

FUTURISTICS: HAVE THE CONCEPTS AND
TECHNIQUES BEEN IMPLEMENTED IN SELECTED POLICING AGENCIES?

by

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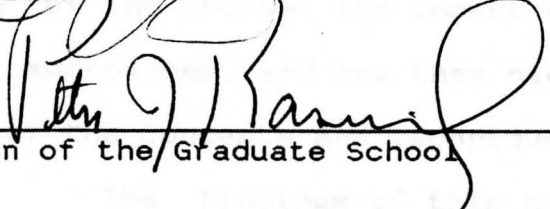
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ABSTRACTFUTURISTICS: HAVE THE CONCEPTS AND
TECHNIQUES BEEN IMPLEMENTED IN SELECTED POLICING AGENCIES?

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Master of Science

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This exploratory study examined how the concepts associated with futuristics have been implemented in selected police agencies. The methodology approach was based upon a survey of the various state and local law enforcement administrators who have attended the graduate level course at the F.B.I. National Academy entitled, "Futures Research: Long-Range Planning for Law Enforcement" under the direction of Supervisory Special Agent, William F. Tafoya, Ph.D. The survey sought their opinions on the value of the course, its impact on their "thinking" and "planning" approaches, and how they have actually implemented some, if any, of the concepts and techniques in their respective agencies.

The findings of this survey provided majority support confirming that the "Futures Research: Long-range Planning for Law Enforcement" course made a significant impact upon police administrators' cognition (more proactive and/or creative) relative to their duties and responsibilities. Moreover, the findings substantiated through majority consensus that proactive and/or

futuristic changes will enhance law enforcement's ability to respond to crime. Administrators acknowledged that based on this course they are more enlightened of the importance of analyzing and predicting the long-range effect of daily decisions and operations. Police administrators also are more likely to establish a magnified orientation relative to the computer revolution, which provides them with the opportunity to institute/modify procedures and training, anticipate needs and trends, and orient tasks and duties in accord with the future. However, this is not solely the case, as many resistive factors lie within law enforcement's administrative/political structure which thwart change and futuristics. This is found to be a common thread inherent within the fabric of many policing agencies and its basis is supported by the findings of this study. Nevertheless, the findings of this survey statistically confirmed that many of the concepts and techniques associated with futuristics have been implemented in selected policing agencies. However, this implementation significantly dwarfs the number of police departments who are actually involved in a futures research project.

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a natural part of everybody's life—highly unstructured, consulting
 typically, preparing reports for a jury, writing papers for a
 conference, and so on. The trouble is that we are all aware that
 thinking is one thing and the attainment of those thoughts is
 quite another. Moreover, when the future becomes the present, it
 has an embarrassing habit of being different from our anticipa-
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 parison to driving on a highway, people need to continually
 review the road ahead, anticipate the actions of other motorists
 and adjust their course every half-hour. This in turn suggests
 that forecasting should be a continuous operation, that as one
 moves forward in time, new forecasts must be made in order to
 incorporate the latest trend analysis and findings.

This exploratory study examined how the concepts and
 applications associated with futuristics have been implemented in
 selected state and local law enforcement agencies. The term
 futuristics (or forecasting) is described as a set of specific
 activities that emerge from a philosophical attitude or approach
 of the futurist. Therefore, by understanding what constitutes the
 issues that are consistently important to the futurist, the

CHAPTER I

INTRODUCTION

Thinking about the future is easy; everybody does it as a normal part of everyday life--making appointments, consulting timetables, preparing remarks for a jury, writing papers for a conference, and so on. The trouble is that we are all aware that thinking is one thing and the attainment of those thoughts is quite another. Moreover, when the future becomes the present, it has an embarrassing habit of being different from our anticipations. Consequently, the future is not a static concept but a constantly evolving one which always lies ahead of us. In comparison to driving on a motorway, people need to continually review the road ahead, anticipate the actions of other motorists and adjust their course every half-hour. This in turn suggests that forecasting should be a continuing operation, that as one moves forward in time, new forecasts must be made in order to incorporate the latest trend analysis and findings.

This exploratory study examined how the concepts and applications associated with futuristics have been implemented in selected state and local law enforcement agencies. The term futuristics (or forecasting) is described as a set of specific activities that emerge from a philosophical attitude or approach of the futurist. Therefore, by understanding what constitutes the issues that are consistently important to the futurist, the

explanation of how futuristics differs from other traditional social and behavior sciences will become more distinct.

Futurists contend that the future will be shaped by human decisions and actions rather than a divine fate, or prediction. Likewise, they do not view the world as a group of independent, unconnected entities working in random fashion and only occasionally interacting with purpose and meaning. By the same token, futurists do not cling to the status quo, or the tried and true beliefs of the past. Nor do they contend that what was good enough yesterday is good enough for tomorrow. Futurists explore new ways of dealing with old problems, while using imagination to project new ways in the anticipation of potential new problems (Tafuya, 1983: 13). Comparatively, law enforcement futurists are asked to query scenarios which might occur in the future and forecast based upon a number of factors, including present day trends and occurrences, technological changes, and crime-related research. Administrators and decision makers frequently become immersed in the multitude of problems that confront their agencies on a daily basis. Therefore, what is not understood is that the major problem today is probably the minor problem ignored yesterday. Despite what lies ahead, law enforcement must await tomorrow in an imaginative, analytical, and prescriptive manner. Administrators must not be lured by the tried and true tenets of the past; there should reflect on the past, not be driven by it (Tafuya, 1990b: 16 and 1990c: 87).

What this endeavor attempted to do was to survey various state and local law enforcement administrators who have attended the "Futures Research: Long-Range Planning for Law Enforcement" course offered through the F.B.I. National Academy under the direction of Supervisory Special Agent, William F. Tafoya. The survey sought their opinions on the value of the course, its impact on their "thinking" and "planning" approaches, and how they have actually implemented some, if any, of the concepts and techniques in their respective agencies.

STATEMENT OF THE PROBLEM

There is limited evidence of a future orientation in law enforcement literature. Current police administration literature evidences several significant obstacles relative to this problem. First, there has been little written regarding the status of futures research, or even a futuristic perspective in American police agencies. Interestingly though, virtually all of these examinations have been retrospective rather than prospective assessments of law enforcement. Over the past century, administrative panels have attempted to improve police performance by correcting past errors, while losing foresight which diminishes their capacity to manage and prepare for tomorrow. This misdirected concern toward improvement of police practices is indicative of law enforcement's lack of provision and guidance.

A review of the criminal justice literature from the late 1960s to the present depicts numerous volumes of texts and

periodicals in a wide range of topics devoted to the future. However, this ever so dwarfs the amount of works directed solely toward the future of law enforcement. Even more disturbing is the scarcity of information and research pertaining to the effect futures philosophies and training has, or will have, upon state and local enforcement agencies.

Law enforcement appears to lack the foresight for tomorrow (Campbell, 1990: 31). When dealing with social issues and problems, law enforcement managers do not often see the "big picture." Rather, where the focus tends to be based on a random sequence of events, law enforcement has often failed to distinguish the link between current problems and possible solutions. This lack of acumen is supportive of what futurist Alvin Toffler refers to as law enforcement's "cling to the status quo" (Tafoya, 1990c: 36). Clearly, this philosophy, coupled with the phenomenon of resistance to organizational change, maintains a road block between the transition of society and law enforcement..

IMPORTANCE OF THE PROBLEM

The current state of the American criminal justice system is overwhelmed and incapacitated by the increase and complexity of crime and internal corruption. What the police should be doing to fight the widespread criminal epidemic and what they are equipped and able to do are unfortunately two separate entities. Since the role of law enforcement has been to

primarily maintain the status quo, there is basically no evidence to suggest that in the 1960s, the police were concerned with 1980. Regarding the same in 1980, there is very little evidence that the police have given much concern to the year 2000 and beyond (Tafoya, 1983: 2). Moreover, in spite of the many advances that have been made in policing in the past several decades, American law enforcement continues to operate much as it did at the beginning of the century (Kuykendall and Unsinger, 1975: 13; Reppeto, 1978: 11).

This can be best illustrated by the "now" orientation of the criminal justice system. Virtually, the entire system is focused on the resolution of immediate problems, in the perspective of historical precedence. Consequently, there is not an institutional working model for the future of the system. By the same design, this single firm conviction to the present insures enduring archaism (Coates, 1974: 45). Moreover, there is little documentation of a future orientation in the law enforcement literature (Tafoya, 1986: 2). This exemplifies that when people perceive that a change will affect them adversely, even if they are wrong, they will tend to resist the change by whatever means available (Kaufman, 1971: 11). Additionally, even if society is unable to sense any harmful effect, people will sometimes resist the change. This takes place because people grow anxious about consequences they cannot predict which might harm their interests (Territo, 1990: 396). In comparison, reliance upon everyday practices and policies will not prepare or guide law enforcement

toward the eventual challenges and confrontations of the future.

This study is significant for several reasons. It may be one of the first comprehensive studies which elicits how the concepts associated with futuristics/forecasting have been implemented in selected policing agencies throughout the country. Furthermore, this survey will help bridge the gap between law enforcement's traditional veracity and today's progressive ideologies. The course entitled "Futures Research: Long-Range Planning For Law Enforcement" was specifically aimed at teaching the use and application of forecasting techniques as an aid in law enforcement decision-making. It is believed to be the first course of its kind to be offered anywhere in the nation. In addition, due to the scarcity and the antiquity of previous forecasting works, this endeavor consequently will serve to both sharpen and define how the concept of futuristics relates to law enforcement. Regarding law enforcement practitioners, this study may serve as both a catalyst and caveat in the development and breeding of futuristic forethought.

DEFINITIONS

* **EXPLORATORY SURVEY:** used to accumulate data in order to formulate more precise hypotheses and research questions. Survey designs do not have control group comparisons or any independent or "cause" variable.

* **FORECAST:** an event, condition, or process that has a high probability of occurrence. Such forecasts are not predictions based upon intuition and insight, but are dependent upon trend data or other acceptable methods used by futurists.

* **FUTURES RESEARCH:** multidisciplinary branch of operations or research which seeks to explore potentialities of interactive intervention in future developments of social behavior. Dedicated to the use of systematic, analytical methods in novel ways. Synonymous with futures, futuristics, and long-range planning.

* **FUTURIST:** one dedicated to the study of futures research or the application of its methodologies.

* **FUTURISTICS:** the field of study that deals with possible future developments. Synonymous with forecasting.

* **LAW ENFORCEMENT:** the community or population of practitioners, academicians, scholars, academics, and researchers in the public sector, private enterprise, colleges and universities whose responsibilities and/or interests involve enforcement of the law. Synonymous with law enforcement community.

* **LONG-RANGE:** a span of ten years or more.

* **LONG-RANGE PLANNING:** involves actions to be taken in the present; it links these current actions with some preferred future. The essential feature of long-range planning is that it deals with present actions to preserve or create the option to take decisive, goal oriented action at the time in the intermediate future when that action is necessary to achieve the preferred long-range future.

* **NEAR-TERM:** a span of five years or more.

* **PRACTITIONERS:** law enforcement personnel currently employed full-time in a law enforcement agency.

* **PREDICTION:** this term will not be used in this study, as it is often confused with the word "forecast." A prediction is a description of an event, condition, or process in advance of its occurrence. A prediction does not allow for error or probability. It properly belongs with such phenomena as extrasensory perception and prevision, rather than in the type of study under discussion here.

* **PROGNOSTICS:** the field that deals with forecasts or study of futures possibilities. From the term prognosis, meaning "foreknowledge" in Greek. In his book entitled Prognostics (Elsevier, 1971), the Dutch scholar Fred L. Polak writes: "In the broad sense prognostics covers all the variants and methods of scientific future thinking."

* **PROJECTION:** to send forth in one's thoughts or imagination; project yourselves into the world of tomorrow.

- * PROSPECTIVE VIEW: orientation of the future guided but not unduly influenced by the past; a prophetic perspective.
- * RETROSPECTIVE VIEW: orientation toward the past dominated by precedent and experience; a historical perspective.
- * SHORT-RANGE: a span of two to five years.
- * STRATEGIC PLANNING: the process by which the guiding members of an organization envision its future and develop the procedures and operations necessary to achieve that future.

OVERVIEW OF THESIS

As the need for past and present knowledge for the future direction of an organization increases, forecasting (futuristics) has maintained its importance in organizational decision making. Furthermore, the entire argument for producing forecasts lies within their use in making decisions. The intent of this is that forecasts help individuals to make better decisions. By doing so, the forecast projects specific roles for advancing the quality of decision making (Martino, 1983: 5). Consequently, in this study, emphasis has been directed toward forecasting for decision making in law enforcement agencies.

In support of the above, a literature review is presented in the next chapter which addresses notable writings associated with law enforcement and the future. There are four sections in Chapter Two which discuss both research based and interpretive literature, in addition to the literature of futures research and its effect upon strategic planning. Research based literature is substantiated by those findings which have made an

exceptional contribution to the futures movement and/or law enforcement. Moreover, interpretive literature is that literature which is not original and/or research based in nature. Chapter Three discusses the design of the study, which specifies the population and sample of this study. Chapter Four provides the analysis and findings where focus is placed upon the effect the "Futures Research" course has had on the police administrators themselves, their respective agencies, and the status or effect of futures research in law enforcement today. Finally, Chapter Five presents the conclusions of this study and recommendations for future research.

in future developments of social behavior, it is dedicated to the use of systematic, analytical methods in novel ways. Research Based Literature is comprised of descriptive writings established through the systematic inquiry or examination in some field of knowledge. It is undertaken to establish facts or principles. Literature which is described as "Interpretive Literature" is referred to as an expression or explanation of a person's convictions of a particular subject of interest; it is not concerned with the establishment of facts or principles. Finally, the literature described as "Futures Research and Strategic Planning" is descriptive of life styles which maintain a futuristic perspective along with the practical applications of strategic planning.

CHAPTER II

LITERATURE REVIEW

For the purpose of this literature review, the following is provided to distinguish the subsequent types or categories of literature to be discussed. Literature which is categorized as "The Literature of Futures Research" describes those writings which seek to explore potentialities of interactive intervention in future developments of social behavior. It is dedicated to the use of systematic, analytical methods in novel ways. "Research Based Literature" is comprised of descriptive writings established through the systematic inquiry or examination in some field of knowledge. It is undertaken to establish facts or principles. Literature which is described as "Interpretive Literature" is referred to as an expression or explanation of a person's conception of a particular subject of interest. It is not concerned with the establishment of facts or principles. Finally, the division described as "Futures Research and Strategic Planning" is descriptive of literature which maintains a futuristic perspective along with the practical applications of strategic planning.

THE LITERATURE OF FUTURES RESEARCH

The certainty of change is possibly the only thing that is absolutely assured. In relation to policing organizations, administration must develop and provide for their agency a "supervision" into the future. According to Campbell (1990), law enforcement must be capable of looking forward with some degree of certainty and be able to produce data that are reliable and valid. He noted that this undertaking is very difficult in these turbulent times due to the many advancements and complexities of our technological age (Campbell, 1990: 30). Given these many countertrends and dramatic reversals of the technological age, there is only one perspective which takes into consideration these multiple measures to analyze and interpret data. That approach is futures research.

According to Campbell (1990), futures research is a discipline devoted to addressing potential changes in our society in novel ways. Moreover, an important aspect of futures research is its emphasis on long-range planning where concern is placed on a period of ten to twenty years. This is in opposition to conventional planning linked to the budget cycle, which is generally one to two years. The message appears to be that in the absence of meaningful analysis, the evaluation of the validity and reliability of projections, and the credible formulation of probability and confidence factors, conventional planning is of little worth in a complex and high-tech society (Campbell, 1990: 30, 31).

Despite the many practical difficulties associated with futures research, an effort to beset the dilemma has not been lacking. Consequently, practices and procedures have developed which have provided the futurist with a constructive and pragmatic framework. The premier examination of the future of policing was an outstanding component of Project STAR (Systems and Training Analysis of Requirement) for criminal justice participants. Project STAR was a thirty-nine month endeavor which began May 1971 with concern toward the effectiveness of the criminal justice system. The assumption that

better identification of the role requirements of criminal justice personnel, born now and in the future, will make possible the development and implementation of appropriate educational and training programs. These programs will contribute to the improvement of performance of criminal justice system personnel in assigned roles, and as a result, to the effectiveness of the criminal justice system (Project STAR, 1976: 2-3).

Project STAR was significant, not because of its findings, but because it was the first major attempt to anticipate the future.

Included in Project STAR (1976) are several recommended methods of research which were understood to be beneficial. These methods include the Delphi technique, scenario, simulation models, decision trees, and cross-impact analysis. Specifically, it was reported that cross-impact analysis as a "systematic method for assessing the reinforcing or inhibiting effects of trends upon one another," while beneficial to itself, would be useful in the study of the implications of long-range trends for the criminal justice system (Project STAR, 1976: 347, 349).

Project STAR (1976) was conducted to identify roles, tasks, and performance objectives for prominent criminal justice personnel and to develop needed education and training programs for these personnel and the public. Consequently, the study utilized expert opinion, time-series trend data, and linear extrapolation of trends as its forecasting methods. The forecasting methods were selected on the assumption that since trends have been in existence for hundreds of years, there is a high probability of continuing throughout the current and well into the next century.

According to Martino (1983), Cornish (1978), and Fowles (1978), the following are mentioned as commonly discussed and implemented procedures of futures research: trend extrapolation, scenarios, Delphi technique, cross-impact analysis, and simulation modeling. Moreover, in examination of the methodologies relative to the future, Martino (1976) contended that there were two basic types of forecasting methods which are distinctive, yet complementary. The first, referred to as "exploratory methods," reportedly begins with the present and its history in an attempt to project future developments. The other, called "normative methods," commences with a desired or postulated future and works backward seeking paths of transition from the present to the postulated future (Martino, 1983: 159). Therefore, it is the exploratory forecast which was more concerned with probable and plausible futures, while the normative forecast would be more

committed to desirable or preferable futures. Finally, in examination of the methodologies, the element of time is also of apparent importance.

While some methodologies are concerned with long-range probabilities and possibilities, others deal with a short-range perspective. In making a forecast, disregarding the short-term changes of fluctuations is a common and expected occurrence. Consequently, what is of importance is the longer-term change which is universally called the trend. "Trend extrapolation" is a commonly mentioned and utilized way of generating a forecast (Fitch, 1979: 33; Hill, 1978: 249; Cornish, 1977: 108; Hahn, 1973: 28). Gordon (1972) stated that trend extrapolation assumes that the forces which were at work to shape the trend in the past will continue to work in the future. In addition, he reported that trend forecasting does not have to be limited to demographic or technological performance data (Gordon, 1972: 168).

