone, Commander
  - Corporal Tom Covington, Analyst
  
- . Hawthorne Police Department
  - Crime Analysis Unit
  - Captain Steve Port, Commander
  
- . Las Vegas Police Department
  - Crime Analysis Unit
  - Sergeant Bill Cavagnaro, Supervisor
  
- . Ontario Police Department
  - Crime Analysis Unit
  - Sergeant Katie Roberts, Supervisor
  - Alan Bediamol, Analyst
  
- . Sacramento Police Department
  - Crime Analysis Unit
  - Sergeant Allen Seivertson, Supervisor
  
- . West Covina Police Department
  - Crime Analysis Unit
  - Lt. Jim Dillon, Administration
  - Jo Ann Simmons, Analyst

**Appendix G**

FILE - NCNAME (CREATED - 86/03/25)

01 NUMBER OF SWORN PERSONNEL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
1-10	1	9	7.3	7.4	7.4
11-25	2	28	22.8	23.0	30.3
26-50	3	20	15.3	16.4	46.7
51-100	4	23	18.7	18.9	65.6
100+	5	42	34.1	34.4	100.0
NO RESPONSE	9	1	.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 122 MISSING CASES 1

FILE - NCNAME (CREATED - 86/03/25)

Q2 NUMBER OF CIVILIAN PERSONNEL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
1-10	1	41	33.3	34.2	34.2
11-25	2	30	24.4	25.0	59.2
26-50	3	18	14.6	15.0	74.2
51-100	4	16	13.0	13.3	87.5
100+	5	15	12.2	12.5	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	120				
		MISSING CASES	3		

FILE - NCNAME (CREATED - 86/03/25)

03 GEOGRAPHICAL LOCATION OF AGENCY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
NORTH CALIF	1	26	21.1	21.3	21.3
CENTRAL CALIF	2	17	13.8	13.9	35.2
SOUTH CALIF	3	57	46.3	46.7	82.0
OTHER	8	22	17.9	18.0	100.0
NO RESPONSE	9	1	.8	MISSING	
	TOTAL	123	100.0	100.0	
VALID CASES	122				
	MISSING CASES		1		

FILE - NCNAME (CREATED - 86/03/25)

04 TOTAL YRS EMPLOYED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
5-10	1	7	5.7	6.0	6.0
11-20	2	45	36.6	38.5	44.4
21+	3	65	52.8	55.6	100.0
NO RESPONSE	0	6	4.9	MISSING	
	TOTAL	<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 117 MISSING CASES 6

FILE - NCNAME (CREATED - 86/03/25)

Q5 TOTAL YRS AS CHIEF EXEC

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
1-5	1	36	29.3	36.4	36.4
6-10	2	45	36.6	45.5	81.8
11-15	3	11	9.9	11.1	92.9
16+	4	7	5.7	7.1	100.0
NO RESPONSE	9	24	19.5	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 99 MISSING CASES 24

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FILE - NAME (CREATED - 86/03/25)

Q6A HAVE CRIME ANALYST OR UNIT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	52	42.3	42.6	42.6
NO	2	70	56.9	57.4	100.0
NO RESPONSE	9	1	.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 122 MISSING CASES 1

- - - - -1- - - - -1- - - - -1- - - - -

FILE - NCNAME (CREATED - 86/03/25)

Q68 INDICATE WHICH

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CRIME ANALYST	1	13	10.6	27.7	27.7
CRM ANAL UNIT	2	29	23.6	61.7	89.4
OTHER	8	5	4.1	10.6	100.0
NO RESPONSE	9	76	51.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 47 MISSING CASES 76

FILE - NCNAME (CREATED - 86/03/25)

Q7 FUNDS FOR CCAP THRU CCJP

CATEGORY LABEL	CCDF	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	25	20.3	21.0	21.0
NO	2	94	76.4	79.0	100.0
NO RESPONSE	0	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

FILE - NCNAME (CREATED - 86/03/25)

Q8 NEED FOR CPIME ANALYSTS TN AGENCY

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	103	83.7	88.0	83.0
NO	2	14	11.4	12.0	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 117 MISSING CASES 6

FILE - NCNAME (CREATED - 86/03/25)

Q9A CITY IN HIGH GROWTH AREA

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	80	65.0	72.1	72.1
NO	2	31	25.2	27.9	100.0
NO RESPONSE	9	12	9.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 111 MISSING CASES 12

FILE - AENAME (CREATED - 86/03/25)

C10A CONTRACT FOR ANY SERVICES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	36	29.3	30.5	30.5
NO	2	82	66.7	69.5	100.0
NO RESPONSE	9	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 118 MISSING CASES 5

FILE - NCNAME (CREATED - 86/03/25)

Q1C81 USE COMPUTERS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	102	82.9	87.2	87.2
NO	2	15	12.2	12.8	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 117 MISSING CASES 6

FILE - NCNAME (CREATED - 86/03/25)

Q1082 FOR CAD

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	46	37.4	37.4	37.4
NOT CHECKED	2	77	62.6	62.6	100.0
	TOTAL	123	100.0	100.0	

VALID CASES 123 MISSING CASES 0

FILE - NCNAME (CREATED - 86/03/25)

Q1CB3 RECORDS MANAGEMENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	89	72.4	72.4	72.4
NOT CHECKED	2	34	27.6	27.6	100.0
	TOTAL	123	100.0	100.0	

VALID CASES 123 MISSING CASES 0

FILE - NCNAME (CREATED - 96/03/25)

01C84 CRIME ANALYSIS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	61	49.6	49.6	49.6
NOT CHECKED	2	62	50.4	50.4	100.0
	TOTAL	123	100.0	100.0	

