CRIMINAL JUSTICE MONOGRAPH

Innovation in Law Enforcement

This monograph consists of papers on related topics presented at the Fourth National Symposium on Law Enforcement Science and Technology, May 1-3, 1972 conducted by:

THE INSTITUTE OF CRIMINAL JUSTICE AND CRIMINOLOGY
UNIVERSITY OF MARYLAND

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FOREWORD

This publication is one of a series of nine monographs extracted from the Proceedings of the Fourth National Symposium on Law Enforcement Science and Technology.

The principal Symposium theme of "Crime Prevention and Deterrence" was chosen by the National Institute as a reflection of LEAA's overall action goal - the reduction of crime and delinquency. Whereas previous Symposia examined methods of improving the operations of individual components of the criminal justice system, the Fourth Symposium was purposefully designed to look beyond these system components and focus on the goal of crime reduction.

A major conference subtheme was "The Management of Change: Putting Criminal Justice Innovations to Work." The Institute's overall mission is in the area of applied rather than basic research, with special attention being given to research that can be translated into operational terms within a relatively short period of time. We have therefore been interested in exploring the obstacles to the adoption of new technology by criminal justice agencies. Many of the Symposium papers identify these obstacles - attitudinal, organizational, and political - and discuss how they are being overcome in specific agency settings.

The titles of the nine Symposium monographs are: Deterrence of Crime in and Around Residences; Research on the Control of Street Crime; Reducing Court Delay; Prevention of Violence in Correctional Institutions; Re-integration of the Offender into the Community; New Approaches to Diversion and Treatment of Juvenile Offenders; The Change Process in Criminal Justice; Innovation in Law Enforcement, and Progress Report of the National Advisory Commission on Criminal Justice Standards and Goals.

This monograph considers the practical problems of introducing change into law enforcement agencies. It includes strategies for changing urban police from the viewpoint of a skilled practitioner: Robert M. Igleburger, Director, Department of Police, Dayton, Ohio; and from the viewpoint of the representative of a major public service group; Christopher F. Edley of the Ford Foundation. Also discussed is the concept of demonstration projects as a strategy for inducing change in police institutions.

Readers concerned with the general problem of transferring innovations into operational reality will also be interested in the Symposium monograph entitled The Change Process in Criminal Justice.

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INTRODUCTION

The Fourth National Symposium on Law Enforcement Science and Technology was held in Washington, D.C. on May 1-3, 1972. Like the three previous Symposia, it was sponsored by the National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration. The Fourth Symposium was conducted by the Institute of Criminal Justice and Criminology of the University of Maryland.

These Symposia are one of the means by which the National Institute strives to achieve the objective of strengthening criminal justice in this country through research and development. The Symposia bring into direct contact the research and development community with the operational personnel of the law enforcement systems. The most recent accomplishments of "science and technology" in the area of criminal justice are presented to operational agencies - law enforcement, courts, and corrections - in a series of workshops and plenary sessions. The give and take of the workshops, followed by informal discussions between the more formal gatherings, provide the scholar and researcher with the all important response and criticism of the practitioner, while the latter has the opportunity to hear the analyst and the planner present the newest suggestions, trends and prospects for the future. In the case of the Fourth Symposium, these opportunities were amply utilized by over 900 participants from across the country.

The specific theme of the Fourth Symposium was "Crime Prevention and Deterrence." The content and the work of the Symposium must be seen against the immediate background of the activities of the National Advisory Commission on Criminal Justice Standards and Goals, which was appointed several months earlier and by the time of the Symposium was deeply involved in its mammoth task. Another major background factor was the National Conference on Corrections, held in Williamsburg shortly before. More generally, of course, the Symposium was one of many activities in the all-encompassing national effort to reduce crime embodied in the Omnibus Crime Control and Safe Streets Act of 1968, and the subsequently established Law Enforcement Assistance Administration.

A twelve-member Symposium committee made up of representatives of the Law Enforcement Assistance Administration and the Institute of Criminal Justice and Criminology of the University of Maryland was responsible for planning and arranging the Program. The program, extending over three days, was organized around three daily subthemes which were highlighted in morning plenary sessions. These
The first day was one of taking stock of recent accomplishments. Richard A. McGee, President of the American Justice Institute, reviewed the progress of the last five years, and Arthur J. Bilek, Chairman of the Illinois Law Enforcement Commission, addressed himself to criminal justice as a system, the progress made toward coordination, and the ills of a non-system. The six afternoon workshops of the first day dealt with recent accomplishments in prevention and deterrence of crime around residences, violence in correctional institutions, control of street crime, court delay, community involvement in crime prevention, and the reintegration of offenders into the community.