According to Hill (1978), trend extrapolation can be the least complex and therefore the most straightforward forecasting tool to comprehend. Beyond these attractions, other advantages were reported. It was noted that data requirements and the costs of data analysis are both quite minimal. Furthermore, benefits such as an increased intellectual precision can be reportedly derived as the researcher is forced to decide exactly which significant trend to observe. Finally, usefulness can be found in the initial application, as it often forces the re-

searcher to acquire a greater knowledge of the history for the preparation of forecasting its future. It was reported that the mere inspection and accumulation of evidence on past trends provide insight toward the possible course of future trends, which otherwise would not have been explored (Hill, 1978: 268-269).

Gordon (1972) stated that a major weakness of this method lies in its assumption that forces which have been at work in the past will continue in the future. Such an assumption is probably justifiable in the near term, but grows less satisfying the farther the time horizon is stretched. Understanding that this premise underlies all trend extrapolation leads to the concept of "development inertia." This means that some systems are easily changed as a result of external influences than others. In conclusion, it was reported that regardless of the sophistication of the application, trend extrapolation assumes that the present is nothing but a point on the continuum and that discontinuities in the flow of history are scarce (Gordon, 1972: 169).

"Consensus methods" are techniques used to derive knowledge on a particular topic by polling knowledgeable opinion regarding expectations of possible alternative futures. One of the most popular is the Delphi technique. Invented by Olaf Helmer and Norman Dalkey at the Rand Corporation in the late 1950s, this method typically involves polling and repolling experts pertain-

ing to likely trends or developments through anonymous questionnaires. Upon the completion of each iteration, the results are refined by seeking greater consensus and distinctness of the trends or developments under consideration. However, it was reported that the Delphi is not a polling procedure, since the selection of experts is not a critical part of the procedure. It simply addresses the question (once a panel of experts has been chosen) pertaining how to set up an effective communication process to survey group opinion (Helmer, 1983: 134). The sole purpose of the Delphi is to obtain the most reliable consensus of opinion of a group of experts through a series of intensive questionnaires interspersed with controlled opinion feedback (Helmer, 1983: 134-135).

Consequently, the Delphi has three identifying characteristics which were created to eliminate the disadvantages of panels. These characteristics are anonymity, controlled feedback, and statistical/structured response (Martino, 1983: 16-17; Linstone, 1978: 274-275). Clearly, these characteristics offer distinct advantages over the conventional face-to-face conference as a communication tool. Moreover, the technique which can and has been used in many situations, is generally recognized as offering a refinement to the traditional ways of obtaining a consensus opinion, and thereby improving the quality of forecasts.

However, the technique has certain drawbacks in reference to the group process. First is the old aphorism that two heads are better than one. In this case, though, there is at least as much misinformation available to the group as there is to any single member. Second, groups inherently are vulnerable to the influence of dominant individuals. A third major disadvantage of groups is that the entire group may share a common bias. The presence of a common bias nullifies the advantage of a group in canceling biases. Finally, the misinformation of an individual or several group members can be compensated by the efforts and expertise in the group. However, there is no guarantee that this will take place (Martino, 1983: 15-16). Clearly, the Delphi method does not take sufficient account of interrelationships and is referred to by Linstone (1975) as a method of last resort to be used particularly when precise analytical techniques are not appropriate. Regarding the future, that is a great deal of the time.

In conjunction with Theodore Gordon, Olaf Helmer devised a technique that systematically explored the chances and consequences of interactions. This is what is referred to as "cross-impact analysis." This method is designed to study the effects on the probabilities of events and the interactions of those events with each other (Fitch, 1979: 34; Stover and Gordon, 1978: 300; Gordon, 1971: 180). Moreover, it is used to analyze the many chains of impact that can occur and to determine the overall effect these chains have on the probability that each

will occur by a defined time. Therefore, this interrelationship between events and developments is termed cross-impact. Cross-impact analysis has been used in several studies since 1968; its use has aided analysts by improving their understanding of the complex interactions among the events being studied. Regardless of these strengths, cross-impact analysis is limited in its application due to the fact that it only deals with events. A majority of systems cannot be described completely with just events. Consequently, the major application of cross-impact in the future will most likely be in combination with other techniques (Stover and Gordon, 1978: 327).

A "scenario" is another method of futures research described as a series of events which are imagined or projected occurring in the future (Fitch, 1979: 35; Wilson, 1978: 228; Cornish, 1977: 111). Herman Kahn, who was perhaps the first to use the term in planning while still at the RAND Corporation in the 1950s, gave the term a detailed description. He defined it as

attempts to describe in some detail a hypothetical sequence of events that could lead plausibly to the situation envisioned. The scenario is particularly suited to dealing with events taken together--integrating several aspects of a situation more or less simultaneously (Kahn and Weiner, 1967: 262).

The most important distinction of this type of methodology is that all scenarios are hypothetical. This is based upon the nature of the future and the essential limitations of futures research. Notably, no scenario will materialize exactly as described because the precise combination of events selected for a

scenario is highly unlikely to develop. However, it is reported that reliance upon the essential limitations of scenarios will provide as much a part of wisdom as the actual administration of its procedures. Nevertheless, the limitation will never negate the importance of the exercise since, even with it, scenarios can fulfill important purposes in forecasting and planning (Wilson, 1978: 226).

Another characteristic of a scenario is that it is primarily a sketch, or a narrative description of a presumed future. Simply, the writer projects and describes a future condition or state of affairs and then highlights the major determinants that may cause the future to evolve from one variant more than the other. Reportedly, this selectivity is the essence of creating a scenario. Finally, scenarios are (or should be) holistic in nature in order to establish a number of points where human decisions will be made and how these decisions will affect later events (Wilson, 1978: 226; Cornish, 1977: 114).

"Simulation modeling" has become an increasingly important tool for thinking about the future (McLean, 1978: 329; Cornish, 1977: 120-121). Its purpose is to reproduce the historical behavior of a system and to project the behavior into the future. The focus of the modeling exercise should be the correct identification of the causal structure that produces that behavior. Merely having knowledge of a particular causal relationship is tantamount to maintaining a theory of the workings of a sys-

tem. At this point, the modeler can attempt to build a model solely on the basis of the data, or create a primitive theory based on plausible relationships checked in accordance with the real world data (McLean, 1978: 331). Finally, many other models are used by futurists and new techniques seem to appear often. Computer simulation models may represent an advantage over traditional simulation models as they can efficiently and precisely enhance the comprehension of complex equations (McLean, 1978: 332; Cornish, 1977: 123).

RESEARCH BASED LITERATURE

The most notable source pertaining to the study of prognostics, specifically in the area of law enforcement, is depicted by the many contributions of William L. Tafoya. His doctoral dissertation, entitled A Delphi Forecast of the Future of Law Enforcement (1986), was undertaken through the Graduate School of the University of Maryland. The purpose of the study was to forecast the scope and role of law enforcement to and into the twenty-first century. This was accomplished by eliciting the opinions of selected leading authorities in the field of law enforcement. The conclusions go beyond what is reported in contemporary police literature, as the findings could represent a foundation upon which to construct models and action plans. By the same token, the findings could serve as a basis for undertaking meaningful and necessary change which may dramatically affect

the way in which society perceives its vulnerabilities. As a result, American law enforcement could reduce not only the fear of crime, but its dependence as well. This work is believed to be one of the futures movement's most recent seminal works.

According to Tafoya (1986), the most complete and comprehensive evaluation of forecasting techniques undertaken at the time of his research was the study published by the Center for the Study of Social Policy at SRI International. The three volumes, entitled The Handbook of Forecasting Techniques, were completed between 1975 and 1977. Notably, the research project was based upon a review of the forecasting literature where 150 methods were examined. Moreover, it was reported that the initial list was reduced to twelve after they were evaluated in relation to their applicability to an extended range of environmental forecasts. Consequently, the following twelve categories or techniques were reportedly of great noteworthiness: trend extrapolation, pattern identification, dynamic models, probabilistic forecasting, cross impact analysis, policy capture, alternative futures, values forecasting, scenarios, and expert opinion (Tafoya, 1986: 38-39).

According to Tafoya (1986), there was a thirteen year time span before another Delphi study was completed in the field of law enforcement in doctoral dissertation research (Tafoya, 1986: 9). This is in reference to the dissertation completed by Terry Cooper in 1973, which is entitled The Professionalization

and Unionization of Police: A Delphi Forecast on Police Values. Cooper reported that the study represents "an attempt to move from probabilities as expressed in the perceived dominant trends of the last ten years, and the anticipated dominant trends of the next thirty years, to two major possibilities for the future of the police service" (Cooper, 1973: 10-11). Cooper (1973) concluded that education clearly appeared as the single most significant consideration toward police professionalism (Cooper, 1973: 156, 162).

INTERPRETATIVE LITERATURE

During the 1960s, America was in the midst of providing the futurist with a remarkable degree of technological optimism. Futurists and organizations of the time concentrated on a technological and social forecasting perspective. Army/Air Force General Henry H. "Hap" Arnold, a military defense planner, made a substantial contribution to the futures movement. Arnold's influence on the Douglas Aircraft Corporation resulted in the establishment of Project RAND (an acronym for research and development) with funding from the Ford Foundation. In 1948, the RAND Corporation became the world's first think tank. In addition to the development of the Delphi technique discussed above, Olaf Helmer in conjunction with Nicholas Rescher added additional support to the futures movement with the publication of the paper entitled "The Epistemology of the Inexact Sciences" (1959), which provided a benchmark for the rising discipline of futures re-

search (Tafoya, 1990d: 200-201). In 1961, Herman Kahn, a well known authority on systems analysis for the Rand Corporation, founded a second "think tank," the Hudson Institute. The Apollo project, the Hudson Institute, and the Institute for the Future were all spawned from the fifties future oriented research of the Rand Corporation and the California Institute of Technology. In addition, the Commission on the Year 2000: Work in Progress was noted as one of the landmark contributions to modern future studies. Finally, in 1966 the World Future Society (organized in Washington, D.C.) was founded and guided by Edward Cornish. This organization became the foremost and encompassing futurist institution. Notably, the society also publishes a bi-monthly journal, The Futurist, which circulates tens of thousands of copies and is substantially larger than any other futurist periodical. By the late 1960s, a new policy oriented area of discipline called "futurism" or "futuristics" was gaining strength and popularity (Jones, 1979: 20-21,23).

By the early 1970s, a considerable number of futurists directed their concern toward ecological considerations. This ecological challenge was diverted away from the technological-social forecasting toward the more popular "technological-ecological" perspective. This movement was indicative of the profession's futuristic activity of the 1970s. Alvin Toffler's Future Shock (1970), which has sold over four million copies, has done more for the popularization of futurism than any other book. In addition, Daniel Bell's The Coming of Post-Industrial Society

(1972) created much attention and initiated the same criticism. Importantly, the increased circulation of the 1972 The Limits to Growth introduced a major contribution to futurism from a popularity and international perspective (Jones, 1979: 23-24).

According to Cornish (1977), the introduction of futuristics into the educational system appears to have originated mainly from initiatives taken by individual teachers rather than the institutions by which they are employed. In 1970, the University of Massachusetts at Amherst's School of Education created an undergraduate futures study curriculum. The first complete graduate degree program for futures research began at the University of Houston at Clear Lake City in 1974. The courses included forecasting techniques, educational futuristics, and apocalyptic images. Moreover, it was reported that elementary and secondary educators are exhibiting a wide variety of ways to ingrain the future to younger students (Cornish, 1977: 213).

In 1982, the William O. Douglas Institute for the study of Contemporary Social Problems initiated a study of police futures covering an eighteen month span. The discussion accumulated a thirty-one page report which emphasized certain highlights encompassing the need for the following: increased national public awareness, modification of police roles and duties, and up and coming issues (privatization, technology and the systems approach). However, in comparison with Project STAR (1976), this study was significant for its effort to anticipate the future and not for its findings (Tafoya, 1986: 24-25).

The Future of Criminal Justice, by Gene Stephens (1982) was inspired by a national competition completed at the University of South Carolina in April of 1981. The articles in the publication are representative of the best of those presented and reportedly provide "insight and foresight" into the future obstacles and opportunities facing the criminal justice system in the United States (Stephens, 1982: vii-ix). In addition, The Future of Law and Justice (Stephens, 1986) is a 500 page reader which provided expected futures and scenario development significant to the criminal justice system (Tafoya, 1986: 26). Moreover, in Stephens' "Crime and Punishment: Forces Shaping the Future" (1987), Stephens illustrated how the changing social and technological environment will lead to new definitions of crime and new challenges for the criminal justice system. He noted that "participatory justice" offered the best hope for meeting these challenges. More recently, Stephens (1992) explained that several types of technological and social innovations will be available to law enforcement in the twenty-first century. He reported that this will enable the police to better fight and prevent crime from occurring. However, Stephens emphasized that these same tools will have the potential for abuse, most notably on the right to privacy.

In addition to the previously mentioned works of William Tafoya and his contributions to the future of law enforcement, he has devoted several commentaries and articles addressing the

changing nature of the police into the twenty-first century. "Law Enforcement Beyond the Year 2000" (1986) evidences Tafoya's beliefs that many budget cuts, new technologies, and shifting responsibilities suggests fewer U.S. law enforcement agencies in the future. Furthermore, he indicated that the end result could be a "national police force" for the entire country. Likewise, in the speech presented before the 12th Police Course, Messina, Italy on October 3, 1989, entitled "The Changing Nature of the Police," Tafoya (1990a) instilled a certain amount of fear that in America the police would soon change under the most trying of circumstances and by the worst possible means--by default rather than by design. Consequently, Tafoya made reference to unabated social forces in society which will "dramatically" and "inextricably" alter policing in the United States by the turn of the century (Tafoya, 1989: 245).

Supportive of Tafoya's comments is the renowned American social critic and futurist, Alvin Toffler. In his 1970 classic book titled Future Shock, Toffler argued that unless man quickly learns to control the rate of change in his personal matters as well as in society at large, society is doomed to a massive adaptational breakdown. Toffler coined the term "Future Shock" to describe the "shattering stress" and "disorientation" which we induce as individuals by subjecting others to too much change in too short a time. As a result of his research, Toffler reportedly came to two convictions. He noted that future shock is

no longer a distant danger, but a real sickness from which large numbers suffer. He stated that this illness is a psychological condition. . . . the disease of change. Secondly, Toffler indicated that during his research he became disturbed by society's lack of knowledge regarding adaptability, either by those who create trends or supposedly prepare society for those changes. Toffler concluded by stating "we remain pitifully ignorant of how the human animal copes" (Toffler, 1970: 4). Additionally, in 1980, Toffler proceeded with the Third Wave in which he expounded his views of societal normality and the effects of value shifts. In his work, Toffler indicated that there have been three periods of societal change recorded historically. He referred to these as being the "First Wave agricultural phase," the "Second Wave industrial phase," and the "Third Wave phase now beginning." The metaphor of this book is that of "colliding waves of change." It describes the dying industrial civilization in terms of a "techno-sphere," a "socio-sphere," an "infosphere," and a "power-sphere," and then describes how each of these is experiencing revolutionary change in today's world. The Third Wave holds that society also utilizes certain processes and principles, and that it promotes its own "super-ideology" to explain reality and to vindicate its own existence (Toffler, 1980: 20-21).

According to Toffler's address before the 130th Session of the FBI National Academy on August 5, 1982, police have two

possible courses of action. The first is to cling to the status quo, while the alternative is to become the catalyst of social change. Toffler's comments indicated that unless the police are viewed by society as congenial, then they will be perceived as adversaries. This, he proclaimed, indicated that the police must ensure that civil rights and grievances are given priority (Tafoya, 1990b: 13-14). Finally, Toffler (1990) described how society is moving into some of the most turbulent years in the history of the United States and will consequently place an enormous strain on the entire criminal justice system. Specifically, Toffler reported that almost all of society's major systems (transportation, education, family, employment, health system) are in simultaneous crisis. Toffler maintained that for law enforcement to be equipped to respond to today's dilemma, it must explore long-range options in order to define the limits of governmental power and individual rights (Toffler, 1990: 2,4). Finally, Thibault (1982) noted that changes in technology, in conjunction with new social and economic necessities, are requiring modifications in police organization and methods of operation. Thibault estimated that by the year 2000, law enforcement will be organized at a "higher" level and will provide a proactive approach to crime, by curtailing crime rather than the apprehension of offenders (Thibault, 1982: 67).

Indicative of the future projections mentioned by Alvin Toffler, several additional authors have introduced collateral

conjectures regarding forces affecting the future of the criminal justice system. Gene Stephens' undertaking, entitled "Crime and Punishment: Forces Shaping the Future" (1987), reported on five forces which will have the most significant affects on the amount, direction, and type of crime that may occur in the near term. These five factors were technological change, value systems, the integration of work and leisure, children and the elderly, and religion (or lack of) (Stephens, 1987: 18). In addition, Coates (1972) reported that by the year 2000 there will be a reclassification of anti-social behavior, a removal of several victimless crimes, an increase in old crimes and in technological crimes, and, consequently, more systematic demands for constitutional safeguards pertaining to these issues (Coates, 1972: 43-44).

The book entitled Crime Warps (1989), by criminologist Georgette Bennett, introduced a descriptive interpretation of the social forces or trends which transform society's responses to crime. Bennett identified six displacements in crime patterns or "crimewarps" which society faces as the sum of the following complex social forces: economics, law, demographics, technology, biology, values, education, politics and religion. Bennett also explained that societal crime varies in definition as these forces shift relative to the social, economic, and political climate of the times. In making forecasts regarding criminality, Bennett took into account these social forces and the tendencies

that are likely to sway definitions one way or another (Bennett, 1989: xiv-xv). Another author who had proposed predictions and presented a forecast regarding the degree of federal involvement in state and local police operations in the near future was Calvin Swank. Swank (1975) indicated that there would be a significant decrease in federal involvement in local police operations and administration from the mid 1970s through the early 1980s. Moreover, Swank predicted that a greater concern would be shown for the individual in police agencies as 1980 approaches. According to Swank, his prediction "reflects differing perceptions by employees as to their role within the organization and toward fulfillment of their individual needs," and not necessarily a new position taken by police administrators. Swank concluded by explaining that as long as law enforcement displays an overdependence on traditional methods, the police would not be able to withstand the tests of today's changing times (Swank, 1975: 296-300).