VALID CASES 123 MISSING CASES 0

FILE - NCNAME (CREATED - 86/03/25)

Q1085 OTHER APPLICATIONS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	7	5.7	5.7	5.7
NOT CHECKED	2	116	94.3	94.3	100.0
	TOTAL	123	100.0	100.0	

VALID CASES 123 MISSING CASES 0

FILE - NCNAME (CREATED - 86/03/25)

Q13 CPIME ANALYSIS VALID TN LAW ENF

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	116	94.3	95.9	95.9
NO	2	5	4.1	4.1	100.0
NO RESPONSE	0	2	1.6	MISSING	
TOTAL		<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 121 MISSING CASES 2

FILE - NAME (CREATED - 86/03/25)

Q14 CRIME ANALYSIS UNITS SHOULD BE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
A-LOCAL AGENCY	1	33	26.8	28.0	28.0
B-MULTI JURIS	2	19	15.4	16.1	44.1
C-SHFF	3	5	4.1	4.2	48.3
A & B	4	53	43.1	44.9	93.2
A & C	5	2	1.6	1.7	94.9
B & C	6	5	4.1	4.2	99.2
A, B AND C	7	1	.8	.8	100.0
NO RESPONSE	9	5	4.1	MISSING	
TOTAL		123	100.0	100.0	

VALID CASES 118 MISSING CASES 5

FILE - NCNAME (CREATED - 86/03/25)

Q15COUNT N OF AREAS O.K. FOR REGIONALIZATION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0	2	1.6	1.6	1.6
	1	5	4.1	4.1	5.7
	2	2	1.6	1.6	7.3
	3	7	5.7	5.7	13.0
	4	12	9.8	9.8	22.8
	5	18	14.6	14.6	37.4
	6	31	25.2	25.2	62.6
	7	46	37.4	37.4	100.0
	TOTAL	123	100.0	100.0	

VALID CASES

123

MISSING CASES

0

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FILE - NCNAME (CREATED - 86/03/25)

Q15A SHARING OF CRIMINAL INFO

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	116	94.3	97.5	97.5
NO	2	3	2.4	2.5	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

FILE - NCNAME (CREATED - 86/03/25)

Q158 SHARING OF PERSONNEL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	45	52.8	59.1	59.1
NO	2	45	36.6	40.9	100.0
NO RESPONSE	9	13	10.6	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 110 MISSING CASES 13

FILE - NCNAME (CREATED - 86/03/25)

C15C SHARING COST PERSONL TRAINING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	91	74.0	80.5	80.5
NO	2	22	17.9	19.5	100.0
NO RESPONSE	0	10	8.1	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 113 MISSING CASES 10

FILE - NCNAME (CREATED - 86/03/25)

Q150 PURCHASE OF EQUIPMENT I.E. COMPUTERS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	97	78.9	86.6	86.6
NO	2	15	12.2	13.4	100.0
NO RESPONSE	9	11	8.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 112 MISSING CASES 11

FILE - NCNAME (CREATED - 86/03/25)

Q15E SECURING GRNT FUNDS BY COMB RESOURCES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	94	75.4	82.5	82.5
NO	2	20	16.3	17.5	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

FILE - NCNAME (CREATED - 96/03/25)

C15F REVIEW OF CRIME TRENDS CN REG

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	104	84.6	91.2	91.2
NO	2	10	8.1	8.8	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

FILE - NCNAME (CREATED - 86/03/25)

Q15G ID OF OFFENDERS ON MULTT JURIS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	109	88.6	92.4	92.4
NO	2	9	7.3	7.6	100.0
NO RESPONSE	0	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 118 MISSING CASES 5

FILE - NCNAME (CREATED - 86/03/25)

Q16 SMALLER LAW ENG KFFP IID

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	55	44.7	48.2	48.2
NO	2	59	48.0	51.8	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

FILE - NCNAME (CREATED - 86/03/25)

017 CRIME ANALYSTS MANGMNT TOOL 018A LIN

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	95.7	95.7
NO	2	5	4.1	4.3	100.0
NO RESPONSE	0	8	6.5	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 115 MISSING CASES 8

FILE - ACNAME (CREATED - 86/03/25)

C18A

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	103	83.7	92.8	92.8
NO	2	8	6.5	7.2	100.0
NO RESPONSE	0	12	9.8	MISSING	
TOTAL		<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 111 MISSING CASES 12

FILE - NCNAME (CREATED - 86/03/25)

Q188 SUPERVISION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	103	83.7	92.8	92.8
NO	2	8	6.5	7.2	100.0
NO RESPONSE	9	12	9.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 111 MISSING CASES 12

FILE - NCNAME (CREATED - 86/03/25)

Q18C MIDMANAGEMENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	98	79.7	89.1	89.1
NO	2	12	9.8	10.9	100.0
NO RESPONSE	9	13	10.6	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 110 MISSING CASES 13

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FILE - NCNAME (CREATED - 86/03/25)

C180 COMMAND

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	99	80.5	88.4	88.4
NO	2	13	10.6	11.6	100.0
NO RESPONSE	9	11	8.9	MISSING	
	TOTAL	<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 112

MISSING CASES 11

FILE - NCNAME (CREATED - 86/03/25)

Q19A DIRECTED PATROL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	120	97.6	100.0	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 120 MISSING CASES 3

-----1-----1-----1-----

FILE - NCNAME (CREATED - 86/03/25)

Q198 MANAGING INVEST

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	90.9	90.9
NO	2	11	8.9	9.1	100.0
NO RESPONSE	9	2	1.6	MISSING	
	TOTAL	<u>123</u>	<u>100.0</u>	<u>100.0</u>	
VALID CASES	121				
		MISSING CASES	2		