The subtheme of the second day was formulated as "The Management of Change - Putting Innovations to Work." This is a reference to the frequently noted fact that the findings of many research projects all too often do not result in operational implementation, in spite of the funds, energy and competence invested in them. New methods that are adopted often prematurely die on the vine, with the old routines winning out and continuing on as before. The objective of the Symposium sessions was to identify the obstacles to change and to explore ways of overcoming them. Thus two papers given in the morning plenary session by Robert B. Duncan of Northwestern University and John Gardiner of the National Institute of Law Enforcement and Criminal Justice dealt, respectively, with attitudinal and political obstacles to change. The five afternoon workshops developed this theme further by discussing the change process within specific law enforcement and correctional settings. From there attention shifted to the role that public service groups play in the process of change, the pilot cities experience, and the diversion of juvenile offenders from the criminal justice system.

The third day of the Symposium was turned over to the National Advisory Commission on Criminal Justice Standards and Goals. The daily subtheme was listed as "Future Priorities." More particularly, however, this was a series of progress reports on the all important activities of the Commission, presented by the Executive Director, Thomas J. Madden, and representatives of the Commission's four Operational Task Forces on standards and goals for police, the courts, corrections, and community crime prevention.

Finally, there was a presentation on the management of change within the eight "Impact Cities" - a major program of the Law Enforcement Assistance Administration - by Gerald P. Remer, Chairman of LEAA's Office of Inspection and Review.

By reproducing the contributed papers of the Symposium, the Proceedings admirably reflect the current intellectual climate of the criminal justice system in this country. It should be kept in mind that the majority of these papers present the results of research and demonstration projects - many of them experimental and exploratory - which have been funded by State and/or Federal agencies and private foundations. Thus these papers do not only reflect the opinions of their authors, but are also indicative of the total climate of action, thought, and quest for new solutions regarding the crime problem in this country.

No reproduction of the papers of a professional meeting can fully reflect the flavor and the total contribution of the event. The questions and remarks from the meeting floor, the discussions in the workshops, the remarks exchanged in the corridors, over meals, or in the rooms of the participants often represent the major accomplishment of such a gathering. New face-to-face contacts and awareness of things done by others - both individuals and agencies - is often the most important byproduct the participant takes home with him. This Symposium was rich in all of this. Close to one thousand persons from all over the country, representing all component elements of the criminal justice system mingled together for three days under the aegis of a major Federal effort to do something about crime and delinquency, which have risen to unprecedented prominence over the last decade. The Symposium provided the needed national forum for all those engaged in the crime prevention and control effort.

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CHANGING THE RHETORIC OF "PROFESSIONALISM"

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Introduction

For the past several years, one of the most over-used, abused, and misunderstood concepts in law enforcement has been the word "professionalism." Since the passage of the Omnibus Crime Control and Safe Streets Act of 1968, it has been the "in" thing in police circles to refer to any new gadget, program, regulation, policy, or procedural change as "professional innovation." Without qualification or evaluation of effect in most cases, such rhetoric has served to notify the public that much-needed changes in law enforcement were at last about to take place in the face of increasing incidents of crime. While the concept of "professionalism" has served to cover up a multitude of ills and unresolved problems of long-standing duration, it has also been used by police management as an unchallenged, simplistic explanation to subordinates who generally resist change and innovation in the police structure and routine.

"Innovation" and "professionalism" are the images being presented before the public while police departments, for the most part,
still function in an archaic and outmoded fashion, providing less and less service in an environment of increasing demands and decreasing budgets.

The major premise of this paper is that law enforcement, as practiced today, has not reached a performance level of true "professional" maturity in the strict sense of the word. No long-lasting innovation or change can take place unless and until this level is reached and is accepted by both law enforcement officers and the communities which they serve.

This is not going to be an easy task. James F. Ahern, the former chief of the New Haven, Connecticut, Police Department in his recent book, *Police in Trouble*, puts the matter in proper perspective, thus:

The only way to improve police service to the point where it will be fair and equal in law enforcement and sensitive to community values in order maintenance is to concentrate on the people who must do the job. This entails "professionalism", and it is highly controversial (Ahern, 1972, pp. 175-176).

The Meaning of "Profession"

One thing that appears to be lacking in police circles is a clear concept of just what a "profession" really is, particularly as it pertains to law enforcement. It is suggested here that a "profession" is service-oriented and has certain identifiable characteristics, among which are: (1) it contains a body of knowledge which is formally presented to candidates by members of the "profession"; (2) it requires successful completion of examination and licensing procedures by the candidate; (3) it contains a code of ethics to which all members subscribe; (4) it allows for sanctions to be imposed by the peer group if a member violates group norms. Such sanctions may well include dismissal from practice in the "profession"; and (5) it is suggested that members perform research to advance the "state of the art" and disseminate the results of such inquiry to the "profession".