In the article by Jack Enter (1991), the importance of current societal changes as being more dynamic and frequent than in the past was discussed. Consequently, Enter claimed that law enforcement agencies would continue to be highly influenced (internally and externally) by demographic trends. He concurred with Swank's (1975) conception that the American police system would become less able to cope with society's expansive change because of its traditional response to transition. Therefore,

Enter noted that (in the future) this hesitancy to elicit change may be more damaging than in the past (Enter, 1991: 65,79).

Since police strategies do not live in a vacuum, they are consequently shaped by legal/political attitudes and local resources. Moreover, according to Cox (1991), in the next decade the partnership between the police and society, the image of the police officer (in terms of gender, race/ethnically, education and training), and the role of the police as negotiators and partners in the near future will improve. He stated that change will be brought on by interest in accreditation and the establishment of recognized measurable standards of performance followed by improved evaluation procedures. Finally, Cox mentioned that the quality of police leadership will continue to improve and the gap between the private and public sector will decrease in relation to technology, administrative skills, and fiscal responsibilities (Cox, 1991: 168).

Author Rob McCord (1990) explained that, during the next decade, "disruptive social, demographic, and technological changes" will confront law enforcement with some intransigent challenges. These troubles will be exacerbated by a backdrop of financial cutbacks from federal, state, and local governments. Moreover, McCord perceived that a complex array of interdependent and competing economic and demographic forces will cause law enforcement policy makers to explore innovative approaches to hiring, training and administration. In closing, McCord noted

that the policy choices made by today's law enforcement officials will directly determine the quality of policing in the future (McCord, 1990: 28,32). In comparison, Robert Trojanowicz and David Carter (1990) expressed that the primary challenge for law enforcement in the future should be directed toward their adaptability with society in meeting the racial, ethnic, cultural, and religious diversity. A perspective toward community policing will allow law enforcement personnel unique flexibility to fashion their response to meet local needs in ways that encourage sensitivity and respect for minority concerns (Trojanowicz and Carter, 1990: 9).

In 1990, Gerald W. Garner asserted that the next twenty years of policing will provide an immense amount of technological progress, as the police will reap the benefits from the modern arenas of defense, space research and private industry (Garner, 1990: 59). Moreover, Rubin (1991) reported that administrators are realizing that the primary resource a police agency has available to support the street personnel is information. The handling of this information, whether it is completed manually or electronically, is data processing. Therefore, tremendous advances in computer technology will enable law enforcement to provide better and more efficient services to communities, while simultaneously enhancing safety and productivity. Furthermore, Bruce Brotman and Rhonda Pavelle (1991) mentioned that, in the years to come, strides in the establishment of a universal means

of communication and identification will provide opportunities for enormous gains in productivity. The author proposed a complementary plan which would provide an enhancement establishment of cooperation between federal, state and local law enforcement in order to sustain the increasing needs of its users into the 21st century. In direct correlation to this is information obtained from the Ohio Attorney General's 1993 Conference on Law Enforcement regarding the implementation of the National Incident-Based Reporting Data (NIBRS) program. Reportedly, the NIBRS system will provide law enforcement agencies with extensive, specific crime information that can help to identify common crime problems or trends. Adjoining jurisdictions will reportedly work together to develop possible solutions or proactive strategies for addressing crime. Specifically, every agency which participates (optional) will be collecting up to sixty-nine common pieces of information using similar incident report forms. It was also explained that the standard form can be modified and agencies which choose not to participate in NIBRS will therefore continue to send reports to the Uniform Crime Reports (UCR). Currently, four hundred twenty agencies are at some stage of implementing NIBRS and it was reported that Ohio may be instituting the program in 1995/1996.

Arts Un Sara Roen (1990) reported that, in agreement with other futurists regarding the computer age and law enforcement, information networking and "thinking" computers will become important

players if the police are to be successful in their future endeavors. Roen also alluded to William Tafoya's comments that a new breed of officer will be required if the police are to be successful in the computer age. However, Tafoya expressed concern that a fear of the impending computerization of law enforcement (cyberphobia), or simply reluctance to any change, will place police so far behind technology that there will not be any way to overcome the lag. Moreover, Tafoya noted that if current administrations are not open to change, then law enforcement will not be opportunistically inclined to respond to the challenges of the future (Roen, 1990: 69,96).

The advent and growing popularity of computers has provided a progressive opportunity resource for criminal misuse. Jay Albanese (1988) reported, from a historical and futuristic perspective, that law enforcement technology will continue to lag behind its criminal counterpart. Accordingly, exploitation opportunities for theft (whether the technology of bank thefts or credit card fraud) will continue to expand until the risk of apprehension is increased and the available latitude is curtailed. Reportedly, fraud will become the most prevalent form of theft in the computer age (Albanese, 1988: 25-28). Nonetheless, Edward Tully, Special Agent (FBI) of the Education/Communication Arts Unit, Quantico, Virginia, indicated that the problem with introducing various forms of high technology into the law enforcement workplace does not rest with the machinery in and of

itself. His article, entitled "The Near Future Implications for Law Enforcement" (1986), explained that the problem lies with the human factor, in the development of software that enables the police to appropriately address problem areas with high technology. Tully reported that the most significant problem confronting law enforcement with high technology is its cost and application to the field (Tully, 1986: 5). Tafoya (1987) concurred by conveying that computer related crime is one of the most serious crimes of the future and is therefore near-term and not long-range. Tafoya commented that for law enforcement agencies to deal effectively with computer related crimes, they need computer educated personnel now; not only non-sworn at terminals in the station, but also detectives and patrol officers in the field (Tafoya, 1987: 20). According to Conser (1984), there will be many implications/applications of technology on law enforcement in the future. Accordingly, it was mentioned that the use of robots for dangerous tasks and assignments will increase, along with micro-computers and lasers for personal protection, and enhanced data transmissions between mobile police units and the communications/transmission center. Lastly, Mark Birchler (1988) reported that as computers are widely used by society, there will be an increasing need for smaller departments to become computerized. Therefore, Birchler reported that the use of microcomputers (laptop) may become a common occurrence and more attention will be given to their use (Birchler, 1988: 30).

FUTURES RESEARCH AND STRATEGIC PLANNING

Futures research, which is changing and moving in new directions, has been described as any activity that improves the understanding of the future outcome of present decisions and policies. Futures research can be broken down into three centers of activity: planning, forecasting and decision making (Allen, 1978: 75). However, for these areas to interrelate, the formulation of strategies to aid in their integration must be present. In addition, since forecasting exists to facilitate planning, specifically long-range planning, any analysis of the methods and organization of forecasting must start with the planning process (Ascher and Overholt, 1983: 21). Therefore, according to the report completed by the Council of State Governments (1976), for planning strategies to be utilized, they must be besieged by the range or scope of authority of the public official for whom such planning is intended.

According to Ascher and Overholt (1983), there is a uniform approach functional for strategic planning which is useful in the short-term. Reportedly, this involves the establishment of a set of fixed interests, "juxtaposes" them with a fixed environment (or set of conditions), and then invents a strategy for the attainment of one's interests, given the limitations placed by the environment. However, for the long-term, it was reported that through alleviating the "uncertainty, self-fulfilling and self-defeating prophecies, and fragmentation,"

these problems can be lessened (Ascher and Overholt, 1983: 21-22). Kuykendall and Unsinger (1975) identified a series of nine steps to the planning process which are a prerequisite to the decision-making and policy formation process prescribed in management literature for law enforcement, public administration, and business. The nine steps are identified as follows:

determination of goals and objectives and/or the recognition and definition of problems and/or the determinization of opportunities to be explored; scanning and forecasting, gathering the data or information needed to help define the exact nature of the problem now and at some future time, and even the related environmental impact; analyzing the data; determination and exploration of all the possible alternatives; selection of the most appropriate alternative; developing support for the plan; actual execution of the plan; review and control, the constant monitoring of the plan in all parts of the organization; changing the plan as necessary (Kuykendall and Unsinger, 1975: 100-102).

A major problem with many comprehensive planning efforts is not that comprehensive planning programs are impossible. Instead, the problem lies with the omission of comprehensive decision makers with the authority to carry out centrally planned decisions. That scope of authority can be measured by that person's ability to implement a strategy after its selection. Moreover, for planning strategies to be utilized, they have to be embodied by the range or scope of the individual for whom the planning is intended (Council of State Governments, 1976: 2). Therefore, in attempts to clarify and resolve these matters, strategic planning has been recognized by public managers and, specifically, police organizations as a valuable management and planning tool.

According to Verbeck (1991), participative strategic planning is a highly useful mechanism for assisting police organizations in adapting to complex changing environments. Verbeck added that the overriding purpose of strategic planning is to assist an organization in focusing on the future. Furthermore, he indicated that strategic planning provides an opportunity for an agency to tap staff expertise as it shifts from a reactive to a proactive stance toward its future (Verbeck, 1991: 35,39). Donald C. Witham (1989) of the Strategic Planning Unit of the F.B.I., explained that strategic planning is a results-oriented philosophy that bestows both the internal organizational assessment and an external environmental examination. Witham noted that since there is no universal technique, there are several different approaches to strategic planning, regarding varying degrees of resource commitments.

Witham (1989) reported that there are three essential elements of strategic planning which are noteworthy. The first element is a management for results orientation, which requires people to distance themselves from their daily duties and consider the big picture. The second element is environment analysis, which involves data gathering and analysis of relevant trends. The last element of strategic planning is an organizational assessment, which is a step that determines an organizations's capabilities (strengths and weaknesses) in light of its duties. Ideas and theories about how to best organize its approaches will continue to evolve in the years to come (Witham, 1989: 4-6).

Strategic planning has provided law enforcement with a useful mechanism for management (Ortega, 1989: 50; Witham, 1989: 3; Verbeck, 1991: 35; Witham, 1991: 30). Zurcher and Hudak (1987) referred to strategic planning as a process involving collecting and identifying information and trends, analyzing the importance of internal/external factors, assessing the organization's strengths and weaknesses, setting goals and objectives, and developing/implementing strategies and specific action plans. Furthermore, the strategic planning process involves eight phases: organization, environmental scan, external analysis and forecast, internal analysis and assessment, goals and objectives setting, strategy development, plan development, and actual implementation (Zurcher and Hudak, 1987: 20).

SUMMARY

The focus of this literature review has been to collaborate through literary analysis a more complete understanding of the present and future possibilities relative to modern law enforcement. It is expected that by the use of futures research and forecasting methods, followed by the consequence of policy alternatives through futures planning techniques, policing agencies can become more proactive. This implies that the agency will be capable of anticipating future trends and developments by choosing between alternative policies deemed most beneficial to achievement of their objectives and goals. The time has come that

criminal justice practitioners confronted with future-oriented decisions should explore the future more than the past for direction.

The key to meeting these challenges is and will be effective leadership. In absence of it, law enforcement executives are destined to wallow as the force of change glides over them, leaving old and ineffective ways of dealing with our changing society. The largest impediments between man and his future are man himself and what he is able to imagine and conceive.

CHAPTER III

STUDY DESIGN

The purpose of this study was to identify how the concepts associated with "futuristics" have been implemented in selected policing agencies. The methodological approach to this was exploratory in nature and was conducted through a survey of the various state and local law enforcement officials who have attended the course entitled "Futures Research: Long-Range Planning for Law Enforcement" at the F.B.I. National Academy. It is believed to be the first course of its kind to be offered anywhere in the nation. The survey sought their opinions on the value of the course, its impact on their "thinking" and "planning" approaches, and how they have actually implemented some, if any, of the concepts and techniques in their respective agencies.

Exploratory methodology is justified or deemed suitable in this study because of the lack of available scholarly research or information regarding this topic. In addition, testing by utilizing the survey is more suited to exploratory discovery (Festinger and Katz, 1953: 75). This study will not only fill a research gap, but may also be one of the first comprehensive studies which will elicit how the concepts associated with futuristics/forecasting have been implemented in selected policing agencies throughout the country. This endeavor consequently will

serve to both sharpen and define how the concept of futuristics corresponds to law enforcement. It will also enable the researcher to identify specific aspects of the subject which may be of additional significance, and this information can be useful in preparing a more rigorous study of the phenomenon with heuristic value.

According to Herbert Blumer (1969), exploratory research of human group life is the means of achieving concurrently two complementary and interknit objectives. Blumer explained that exploratory research has two objectives:

it is a way by which a research scholar can form a close and comprehensive acquaintance with a sphere of social life that is unfamiliar and hence unknown to him. On the other hand, it is a means of developing and sharpening his inquiry so that his problem, his directions of inquiry, data, analytical relations, and interpretations arise out of, and remain grounded in, the empirical life under study (Blumer, 1969: 40).

In addition, Blumer explained that the actual purpose of exploratory research is to move toward a more descriptive understanding of how an individual's problem is to be posed, to ascertain the appropriate data, to develop ideas pertaining to the significant lines of relation, and to evolve conceptual tools in light of what is being learned of that area of concern (Blumer, 1969: 40).

Exploratory research is distinctive due to its loose structure and flexible nature (Adams and Schvaneveldt, 1991: 104; Dane, 1990: 234; Fitzgerald and Cox, 1987: 63; Blalock and Blalock, 1982: 81; Blumer, 1969: 40). In addition, Dane (1990)

elaborated on the flexible nature of exploratory research by indicating that while the design can be very simple, it may also be very complex, and sometimes the object of its research is the research process itself (Dane, 1990: 5). Furthermore, Dixon, Bouma, and Atkinson (1987) explained that an exploratory study takes a broad look at the phenomenon under study. Attention is not as focused as in a study to test a hypothesis. Rather, the purpose is to gather information, so that a description of what is going on can be recognized (Dixon, Bouma, and Atkinson, 1987: 108). Therefore, such designs demand that the researcher become thoroughly immersed in the data and rely intensely on insight and intuition, since reliance upon a hypothesis or a relatively small number of variables known to be of relevance is neither likely nor feasible (Blalock and Blalock, 1982: 80).

According to Blumer (1969), one guiding conviction of an exploratory study is to use any ethically allowable procedure that offers a probable possibility of obtaining a clearer picture of what is transpiring. Reportedly, a procedure should be adapted to its circumstances and guided by judgment of its propriety and prosperousness. With an exploratory inquiry, there is no etiquette to be followed in the use of any of its procedures. Nevertheless, Blumer explained that this does not mean that it is frivolous or uninformative; rather, the focus is originally broad but becomes progressively sharpened as the inquiry proceeds (Blumer, 1969: 41). Finally, Festinger and Katz (1953) explained

that an exploratory study should be designed to furnish specific information concerning the research objectives. Reportedly, there are two levels of exploratory research. The first is the discovery of the significant variables in the situation and the other is the discovery of relationships between variables. He noted that exploratory studies which do not set limits for themselves will have limits imposed by various feasible matters, some of which are not known to the investigators (Festinger and Katz, 1953: 75).

SAMPLE

The Universe of individuals who are representative of this survey involve all law enforcement executives who maintain policy-making and/or planning responsibilities. The population for this survey consists of a list of three hundred and forty-two (342) individuals of the law enforcement community (mostly executives) who have attended the Ph.D. level course entitled "Futures Research: Long-Range Planning for Law Enforcement" taught at the FBI National Academy. The actual class rosters were obtained from Agent William F. Tafoya, Ph.D., who was the primary instructor of the course from July 11, 1982 to June 21, 1991. The actual sample size is two hundred and eighty-seven (287). The sample was determined by eliminating those attendees who are now retired or who were not employed by state and local law enforcement agencies. Attendees from the same agency were grouped and only one person from that agency was included in the sample.

Normally, the person who first attended the course from this group became part of the sample. Exceptions to this procedure occurred only if that person had changed agencies (i.e., no longer employed by their original agency).

INSTRUMENTATION

The tactics utilized in this exploratory survey are relatively clear-cut. Upon determination of the specific sample, those individuals were asked for their input as to the value of the course, its impact on their thinking and planning approaches, and how they actually implemented some, if any, of the concepts and techniques in their respective agencies.

The survey is the principle research instrument used in this study. Accordingly, it has been described as one of the most widely used and/or important methods of data collection in social research (Hagan, 1989: 68; Futrell and Roberson, 1988: 135; Hakim, 1987: 47; Nachmias and Nachmias, 1987: 247; Sanders and Pinhey, 1983: 48). According to Babbie (1975), survey research is probably the best method available involving the collection of original data for purposes of describing a population too large to observe directly (Babbie, 1975: 259). Futrell and Roberson (1988) explained that the survey method of data collection is oriented toward events and behaviors which are observational in nature with the goal of determining people's attitudes, values, feelings, future expectations and past experiences.

Furthermore, there are two basic types of surveys commonly used for research data collection: the questionnaire and the interview (Futrell and Roberson, 1988: 135). For the purpose of this study, the interview was not found to be beneficial due to its high cost, interviewer bias, lack of anonymity, and poor applicability to geographically dispersed populations.

Selection of the mail survey as the primary research tool for the study was beneficial in a multitude of ways. A mail survey was less expensive than the personal interview since it did not require a trained staff of interviewers. This lower cost in the administration of a mail questionnaire was particularly evident because the population under study was widely spread geographically. The second major advantage of the mail questionnaire was that it reduced bias errors that could have resulted from personal characteristics of interviewers and from variabilities in their skills. The third advantage of a mail questionnaire was that it maintained a greater anonymity because it was also associated with the absence of an interviewer. Mail questionnaires also are preferred when questions demand a considered (rather than an immediate) answer or if the answer requires consultations of personal documents or of other people. Finally, the mail questionnaire permitted increased accessibility and wider geographic contact with minimal cost (Hagan, 1989: 94; Nachmias and Nachmias, 1987: 227-228; Miller, 1983: 98; Erdos, 1970: 5-10; Selltitz, Jahoda, Deutsch and Cook, 1959: 238-240).

There were a few disadvantages or limitations to the use of the mail questionnaire. The questionnaire did not allow for control over the respondent's environment and therefore did not provide for the capacity to assure that the intended person completed it. Another disadvantage of the mail questionnaire was that there was not an opportunity to probe beyond the given answer in order to clarify the final answer (Nachmias and Nachmias, 1987: 228-229; Erdos, 1970: 11-13).

A method used in this study to measure the respondent's attitudes through data collection was the summated, or Likert scale. The Likert scale is currently the most widely used approach to measurement in the social sciences (Adams and Schvaneveldt, 1991: 160; Hagan, 1989: 215). A Likert scale consists of a list of items where the individual responds with a degree of agreement or disagreement to the question. Likewise, Likert scales only utilize monotone items, or items that are definitely favorable or unfavorable in direction, not items that reflect a middle of the road or uncertain position on the issue (Adams and Schvaneveldt, 1991: 159-160; Nachmias and Nachmias, 1987: 473; Kidder and Judd, 1986: 210; Miller, 1983: 136-137; Blalock and Blalock, 1968: 94-95; Selltiz, Jahoda, Deutsch and Cook, 1959: 366).