FILE - NCNAME (CREATED - 86/03/25)

Q19C MANPOWER DEPLOYMENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	115	93.5	95.8	95.8
NO	2	5	4.1	4.2	100.0
NO RESPONSE	9	3	2.4	MISSING	
TOTAL		123	100.0	100.0	

VALID CASES 120 MISSING CASES 3

FILE - NCNAME (CREATED - 86/03/25)

Q190 CPIME PREVENTION

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	117	95.1	98.3	98.3
NO	2	2	1.6	1.7	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

FILE - ACNAME

(CREATED - 86/03/25)

86/03/25. 15.27.10. PAGE

019E

COMM CRTME RESISTANCE

CATEGORY LABEL

YES

NO

NO RESPONSE

VALID CASES

115

CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
1	109			
2	6	88.6	94.8	94.8
9	8	4.9	5.2	100.0
TOTAL	<u>123</u>	<u>6.5</u>	<u>MISSING</u>	
MISSING CASES		100.0	<u>100.0</u>	

8

FILE - NCNAME (CREATED - 86/03/25)

Q19F FORECASTING CRIME

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	111	90.2	93.3	93.3
NO	2	8	6.5	6.7	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119. MISSING CASES 4

FILE - NCNAME (CREATED - 86/03/25)

G20 CRIME ANALYST SHOULD REPORT TO

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
A-CHIEF'S OFFICE	1	35	28.5	29.9	29.9
B-DIVISION COMOP	2	52	42.3	44.4	74.4
B & C	3	2	1.6	1.7	76.1
C-UNIT COMOP	4	19	15.4	16.2	92.3
A & C	5	2	1.6	1.7	94.0
A, B & C	6	5	4.1	4.3	98.3
A & B	7	2	1.6	1.7	100.0
NO RESPONSE	9	6	4.9		
TOTAL		123	100.0	MISSING 100.0	

VALID CASES 117

MISSING CASES 6

FILE - NCNAME (CREATED - 86/03/25)

Q21A CRIME ANALYST SHLD RF

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
SWORN	1	34	27.6	30.9	30.9
NON SWORN	2	66	53.7	60.0	90.9
EITHER	3	8	6.5	7.3	98.2
OTHER	8	2	1.6	1.8	100.0
NO RESPONSE	9	13	10.6	MISSING	
TOTAL		<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 110 MISSING CASES 13

.FILE - NCNAME (CREATED - 86/03/25)

0218 CPM ANALYST SHLD RF

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
MNGMNT	1	28	22.8	28.6	28.6
NON MNGMNT	2	69	56.1	70.4	99.0
OTHER	8	1	.8	1.0	100.0
NO RESPONSE	9	25	20.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 98 MISSING CASES 25

FILE - NCNAME (CREATED - 86/03/25)

G21C1 RANK

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
OFFICER	1	6	4.9	27.3	27.3
SERGEANT	2	7	5.7	31.8	59.1
LIEUT	3	5	4.1	22.7	81.8
CAPTAIN	4	1	.8	4.5	86.4
OTHER	8	3	2.4	13.6	100.0
NO RESPONSE	9	101	82.1	MISSING	
TOTAL		123	100.0	100.0	

VALID CASES 22 MISSING CASES 101

FILE - NCNAME (CREATED - 86/03/25)

02102 TITLE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CRIME ANALYST	1	20	16.3	76.9	76.9
ADMIN ASSIST	2	2	1.6	7.7	84.6
OTHER	8	4	3.3	15.4	100.0
NO RESPONSE	9	97	78.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 26 MISSING CASES 97

FILE - NCNAME (CREATED - 86/03/25)

Q210 CCLL DEGREE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
BA	1	64	52.0	75.3	75.3
MA	2	17	13.8	20.0	95.3
OTHER	8	4	3.3	4.7	100.0
NO RESPONSE	9	38	30.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 85 MISSING CASES 38

FILE - NCNAME (CREATED - 86/03/25)

Q22A ANALYST TRAINING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1	64	52.0	67.4	67.4
	2	14	11.4	14.7	82.1
	3	9	7.3	9.5	91.6
	4	3	2.4	3.2	94.7
	5	4	3.3	4.2	98.9
	6	1	.8	1.1	100.0
NO RESPONSE	0	28	22.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 95 MISSING CASES 28

.FILE - NCNAME (CREATED - 86/03/25)

Q228 OFFICER TRAINING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1	12	9.8	13.0	13.0
	2	39	31.7	42.4	55.4
	3	27	22.0	29.3	84.8
	4	8	6.5	8.7	93.5
	5	5	4.1	5.4	98.9
	6	1	.8	1.1	100.0
NO RESPONSE	9	31	25.2	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 92 MISSING CASES 31

FILE - NENAME (CREATED - 86/03/25)

Q22C INVEST TRAINING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1	4	3.3	4.4	4.4
	2	14	11.4	15.6	20.0
	3	42	34.1	46.7	66.7
	4	24	19.5	26.7	93.3
	5	5	4.1	5.6	98.9
	6	1	.8	1.1	100.0
NO RESPONSE	9	33	26.8	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 90 MISSING CASES 33

FILE - NCNAME (CREATED - 86/03/25)

0220 OTHER PERSONNEL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1	1	.8	1.1	1.1
	2	7	5.7	8.0	9.2
	3	1	.8	1.1	10.3
	4	18	14.6	20.7	31.0
	5	42	34.1	48.3	79.3
	6	18	14.6	20.7	100.0
NO RESPONSE	9	36	29.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 87 MISSING CASES 36

FILE - NCNAME (CREATED - 86/03/25)