Obstacles to Professionalism of Police

While this definition of "professionalism", or one similar to it may be accepted in theory by some progressive law enforcement agencies, it is not practiced, to the author's knowledge, in any police department today. Certain attitudes, traditional methods of operation, and "rites of passage" tend to block sustained efforts to reach the level of maturity implied in such a definition.

For example, recruitment to the law enforcement "profession" is not actively geared to attracting the best qualified candidates. With the exception of a few police departments, the college graduate, as a possible candidate, is not actively sought. If occasionally one does happen to "slip in", there is usually little incentive to develop and sustain a career interest in law enforcement. Yet, the pressures upon the police today are such that many varieties of skills and sensitivity are required to meet the conflicting demands of our society. Lateral entry of qualified civilians to specialized positions in fiscal affairs, crime laboratory, planning and research, education, and training are practically unheard except in some of the larger
departments. Yet, business and industry have long made use of this recruitment technique to enhance the service and productivity of their organizations. Such recruitment would have the effect of freeing the police officer from the clerical and technical jobs for which he may have little inclination or ability and allow him to return to his job of being a policeman.

Once the recruit has passed the entrance requirements, he enters the police academy where the "knowledge of the profession" is formally presented. Here the candidate is drilled in the fundamentals of "policing," much of which does little to prepare the potential policeman for the realistic situations that will soon confront him on the street.

What the policeman does on the street--what he does on the job--defines his role. That role, according to James Q. Wilson, is "... unlike any other occupation... one in which subprofessionals working alone, exercise wide discretion in matters of utmost importance in an environment that is apprehensive and sometimes hostile," (Wilson, 1970, pp. 29-30). Such a job description suggests that today's policeman is not selected and trained as a professional, but as some sort of semi-skilled para-professional. Ahern offers two alternative solutions to this disparity. "One is to narrow the police role to the point where it can be performed by a semi-skilled laborer. The other is to professionalize the police to the point where they can handle their jobs as they are presently constituted" (Ahern, 1972, p. 178).

Finally, the systems of reward and punishment as well as career development and promotional opportunity inherent in the police structure today tend to support the "semi-skilled laborer" concept rather than law enforcement as a "profession." No activity can achieve the status level of a true profession as long as these conditions continue to exist.

By way of summary, the first problem encountered in changing the rhetoric of "professionalism" to a meaningful working definition, therefore, lies with the police themselves--in their attitudes toward themselves, toward the job, and toward the people they must serve. The first innovation must be a changed attitude among law enforcement practitioners.

The second major problem area in changing the rhetoric of "professionalism" lies in the public's misconceptions and expectations of the police. Many segments of our society view with alarm the concept of "police professionalism." "Professional" law enforcement somehow conjures up an image of a potential police state in a democratic society. Much of this is based upon the myth that the police are primarily "crime fighters," that they are an "army" fighting "criminals." Nothing could be further from the truth than this misconception that the police "fight crime." A more realistic appraisal is that the police respond to crime, after the fact, and record the incident as historical data. Occasionally, the police apprehend a person who has committed a crime. This person is then arrested, but for the most part, the police are ill
prepared to prevent an act of criminal behavior; and, because they are responders to citizens' calls for service, the arrest constitutes an exception to the normal police function.

This leads to a crucial question of professional police service which, simply stated is: What do the police actually do? This question aroused the interest and curiosity of the author when he served as Director of the Planning and Research Division of the Baltimore Police Department. Consequently, a survey of over 700,000 calls for police service in Baltimore during the year 1970 was conducted with the following results:

<table>
<thead>
<tr>
<th>Type of Call</th>
<th>Per Cent of Total Calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index Crimes</td>
<td>10.7%</td>
</tr>
<tr>
<td>Other Crimes</td>
<td>8.4%</td>
</tr>
<tr>
<td>Other Calls including sick persons, dog bites, sanitation complaints and the like</td>
<td>63.0%</td>
</tr>
<tr>
<td>Accidents involving vehicles and/or pedestrians</td>
<td>5.0%</td>
</tr>
<tr>
<td>Duplicate Calls (more than one person calling to report same incident)</td>
<td>6.8%</td>
</tr>
<tr>
<td>Unfounded Calls (like a false alarm of fire, an officer had to respond)</td>
<td>6.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

This data tends to support an unverified assumption on the part of many law enforcement practitioners that the police do much more than "fight crime" or chase "criminals." If the "other calls" and "unfounded calls" are grouped into a single category, it is seen that approximately 70 percent of all calls for service were, at least, initially non-crime related. This phenomenon can be summed up by the statement of a citizen during an interview concerning the police function in a Negro community in Baltimore:

... anybody with a dime can get a policeman to come to his door for any reason (Wallach, 1970, p. 29).