The advantages of Likert scaling methods are numerous. In comparison to a Thurstone scale, a Likert is simpler to construct and can be used in many cases (e.g., multidimensional

domains) which the Thurstone and even the Guttman scale cannot. In addition, a Likert scale is also more reliable than the Thurstone scale of the same length. Finally, the range of agreement-disagreement responses allowed with Likert items tend to make subjects more comfortable with their position than the basic agree and disagree choice forced by Thurstone items. The graded responses also give more precise information about the individual's opinion on the issue referred to by the item (Kidder and Judd, 1986: 213-214; Seltiz, Jahoda, Deutsch and Cook, 1959: 368).

Likert scales also have disadvantages. Dissimilar to Thurstone scales, Likert scales do not supply information regarding the subject's freedom to measure the degree of issue involvement. However, by utilizing the Likert scale, a rough measure of involvement could be calculated by the number of responses of strong agreement or disagreement (Kidder and Judd, 1986: 214). Furthermore, Likert scales tend not to bear information regarding the exact pattern of responses to all the individual responses (Kidder and Judd, 1986: 214; Seltiz, Jahoda, Deutsch and Cook, 1959: 369). For the purpose of this paper, the Likert scale will be used for those questions which are not open-ended in nature.

The individuals of the sample who resided in close proximity to the researcher formed the pool for a pilot study and were initially questioned in hopes of facilitating any needed changes. Based upon their suggestions and recommendations,

several questions of the instrument were revised and the questionnaire was mailed.

This chapter contains the findings from the questionnaire distributed to the judges and magistrates (1997) law enforcement administrators who attended the National Research Longitudinal Planning for Law Enforcement course at the F.B.I. National Academy under the direction of Supervisory Special Agent William F. Adams, Sr. from July 11, 1982 to June 11, 1991. The questionnaire was exploratory in nature and utilized the social and self survey and the Likert scale as the primary data gathering strategy. The survey solicited the respondents' opinions on the value of the course, the extent to which "thinking" and "planning" were implemented, and how they have actually implemented some, if any, of the concepts and techniques in their respective agencies.

The sample which responded to the questionnaire and the follow-up mail were divided into several geographical police administrators (with various type) numbering and including 129 different law enforcement agencies throughout the country (See Appendix A for details and statistical results of Likert type questions).

This chapter also contains a summary of the findings on describing the effect the "National Academy" course had on

CHAPTER FOUR

ANALYSIS AND FINDINGS

This chapter presents the findings from the questionnaire distributed to two hundred and eighty-seven (287) law enforcement administrators who attended the "Futures Research: Long-Range Planning for Law Enforcement" course at the F.B.I. National Academy under the direction of Supervisory Special Agent William F. Tafoya, Ph.D., from July 11, 1982 to June 21, 1991. The methodology used was exploratory in nature and utilized the social and mail survey, and the Likert scale as its primary data gathering strategy. The survey solicited the respondent's opinions on the value of the course, its impact on their "thinking" and "planning" approaches, and how they have actually implemented some, if any, of the concepts and techniques in their respective agencies.

The sample which responded to the questionnaire and the follow-up post card totaled one hundred twenty-nine police administrators (45% return rate) representing one hundred twenty-nine (129) different law enforcement agencies throughout the country (See Appendix A for numeric and statistical results of Likert type questions).

This chapter was apportioned with emphasis placed upon describing the effect the "Futures Research" course has had on

the respondent's "thinking" and/or "planning" approaches, and how it has assisted and/or enhanced the respondent's agency in developing policy making and planning responsibilities.

The police administrators were asked what prompted them to attend the "Futures Research: Long-Range Planning for Law Enforcement" course at the F.B.I. National Academy and specifically how they became aware of its existence. A total of one hundred nineteen responded to the question which provided one hundred forty-seven separate responses.¹ Respectively, seventy-one (48%) administrators indicated that they had obtained information of the course through criminal justice publications, and/or a N.A. course description. Similarly, forty (34%) respondents related they were referred by a colleague, thirty-six (30%) pursued the course for academic credit, and ten (8%) did not answer this item.

After attending the "Futures Research" course, the majority (78%) of administrators reported the following as the "most" beneficial aspect of the course. The course enhanced and/or stimulated their "urgency" for knowledge either toward their own personal need to become more involved in a future oriented perspective, or for their department to become more proactive accordingly. The respondents also expounded upon the significance and potential of the "computer age" relative to law enforcement and the "changing mission upon us." Moreover, the

¹ Total number of responses is inflated due to multiple answers.

respondents explained that the course and its readings reemphasized the need to challenge "bureaucratic indifferences" or complacency which diminish and inhibit progressive change. The course reportedly was also "beneficial" as it provided a majority of the participants with practical tools (methodology and forecasting techniques) to prepare for change and become more proactive. Finally, several of the respondents concurred that networking with other students and Mr. Tafoya's dedication and approach to the subject were notably a "beneficial aspect" of the course.

Likewise, one hundred twenty-one of the executives indicated what they believed was the "least" beneficial aspect of the "Futures Research" course and responded with one hundred forty-two total responses.¹ Specifically, fifty-seven (47%) respondents indicated that there were no detrimental aspects of the course, thirty-three (27%) implied lack of applicability,² twenty-four (20%) indicated academic time constraints and/or excessive material, and twenty (17%) emphasized unorganized and/or inadequate course material or instruction as the "least" beneficial aspect of the course. Eight (7%) administrators did not respond to this item.

1 Total number of responses is inflated due to multiple answers.

2 This statement is in contradiction to the results of a question to which 86% (111) of the respondents reportedly "disagree" that the "Futures Research" course had "little" practical application to their job.

THE EFFECT OF THE "FUTURES RESEARCH" COURSE ON ADMINISTRATORS

The administrators were asked what effect the course had on their thinking and/or planning approaches. Of the one hundred twenty-nine who responded, 91% (118) of them "agreed"¹ that the "Futures Research" course had a major impact on their way of thinking; similarly, 96% (124) acknowledged they "disagreed" that they gained very little from attending the course; 91% (116) believed the course had been "beneficial" to them and/or their agency (See page 121 of Appendix F). Fifty-three percent (68) of the respondents believed their colleagues considered them "different" due to their futuristic approach (philosophy) to today's issues (See Table 1 for a summary of responses to items one through five).

Question two asked the respondents whether they would recommend the course to others. Ninety-three percent (120) of the respondents "agree" that they would recommend the course to other administrators/colleagues (See page 122 of Appendix F). Explicitly, the administrators "believed" that after attending the course they had become more creative and/or proactive in their responsibilities or duties at a response rate of 94% (121).

One hundred twenty-six administrators responded to the issue of whether their department is considered "resistant" to change. Forty-six percent (58) of the administrators reportedly

¹ Responses categorized as "strongly agreed" or "strongly disagreed" are represented in narrative as "agreed" or "disagreed" respectively.

TABLE 1

RESPONSES TO QUESTIONS CONCERNING THE EFFECT THE "FUTURES RESEARCH: LONG-RANGE PLANNING FOR LAW ENFORCEMENT" COURSE HAS HAD ON RESPONDENTS "THINKING" AND/OR "PLANNING" APPROACHES.

	N*	n	%
1. What effect did the course have on your thinking and/or planning approaches? Please answer the following in response:			
The "Futures Research" course had a major impact on my way of thinking.	129		
Strongly Agree		65	50.4
Agree		53	41.1
Uncertain		4	3.1
Disagree		4	3.1
Strongly Disagree		3	2.3
The "Futures Research" course had little practical application to my job.	129		
Strongly Agree		0	0.0
Agree		11	8.5
Uncertain		7	5.4
Disagree		62	48.1
Strongly Disagree		49	38.0
I gained very little from attending the "Futures Research" course.	129		
Strongly Agree		0	0.0
Agree		3	2.3
Uncertain		2	1.6
Disagree		43	33.3
Strongly Disagree		81	62.8
2. I would recommend the course to other managers/administrators.	128		
Strongly Agree		82	64.1
Agree		38	29.7
Uncertain		3	2.3
Disagree		3	2.3
Strongly Disagree		2	1.6

TABLE 1 CONTINUED

3. I believe as a result of attending the "Futures Research" course, I have become more creative and/or proactive in my responsibilities or duties.	129		
Strongly Agree		48	37.2
Agree		73	56.6
Uncertain		4	3.1
Disagree		4	3.1
Strongly Disagree		0	0.0
4. I am considered "different" by many colleagues because of my futuristic approach (philosophy) to today's issues.	128		
Strongly Agree		11	8.6
Agree		55	43.0
Uncertain		24	18.8
Disagree		35	27.3
Strongly Disagree		3	2.3
5. What effect has the "Futures Research" course had on YOUR thinking in regards to your duties/responsibilities with your department? Please explain.	128		
Responses reviewed in narrative of study.			

* N may not always equal 129 due to missing data.

% = rounded to the tenth.

The total number of responses is 129.

"disagree" that their agency is "resistant" to change (See page 123 of Appendix F). Moreover, of the fifty-eight respondents, 38% (22) reportedly contributed a lack of departmental resistance directly to personnel and/or staff. With increasing specificity, fourteen of the aforementioned twenty-two expressed that their agencies' progressiveness is directly associated with their chief and/or administrators, while eight administrators attributed this to highly motivated/educated young officers. In addition, nine (7%) executives attributed proactive change within their department to the active involvement of the entire staff in the planning and/or decision making process, while thirteen (10%) administrators ascribed to new programs/projects (internal and external) relative to their department. Finally, seventeen (14%) of the individuals did not respond or explain why their department was not considered "resistant to change."

In contrast to the previous paragraph, 44% (55) of the one hundred twenty-six respondents reportedly "agree" that their department is currently "resistant to change."¹ Notably, 49% (27) contributed departmental resistance to a traditional management and/or administrative approach. Moreover, several of the respondents individually described this philosophy as "old line," "brush fire," "reactive mode," "good ol'boy network," and a "conservative outlook." Likewise, 22% (12) of the respondents associated their agencies' resistance to a lack or failure to implement and

¹ The total number of responses is inflated due to multiple answers.

maintain proactive programs and/or projects once initiated. Two respondents stated "we continue to undertake (at least in speech) new philosophies, but where the rubber meets the road--it is business as usual--example: community policing" and "during a recent budget hearing, the City Manager attempted to end funding for the Planning and Research Unit from the police department budget. He stated that he saw no value in planning for the future." Finally, 13% (7) of the administrators inferred specifically that education is a significant factor causing departmental resistance, and 14% (17) of the police executives did not respond by providing an answer or explanation to this question.

When the respondents were asked if they asserted that police departments (in general) are resistant to the use of "Futures Research" concepts and practices, 67% (86) of the administrators reported that they "agree," 20% (25) reportedly "disagree" and 13% (17) were "undecided" (See page 124 of Appendix F).

A question which asked the executives what they believed could be done to alleviate any problems associated with departmental resistance. Respectfully, one hundred ten individuals responded to the question.¹ Seventy-one percent (78) of the police administrators indicated that the best suggestion to alleviate departmental resistance toward the future was current and continual education/training of "top level" executives, government personnel, and politicians relative to the principles and benefits of futures research. Another 17% (19) of the re-

¹ The total number of responses is inflated due to multiple answers.

spondents indicated that agencies should "teach results" and provide a wider dissemination and exposure of successful programs to the community to help cultivate political pressure to appropriate their existence. Finally, 13% (14) of the respondents acknowledged politics as another important factor/element restraining policing agencies from becoming more proactive and/or future oriented.

The administrators were asked to identify what they believed to be the major barriers inherent in law enforcement which limit or restrict "Futures Research" concepts and practices. One hundred thirteen administrators responded to this question and 68% (77) reported that the foremost inhibiting factor is law enforcement's adherence to the "status quo" and/or the traditional (militaristic) management style.¹ Specifically, the respondents characterized this type of management style as: "resistant to change," "fear of the unknown," "lack of insight," "archaic concept," "dinosaur mentality," and "skepticism."

Several additional locutions are specifically noteworthy in reference to this type of ensconced management style: "just the facts ma'am," "vision is end of nose," "if it ain't broken...", "it wont happen here... nothing I can do about it anyway" and, as a means of resolution, "time cures everything, wait for the dinosaurs to die" and "I believe that as the old guard moves out, the new educated warrior will take the place, unfortunately this takes time." In addition, 45% (51) of the

¹ The total number of responses is inflated due to multiple answers.

respondents indicated that resource deprivation (i.e., time, money, competent and educated manpower, and information) and improper allocation, along with an agency directed/dedicated toward this, are other significant obstacles prohibiting law enforcement from becoming more proactive and therefore future oriented. Finally, 15% (17) of the administrators believed that law enforcement is overly concerned and burdened with today's problems and "now oriented" managers are therefore unable or unwilling to look into the future. One individual reported that since there is not enough money and resources for today's problems, it is difficult (almost impossible) to save money by justifying research which is not proven beneficial.

When the respondents were questioned on whether they believe that proactive and/or futuristic changes will enhance law enforcement's ability to deal with crime, 96% (122) "agreed" with the statement. The remaining 4% (6) who responded reportedly were either "uncertain" or "disagreed" with this item (See page 125 of Appendix F).

In accordance with the previous paragraph, the majority of administrators "agreed" at a rate of 91% (117) that the organizational structure of police agencies will have to change toward a more proactive/futuristic philosophy in order to be effective in the next 10-20 years. The remaining 3% (4) of the respondents "disagreed" and 6% (7) were "uncertain" (See page 126 of Appendix F). The same one hundred twenty-eight respondents¹ reported in a

¹ The total number of responses is inflated due to multiple answers.

majority opinion of 48% (61) proclaiming that most police innovations fail. Thirty-three respondents attributed this to "poor preparation and planning," coupled with a lack of execution (selling the benefits to those involved) and a commitment where the goals are clear and defined. In following, seventeen of the responses charged administration and/or politicians with a lack of insight and an inability to accept futures research, while thirteen noted resistance from within the department (particularly those not involved with the program) as an explanation/justification. Various respondents stated "they are so locked into the 'short-term'...basically, the initial commitment to the future gives way to the more comfortable position of shortsightedness," "changing people's mindset is like 'bending granite,'" "because they are out of the comfort zone or beyond the dots," and "they would rather bear those ills they have than fly to others they know not of." In addition, eleven respondents reported the budget and/or insufficient funding; the same referred to the inability of the police to prepare and commit for the future instead of "working primarily with crisis after the fact". Finally, six respondents reported unrealistic expectations of the police and community (which breeds lack of support), six noted an inability to "follow up" with programming, and four expressed a change in administration as the significant factor. Seven administrators failed to provide any further explanation.

Among the 30% (38) of the administrators who acknowl-

edged their belief that police innovations do not fail, there were exactly twenty two respondents who provided an explanation and twenty-one who failed to elaborate. Of those who expounded upon their justification, seven attributed this to strong preparation and planning of "new programs," and five noted commitment and/or the ability to "stay the course...an ongoing mission." Finally, the remaining ten responses were primarily unremarkable, lacking in specificity. Additionally, a total of twenty-nine respondents indicated that they were not sure whether they believe police innovations fail.

Regarding the status of "empirical research in law enforcement at the agency level," the following is noteworthy. Ninety percent (114) of the respondents believed that research based upon, or relying on, factual information is lacking in policing agencies. Ten percent (13) directly refuted this understanding. ¹ Of the one hundred two administrators who acknowledged a resolution to the reported diminished presence of empirical research with agencies (therefore expressing the deprivation as being problematic), 29% (30) attributed this to diminished resources (i.e., time, finances/budget, trained administrative and sworn personnel), and 27% (28) credited this to a need or awareness for police executives to utilize the "building and bridging" of liaisons ("networking") with educational institutions in concert with the community. Agencies categorized as small to medium size which lack access to universities should reportedly

¹ The total number of responses is inflated due to multiple answers.

ly seek federal funds and/or grants. In following, 26% (26) of the respondents placed an emphasis on increased education and/or training among administrators and sworn personnel explicitly reporting results and benefits. In addition, 17% (17) of the executives indicated the need for the establishment of a "mandated viable" planning/research unit or task force (i.e., crime analysis unit) comprised of trained staff (possible unsworn), while another explained that empirical research must be a "principle and ongoing mission and anything short ...will most likely fail" and "police planning is an oxymoron." Likewise, 16% (16) reported a necessity for police departments to publish and distribute "success stories" of programs and/or research to colleagues, government and the community. Reportedly, one department is utilizing a "retired senior volunteer program" to assist (directly/indirectly) with research. Finally, seven of the respondents from California reported the existence of a two year training curriculum for police executives/administrators oriented toward the future called the "Command College" via the California Peace Officers Standards and Training Course. Further information relative to this curriculum was not provided.

In conclusion, with regard to the proliferation of the computer age, several of the respondents agreed that comprehensive training and education relative to computer use and applicability with empirical based research must become a reality. Twenty-eight percent (29) of the respondents who acknowledged

that empirical research was indeed a scarce commodity within police agencies, either entirely failed to respond/suggest a resolution, or clearly admitted their lack of knowledge/insight toward the subject.

THE EFFECT OF THE "FUTURES RESEARCH" COURSE ON POLICE AGENCIES

Of the sixty-nine (54%) respondents who acknowledged that futuristic applications and/or technology are currently being utilized by their respective departments (derived from a total of 127 responses), there were a total of forty-three iterations which attributed this implementation to computer and/or technological advancements.¹ Moreover, there were twenty-five responses referencing management programs within their department, and nine responses relative to community policing techniques. Respectively, noted examples of the aforementioned include: two million CAP/RMS/MDT project, forecasting relative to personnel and directed patrol, crime analysis and survey unit, D.A.R.E., N.G.T., futures committee report, police recourse integration program, environmental scanning, youth/gang programs, video technology, and retirement programs. Sixteen percent (11) failed to respond by further explanation. Moreover, one respondent indicated that their agency is currently "joined with Westinghouse to test their SMART car in a MDC system... which works with the CAD system. The police department is the biggest user of

¹ The total number of responses is inflated due to multiple answers.

computer technology." Another noted a department that is "ninety-five percent computerized."

In contrast with the above, 39% (50) of the respondents indicated that their department does not employ futuristic applications and/or technology. Moreover, only five of these fifty administrators acknowledged whether computer applications (associated with forecasting) had a positive or negative application to their department. One notable respondent stated "Forecasting--are you kidding? We can't get the computer applications we need for records and property divisions!" Several other responses are recollected: "our computer people don't know what they are doing"; "attempted to use computers for multivariate regression analysis to forecast one volatile area of the payroll budget... ended up in a drawer"; "the current administration had no training in futuristic applications... very little application in our department"; "the problem is that the 'executive' refuses to be persuaded and often chooses to employ 'hip-shooting decisionmaking'"; and "lack of money and 'foot-dragging' as most records are still hard to copy with manual file access."