Q22E CHIEF EXEC

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1	10	8.1	11.6	11.6
	2	13	10.6	15.1	26.7
	3	8	6.5	9.3	36.0
	4	16	13.0	18.6	54.7
	5	14	11.4	16.3	70.9
	6	25	20.3	29.1	100.0
NO RESPONSE	9	37	30.1	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 86 MISSING CASES 37

FILE - NCNAME (CREATED - 86/03/25)

Q22F COMMUNITY AWARENESS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1	4	3.3	4.3	4.3
	2	6	4.9	6.5	10.9
	3	5	4.1	5.4	16.3
	4	21	17.1	22.8	39.1
	5	16	13.0	17.4	56.5
	6	40	32.5	43.5	100.0
NO RESPONSE	9	31	25.2	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 92 MISSING CASES 31

Q23 CONCEPT TRAIN ACADEMY RECRUIT CLASS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	90	73.2	81.1	81.1
NO	2	21	17.1	18.9	100.0
NO RESPONSE	9	12	9.8		
	TOTAL	123	100.0	MISSING 100.0	

VALID CASES 111 MISSING CASES 12

FILE - NCNAME (CREATED - 86/03/25)

Q24A LAW ENFORCEMENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	51	41.5	73.9	73.9
NO	2	18	14.6	26.1	100.0
NO RESPONSE	9	54	43.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 69 MISSING CASES 54

FILE - NCNAME (CREATED - 86/03/25)

Q248 STATISTICS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	69	56.1	95.8	95.8
NO	2	3	2.4	4.2	100.0
NO RESPONSE	9	51	41.5	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 72 MISSING CASES 51

FILE - NCNAME (CREATED - 86/03/25)

024C COMPUTED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM- FREQ (PCT)
YES	1	73	57.3	97.3	97.3
NO	2	2	1.6	2.7	100.0
NO RESPONSE	0	48	39.0	MISSING	
TOTAL		123	100.0	100.0	

VALID CASES 75 MISSING CASES 48

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FILE - NCNAME (CREATED - 86/03/25)

Q240 REPORT WRITING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	58	47.2	87.9	87.9
NO	2	8	6.5	12.1	100.0
NO RESPONSE	9	57	46.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 66 MISSING CASES 57

Q24E ALL ABOVE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	84	68.3	91.3	91.3
NO	2	8	6.5	8.7	100.0
NO RESPONSE	0	31	25.2		
TOTAL		<u>123</u>	<u>100.0</u>	<u>MISSING</u>	
				<u>100.0</u>	

VALID CASES 92

MISSING CASES 31

FILE - NCNAME (CREATED - 86/03/25)

Q25COUNT N OF MULTIJURISDICTIONAL AREAS DESIRED

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	0	3	2.4	2.4	2.4
	1	1	.8	.8	3.3
	3	4	3.3	3.3	6.5
	4	8	6.5	6.5	13.0
	5	7	5.7	5.7	18.7
	6	20	16.3	16.3	35.0
	7	34	27.6	27.6	62.6
	8	46	37.4	37.4	100.0
	TOTAL	123	100.0	100.0	

VALID CASES 123

MISSING CASES 0

FILE - NCNAME (CREATED - 86/03/25)

Q25A REG COMP SYS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	101	82.1	86.3	86.3
NO	2	16	13.0	13.7	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 117 MISSING CASES 6

- - - - -1- - - - -1- - - - -1- - - - -

FILE - NCNAME (CREATED - 86/03/25)

Q258 REG DAT CENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	100	81.3	87.7	87.7
NO	2	14	11.4	12.3	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

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FILE - NCNAME (CREATED - 86/03/25)

Q25C NETWORK COMP

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	93.2	93.2
NO	2	8	6.5	6.8	100.0
NO RESPONSE	9	5	4.1	MISSING	
TOTAL		123	100.0	100.0	

VALID CASES 118 MISSING CASES 5

FILE - NCNAME (CREATED - 86/03/25)

0250 REG COMP AID DISPATCH CENT

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	61	49.6	52.1	52.1
NO	2	56	45.5	47.9	100.0
NO RESPONSE	9	6	4.9	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 117 MISSING CASES 6

-----1-----1-----1-----

FILE - NCNAME (CREATED - 86/03/25)

Q25E SHARING CRIM RECORDS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	110	89.4	92.4	92.4
NO	2	9	7.3	7.6	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

FILE - NCNAME (CREATED - 86/03/25)

Q25F REG FORCASTING

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	109	88.6	91.6	91.6
NO	2	10	8.1	8.4	100.0
NO RESPONSE	9	4	3.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 119 MISSING CASES 4

-----1-----1-----1-----

FILE - NAME (CREATED - 86/03/25)

Q25G REG ANALYSIS IN CRTM

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	119	96.7	99.2	99.2
NO	2	1	.8	.8	100.0
NO RESPONSE	9	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 120 MISSING CASES 3

FILE - NCNAME (CREATED - 86/03/25)

Q25H PURCHASE OF HIGH TECH EQUIP

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	96	78.0	84.2	84.2
NO	2	18	14.6	15.8	100.0
NO RESPONSE	9	9	7.3	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 114 MISSING CASES 9

FILE - NCRNAME (CREATED - 86/03/25)

Q26 CRM ANALYSIS TOTALLY AUTO

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	41	33.3	34.7	34.7
NO	2	77	62.6	65.3	100.0
NO RESPONSE	0	5	4.1	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 118 MISSING CASES 5

FILE - NCNAME (CREATED - 86/03/25)

Q27 SHARING BETW AGENCIES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	116	94.3	96.7	96.7
NO	2	4	3.3	3.3	100.0
NO RESPONSE	0	3	2.4	MISSING	
	TOTAL	123	100.0	100.0	