It is suggested that the function of the police today and indeed, the expectation of the community itself, is one of assuming the responsibilities of other agencies which cannot respond to citizens needs on a 24-hour-everyday basis. Thus, with the "order maintenance function" as suggested by Wilson (1970) and performing the services of other agencies in their absence, one must conclude that the police have little time remaining to perform their traditional law enforcement duties. Such activities tend to detract from the crime prevention and deterrent function and force the police to act in a capacity and at a level which is less "professional" in the true sense of the word.

This perceived public image of the police as "errand boys" and "crime fighters" represents the second problem area in police "professionalism."

The final problem area of "professionalism" to be discussed here is a functional rather than a rhetorical one. It concerns the decision-making and discretionary aspects of law enforcement practice.

As indicated previously, police work is a unique and specialized kind of occupation. This uniqueness is highlighted by the fact that police must work within a bureaucratic framework of rules and
regulations promulgated by a centralized authority. Yet, in actual practice, the police officer on the job must act alone, making decisions and discretionary judgments which affect the lives of other people. In many instances, the officer's judgment and discretion in the line of duty may be in conflict with the rules of the bureaucracy. Even though his decision may not be final in each case, however, in all cases, the police officer is held accountable for his actions.

As Reiss points out:

A command organization threatens professional status because it expects men to follow orders regardless of their judgement. The professional ideal holds that orders are antithetical to the exercise of discretion. All bureaucracies, then, pose problems for the exercise of discretion (Reiss, 1971, p. 124).

Therefore, in actual practice, the police officer is being asked to act in a "professional" capacity in all of his direct actions with the public. At the same time, his autonomy as a "professional" is challenged by bureaucratic review and sanction.

Until such time as the needed changes in law enforcement agency and society take place, the police officer will continue to work as a "semi-skilled laborer" and not as a client-centered, service-oriented "professional."

Conclusion

Attention is now directed to those considerations needed to effect change in any law enforcement agency. Accordingly, it is suggested that:

1. Law enforcement agencies develop a posture of more "open" interaction with the communities they serve. In order to accomplish this, the police must seek to redefine their relationships toward the people they serve. A keenly sensitive awareness of the conflicting needs of various segments of society is essential to this effort. The police in the role of "mediator" or "referee" would even be conceivable in some instances of social interaction.

2. Intelligent recruitment and training toward the development of the "total police officer" should be initiated. Such a police officer should be trained not only to handle problems of "order maintenance," but problems of so-called white collar and organized crime as well. Today's police officer has no training in this area at all. The result is that Federal "task forces" must be called in to handle such cases.

3. Minimum performance standards should be established for all police officers. With some local orientation, an officer properly trained in the fundamental requirements should be able to transfer to other geographical locations and jurisdictions. Lateral entry, particularly in specialized areas using civilian personnel in non-enforcement areas of police work, should become a part of this effort.

4. Law enforcement agencies should develop a capacity for referral to other departments, agencies, or services for those cases which do not pertain directly to law enforcement. Such procedures should result in more concentrated efforts toward providing better police service to the community.

5. Law enforcement needs to develop better methods of evaluating its present activities and disseminating this information to others in the profession. A national clearing house for such information should be established at the Federal level to accomplish this task. Such an effort would serve to prevent duplication of effort nationwide, wasting of scarce funds, and unwise police management decisions. It would serve to provide continuity in the "state of the art" of law enforcement nationwide, thereby
allowing even the smallest department to benefit from the mistakes and accomplishments of others.

Resolving these dilemmas surrounding the "rhetoric of professionalism" may well be the law enforcement challenge of the seventies. Without their resolution, no change will take place.

**BIBLIOGRAPHY**


Introduction

In counties with highly fragmented responsibility for public safety, consolidation of communications facilities can provide significant operational advantages. Recent studies conducted by the University of Denver Research Institute (DRI) indicate that savings of up to forty percent of present communications operating costs can accompany consolidation. Yet, in spite of both the operational and cost advantages, progress towards public safety communications consolidation has been slow across the country.

Political factors appear to be more significant than technical factors in bringing about public safety communications consolidation. Not only must political factors be considered in a consolidation study, but also the factors should affect the study design itself. The Major political factors may be generally categorized as legal, inter-city, intra-city, inter-agency, inter-service and metropolitan factors. DRI's experience with these factors as they affect consolidation of public safety services is presented in the hope that it will be helpful to analysts and law enforcement personnel engaged in similar consolidation efforts.