Finally, of the one hundred and twenty-seven respondents¹ who replied to the initial question, 35% (44) failed to respond to the follow-up question and cite specific examples, studies, or projects. In addition, there were another thirty-one (24%) respondents who did not specifically discuss whether computer applications (associated with forecasting) had a positive

¹ The total number of responses is inflated due to multiple answers.

or negative effect accordingly. However, thirty-seven did report that computer applications maintained a "positive" effect, and eleven who noted a "negative" consequence. Specific responses were repetitive and indifferent to those stated previously in this section. In conclusion, twenty-eight responded either "no" or "n/a" and twenty-two administrators were unaware or uncertain if computer applications encouraged a positive or negative effect upon their agency.

Two police administrators provided additional information (copies of projects, studies, etc.) relative to their particular agency (See appendix B).

When the administrators were questioned whether their department is currently involved in a futures research project, one hundred and twenty-eight responded to the question. However, only 12% (15) responded positively, while 84% (108) reported "no" and 4% (5) were not sure. This statistic is particularly surprising since 69% (87) of the respondents reported separately that their agency maintains personnel competent to conduct "practical (applied) empirical research," while only 28% (35) to the contrary and 3% (4) reportedly unsure.

Nevertheless, of the fifteen administrators who acknowledged that their agency is involved in a futures research project, 47% (7) were involved with the California P.O.S.T. "Command College" and reportedly are required to complete a "futures research project" as a required part of the curriculum.

The seven California respondents reported that California P.O.S.T. can supply copies of completed studies, as they copy-right them all. Finally, only three of the remaining eight responses were noteworthy¹ and are consequently reported: "Ongoing grant for Crime Analysis... third year of three year grant. Grants for Gang Enforcement: video technology, community involvement/intervention, volunteers, school liaisons"; "the use of lap top computers by field officers... will interface with Dept. of Motor Vehicles and Dept. of Records system"; and "the effect of crack babies on law enforcement agencies by the year 2008." The only respondent who provided material specifically to this question sent a short synopsis indicating an agency that is currently involved in "an anonymous survey based upon the rank ordered operationalized objectives for a stratified random sample of front line community policing officers." In addition, it was reported that an interview format for first line supervisors is currently being assessed. Lastly, a code book was provided for "translating the response sets into quantitative data for descriptive and inferential statistical manipulation through SPSS 5.0."

Despite the statistic that only fifteen administrators reported that their department is involved in a futures research project, the respondents provided more favorable results when asked if they believed the concepts and applications discussed in the "Futures Research" course had been useful in fostering proac-

¹ Provided specific information and/or was more complete than the other responses.

tive change in their department. One hundred and twenty-eight responded to the initial question, while ninety reported a further explanation and/or cited examples.¹ Specifically, 4% (5) reported "almost always," 35% (45) responded with "frequently," 44% (56) highlighted "occasionally," 13% (16) reported the course was "rarely" useful, and 5% (6) responded "almost never." Furthermore, when the ninety administrators were asked to explain and cite examples, exactly one third (30) reported technological advancements as a significant change the "Futures Research" course has maintained on their agency. Moreover, nineteen of the thirty respondents emphasized the proliferation of computerization within their agency, and five explicitly mentioned "networking" with other departments and organizations. Noted examples of this are "mobile data terminals," "computer aided dispatch (CAD)," "A.F.I.S., an automated regional justice information system," "fully automated citation program (violator to court), first program in nation," and a "direct entry reporting system (PACE)." One respondent reportedly was responsible for the planning and construction of a \$100 million criminal justice facility as his agency representative. Similarities in responses were also notable in relation to the concept of "community based policing," as sixteen administrators emphasized this as a viable "holistic consumer oriented" approach enhanced by the "Futures Research" course. Examples of programs in this area include "Support Citizens Against Substance Abuse," "Support El Cajon Youth Develop-

¹ The total number of responses is inflated due to multiple answers.

ment Advisory Council (ECYDAC)," "Drug Abuse Resistance Education (DARE)," and the local "Police Athletic League (PAL)." In addition, twenty six of the respondents reported personnel and/or programming changes relative in their department and specified utilizing the "nominal group technique" to prioritize problems and issues. Furthermore, civilian assistance programs, further education and requirements, auxiliary police, drug, youth, and ethnic task forces, and bicycle patrols were also noted. Of those respondents who indicated that the course was not beneficial in "fostering proactive change," nine contributed the lack of advancement was dictated by budget constraints and seventeen pointed to the bureaucratic/traditional structure. Several respondents stated "futures research is viewed as a kind of voodoo by many in law enforcement," "our department (admin.) is very resistant to change--almost combative," and "...changes have been thwarted by bureaucratic inertia." Finally, the twenty three remaining administrators provided information which was lacking in specificity and therefore limited in value and usefulness.

One hundred twenty-two administrators reported whether the concepts and techniques in the "futures research" course assisted/enhanced their agency in developing policymaking and/or planning responsibilities.¹ Thirty-one percent (38) indicated that the course did not benefit their agency and therefore no discernible enhancement was reported. In part, eight administrators attributed this to administrative "blockage of change" in

¹ The total number of responses is inflated due to multiple answers.

policy and planning, while seven individuals imparted this to depreciating resources (manpower, finances, college educated employees, etc.). Several police managers stated "futures research is an attitude more than anything," "the thinking is 'that's not real cop work,'" "the administration does not believe in the N.A., or its course," "we either have political powerbrokers or paperclip counters," and "manpower limitations preclude many avenues we wish to follow." When asked to cite specific examples, exactly 50% (61) responded; therefore, the same number did not respond. Of those who responded, thirty-four reported that the course had enhanced/initiated progressive departmental programs including departmental reorganization, implementation of "strategic planning," trend analysis, and volunteer training programs. Finally, sixteen respondents reported recruitment and nineteen mentioned computer applications as an elevated advantage derived from the course. One respondent stated the course "enabled me to realize that our 'Performance Based Budget System' which was touted as 'long range planning' balancing the budget for twenty years, was just the opposite. It merely projects the cost of doing things the same way for 20 years." Another individual illustrated his agency's response as "Random patrol gave us random results... with severe budget cuts resources must be managed... directing patrol and investigations based on crime analysis gives us direct results. Its like a graph on a fishing boat, let's fish where there is fish." In conclusion, twenty-nine

indicated the course has provided them with a more proactive/progressive attitude and/or awareness relative to policy, problem solving, personnel, etc. Moreover, nineteen administrators reported community policing or integration, three with inter-agency networking, and five noted educational requirements and training as a benefit derived from the "Futures Research" course.

When the administrators were asked to elaborate on the above and explain both the internal and external factors which they contend either contributed to or inhibited the specific implementation of futures planning and research within their department, a total of one hundred and two responded. Explicitly, there were one hundred and forty-six iterations which were reported as internal factors which had inhibited the implementation of futures planning and research within their agency. Particularly, there were forty-nine responses attributed to resource limitations (i.e., economic and/or budget, time, skilled personnel), thirty-seven ascribed to traditional/bureaucratic administration's "closed mindedness," twenty-two who reported to administrative and/or staff's lack of awareness as to the need and benefit of futures research, fifteen who acknowledged a lack of impetus or interest/enthusiasm among staff toward change, thirteen who indicated an inadequacy in futures training and education for police personnel, seven who related to uncertainty of tangible results associated with futures research, and three who

noted union constraints as factors inhibiting the implementation of futures research and planning in law enforcement. Externally, three responses were reported which attributed a lack of education outside of the police culture, and two who indicated Tafoya's N.A. course as lacking applicability to small agencies and Tafoya's refusal to recognize opinions of others.

There were a total of thirty-seven responses reporting internal factors which contributed to the effective and/or proactive implementation of futures research and planning. Specifically, fifteen of the responses attributed the effective implementation of futures research and planning to progressive/ proactive administration and/or a young staff. In addition, twelve responses were affiliated with increased/enhanced education within the department, six reported to personal initiative, and four noted either "grant money" or "asset forfeiture funds" as internal factors which contributed to the implementation of futures research and planning within their organization. Finally, there were a total of fourteen responses which reported external factors contributing toward the implementation of futures research and planning. Explicitly, seven responses acknowledged graduate education, while six attributed the N.A. "Futures Research" curriculum and one who reported the "Rodney King backlash."

Responses to the question inquiring about the factors (internal or external) which have prevented or restricted the

implementation and/or changes in policy suggested by the "Futures Research" course reported a multitude of factors which were notably significant and have consequently "prevented" and "restricted" the implementation for change within policing agencies.¹ Statistically, 53% (68) of the respondents reportedly held that current or past law enforcement administrators/bureaucrats and employees advocate and practice a working conceptualization diverted away from those concepts derived from the "Futures Research" course. Furthermore, it was noted that this tenuous foresight was either directly related to the individual's lack of knowledge/insight toward the future or a lack of exposure due to a diminished concern and/or ignorance. Likewise, it was reported that the dynamics and reality of governmental agencies are generally not geared toward future planning due to both the urgency and obligation to satisfy day to day concerns and political issues respectively. It was also stated that many "old and new timers" would prefer to deal with problems as they come and not the futures approach contingent upon trends, current issues and community intervention. Finally, 34% (44) of the respondents identified financial or budget constraints (internal and/or external) as a major impediment and barrier to change. This is particularly evident with the respondents from the state of California: "Budget increases are directly related to the rate of inflation and dependent upon a direct vote of the electorate (Proposition 13)." Noteworthy is that 83% (15) of the California

¹ The total number of responses is inflated due to multiple answers.

responses reported decreasing revenues as a significant factor affecting their ability to promote change within their department. One respondent followed by predicting "the state will cut all funds to local jurisdictions."

The respondents were questioned regarding the effect the "Futures Research" course has had upon their "thinking" in regards to their duties/responsibilities within their departments.¹ Thirty-seven percent (46) of the respondents indicated that as a consequence of having been introduced/confronted with the many complexities and opportunities associated with proactive thought (derived from the "Futures Research" course), the respondents have become enlightened of the importance of analyzing and predicting the long-range effect of daily decisions. Consequently, 59% (27) of the respondents agreed that this proactive approach had consequently caused their duties/responsibilities to become more complex and involved when confronted with present problems and affiliated future ramifications. Furthermore, it was quite often expressed that this condition (more often than not) is exacerbated by complacent command level administrators, government and elected officials who thwart change and thrive upon the bureaucratic structure.

Respondents emphasized that the "course" magnified their orientation/cognition relative to the computer revolution, which as previously noted had increased their duties and responsibilities. Nevertheless, respondents reported that this in-

¹ The total number of responses is inflated due to multiple answers.

creased self-awareness had enabled them to institute/modify current procedures and training, anticipate needs and trends, and proactively orient tasks and duties to the future accordingly. Finally, 44% (57) of the respondents reported the use of environmental scanning/monitoring within their department, thus necessitating a community oriented policing perspective which one respondent described as a "results oriented strategic planning approach." However, one respondent exclaimed in frustration about the future, "I've seen enough of what the future holds--I plan to retire before the wars start!"

When the administrators were asked if the "Futures Research" course had assisted them or their department in developing strategies or plans to assist in the recognition of indicators of crime patterns, one hundred twenty-three responded.¹ Fifty-five percent (68) of the reporting respondents indicated that as a direct result of the "Futures Research" their department developed and/or enhanced a specific viable system or approach to recognize indicators of crime patterns and trends. Moreover, of the above sixty-eight respondents, 35% (24) acknowledged that they explicitly created a "crime analysis unit" within their department. Likewise, 41% (28) reportedly utilized computer technology to heighten and/or analyze crime trends and patterns, whereas 28% (18) indicated the existence of new or enhanced units within their agency specifically created to deal either with

¹ The total number of responses is inflated due to multiple answers.

"gangs," "ethnic groups," or "delinquent youths."¹ Several exceptional responses were noted: "We are 95% computerized..."; "I was instrumental in obtaining a crime analysis unit for our department. I obtained a C-Cap grant of \$735,000.00 which actually got us into our first generation of computerization (1990)"; and "we organized a computer based crime analysis unit, an automated MCI (managing criminal investigations), and automated records with dispatch and mobile data units." In following, several officers reportedly use lap top computers to do reports, and their department also implemented a five year strategic plan which includes police, city government and the community. Finally, 24% (16) of the executives who expressed that the course was indeed beneficial failed to provide additional information or a specified response.

Forty-five percent (55) of the one hundred twenty-three administrators either indicated that their department did not assist/benefit from the "Futures Research" course, or that the course had very minimally affected their department.² Explicitly, of those agencies who represented this, 71% (39) indicated that their department clearly does not "subscribe" or "participate" in developing strategies or plans to aid in recognizing indicators of crime patterns or trends. Several responses reported "we are still in the dark ages on this one," "don't know, there has been

1 Six of these respondents specifically identified to a sophisticated computer system, but explained that it was not being utilized at its full capacity/potential.

2 The total number of responses is inflated due to multiple answers.

no attempt to identify trends for the purpose of planning," and "no, we do not have the numbers to do significant trends." Additionally, 16% (9) of the respondents reported that the course maintained a small or limited effect upon their department since they rarely participate or forecast crime patterns or trends other than what has occurred in the past. The remaining thirteen percent (7) also explained that the course maintained a small or limited effect upon their department as their agency already maintained a viable program in existence.

Likewise, the respondents were questioned whether their agency is currently involved in environmental scanning to ameliorate crime reduction and/or prevention.¹ Forty-four percent (55) responded favorably, while 48% (61) indicated that their department is not actively involved, and 8% (10) were unsure. Moreover, of the one hundred twenty-six administrators who responded to the question, thirty-one percent (39) of the aforementioned fifty-five respondents provided further explanation and/or examples. Of these thirty-nine police administrators who contributed additional information and/or explanations with examples, 90% (35) reported a current interaction/cooperation with other agencies, mass media, and organizations within their jurisdiction. Moreover, 54% (21) are likewise observing it beneficial and even paramount to involve communities with their scanning and research campaigns. Therefore, all but six of the responding departments

¹ The total number of responses is inflated due to multiple answers.

referred to a centralized crime prevention/analysis unit and/or a community outreach program within their department. The identification and survey of "focus zones" or "targets" of specific crime patterns and tendencies were noted to provide the foundation for the development of strategies and swift resolutions to crime problems. However, it was reported that "demands on their time and equipment often exceed their resources." In resolution, one respondent indicated that "we recently interacted with our Growth Management Department to have the first ever use of U.S. Military personnel to assist local government in the demolition and destruction of targeted drug crimes."

In conclusion, the police administrators were asked what they anticipated will be the five major problems (in decreasing order of significance) that their department will face within the next five years and consequently provided a total of three hundred eighty responses.¹ Twenty-four percent (93) of the responses identified economic and/or budgetary constraints as the momentous problem facing law enforcement in the United States today.² One respondent remarked, "We are in trouble," after indicating that budget constraints and decreasing loss of revenue in California is the "1st most problematic" issue affecting his department. Similarly, managers acknowledged that as a direct ramification to the current and future financial stagnation within departments, coupled with an increase in demand for serv-

1 The total number of responses is inflated due to multiple answers.

2 These figures were derived from the total number of responses from the initial three questions.

ice, agencies are hampered/afflicted with problems associated with attracting and maintaining qualified personnel due to diminished salaries, benefits, and working conditions (training and equipment). One respondent indicated "we are now at 1.17 officers per 1000 population." The second most common response¹ [19% (74)] specified by the respondents as problematic was the presence and/or increase of the minority/ ethnic population ("changing demographics") in society, followed by 16% (61) who reported a significant increase in violent crimes. Administrators maintained that as a result of increased racial tension and crimes, civil unrest will continue to ensue, exacerbated by gangs (breakdown of the family structure), drug and alcohol use/abuse, an aging population, and a continuing disparity between the "have and have nots." Moreover, lack of dedicated police personnel was also mentioned, followed in response by community discontent and possible "vigilante justice -- people will no longer tolerate the deficiencies of the C.J. system." Finally, 8% (29) of the respondents reported the juvenile population (third in response)¹ as a considerable factor affecting society and therefore the enforcement profession. The fourth and fifth rated "most problematic" aspects believed to be present within the next five years are similar in context with the aforementioned initial three and were therefore not repeated.

In addition to the above representations, two of the respondents provided copies of projects and/or studies from their

¹ These figures were derived from the total number of responses from the initial three questions.

departments in response to this particular question (See Appendix B for specific information). The first respondent provided a "Needs Assessment" which was supplied by an administrator of a major U.S. city with a total size of 1,656 personnel (sworn and civilian) supervising a jurisdiction of 360,000 citizens. Included was an "Executive Summary, A Needs Assessment for the 1990's, the department's strengths and weaknesses"; "Major Trends for the 1990's: resident information, daily service population; part I crime, calls for service, manpower needs, manpower needs by geographic area, critical concerns for their department, a plan of action, conclusions"; and "Part I Crime Projections, Calls for Service Projections, and Manpower Projections." The second respondent attached a copy of a research paper entitled "The Impact of Smart Card Technology on Welfare Fraud in California by the Year 2002," which he presented to the Command College representative of the Peace Officers Standards and Training (POST) in Sacramento, California, in December, 1992. The paper reports trend and event development and cross impact analysis, in addition to future scenarios formulated by policy analysis along with conclusions.

SUMMARY

It is statistically unmistakable that the N.A. "Futures Research" course has had a significant and practical impact upon the majority of police administrators with regard to their "thinking" and/or "planning" approaches throughout the United

States (See question four (4) in Appendix A). However, it is also empirically sound to report that although 69% of reporting departments maintain personnel competent to conduct applied research, and 96% report that proactive and/or futuristic changes will enhance law enforcement's ability to deal with crime, strangely, 90% report that empirical research is scarce in law enforcement, and 84% are not involved in a futures research project. Moreover, 43% of respondents ironically acknowledged, to their own detriment, that while police departments are resistant to change and specifically 67% relative to "futures research and practices," 91% reported that agencies will have to change proactively to maintain effectiveness in the next ten to twenty years. Fortunately, though, 54% of the administrators admitted that futuristic applications and/or technology are currently being utilized and 91% noted that the course has been beneficial to them and/or their agency. Precisely, 90% of reporting police executives explained that the "Futures Research" course has made them more creative and/or proactive with respect to their responsibilities and duties, whereas 83% reported favorably that the course has fostered proactive changes in respective departments. Finally, in order to alleviate the problems associated with departmental resistance (and therefore create proactive and/or futuristic approaches and programs), continual education/training of administrative personnel and government relative to the principles and benefits of futures research is the most familiar response.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this exploratory study was to examine how the concepts and applications associated with futuristics have been implemented and/or utilized in selected state and local law enforcement agencies throughout the United States. The analysis of the data is believed to have provided considerable information relevant to the administrators' opinions on the value of the course, its impact on their "thinking" and "planning" approaches, and how they have actually implemented some, if any, of the concepts and techniques in their respective agencies.