VALID CASES 120 MISSING CASES 3

FILE - NCNAME (CREATED - 86/03/25)

Q29A POLITICS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	93	75.6	75.6	75.6
NOT CHECKED	2	30	24.4	24.4	100.0
TOTAL		123	100.0	100.0	

VALID CASES 123 MISSING CASES 0

\*\*LINE LIMIT EXCEEDED.\*\*



FILE - NCNAME (CREATED - 86/03/25)

029A POLITICS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	93	75.6	75.6	75.6
NOT CHECKED	2	30	24.4	24.4	100.0
	TOTAL	123	100.0	100.0	

VALID CASES 123 MISSING CASES 0

\*\*LINE LIMIT EXCEEDED.\*\*

- - - - -1- - - - -1- - - - -1- - - - -1- - - - -

FILE - NNAME (CREATED - 86/03/25)

0298 LOCAL CONTROL

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	87	70.7	70.7	70.7
NOT CHECKED	2	36	29.3	29.3	100.0
	TOTAL	<u>123</u>	<u>100.0</u>	<u>100.0</u>	
VALID CASES	123				
		MISSING CASES	0		

- - - - -1- - - - -1- - - - -1- - - - -1- - - - -

FILE - NCNAME (CREATED - 86/03/25)

029C SHARING OF RECORDS

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	34	27.6	27.6	27.6
NOT CHECKED	2	89	72.4	72.4	100.0
	TOTAL	123	100.0	100.0	
VALID CASES	123				
	MISSING CASES		0		

FILE - NCNAME (CREATED - 86/03/25)

Q29D OTHER

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
CHECKED	1	18	14.6	14.6	14.6
NOT CHECKED	2	105	85.4	85.4	100.0
TOTAL		<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 123 MISSING CASES 0

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FILE - NCNAME (CREATED - 86/03/25)

030 CONSIDER CONTRACTING CRM ANALYSIS SERV

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	59	48.0	50.0	50.0
NO	2	59	48.0	50.0	100.0
NO RESPONSE	9	5	4.1	MISSING	
	TOTAL	<u>123</u>	<u>100.0</u>	<u>100.0</u>	

VALID CASES 118 MISSING CASES 5

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q6A HAVE CRIME ANALYST OR UNIT  
 BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF

	Q1	11-10	11-25	26-50	51-100	100+	ROW TOTAL
Q6A	1.	1	5	11	29		51
YES		11.1	17.9	25.0	50.0	69.0	42.1
NO	2.	8	23	15	11	13	70
		88.9	82.1	75.0	50.0	31.0	57.9
COLUMN TOTAL		7.4	23.1	16.5	18.2	34.7	121

RAW CHI SQ = 25.76287 WITH 4 D.F., SIG. = .0000

MISSING OBSERVATIONS - 2

FILE - NCRAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q8 NEED FOR CRIME ANALYSTS IN AGENCY  
 BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF

Q8	COUNT COL PCT	Q1					ROW TOTAL
		1-10	11-25	26-50	51-100	100+	
		1. I	2. I	3. I	4. I	5. I	
YES	1.	5 62.5	21 77.8	17 89.5	21 100.0	38 92.7	102 87.9
NO	2.	3 37.5	6 22.2	2 10.5	0 0	3 7.3	14 12.1
	COLUMN TOTAL	8 6.9	27 23.3	19 16.4	21 18.1	41 35.3	116 100.0

RAW CHI SC = 11.29547 WITH 4 D.F., SIG. = .0234

MISSING OBSERVATIONS - 7



FILE - ACRNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A R U L A T I O N O F \*\*\*\*\*

Q1081 USE COMPUTERS  
BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

	COUNT COL PCT	Q1					ROW TOTAL
		1-10	11-25	26-50	51-100	100+	
Q1081		1.1	2.7	3.1	4.1	5.1	
YES	1.	7 77.8	23 85.2	14 77.8	17 81.0	40 97.6	101 87.1
NO	2.	2 22.2	4 14.8	4 22.2	4 19.0	1 2.4	15 12.9
COLUMN TOTAL		9 7.8	27 23.3	18 15.5	21 18.1	41 35.3	116 100.0

RAW CHI SQ = 6.86181 WITH 4 D.F., SIG. = .1434

MISSING OBSERVATIONS - 7

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q1082 FOR CAD  
BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

COUNT COL PCT	Q1					ROW TOTAL
	1-10	11-25	26-50	51-100	100+	
Q1082	1. I	2. I	3. I	4. I	5. I	
CHECKED	22.2	21.4	10.0	34.8	64.3	45
NOT	77.8	78.6	90.0	65.2	35.7	77
COLUMN TOTAL	7.4	23.0	16.4	18.9	34.4	122

RAW CHI SQ = 23.50319 WITH 4 D.F., SIG. = .0001

MISSING OBSERVATIONS - 1

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C F O S S T A B U L A T I O N O F \*\*\*\*\*

Q1083 RECORDS MANAGEMENT  
 BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

COUNT COL PCT	Q1					ROW TOTAL	
	11-10	11-25	26-50	51-100	100+		
Q1083	1. I	1. I	2. I	3. I	4. I	5. I	
CHECKED	6	18	13	15	37	89	
	66.7	64.3	65.0	65.2	88.1	73.0	
NOT	2. I	10	7	8	5	33	
CHECKED	33.3	35.7	35.0	34.8	11.9	27.0	
COLUMN TOTAL	9	28	20	23	42	122	
	7.4	23.0	16.4	18.9	34.4	100.0	

RAW CHI SC = 7.46504 WITH 4 D.F., SIG. = .1133

MISSING OBSERVATIONS - 1

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* CRIMINAL STATISTICS OF \*\*\*\*\*