Brief Review of the Studies

During 1971 and 1972, DRI conducted studies of public safety communications within three of the five counties comprising the Denver, Colorado Metropolitan area. The studies were performed at the request of police agencies within Jefferson, Boulder, and Adams counties under planning grants to the University of Denver from the Region Three Planning Council, Colorado Division of Criminal Justice. The demographic characteristics of the counties are summarized in the appendix.

The studies in all three counties encompassed a review of dispatching and complaint-taking activities, records, and the possibility of implementing a 911 emergency reporting system. The technical analysis included a survey of dispatch and complaint-taking activities for police and fire agencies, review of all current and planned facilities and equipment, review and projections of population and crime rate activities, an analysis of the frequency of interaction in radio and records communication between agencies within the county, and consideration of all related criminal justice communications and records systems activities within the metropolitan area.
Jefferson County has nine law enforcement agencies and nineteen fire districts or fire departments. Within Boulder County, there are eight law enforcement agencies and sixteen fire districts or fire departments. There are eight law enforcement agencies and fifteen fire districts or fire departments in Adams County. At the start of each study, a Public Safety Communications Council, composed of police and fire representatives, was established in each county to monitor the study.

Studies performed in the three counties were based primarily on detailed fifteen-page questionnaires completed by all public safety agencies within the county. These questionnaires were supplemented by regular meetings of the DRI research team with representatives of the agencies and by field observation of operations. The data gathered from these activities were analyzed for such items as channel loading, staffing, and call volume per capita. Planned equipment expenditures were analyzed and totaled for the county. Representatives of Mountain States Telephone Company assisted in review of 911 feasibility in each of the counties; and in Boulder and Adams Counties, radio frequency signal surveys were conducted by the National Bureau of Standards and DRI.

Through regular meetings with public safety representatives and occasional meetings with civic representatives, a number of alternatives were examined during the course of the studies. At the conclusion of each of the studies, several of the most feasible alternatives were presented in detail by DRI with estimated costs of implementation provided. These alternatives ranged from a maintenance of the status quo to the development of a single wholly integrated communications center within each of the counties.

The present status in Adams County consists of active development of detailed plans for a single dispatch center and a limited consolidated records center within the county. Preliminary plans for the communications facility are being developed; detailed cost estimates are being prepared; and during the summer of 1972, the various jurisdictions involved will be asked to participate in requesting a grant for the implementation of the center. In Boulder County, plans are progressing somewhat slowly for development of a primary center located in Boulder and two satellite centers in Broomfield and Longmont. No significant change in present operations appears to be occurring in Jefferson County with the possible exception of installation of a 911 emergency reporting center.

**Political Factors**

A number of political factors operating within each county influenced selection of alternative plans of action. In fact, these factors also shaped the conduct of the feasibility studies themselves. The factors may be grouped generally in six categories. They are:

- **legal**
- **inter-city**
- **intra-city**
- **inter-agency**
These factors and how they influenced consolidation plans in each of the counties are discussed in the remainder of this paper.

Legal Factors

During the time period over which the studies were conducted, important legislation was passed affecting consolidation of public safety services. The result of new legislation has resulted in a more favorable legal situation for consolidation in 1972 than existed in 1971 when the studies were initiated.

Recent political history in Jefferson County is of interest. In 1969, the cities of Lakewood (1970 population-92,800) and Wheatridge (1970 population-29,800) were incorporated. At the time of incorporation, contracting with the sheriff’s office for law enforcement services was considered, particularly by Wheatridge. However, although the state constitution allowed cities to contract with other cities for services, in the opinion of the State’s Attorney General it did not allow cities to contract for services with the county. At least partially, this legal situation resulted in the formation of two new police departments within the county.

Problems encountered in the study indicate that this recent fragmentation of police services, with strong new organizational identities being formed, has negatively affected the chances for consolidation of public safety services in Jefferson County.

Legislation recently passed might have forestalled a situation such as existed in Jefferson County. Colorado Senate Bill 175, passed in 1971, allows any “county, city and county, city, town, service authority, school district, local improvement district, law enforcement authority . . . or any kind of municipal, quasi-municipal, or public corporation organized pursuant to law” to “cooperate or contract with one another to provide any function, service, or facility lawfully authorized to each of the cooperating or contracting units including the sharing of costs, the imposition of taxes, or the incurring of debt.” In addition, a 1971 amendment to the Colorado law enforcement authority statute provides legal authority for contractual relationships between cities and counties for the provision of “law enforcement including the enforcement of municipal ordinances by the sheriff within the boundaries of the municipality.”