The findings provided majority support confirming that the "Futures Research: Long-range Planning for Law Enforcement" course had made a significant impact upon police administrators' cognition (more proactive and/or creative) relative to their duties and responsibilities. Moreover, the findings substantiated through majority consensus that proactive and/or futuristic changes will enhance law enforcement's ability to compete/deal with crime. Administrators acknowledged that they are more enlightened of the importance/urgency of analyzing and predicting the long-range effect of daily decisions and operations. Police

administrators are also more likely to establish a magnified orientation relative to the computer revolution, thus enabling them to institute/modify current procedures and training, anticipate needs and trends, and orient tasks and duties in accord with the future. Interestingly, the most commonly mentioned types of futures research techniques (trend extrapolation, scenarios, Delphi technique, cross-impact analysis, and simulation modeling) were seldom identified by the administrators in their responses as utilized methods/procedures of futures research. This proposes that either the futures research techniques may be inadequate to justify/initiate program implementation, or impractical to operationalize within individual departments. Furthermore, the problem may lie within a specific agency's administrative/political concept, which is a common thread inherent within the fabric of many policing agencies. This latter proposition is more empirically sound as its basis is supported by the findings of this study.

In accordance with research completed by Campbell (1990), and the findings of this study, a police administrator's duties and responsibilities have become increasingly complex when confronted with present problems and affiliated future ramifications due to an increasingly proactive and/or futuristic approach. Furthermore, the findings also provided support that this condition can be severely amplified due to complacent command level administrators, government, and elected officials who

resist change and depend upon the bureaucratic structure. This is supported by the work of Swank (1975) and Enter (1991), who concluded that the American police system will continue to become decreasingly able to cope with society's expansive change due to its traditional response. Finally, the findings also affirmed that administrators believe that they are considered different by their colleagues due to their futuristic approach (philosophy) to current issues. As a result, the potential for stagnation and alienation of proactive/futuristic concepts and applications away from police departments and those who practice futuristics is enhanced.

The findings also maintained that the organizational structure of policing agencies will have to change toward a more proactive/futuristic approach to be effective within the next ten to twenty years. Consequently, Tafoya (1986) depicted this to mean that many budget cuts, new technologies, and shifting responsibilities will result in fewer U.S. law enforcement agencies and therefore the possibility of a "national police force" in the future. Therefore, to achieve and maintain effectiveness, policing agencies must establish/maintain the capability and resources necessary to overcome countless obstacles. However, the dichotomy between the community pressure and/or need for swift, efficient police service and the reality of dwindling resources (time, finances/budget, trained/educated personnel) is what administrators stressed has been an ongoing and momentous struggle in

futility. The police executives also proclaimed (in majority opinion) that most police innovations fail due to poor departmental preparation and planning, coupled with improper execution and commitment where goals and objectives are ambiguous and unspecified. Lack of administrative and political insightfulness along with inter-departmental resistance was additionally noted. Therefore, the administrators submitted, that to survive, the system must notably provide for top level executives, government personnel, and politicians to become educated as to the principles and benefits of futuristic applications. This finding is in direct correlation with Cooper (1973 :156), who reported that education appeared as the single most significant consideration toward police professionalism. In today's society, change is so rapid and drastic that future generations, if provided with an education based on the already outdated perceptions of the previous generation, may not be capable to adjust in time to the new conditions. This inevitable time lag in the educational process makes these next few decades all the more critical for the generations that lie ahead.

It is absolute, and supported by Toffler (1990), that due to the continual disarray and decline of the economical considerations, coupled with the proliferation of the technological age, law enforcement is due for expanded difficulties. The findings provided majority support for finance and/or budget constraints to maintain a particular stronghold away from futures research applications. The findings also revealed that the

respondents anticipated that economic and/or budgetary constraints, the presence and/or increase of the minority/ethnic population, and the juvenile population will be the three major problems law enforcement will encounter in the next five years. This understanding was partially confirmed by McCord (1990), who acknowledged that these troubles will be inflated due to increasing financial cutbacks from federal, state and local governments. In response, it is hopeful that law enforcement policy administrators will explore and implement needed innovative approaches across the board.

A prevailing number of police administrators (69%) acknowledged that their agency has personnel competent to conduct practical empirical research and noted that they are currently utilizing futuristic applications and/or technology; despite this, they reported in conflicting consensus (84%) that their department is not involved in a futures research project. This raises a serious question of why this exceedingly large majority of executives, who maintain capable and/or competent personnel to conduct viable empirical research and therefore acknowledge their awareness for the need for such research, are unable to provide and/or be involved in a future research project. Evidently, there exists significant restrictive factors (see preceding paragraph) which are universal among policing agencies throughout the country which actually inhibit growth of futures research. In agree-

ment, the findings established that the traditional (militaristic) management approach, resource deprivation, and the "now" orientation or mode of operation are the top three constraints limiting futures research and practices. It appears that virtually the entire system is focused on the resolution of immediate problems, from the perspective of historical precedence. By the same design, Coates (1974) explained this single firm conviction to the present insures enduring archaism. Here again, this exemplifies that when people/organizations perceive that a change will affect them adversely, even if they are wrong, they will tend to resist the change due to increased anxiety regarding consequences they cannot predict.

According to United States Attorney General Janet Reno's presentation at the 1993 Ohio Conference on Law Enforcement, federal, state, and local law enforcement communities must "all band together" through a "common sense approach" involving the integration of information, services, and cooperation. Correspondingly, Stephens (1990) coined this as "participatory justice" and believed that this offered the best hope for the criminal justice system in meeting its future challenges. Attorney General Reno additionally stated that in order to "reweave the fabric of society," emphasis must be placed upon youths and the family structure as there is "no substitute for family."

There were certain limitations to this research. Since the sample in this exploratory study extends from the class

rosters from July 11, 1982 to June 21, 1991, a number of prospective participants may have been either unable to provide specific/complete information relative to the "Futures Research" course and their department, or failed to respond altogether due to the extended period of time since the course was taken and this questionnaire was received. Another limitation of this study is the inherent fact that this was not a random sample and therefore the findings do not claim to be representative of law enforcement in general. The conclusions mentioned in this study are based upon the opinions and beliefs of only those administrators who have successfully completed the "Futures Research: Long-Range Planning for Law Enforcement" course offered explicitly through the National Academy, as they are believed to be best able to provide the most knowledgeable conclusions regarding futures research and law enforcement today.

Recommendations for future studies include changes in methodological approaches and a more refined and narrowly focused follow-up questionnaire which would provide more specific information on a particular jurisdiction. However, the findings from this study should help refine the focus of future research. In addition, a follow-up study and a longitudinal study may be useful to determine the accuracy and/or reliability the forecasts made or suggested in this paper. Finally, another approach to determine the significance and/or impact of the "Futures Research" course would be to select another national sample of

police administrators who did not complete the course and solicit information relative to the status or impact that futures research has had upon their agency in comparison to this study.

Three years ago, Alvin Toffler wrote:

To guarantee democracy's future in the dangerous decade to come, all the agencies that form part of the American justice system need to rethink their assumptions about tomorrow and to pool their findings. They must not only know that they can never get it 'right' but also realize that the very act of asking the right questions, or shaking people out of their mental lethargy, is essential to survival (1990: 5).

Law enforcement is infamously rigid and exceedingly centralized due primarily to the military model of organization. However, this does not imply that futures research is incongruous with law enforcement. Administrators are gradually becoming aware that the "quick fix" primarily does not work, and that systematic research offers the best chance to avoid being caught unprepared by the future. Moreover, the synthesis of sociological theory with practiced wisdom is crucial to the prosperity of the police policy process in a world of increasing complexity. When all is said and done, the central message presented by this paper is that crime in the future will be influenced not only by what we do, but by what we think--by public attitude and action.

APPENDIX A

NUMERIC/STATISTICAL RESULTS OF LIKERT-TYPE QUESTIONS

1. THE COURSE RESEARCHER COURSE HAS A POSITIVE IMPACT ON MY RESEARCH.

N = 229

Response	Count	Percentage	Response	Count	Percentage
Strongly Agree	11	4.8%	Disagree	11	4.8%
Agree	111	48.5%	Strongly Disagree	20	8.7%
Uncertain	107	46.7%			

2. THE COURSE RESEARCHER COURSE HAS LITTLE PRACTICAL APPLICATION TO MY JOB.

N = 229

Response	Count	Percentage	Response	Count	Percentage
Strongly Agree	11	4.8%	Disagree	11	4.8%
Agree	111	48.5%	Strongly Disagree	20	8.7%
Uncertain	107	46.7%			

3. I WOULD NOT GO TO THE COURSE IF I HAD TO PAY FOR IT.

N = 229

Response	Count	Percentage	Response	Count	Percentage
Strongly Agree	11	4.8%	Disagree	11	4.8%
Agree	111	48.5%	Strongly Disagree	20	8.7%
Uncertain	107	46.7%			

QUESTION FOUR (4):

WHAT EFFECT HAS THE "FUTURES RESEARCH: LONG-RANGE PLANNING FOR LAW ENFORCEMENT" COURSE HAD ON YOUR "THINKING" AND/OR "PLANNING" APPROACHES?

- * THE "FUTURES RESEARCH" COURSE HAD A MAJOR IMPACT ON MY WAY OF THINKING.

N = 129

#	65	53	4	4	3
%	50.4	41.1	3.1	3.1	2.3
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

- * THE "FUTURES RESEARCH" COURSE HAD LITTLE PRACTICAL APPLICATION TO MY JOB.

N = 129

#	0	11	7	62	49
%	0	8.53	5.43	48.1	40
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

- * I GAINED VERY LITTLE FROM ATTENDING THE "FUTURES RESEARCH" COURSE.

N = 129

#	0	3	2	43	81
%	0	2.3	1.6	33.3	62.8
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION FIVE (5):

I WOULD RECOMMEND THE COURSE TO OTHER MANAGERS/
ADMINISTRATORS.

#	79	41	3	3	3
	-----	-----	-----	-----	-----
%	61.2	31.8	2.3	2.3	2.3
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION SIX (6):

I AM CONSIDERED "DIFFERENT" BY MANY COLLEAGUES
BECAUSE OF MY FUTURISTIC APPROACH (PHILOSOPHY)
TO TODAY'S ISSUES.

N = 129

#	11	57	25	32	4
	-----	-----	-----	-----	-----
%	8.5	44.2	19.4	24.8	3.1
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION SEVEN (7):

I BELIEVE THE COURSE HAS BEEN BENEFICIAL
TO ME AND/OR MY AGENCY.

N = 127

#	49	67	8	2	1
	-----	-----	-----	-----	-----
%	38.6	52.8	6.3	1.6	.78
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION EIGHT (8):

I BELIEVE THAT AS A RESULT OF ATTENDING THE "FUTURES RESEARCH" COURSE, I HAVE BECOME MORE CREATIVE AND/OR PROACTIVE IN MY RESPONSIBILITIES OR DUTIES.

N = 128

#	45	70	4	4	0
	-----	-----	-----	-----	-----
%	35.2	54.7	3.1	3.1	0.0
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION NINE (9):

I BELIEVE THAT THE CONCEPTS AND APPLICATIONS DISCUSSED IN THE "FUTURES RESEARCH" COURSE HAS BEEN USEFUL IN FOSTERING PROACTIVE CHANGES IN MY AGENCY.

N = 128

#	5	45	56	16	6
	-----	-----	-----	-----	-----
%	3.9	35.2	43.8	12.5	4.7
	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	RARELY	ALMOST NEVER

QUESTION FIFTEEN (15):

I BELIEVE THAT POLICE DEPARTMENTS (IN GENERAL) ARE RESISTANT TO USING "FUTURES RESEARCH" CONCEPTS AND PRACTICES .

N = 128

#	16	70	17	23	2
	-----	-----	-----	-----	-----
%	12.5	54.7	13.3	18	.8
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION SIXTEEN (16):

I BELIEVE THAT PROACTIVE AND/OR FUTURISTIC
CHANGES WILL ENHANCE LAW ENFORCEMENT'S
ABILITY TO DEAL WITH CRIME.

N = 127

#	71	51	3	0	2
	-----	-----	-----	-----	-----
%	55.9	40.2	2.4	0	1.6
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

QUESTION SEVENTEEN (17):

I BELIEVE THAT THE ORGANIZATIONAL STRUCTURE
OF POLICE AGENCIES WILL HAVE TO CHANGE TOWARD
A MORE PROACTIVE/FUTURISTIC PHILOSOPHY IN
ORDER TO BE EFFECTIVE IN THE NEXT 10-20 YEARS.

N = 128

#	70	47	7	2	2
	-----	-----	-----	-----	-----
%	54.7	36.7	5.5	1.6	1.6
	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE

IN RESPONSE, DO YOU BELIEVE THAT MOST POLICE INNOVATIONS SEEM TO FAIL? WHY?

N = 128

#	61	38	29
	-----	-----	-----
%	47.7	29.7	22.7
	YES	NO	NOT SURE

QUESTION EIGHTEEN (18):

DO YOU BELIEVE THAT EMPIRICAL RESEARCH IS SCARCE IN LAW ENFORCEMENT AT THE AGENCY LEVEL?

N = 127

#	114	13
	-----	-----
%	89.8	10.2
	YES	NO

QUESTION NINETEEN (19):

MY AGENCY CURRENTLY HAS PERSONNEL COMPETENT TO CONDUCT PRACTICAL (APPLIED) EMPIRICAL RESEARCH.

N = 126

#	87	35	4
	-----	-----	-----
%	69	27.8	3.2
	YES	NO	NOT SURE

QUESTION TWENTY (20):

MY AGENCY IS CURRENTLY INVOLVED IN ENVIRONMENTAL SCANNING TO ASSIST IN CRIME REDUCTION/PREVENTION OR RESPONSE.

N = 126

#	55	61	10
	-----	-----	-----
%	43.7	48.4	7.9
	YES	NO	NOT SURE

TWENTY-ONE (21):

I WOULD DESCRIBE MY AGENCY AS ONE THAT IS RESISTANT TO CHANGE.

N = 126

#	9	46	13	45	13
	-----	-----	-----	-----	-----
%	7.1	36.5	10.3	35.7	10.3
	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE

TWENTY-TWO (22):

FUTURISTIC APPLICATIONS AND/OR TECHNOLOGY (AS EXPLAINED IN TAFOYA'S COURSE) ARE CURRENTLY BEING USED IN MY AGENCY.

N = 127

#	69	50	8
	-----	-----	-----
%	54.3	39.4	6.3
	YES	NO	NOT SURE

TWENTY-THREE (23):

MY AGENCY IS CURRENTLY INVOLVED IN A FUTURES RESEARCH PROJECT.

N = 128

#	15	108	5
	-----	-----	-----
%	11.7	84.4	3.9
	Yes	NO	NOT SURE

119

PLEASE SEND ME A SUMMARY COPY OF THE RESULTS OF THE COMPLETED STUDY.

10

PLEASE DO NOT SEND ME A SUMMARY COPY OF THE RESULTS OF THE COMPLETED STUDY/OR FAILED TO RESPOND.

APPENDIX B

Projects/Studies Provided by Administrators

...of ... and ... Part ... and future ... anticipate ... The ... concerns ... included the need to ... a reactive to ... style, the need for a ... of the ... philosophy, the need for ... growth, the ... of a career development program, the ... of diminishing ... and ... including a ... and a staff of ... control within the Department. The strengths and weaknesses of the Department were ... and analyzed and future ... were made and ... with ... needs were drawn. Finally, a five ... of action was ... along with Part ... and ... in addition, ... were pre- ... in the ...

"The Impact of Smart Card Technology on Welfare Fraud in California by the Year 2002." Edward Collins, Glenn Hill, Peace Officers Sherwood and Isaacson (2001), Sacramento, California, 1992, 90 pp.

This study reported that as a consequence to the state of California's rising (12% annually) welfare costs through fraud and a current shift in the ratio of taxpayers to tax receivers, law enforcement is suffering from depleting funds which could be appropriated for public safety, as well as a host of other programs. The report contended that such of the fraud within the welfare system centers around the "cash entitlement and food stamp entitlement, and a lack of positive identification in the system." In resolution, the emerging technology of "Smart Cards" provides a viable future which reportedly could change potential visions, specifically, the smart card is an integrated microcomputer chip designed to process and maintain data with a variety of applications as a means of positive identification.

The purpose of the paper (issue summary) was oriented toward the impact the smart card technology will have on welfare fraud in California by the year 2002. The author reported that based upon responses of an eleven page ... the

"The Miami Police Department: Needs Assessment," The Miami Police Department, 1988: 1-35b.

This study provides a plan by assessing the needs of the organization over the next ten years. A detailed study and projection of resident population, daily service population, Part I crime, and calls for service was conducted and future demands were projected. From these projections manpower estimates tempered by fiscal reality were completed. The critical concerns which were examined included the need to move from a reactive to proactive management style, the need for a formalization of the Department's philosophy, the need for service crunch, the development of a career development program, the issue of diminishing financial resources and personnel usage concerns including a personnel master plan and a study of a span of control within the Department. The strengths and weaknesses of the Department were also noted and analyzed and future projections were made and correlations with staffing needs were drawn. Finally, a five point plan of action was completed along with Part I crime and calls for service; in addition, manpower projections were presented in the appendices.

"The Impact of Smart Card Technology on Welfare Fraud in California by the Year 2002," Command College Class XVII: Peace Officers Standards and Training (POST); Sacramento, California, 1992: 70 pp.

This study reported that as a consequence to the state of California's rising (12% annually) welfare costs through fraud and a current shift in the ratio of taxpayers to tax receivers, law enforcement is suffering from depleting funds which could be appropriated for public safety, as well as a host of other programs. The report contended that much of the fraud within the welfare system centers around the "cash entitlement and food stamp portions... and a lack of positive identification in the system..." In resolution, the emerging technology of "Smart Cards" proposes a possible future which reportedly could change potential misuse. Specifically, the smart card is an embedded microcomputer chip designed to process and maintain data with a variety of applications as a means of positive identification.