Q1084 CRIME ANALYSIS  
BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

COUNT	COL	Q1					ROW
		1-10	11-25	26-50	51-100	100+	
		1.	2.	3.	4.	5.	
Q1084							
CHECKED	1.	22.2	46.4	25.0	56.5	66.7	50.0
NOT	2.	77.8	53.6	75.0	43.5	33.3	50.0
	CHECK						
	COLUMN	9	28	20	23	42	122
	TOTAL	7.4	23.0	16.4	18.9	34.4	100.0

RAW CHI SC = 12.97861 WITH 4 D.F., SIG. = .0114

MISSING OBSERVATIONS - 1

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* CROSS TABULATION OF \*\*\*\*\*

Q13 CRIME ANALYSIS VALID IN LAW ENF  
 BY 01 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

Q13	COUNT COL PCT	01					ROW TOTAL
		1-10	11-25	26-50	51-100	100+	
YES	1.	8 100.0	27 100.0	19 95.0	21 91.3	40 95.2	115 95.8
NO	2.	0 0	0 0	1 5.0	2 8.7	2 4.8	5 4.2
COLUMN TOTAL		8 6.7	27 22.5	20 16.7	23 19.2	42 35.0	120 100.0

RAW CHI SQ = 2.77526 WITH 4 D.F., SIG. = .5961

MISSING OBSERVATIONS - 3

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q14 CRIME ANALYSTS UNITS SHOULD BE  
BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

COUNT COL PCT	Q1					ROW TCTAL
	1-10	11-25	26-50	51-100	100+	
Q14	1.	2.	3.	4.	5.	
A-LOCAL	0	5	3	17		33
	0	19.2	40.0	13.0	41.5	28.0
B-MULTI	2	6	4	5		19
	25.0	23.1	10.0	17.4	12.2	16.1
C-SHRF	2	2	0	1		5
	25.0	7.7	0	2.4		4.2
A & B	1	11	15	17		53
	12.5	42.3	45.0	65.2	41.5	44.9
A & C	1	1	0	0		2
	12.5	3.8	0	0	0	1.7
B & C	2	1	1	0		5
	25.0	3.8	5.0	4.3	0	4.2
A, B AND C	0	0	0	0	1	1
	0	0	0	0	2.4	.8
CELLMN TCTAL	8	26	20	23	41	118
	6.8	22.0	16.9	19.5	34.7	100.0

RAW CHI SQ = 45.11120 WITH 24 D.F., SIG. = .0057

MISSING OBSERVATIONS - 5

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

014 CRIME ANALYSTS UNITS SHOULD BE  
 BY 09A CITY IN HIGH GROWTH AREA

\*\*\*\*\* PAGE 1 OF 1

COUNT	09A		ROW TOTAL
	COL	PCT	
	YES	NO	
014	1.1	2.1	
A-LOCAL	19 24.7	9 30.0	28 26.2
B-MULTI	15 19.5	4 13.3	19 17.8
C-SHRF	3 3.9	2 6.7	5 4.7
A & B	34 44.7	13 43.3	47 43.9
A & C	2 2.6	0 0	2 1.9
B & C	3 3.9	2 6.7	5 4.7
A, B AND C	1 1.3	0 0	1 .9
COLLYN	77	30	107
TOTAL	72.0	29.0	100.0

RAW CHI SC = 2.57475 WITH 6 D.F., SIG. = .8600  
 MISSING OBSERVATIONS - 16

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q15COUNT N OF AREAS O.K. FOR REGIONALIZATION  
 BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

COUNT COL PCT	Q1					PCW TOTAL
	11-10	11-25	26-50	51-100	100+	
Q15COUNT	1.	2.	3.	4.	5.	
C	0	0	5	0	1	1.6
1.	0	0	0	3	2	5
	0	0	0	13.0	4.8	4.1
2.	0	0	0	0	2	2
	0	0	0	0	4.8	1.6
3.	0	1	0	3	3	7
	0	3.6	0	13.0	7.1	5.7
4.	0	0	2	1	8	11
	0	0	10.0	4.3	19.0	9.0
5.	1	10	1	2	4	18
	11.1	35.7	5.0	8.7	9.5	14.8
6.	5	4	6	5	11	31
	55.6	14.3	30.0	21.7	26.2	25.4
7.	3	13	10	9	11	46
	33.3	44.4	50.0	39.1	26.2	37.7
COLUMN TOTAL	9	28	20	23	42	122
	7.4	23.0	16.4	18.9	34.4	100.0

RAW CHI SC = 44.80259 WITH 28 D.F., SIG. = .0231

MISSING OBSERVATIONS - 1

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q15COUNT N OF AREAS O.K. FPO REGIONALIZATION  
 BY Q14 CRIME ANALYSIS UNITS SHOULD BE

\*\*\*\*\* PAGE 1 OF 2

		Q14					ROW
COUNT	CPL PCT	A-LOCAL AGENCY	B-MULTI JURIS	C-SHRE	A & R	A & C	TOTAL
Q15COUNT		1.I	2.I	3.I	4.I	5.I	
C		2	0	0	0	0	2
		6.1	0	0	0	0	1.7
1.		3	0	0	2	0	5
		9.1	0	0	3.8	0	4.2
2.		2	0	0	0	0	2
		6.1	0	0	0	0	1.7
3.		3	1	0	3	0	7
		9.1	5.3	0	5.7	0	5.9
4.		4	0	0	6	0	10
		12.1	0	0	11.3	0	8.5
5.		3	3	1	8	1	17
		9.1	15.8	20.0	15.1	50.0	14.4
6.		8	6	4	12	0	31
		24.2	31.6	80.0	22.6	0	26.3
7.		9	9	0	22	1	44
		24.2	47.4	0	41.5	50.0	37.3
COLUMN TOTAL		33	10	5	53	2	118
(CONTINUED)		28.0	16.1	4.2	44.9	1.7	100.0