Although not yet directly including law enforcement agencies, perhaps even greater impetus to consideration of consolidation has been provided by a recent state constitutional amendment which allows the formation of “regional service authorities” to meet government needs on a regional basis. Although the present regional service authority, which would encompass the Denver metropolitan area, does not include law enforcement functions, such functions could be added in the future. In addition to this being a possible way to achieve consolidation, the threat of an overall regional service authority encompassing many counties has seemed to spur consideration...
of consolidation and improvement of services within counties by public safety agencies. It does appear that during the Boulder and Adams County studies, performed after passage of the new legislation, the general atmosphere for consideration of consolidation within a county had improved.

This brief review of some of the legal constraints affecting consolidation of police services (1) illustrates the effects such constraints can have on motivations for consolidation. Until late 1971, consolidation was considered by most agencies to be a foreign concept and acceptability of plans suggesting such consolidations was quite low. By 1972, the activity within the state in many different government areas pointed to increasing consolidation of services and extensive publicity had pointed up many inefficiencies of fragmented services. In essence, there now seems to be some impetus among public safety agencies and civic officials to "put our house in order" before the frustration of their constituents leads to consolidations of multi-county scope with the accompanying lack of influence of individual agencies on the shape of such a broad consolidation. It can be argued that consolidation within counties rather than on a metropolitan basis is a form of suboptimization. This point is discussed later in the paper under "metropolitan factors."

Inter-city Factors

The history of relationships between cities within a county has significant effect on the possibilities of consolidation. For example, the formation of the cities of Lakewood and Wheatridge, which adjoin each other, was accompanied by some political friction between leaders within each of the communities. Before incorporation of the cities, it was considered that both areas might unite to form a single city, but different governing philosophies, along with other factors, resulted in the formation of two cities. In the course of our study, it never appeared feasible to effect a consolidation of Wheatridge and Lakewood communications and records facilities except within the broad context of a single overall county center, primarily because of the recent political history involving the two cities.

In another case, in Adams County, the city of Westminster has been pursuing an active annexation policy. Although this has never explicitly figured in our communications studies, except for the fact that some of Westminster's annexation has been in adjoining Jefferson County, it is at the very least a factor which any analyst must be aware of in working with affected cities. Similar inter-city disputes over concerns such as water, freeway routing, and schools must also be considered.

In a somewhat different context, the geographic separation of the cities of Longmont, Boulder, and Broomfield in Boulder County necessitated consideration of the three center, a main center and two satellites, concept in addition to an overall county unification. The agencies involved enthusiastically received the three center concept, but there was no significant favorable response to overall consolidation. The fact is that geographic separation between the
cities has resulted in a much lower level of inter-agency interaction than is found in the more closely grouped cities in Adams and Jefferson Counties. Although efficiencies in operation favored a single center, the separation of the three areas and their varied demographic makeup resulted in little perception by the cities of the need for total consolidation.

**Intra-city Factors**

In analyzing any consolidation of police functions, it should be remembered that the final decision rests with the city councils, city managers, mayors, and county officials. Therefore, even if a police chief may indicate that the city manager is "not interested in the study" or "will leave any decision up to me," there should be at the very least some general meetings involving civic officials. By holding general meetings of city officials rather than individual meetings, subordinate members of the police force will not be placed in the position of going directly against the chief's wishes if he does not want you to communicate with the city officials.

It is possible to go too far in early involvement of city officials in such a study. Although the officials should be apprised of the nature and scope of the study at its initiation, they will have little upon which to make a decision until some general outline of plan and costs has been developed. Because of lack of detail, such things as inter-city factors then may lead to premature rejection of the concept by city officials. Another intra-city factor, which is also an inter-service factor—the relationship between city police and fire departments—also must be considered.

**Inter-agency Factors**

One generalization in terms of inter-agency factors is that city agencies seemed initially to suspect that any consolidation was a "power play" by the sheriff's office. Immediate confrontation of this concern and development of mechanisms to assure that the sheriff's office was clearly not the only one involved is important to the success of a study.

Another factor to be considered is the matter of prestige. Some law enforcement agencies may pride themselves on extensive training of their personnel or high educational requirements and may, therefore, consider other agencies not suitable partners for any sort of close joint venture. Analysts performing any consolidation study, however, must be sure to contact all law enforcement agencies at the initiation of the study, because waiting until far into the analysis before contacting the small agencies will almost insure their non-cooperation.