The purpose of the paper (issue question) was directed toward the impact the smart card technology will have on welfare fraud in California by the year 2002. The author reported that based upon responses of an eleven panel board who examined the

current issues, trends and the events impacting it were developed. Through private listings and round robin sharing, a list of 38 trends were developed. The top ten (forecasted events) were grouped together by a vote and relayed in graph form. Moreover, the measurement of the graphs is also a product of a Delphi process, that was used after the trend and event forecasting portions of the process. It was related that due to the complexities inherent in the welfare system, uniformity among the 58 counties in California will be most successful if initiated by piloting the change in one county before recommending it to the entire system. In addition, right to privacy fears and concerns will be the largest potential obstacle in the way of the advancement by government entities. Five events and policies are also discussed which must take place before smart card technology can have a positive impact.

2. What do you believe was the MOST beneficial aspect of the "Futures Research: Long-Range Planning for Law Enforcement" course?

3. What do you believe was the LEAST beneficial aspect of the "Futures Research: Long-Range Planning for Law Enforcement" course?

5. Would you recommend the course to other law enforcement administrators?

4. What effect did the course have on your thinking and/or planning approaches? Please answer the following in response:

The "Futures Research" course had a major impact on my way of thinking.

STRONGLY
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY
DISAGREE

The "Futures Research" course had little practical application to my job.

STRONGLY
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY
DISAGREE

I gained very little from attending the "Futures Research" course.

STRONGLY
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY
DISAGREE

5. I would recommend the course to other managers/administrators.

STRONGLY
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY
DISAGREE

6. I am considered "different" by many colleagues because of my futuristic approach (philosophy) to today's issues.

STRONGLY
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY
DISAGREE

7. I believe that the course has been beneficial to me and/or my agency.

-----	-----	-----	-----	-----
STRONGLY	AGREE	UNCERTAIN	DISAGREE	STRONGLY
AGREE				DISAGREE

8. I believe that as a result of attending the "Futures Research" course, I have become more creative and/or proactive in my responsibilities or duties.

-----	-----	-----	-----	-----
STRONGLY	AGREE	UNDECIDED	DISAGREE	STRONGLY
AGREE				DISAGREE

9. I believe that the concepts and applications discussed in the "Futures Research" course has been useful in fostering proactive changes in my agency.

-----	-----	-----	-----	-----
ALMOST	FREQUENTLY	OCCASIONALLY	RARELY	ALMOST
ALWAYS				NEVER

Please explain and cite examples.

10. What effect has the "Futures Research" course had on YOUR thinking in regards to your duties/responsibilities with your department? Please explain.

11. How have the concepts and techniques in the "Futures Research" course assisted/enhanced YOUR AGENCY in developing policy making and planning responsibilities?

as applied to you and/or your department in developing strategies or plans to assist in the recognition of indicators of crime patterns or trends?

PLEASE CITE SPECIFIC EXAMPLES.

Please cite specific examples.

14. If you were conducting this analysis again, what other variables would you want to include?

12. What factors (internal or external) have prevented or restricted the implementation and/or changes in policy suggested by the "Futures Research" course.

13. Has the "Futures Research" course assisted you and/or your department in developing strategies or plans to assist in the recognition of indicators of crime patterns or trends?

PLEASE CITE SPECIFIC EXAMPLES.

14. If you were conducting a similar study, what ONE question would you add that is not included?

15. I believe that police departments (in general) are resistant to using "Futures Research" concepts and practices.

STRONGLY AGREE UNCERTAIN DISAGREE STRONGLY
AGREE

What do you believe can be done to alleviate any problems?

What are the major barriers?

16. I believe that proactive and/or futuristic changes will enhance law enforcement's ability to deal with crime.

STRONGLY AGREE UNCERTAIN DISAGREE STRONGLY
AGREE

THE FOLLOWING QUESTIONS PERTAIN TO YOUR AGENCY

19. My agency currently has personnel competent to conduct practical (applied) empirical research.

----- YES ----- NO ----- NOT SURE

20. My agency is currently involved in environmental scanning to assist in crime reduction/prevention/or response.

----- YES ----- NO ----- NOT SURE

If so, please explain and cite examples.

21. I would describe my agency as one that is resistant to change.

----- ----- ----- ----- -----
 STRONGLY AGREE UNDECIDED DISAGREE STRONGLY
 AGREE

Please explain/justify your response.

22. Futuristic applications and/or technology (as explained in Tafoya's course) are currently being used in my agency.

----- YES

-----NO

----- NOT SURE

If so, please explain.

Can you cite specific examples, studies or projects? Can you please send copies?

Have computer applications (associated with forecasting) had a positive or negative effect in this area? Please explain.

23. My department is currently involved in a futures research project.

----- Yes ----- NO ----- NOT SURE

If so, please explain.

Could you provide a copy?

24. What factors (internal or external) do you believe either contributed to or inhibited the implementation of futures planning and research in your agency?

25. What do you believe will be the five major problems that your agency will encounter in the next five years?

1st most problematic: _____

2nd most problematic: _____

3rd most problematic: _____

4th most problematic: _____

5th most problematic: _____

____ PLEASE SEND ME A SUMMARY COPY OF THE RESULTS OF THE
COMPLETED STUDY.

____ PLEASE DO NOT SEND ME A SUMMARY COPY OF THE RESULTS
OF THE COMPLETED STUDY.

PLEASE INDICATE ANY ADDITIONAL COMMENTS OR INFORMATION BELOW

1993

Appendix D

Request Letter

I am conducting a chapter on part of my Master's Thesis at the University of Illinois. The cooperation and assistance of Supervisory Marshal Agent William F. [Name] of the U.S. has been obtained for this project which is an exploratory study designed to identify those individuals who have completed the course entitled "Public Research Long-Range Planning for Law Enforcement" at the U.S. National Academy. Your input and opinions are valued and desired for this research effort.

According to the plans received from Agent [Name], you have been identified as participating in the course [Name] in 1982-1983, and therefore are given the opportunity to participate in this survey. I am requesting that you take part in this unique research project since your response in effect is making law enforcement more productive.

Enclosed is a copy of questionnaires, while it is a bit lengthy and will require approximately 30 minutes to complete. It is hoped that you will take the time to complete it and return it to me in the enclosed self-addressed envelope.

As to confidentiality, I assure you confidential standards of academic research. Your name will not be revealed or correlated with your responses; however, you will be listed in an appendix as a respondent. Please note the number in the upper right-hand corner of the questionnaire. This number allows me to temporarily identify you by referring to this number. I will know that you responded to the questionnaire and will not reveal the following mailing which I will send to [Name].

I appreciate your willingness to assist in this research endeavor. If you would like a summary copy of the results of the completed study, please indicate this on the last page of the questionnaire. I believe that you will find the questionnaire both interesting and provocative and I look forward to receiving your reply.

Thank you for your cooperation. If you have any questions, please contact me at (216) 525-5911 from after 5:00 PM.

[Signature]
[Name]

Enclosures

xxx xx, 1993

xxxxxxx
xxxxxxx
xxxxxxx

Dear Mx. xxxxxx,

I am conducting a survey as part of my Master's Thesis at Youngstown State University. The cooperation and assistance of Supervisory Special Agent William F. Tafoya of the F.B.I. has been obtained for this project which is an exploratory study directed toward only those individuals who have completed the course entitled "Future Research: Long-Range Planning for Law Enforcement" at the F.B.I. National Academy. Your input and opinions are valued and deemed vital to this research effort.

According to the class rosters received from Agent Tafoya, you have been identified as participating in the course from xxxxxx, xx 19xx to xxxxxx xx, 19xx, and therefore are given the opportunity to participate in this survey. I am requesting that you take part in this unique research project since you represent an effort in making law enforcement more proactive.

Enclosed is a copy of questionnaire. While it is a bit lengthy and will require approximately 30 minutes to complete. It is hoped that you will take the time to complete it and return it to me in the enclosed self-addressed envelope.

A note about confidentiality. I promise you confidential standards of academic research. Your name will not be revealed or associated with your responses; however, you will be listed in an appendix as a respondent. Please note the number in the upper right-hand corner of the questionnaire. This number allows us to temporarily identify you. By referring to this number I will know that you responded to the questionnaire and will not send you the follow-up mailing which I will send to nonrespondents.

I appreciate your willingness to assist in this research endeavor. If you would like a summary copy of the results of the completed study, please indicate this on the last page of the questionnaire. I believe that you will find the questionnaire both interesting and provocative and I look forward to receiving your reply.

Thank you for your cooperation. If you have any questions, please contact me at (216) 665-5911 (Home after 6PM).

Sincerely,

Enclosures

Jonathan J. Diller

Adams, Randy	Ventura Police Department
Alukonis, Joseph	U.S. Capitol Police
Andrews, William	Arroyo Grande Police Department
Arcand, Garnett	Bellevue Police Department (WA)
Arkenau, Daniel	Cincinnati Police Department
Babcock, Lynn	Glendale Police Department
Baker, Roger	Anaheim Police Department
Barcliff, Clifford	Central Berks Regional Police
Bartosh, Douglas	Scottsdale Police Department
Bauer, Thomas	Delhi Township Police Department
Beckman, Gerald	Maderia Police Department
Berger, William	North Miami Beach Police Department
Bienz, Edward	Suffolk County Police Department
Billings, James	Pueblo Police Department
Bishop, Benjamin	Des Moines Police Department
Black, Patrick	Buena Park Police Department
Blocker, T.C.	Pennsylvania State Police
Broadfoot, Philip	Waynesboro Police Department
Callander, Earl	Escondido City Police Department
Carlson, Ronald	Oak Brook Police Department (IL)
Cooper, Gregory	Sanger Police Department
Cosgrove, Peter	Suffolk County Police Department
Covey, Rodney	Arizona Dept. of Public Safety
Davidson, John	Oak Ridge Police Department
Dean, Roger	Huntsville Police Department (AL)
Deese, Edward	National City Police Department
Deichsel, Ray	Hemet Police Department
Della-Monica, Glenn	California State Police
De Jong, Dean	Miami Police Department
DeNisi, William	Fountain Valley Police Department
Dettmer, Richard	Haywood Police Department
DeuPree, Robert	Astoria Police Department
Dial, David	Naperville Police Department
Diaz, Manuel	Miami Police Department
Drulias, Gus	Los Angeles Police Department
Fetherolf, Louis	Fallen Police Department (NV)
Fields, Donald	California State Corp. Comm. Motor-Carrier Enforcement
Finch, James	Asheboro Police Department
First, Donald	Long Beach Police Department
Fleming, James	Oak Brook Police Department
Freeman, Henry	Stockton Police Department
Friedman, Stanley	California State University Police
Forry, Robert	Glendale Police Department
Foster, James	Little Rock Police Department
Giannone, Donald	Teaneck Police Department
Giuliani, Otto	Benicia Police Department
Goforth, Charles	Kings Mountain Police Department
Guthrie, Edward	Salisbury Police Department
Hansen, Larry	Lodi Police Department
Harper, James	Dallas Police Department

Hart, Gary	Upland Police Department
Hernandez, Eugene	Orange Police Department
Hersom, Larry	Spokane Police Department
Hight, Martin	San Diego Harbor Police
Holsapple, Michael	Kokomo Police Department
Hughes, Donald	Kentucky State Police
Hunter, C.G.	Hampton Police Department
Jackson, Arthur	Cook County Sheriff's Police
Jahn, Thomas	Phoenix Police Department
Johnson, Lawrence, Jr.	Oklahoma City Police Department
Johnston, Steven	Rochester Police Department (MN)
Jones, Jay	Lee County Sheriff's Office
Kane, Robert	Stanwood Police Department
Kantor, Stanley	Anaheim Police Department
King, Joseph	Freeport Police Department
King, Timothy	Los Angeles Police Department
Knight, Douglas	Vandalia Division of Police
Koch, Edgar	Anne Arundel County Police
Konkler, Gerald	Tulsa Police Department
Kraus, Larry	Colorado Springs Police Department
Kregelka, Garry	Michigan State Police
Lance, Jerome	Long Beach Police Department
Langford, Lester	Cherry Hills Police Department
Lewis, Judith	Los Angeles Sheriff's Department
Long, Charles	Martinsville Police Department (VA)
Lynch, Charles	Bart Police Department
Markham, Jeffrey	Lake County Sheriff's Department
Mathey, Joseph	Iroquois County Police Department
Meiners, Robert	Lincolnwood Police Department
Moore, Robert	Englewood Dept. of Safety Services
Moore, Robert	Suffolk County Police Department
Moreau, Robert	El Cajon City Police Department
Morris, Daniel	Kenai Police Department
Mulhall, Richard	Bloomfield Police Department
Myers, Richard	Lisle Police Department
McClurg, William	El Cajon County Police Department
McFarlin, R.	Salem Police Department (Oregon)
McGee, Dennis	Auburn Hills Police Department
McNamee, Richard	Colorado Bureau of Investigation
McSweeney, Francis	Lyndhurst Police Department
Nygren, Keith	Crystal Lake Police Department
Oleary, Edward	Foxborough Police Department
Olson, Donald	Sunnyvale Dept. of Public Safety
Overton, Timothy	Maricopa County Sheriff's Office
Paresi, Mark	Portland Police Department
Patterson, Richard	Kent State University Police
Price, Marlin	Dallas Police Department
Reding, Thomas	St. Paul Police Department
Rod, Tim	M.S.P. Traverse City Post
Ross, James	N.Y.C. Housing Authority Police
Ryckman, Kenneth	Wankeyan Police Department

Sarcone, Richard Croton-on-Hudson Police Department
Scott, Samuel Fontana Police Department
Schmialin, John Westbrook Police Department
Schneblin, Merlin Huntington Beach Police Department
Schrader, G.E. Anaheim Police Department
Seamon, Thomas Philadelphia Police Department
Sides, Eugene University of Maryland at College Park
Sill, Richard Chino Police Department
Sireci, Paul Naples Police Department
Smeel, William Northern York County Regional
Smith, Patrick Beaumont Police Department
Soarer, Stephen Dartmouth Police Department
Starzyski, Florence Arlington County Police Department
Stotesbury, Paul Escondido Police Department
Swofford, Michael Sunset Hills Police Department
Tipton, Stan Pompano Beach Police Department
Tye, Ernest Oklahoma State University Police
Varga, Albert Hamilton Police Department
Wagner, Kenneth Hallandale Police Department
Wallace, Robert Alabama Alcoholic Beverage Control-
Board--Enforcement Division
Ward, George Fort Lupton Police Department
Warner, Shirley Anchorage Police Department
Weller, Robert Muncie Police Department
Whitman, Mark Hornell Police Department
Williamson, James Littleton Police Department
Willingham, Mark Florida Division of Alcohol & Tobacco
Wynne, James North Kingstown Police Department
Zimmon, Garrett Los Angeles Police Department