FILE - NAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q16 SMALLER LAW ENF KEEPING  
 BY Q14. CRIME ANALYSTS UNITS SHOULD BE

\*\*\*\*\* PAGE 1 OF

		Q14					ROW TOTAL
COUNT COL PCT	IA-LOCAL AGENCY	A-MULTI JURIS	C-SHOE	A & B	A & C		
Q16		1.	2.	3.	4.	5.	
YES	1.	20 64.5	5 27.8	0	24 46.2	1 100.0	53 47.7
NO	2.	11 35.5	13 72.2	4 100.0	28 53.8	0	58 52.3
	COLUMN TOTAL	31 27.9	18 14.2	4 3.6	52 46.8	1 .9	111 100.0

		Q14		ROW TOTAL
COUNT COL PCT	A, B AND C	A, B AND C		
Q16		6.	7.	
YES	1.	2 50.0	1 100.0	53 47.7
NO	2.	2 50.0	0	58 52.3
	COLUMN TOTAL	4 3.6	1 .9	111 100.0

RAW CHI SQ = 12.27583 WITH 6 D.F., SIG. = .0561  
 MISSING OBSERVATIONS - 12



FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* CRISTARULATION OF \*\*\*\*\*

Q21A CRIME ANALYST SHLD BE  
BY Q1 NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF

COUNT COL PCT	Q1					ROW TOTAL
	11-10	11-25	26-50	51-100	100+	
Q21A	1. I	2. I	3. I	4. I	5. I	
SWORN	4 50.0	9 36.0	3 17.6	3 13.6	15 40.5	34 31.2
NON SWORN	4 50.0	16 64.0	13 76.5	17 77.3	15 40.5	65 59.6
EITHER	0 0	0 0	0 0	2 9.1	6 16.2	8 7.3
OTHER	0 0	0 0	1 5.9	0 0	1 2.7	2 1.8
COLUMN TOTAL	7.3	22.9	17 15.6	22 20.2	37 33.9	109 100.0

RAW CHI SC = 20.13797 WITH 12 D.F., SIG. = .0645

MISSING OBSERVATIONS - 14



FILE - NNAME (CREATED - 86/03/25)

\*\*\*\*\* CROSSTABULATION OF \*\*\*\*\*

Q25COUNT N OF MULTIJURISDICTIONAL AREAS DESIRED  
BY Q1. NUMBER OF SWORN PERSONNEL

\*\*\*\*\* PAGE 1 OF 1

COUNT	Q1					ROW TOTAL	
	COL PCT	1-10	11-25	26-50	51-100		100+
C25COUNT		1.	2.	3.	4.	5.	
C	0	1	0	0	0	2	3
	0	3.6	0	0	0	4.8	7.5
1.	0	0	0	0	0	1	1
	0	0	0	0	0	2.4	.8
3.	1	0	1	0	0	2	4
	11.1	0	5.0	0	0	4.8	3.3
4.	1	1	1	0	0	5	8
	11.1	3.6	5.0	0	0	11.9	6.6
5.	1	1	2	1	0	2	7
	11.1	3.6	10.0	4.3	0	4.8	5.7
6.	1	4	0	5	9	19	19
	11.1	14.3	0	21.7	21.4	15.6	15.6
7.	1	12	7	6	8	34	34
	11.1	42.9	35.0	26.1	19.0	27.9	27.9
8.	4	9	9	11	13	46	46
	44.4	32.1	45.0	47.8	31.0	37.7	37.7
COLUMN TOTAL	9	28	20	23	42	122	122
	7.4	23.0	16.4	18.9	34.4	100.0	100.0

RAW CHI SC = 24.81659 WITH 28 D.F., SIG. = .6378

MISSING OBSERVATIONS - 1

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*  
 O25COUNT N OF MULTIJURISDICTIONAL AREAS DESIRED  
 PY O2 NUMBER OF CIVILIAN PERSONNEL  
 \*\*\*\*\* PAGE 1 OF 1

COUNT COL PCT	O2					ROW TOTAL
	1-10	11-25	26-50	51-100	100+	
O25COUNT	1.	2.	3.	4.	5.	
C	1	1	0	1	0	3
	2.4	3.3	0	6.3	0	2.5
1.	0	0	0	0	1	1
	0	0	0	0	6.7	.8
3.	1	1	1	1	0	4
	2.4	3.3	5.6	6.3	0	3.3
4.	3	0	2	1	1	7
	7.3	0	11.1	6.3	6.7	5.8
5.	3	1	1	1	1	7
	7.3	3.3	5.6	6.3	6.7	5.8
6.	6	2	4	3	4	19
	14.6	4.7	22.2	18.8	26.7	15.8
7.	10	13	5	4	2	34
	24.4	43.3	27.8	25.0	13.3	28.3
8.	17	12	5	5	6	45
	41.5	40.0	27.8	31.3	40.0	37.5
COLUMN TOTAL	41	30	18	16	15	120
	34.2	25.0	15.0	13.3	12.5	100.0

RAW CHI SC = 21.39188 WITH 28 D.F., SIG. = .8086

MISSING OBSERVATIONS - 3

FILE - NNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q25CCLNT N OF MULTIJURISDICTIONAL AREAS DESIRED  
 BY Q14 CRIME ANALYSTS UNITS SHOULD BE