Another factor besides personnel affecting prestige seems to be equipment. We have found in our studies that the agencies who were a bit faster on the draw in getting federal grants for communications equipment are the least interested in any form of consolidation. This seems to be because they are now in possession of an adequate and possibly prestigious set of equipment for their communication needs. Establishment of a joint center accompanied by moving that beautiful console and map with flashing lights out of their department causes more pain than in those departments that are getting by with
well-worn desk top consoles. For a department with a very limited center, being partners in a new and sophisticated communications center will appear to be a step up in prestige, whereas departments with new equipment now tend to view the unified center as a step down. However, this is not always the case. There are departments who have had their new equipment long enough to realize that it has not solved some of their major communications ills; and therefore, are quite ready to listen to alternative forms of communications operations. Although incapable of being factored into an operations model, prestige concerns are basic motivating factors and must be considered in a consolidation study.

Inter-service Factors

In all three studies, fire districts were involved from the beginning of the study. In the three counties involved, the fire districts consisted of a mixture of volunteer and paid departments.

Many of these fire districts have been or are being dispatched by police agencies. Often, the districts will have a long list of grievances because of failures by police agencies to extend supportive services. Generally, though, the reaction of the fire districts has been that some form of consolidation should result in better service than they are now receiving from an individual agency. We have found in all three counties that the fire districts are much less resistant to consolidation than are police agencies. Their low frequency of use of radio communications makes it much easier for them to see the economies that can be realized through consolidation, and the absence of a fire counterpart to LEAA funds seems to result in their watching expenditures more closely.

Care must be taken throughout the study to give fire districts ample representation, and the analyst should be sensitive to their special communications needs. Although they don't use the radio channels as extensively as law enforcement agencies, the overwhelming majority of their usage is connected with emergencies as opposed to the frequent, more routine transmissions of police agencies. Fire agencies also have very special records needs, and in consideration of any records consolidation, these needs should be taken into account. For example, a major improvement in fire service available through consolidation would be computer retrievable records for each address in a county which would list the type of structure at each address, the location of the nearest water source, hazardous materials stored at that location, and other factors of value to the fire service. Police may not see much need for such capability, but proper attention to specialized service needs is important if public safety integration is to be achieved.

Finally, we have found that early involvement of representatives of civil defense and other related services such as ambulances, hospitals, and public works was of value. Although these representatives need not be involved as deeply as police and fire, they should be involved early and should be informed at frequent intervals of the progress of the study.
Metropolitan Factors

Any consolidation study within a county which is part of a metropolitan area must be conducted with knowledge of other related activities within the metropolitan area. Because DRI was involved in all three county studies, this problem was simplified. Major metropolitan factors considered included the computer-based Colorado Crime Information Center (CCIC), the statewide emergency radio network, the present and projected communications and records operations of the Denver Police Department, and the telephone company plans for new telephone offices and switching equipment.

The CCIC system resulted in the need for a limited central records system within each county. Even with the introduction of a 911 system and police and fire communications within Denver, the systems are still not consolidates, and the 911 operator acts only as a relay point. The conservative approach of the Denver Police Department to any consolidation of communication functions indicate that immediate needs will have to be met by something less than a metropolitan center. The slow introduction of electronic switching by the telephone company indicated that a relatively unsophisticated 911 system was all that could be implemented in the next few years.

The question may be raised as to why these studies were performed on a county basis rather than a single metropolitan-wide review. This is a limitation of the studies and results from the nature of our grant which allows us to provide services on request to agencies in the metropolitan area. As the requests for studies came in, none of the agencies expressed interest in a metropolitan-wide study of communications needs, although initially such a study had been proposed by DRI. Judging from regional activities in other areas of civic services in Denver and the immediate communications needs of the counties in which these studies were performed, consolidation within the counties should be at the very least a feasible interim solution.

These comments should not be construed to imply that the overall regional consolidation in fact would be an optimum solution. Experience in the three counties emphasized the great diversity between counties. When you consolidate from units of population of 20,000-50,000 into units of 200,000 for a communications center, it is not at all clear that further efficiencies in operation and economies of scale would come from a single communications center serving a population of one million. It is quite possible that the diversity and close agency involvement and identification provided by several county centers, formed eventually into a multi-county network, may represent an effective compromise between those who want local control and those who believe that bigger is better.