Appendix F
Percentage Pie Chart Graphs



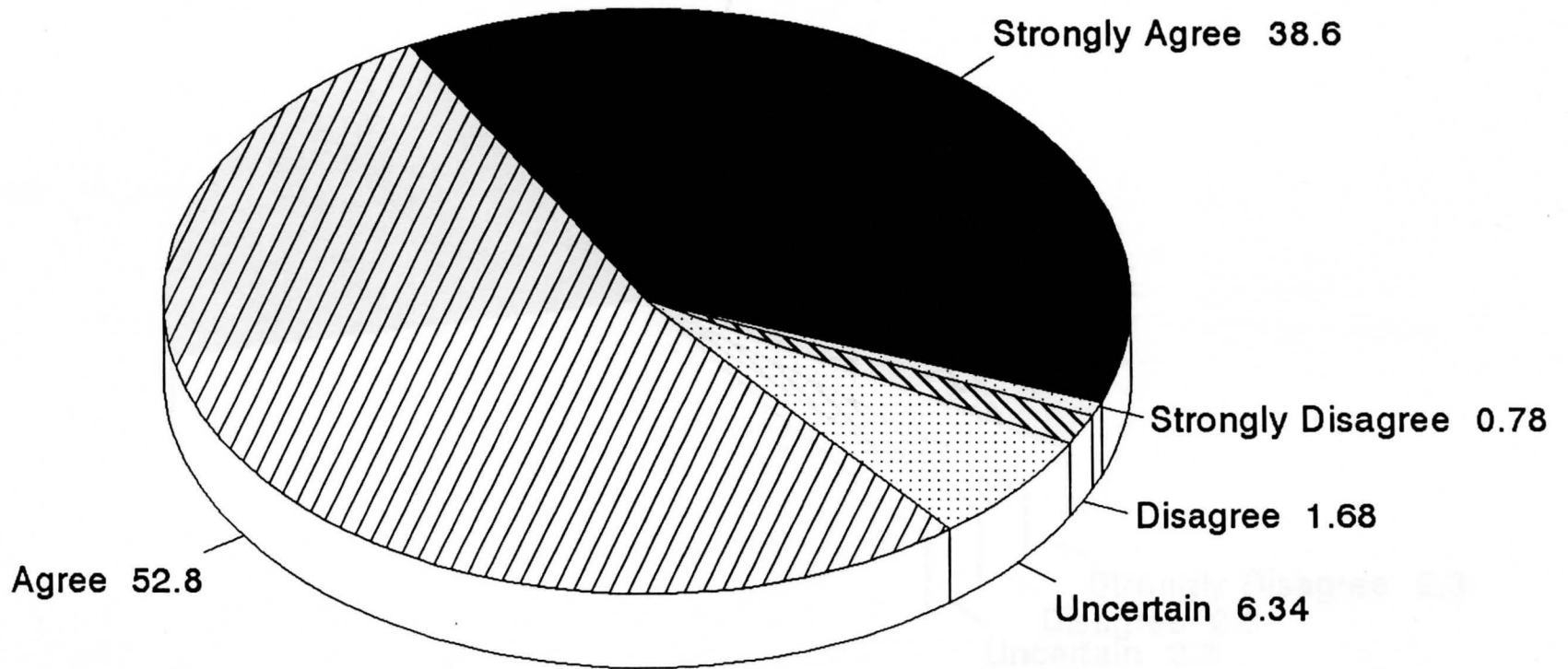
percent

Agree 50.0

Uncertain 16.04

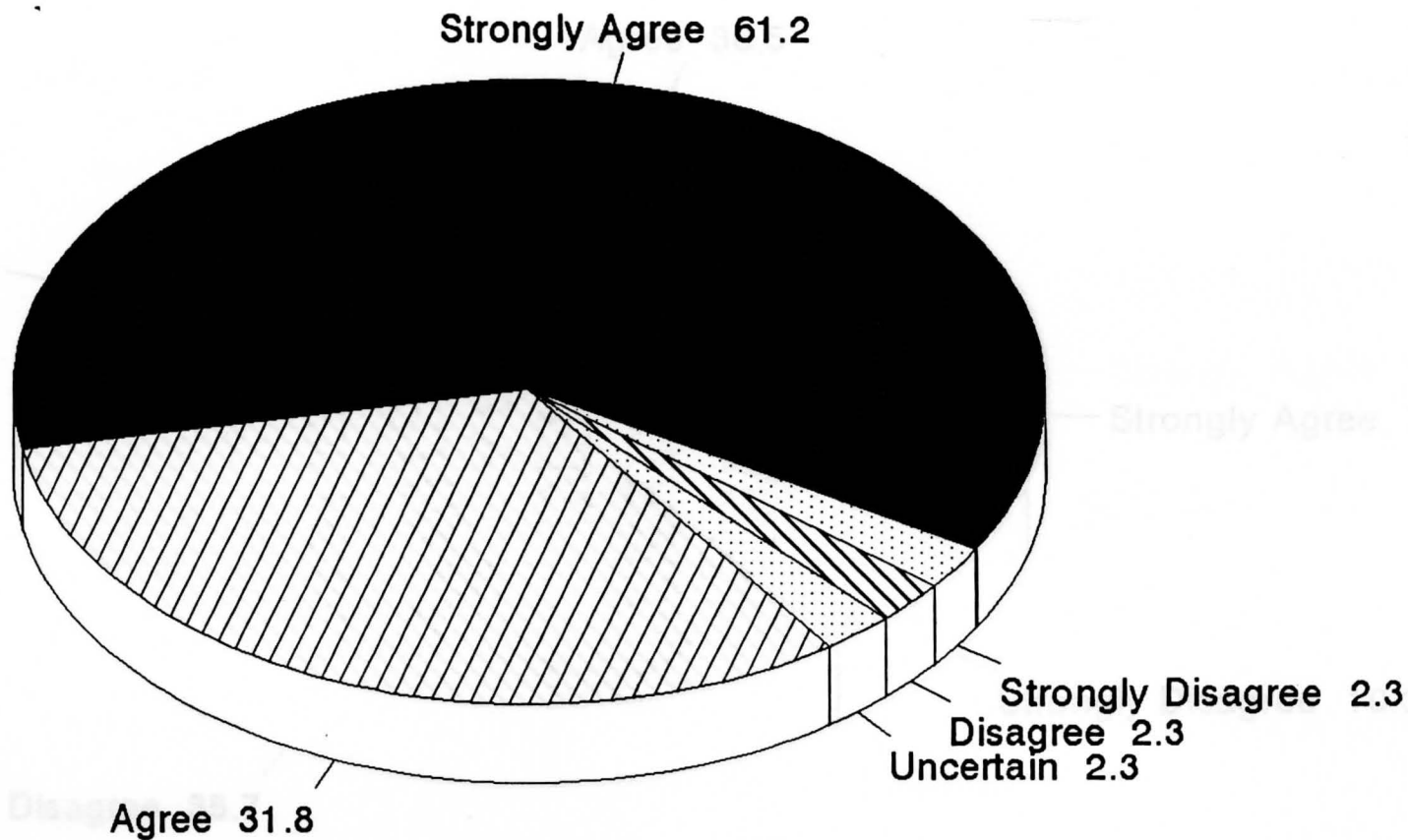
Strongly Agree 34.0

Course Beneficial



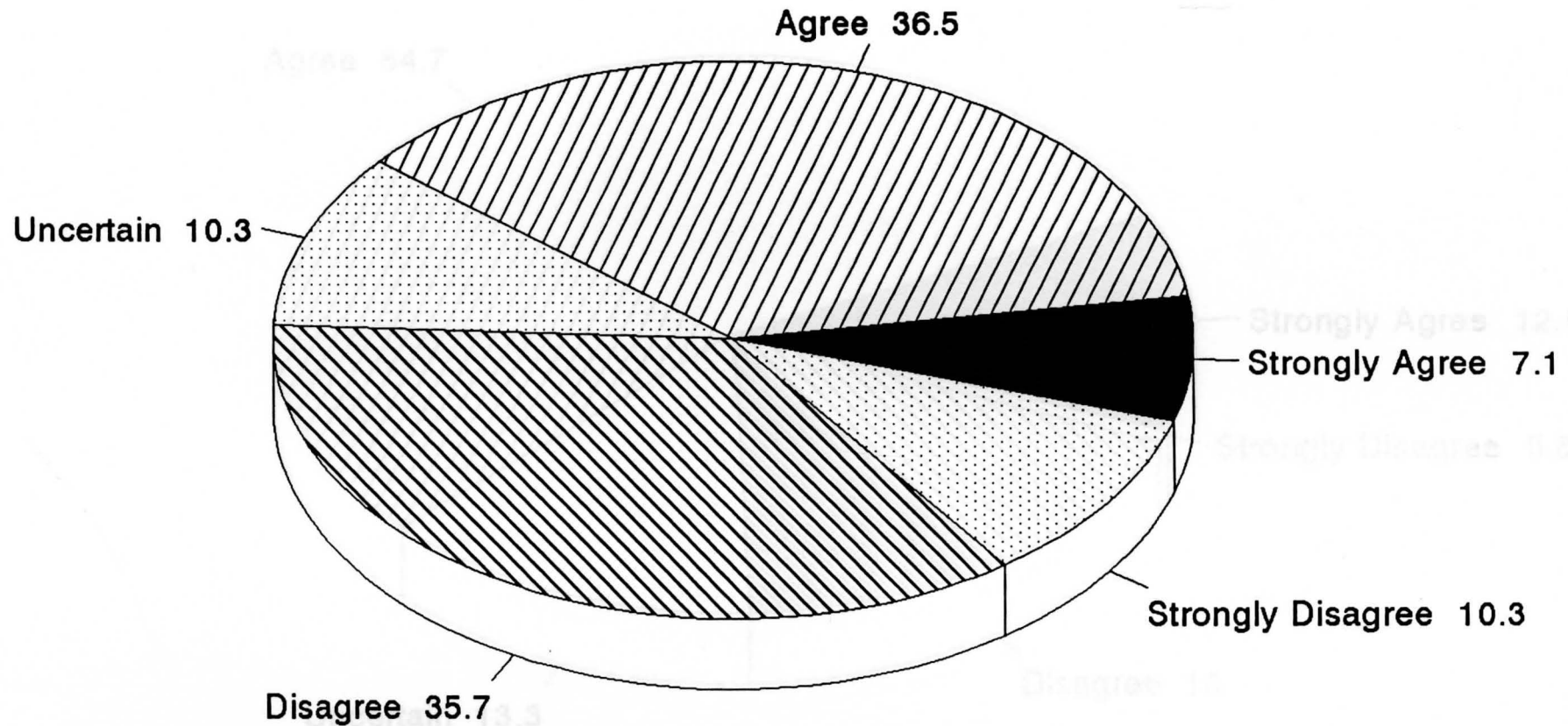
percent

Recommend the Course



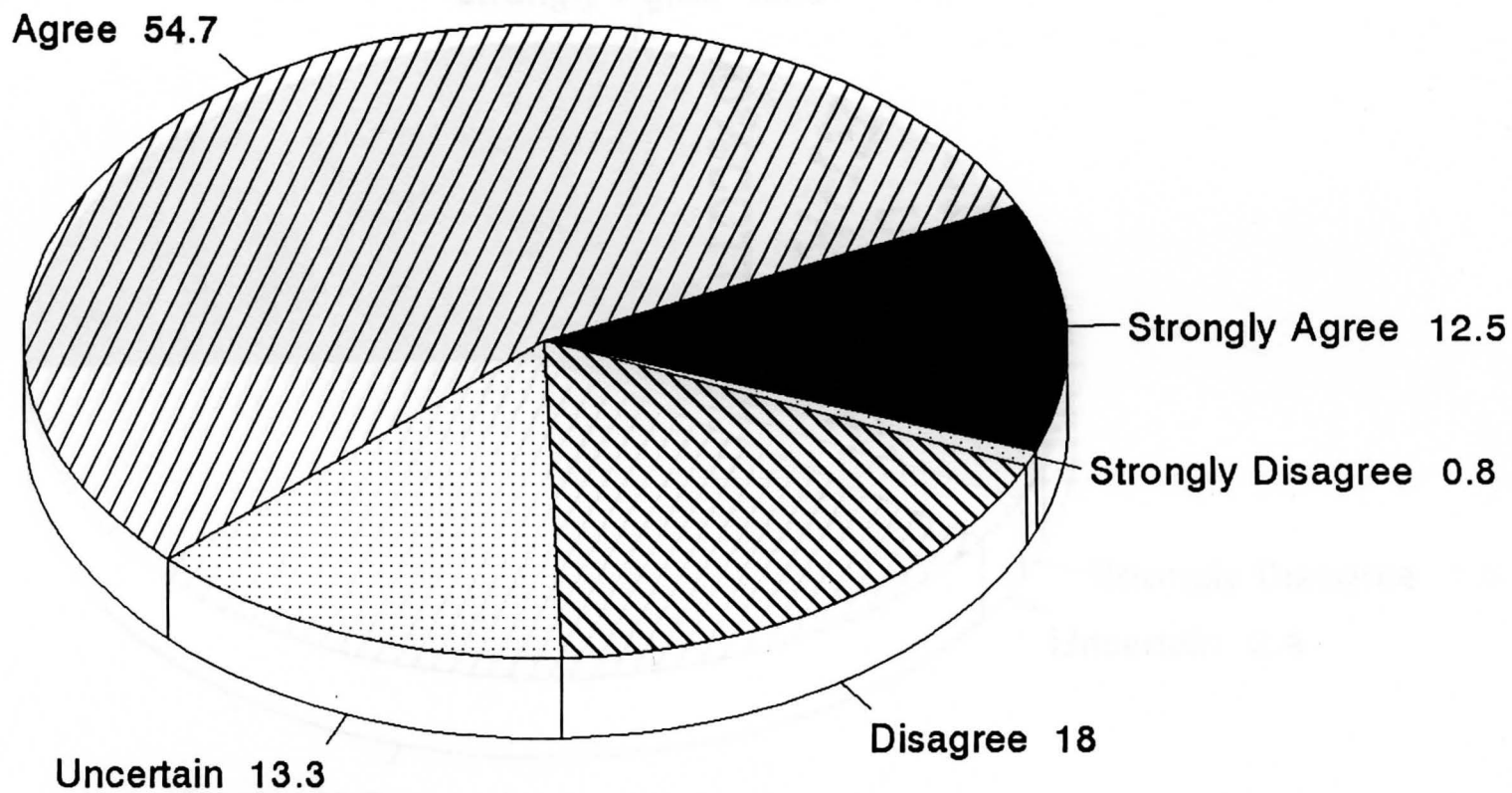
percent

Agency Resistant to Change



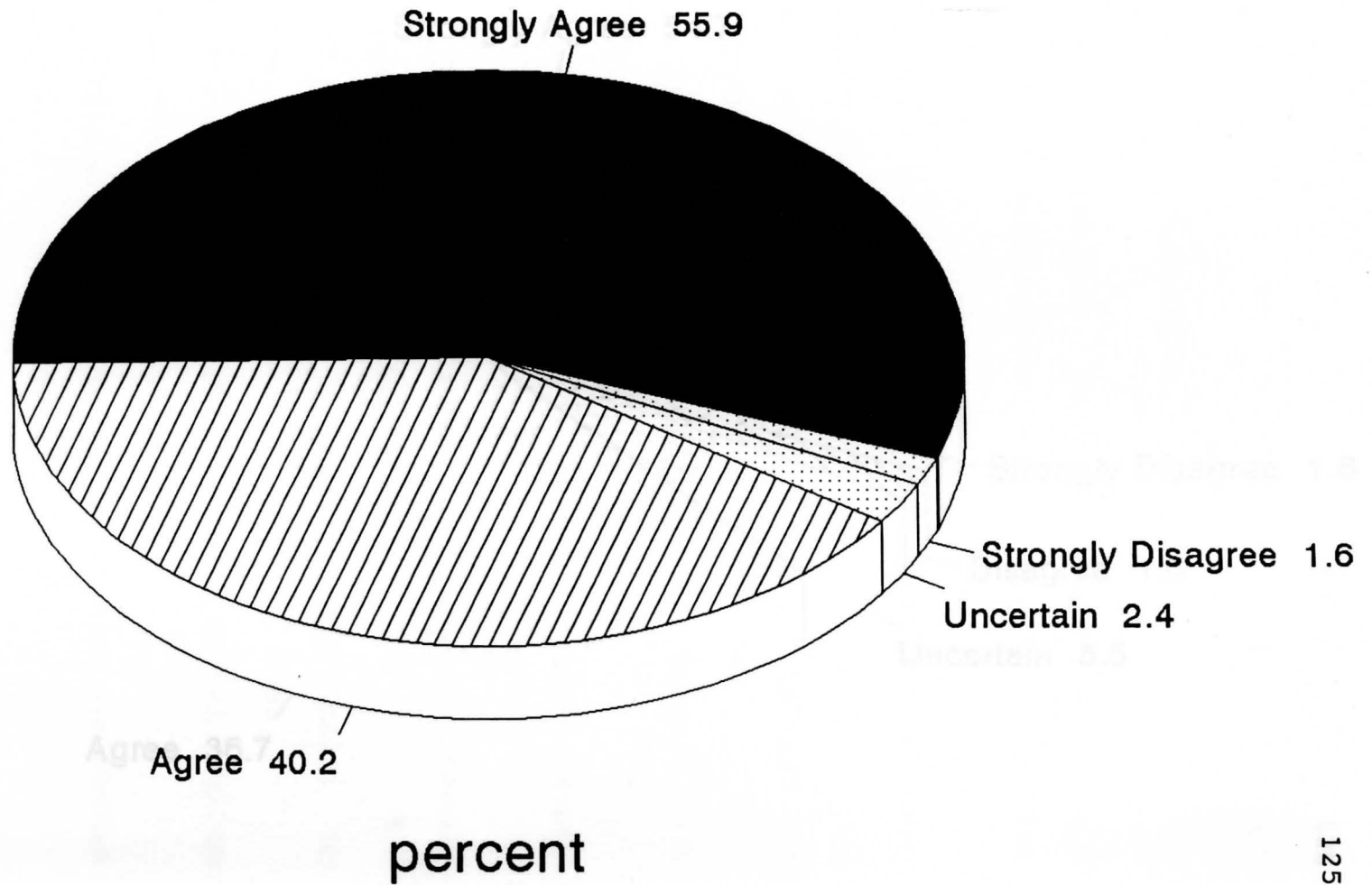
percent

Police Departments Resistant

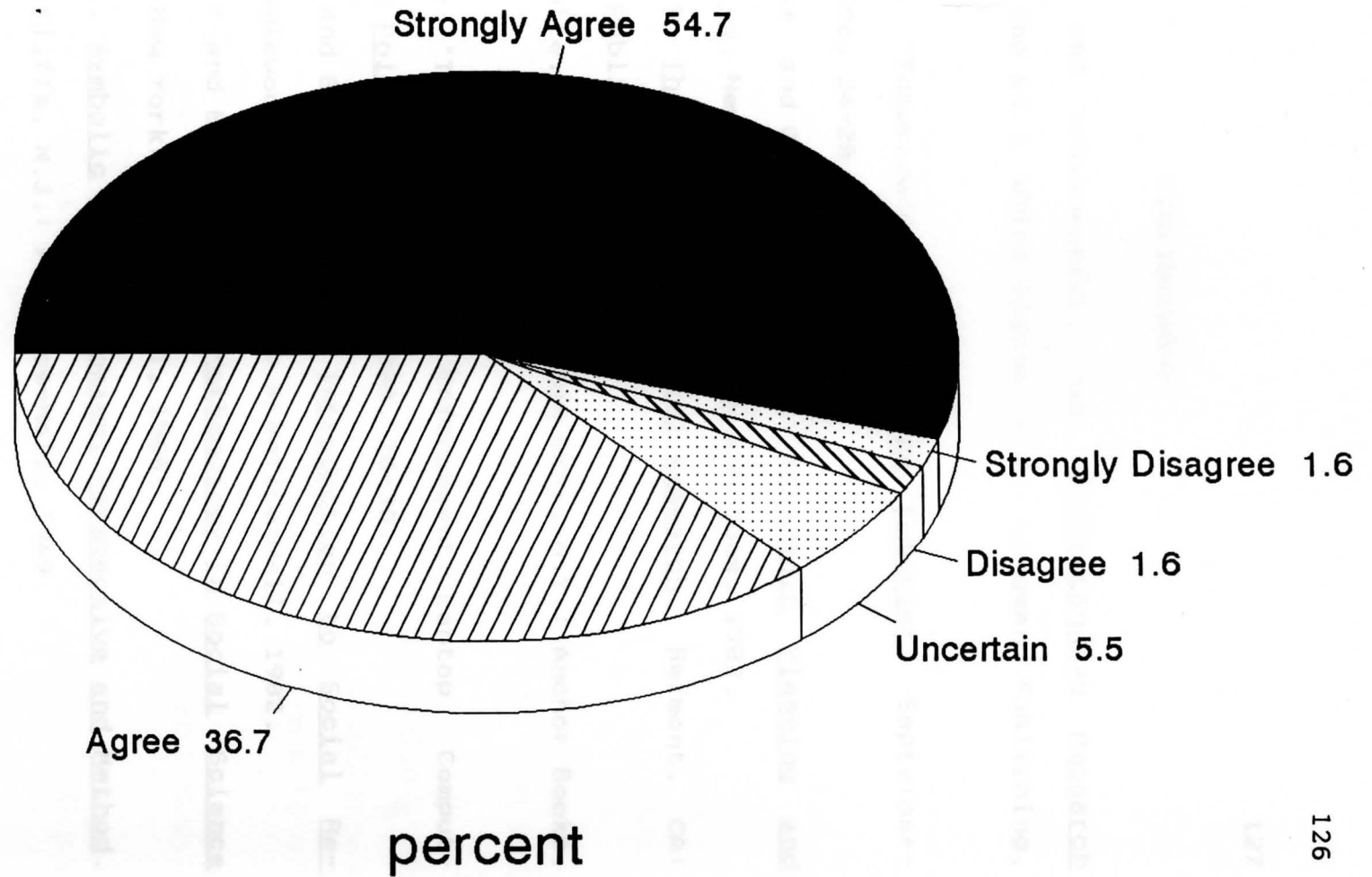


percent

Enhance Ability/Deal with Crime



Futuristic Change Needed



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