\*\*\*\*\* PAGE 1 OF

		Q14					ROW
COUNT	PCT	A-LOCAL	B-MULTI	C-S400	A E S	A E C	TOTAL
COL		AGENCY	JURTS				
Q25CCLNT		1.	2.	3.	4.	5.	
C		0	2	0	1	0	3
		0	10.5	0	1.9	0	2.5
1.		1	0	0	0	0	1
		3.0	0	0	0	0	.8
3.		1	1	0	1	1	4
		3.0	5.3	0	1.9	50.0	3.4
4.		4	0	0	2	0	6
		12.1	0	0	3.8	0	5.1
5.		1	2	0	4	0	7
		3.0	10.5	0	7.5	0	5.9
6.		9	0	0	9	0	19
		27.3	0	0	17.0	0	16.1
7.		6	7	2	15	1	32
		18.2	36.8	40.0	28.3	50.0	27.1
8.		11	7	3	21	0	46
		33.3	36.8	60.0	39.6	0	39.0
COLLUMN		33	19	5	53	2	118
TOTAL		28.0	16.1	4.2	44.9	1.7	100.0

(CONTINUEC)

-----1-----1-----1-----1-----1-----

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q25CCOUNT N OF MULTIJURISDICTIONAL AREAS DESIRED  
 BY Q14 CRIME ANALYSTS UNITS SHOULD BE

\*\*\*\*\* PAGE 2 OF

Q25CCOUNT	Q14	COL	PCT	B	A, R AND C	C	ROW TOTAL
				5.1		7.1	
				0		0	3
				0		0	2.5
1.				0		0	1
				0		0	.8
2.				0		0	4
				0		0	3.4
4.				0		0	6
				0		0	5.1
5.				0		0	7
				0		0	5.9
6.				1		0	19
				20.0		0	16.1
7.				0		1	32
				0		100.0	27.1
8.				4		0	46
				80.0		0	39.0
COLUMN TOTAL				5		1	118
				4.2		.8	100.0

RAW CHI SC = 46.35805 WITH 42 D.F., SIG. = .2973

MISSING OBSERVATIONS - 5

FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q25CCUNT N OF MULTIJURISDICTIONAL AREAS DESIPED  
 BY Q15CCUNT N OF AREAS O.K. FOR REGIONALIZATION

\*\*\*\*\* PAGE 1 OF 2

		Q15CCUNT					ROW TGTAL
Q25CCUNT	COL PCT	0.I	1.I	2.I	3.I	4.I	
C		0	0	0	0	0	3
		0	0	0	0	0	2.4
1.		0	0	1	0	0	1
		0	0	50.0	0	0	.8
3.		0	0	0	0	2	4
		0	0	0	0	16.7	3.3
4.		1	0	1	0	1	8
		50.0	0	50.0	0	8.3	6.5
5.		0	0	0	1	1	7
		0	0	0	14.3	8.3	5.7
6.		0	1	0	1	6	20
		0	20.0	0	14.3	50.0	16.3
7.		0	1	0	2	0	34
		0	20.0	0	28.6	0	27.6
8.		1	3	0	3	2	46
		50.0	60.0	0	42.9	16.7	37.4
COLUMN TOTAL (CONTINUED)		2 1.6	5 4.1	2 1.6	7 5.7	12 9.9	123 100.0



FILE - NCNAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q258 REG DAT CENT  
BY Q3 GEOGRAPHICAL LOCATION OF AGENCY

\*\*\*\*\* PAGE 1 OF 1

		Q3				
Q258	COL	NORTH CALIF	CENTRAL CALIF	SOUTH CALIF	OTHER	ROW TOTAL
YES	1.	19	17	48	16	99
		79.3	100.0	87.3	88.9	87.6
NO	2.	5	0	7	2	14
		21.7	0	12.7	11.1	12.4
	COLUMN TOTAL	23	17	55	18	113
		20.4	15.0	48.7	15.9	100.0

RAW CHI SC = 4.28927 WITH 3 D.F., SIG. = .2319

MISSING OBSERVATIONS - 10

FILE - NAME (CREATED - 86/03/25)

\*\*\*\*\* CROSS TABULATION OF \*\*\*\*\*

Q250 REG COMP AND DISPATCH CENT  
 BY Q3 GEOGRAPHICAL LOCATION OF AGENCY

\*\*\*\*\* PAGE 1 OF

COUNT	COL PCT	Q3				ROW TCTAL
		NORTH CALTE	CENTRAL CALTE	SOUTH ALTE	OTHER	
Q250		1. I	2. I	3. I	3. I	
YES	1. I	15 62.5	8 47.1	20 35.7	17 89.5	60 51.7
NO	2. I	9 37.5	9 52.9	36 64.3	2 10.5	56 48.3
COLUMN TCTAL		24 20.7	17 14.7	56 48.3	19 16.4	116 100.0

RAW CHI SC = 17.85566 WITH 3 D.F., SIG. = .0005

MISSING OBSERVATIONS - 7





FILE - NAME (CREATED - 86/03/25)

\*\*\*\*\* C R O S S T A B U L A T I O N O F \*\*\*\*\*

Q26 CRM ANALYSIS TOTALLY AUTO  
BY Q1081 USE COMPUTERS

\*\*\*\*\* PAGE 1 OF 1

		Q1081		ROW TOTAL
COUNT	COL PCT	YES	NO	
Q26				
		1.	2.	
YES	1.	33	5	38
		34.0	33.3	33.9
NO	2.	64	10	74
		66.0	66.7	66.1
	COLL MN	97	15	112
	TOTAL	86.6	13.4	100.0

CORRECTED CHI SQ = 0 1 D.F.; SIG. = 1.0000  
RAJ CHI SQ = .00274 1 D.F.; SIG. = .9583

MISSING OBSERVATIONS - 11.