Conclusions

The political factors affecting criminal justice consolidation are many. Even in these three case studies limited to consideration of communications, records, and emergency telephone services the effect of these factors was crucial to the outcomes within each of
the three counties. The systems analyst should not concern himself only with technical parameters of performance; he must also learn what the factors are within each of the categories identified above within the area he is studying. Careful attention to these factors not only in the consideration of alternatives, but also in the design of the study itself, must take place. Ignoring these factors in setting up items of the study such as the nature of the directing board for the study, advisory committees, frequencies of meetings with the public or civic officials, and the manner of selecting feasible alternatives from among the multiplicity always available can result in a fruitless academic exercise irrespective of the analyst's technical proficiency.
This review is based on an analysis by the Colorado Division of Criminal Justice of legal constraints affecting provision of law enforcement services in Colorado.

The locations of the three counties studied are shown in Figure 1. All three counties are experiencing rapid growth as part of the general expansion of the Denver metropolitan area. Population, income, and geographic data are presented in Table 1.

Jefferson County is the most densely populated of the three with its population heavily concentrated in the northeast part of the county adjacent to Denver. The western and southern portions of the county are mountainous with some relatively dense population growth occurring in the foothills directly west of Denver.

Boulder County has three major, clearly defined population centers. Approximately in the center of the county is the city of Boulder, which is also the home of the University of Colorado. The Broomfield area in the southeast corner of the county is experiencing rapid growth because of its proximity to Denver. The third major population center within the county is centered around the city of Longmont in the northeast part of the county. Large, rural, open areas presently separate these three population centers. The western part of the county is mountainous.

Adams County has the greatest demographic diversity of any of the three counties. At the western end of the county just north of Denver are located several rapidly growing suburban cities. The rural areas of the county stretch seventy-eight miles to the east.
Table 1 - Selected Characteristics of the Counties

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<td>750</td>
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<td>$3688</td>
<td>$3800</td>
<td>785</td>
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THE CLIMATE FOR CHANGE IN THREE POLICE DEPARTMENTS: SOME IMPLICATIONS FOR ACTION (1)

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Introduction

There is increasing pressure for changes in police organizations, and these pressures come from a variety of sources. The Task Force Report on the Police (2) identified a variety of ways that police organizations could and, in fact, should change. Funding agencies such as the Law Enforcement Assistance Association and the Police Foundation have been established to provide funds that hopefully will make available the resources to facilitate some changes. There are pressures for change from the community with respect to how police departments operate. Finally, there are pressures for change from both the rank and file as well as the command staff within police organizations.

However, there has been little systematic investigation of the change process itself. If changes and innovations are going to be integrated into police organizations, it is important to determine departmental personnel's perception of the change process (Campbell and Converse, 1972). What are their attitudes toward change?
Are they open to change? Do they feel changes are needed? Also, if there are differences between the rank and file and command staff with respect to this climate for change, the change progress could become more difficult. For example, if the command staff is more open to change than the rank and file, the first major task for the command staff before actually attempting change may be to try to reduce rank and file's resistance to change (Bennis, et al, 1969).

The preliminary research reported here will focus on the following areas: (1) the climate for change in three police departments will be discussed; (2) differences in climate for change identified in different levels in the departments will be discussed; (3) the implications of these findings for police practitioners will be discussed.

Nature of the Sample

The selection of departments for this study was something less than scientific. It was based mainly upon the department's willingness to allow researchers to come in and interview and then administer a follow-up questionnaire. The main resource we had in gaining access to the departments was James Slavin, Director of the Traffic Institute, Northwestern University. His contacts and assistance made this study possible.

Questionnaire data was collected from a total of 162 sworn personnel from the rank of patrolman to chief in three police departments. College City is a midwestern city of approximately 80,000 population with a police department of 131 sworn personnel. A stratified sample of 62 sworn personnel filled out and returned questionnaires from this department. Suburban City is a western metropolitan community of approximately 102,000 population adjoining a medium sized urban area. This community was just incorporated in 1970, and the police department became operational in May of 1970. Suburban City has police force of 72 sworn personnel. A stratified sample of 58 sworn personnel filled out and returned questionnaires from this department. Capital City is a capital of a midwestern state and has a population of 131,500 and a police department of 242 sworn personnel. A stratified sample of 42 sworn personnel filled out and returned questionnaires.

Climate for Change Defined

The notion of "climate for change" was developed by this author for the present research. The climate for change is defined as the perception of departmental personnel along four different dimensions.

Table 1 presents the four different dimensions of the climate for change scale with representative questionnaire items. The four dimensions are defined below.

The Four Different Dimensions of Climate for Change for the Total Sample

1. Need for Change

This dimension focuses on the perception by departmental personnel as to the need for change. This dimension focuses on such issues as whether personnel feel the department is keeping up with the demands of society, whether past practices are...
effective in dealing with new situations when they arise, etc.

2. Openness to Change

This dimension focuses on the perception by the departmental personnel as to the openness or willingness of the department to change. The specific issues here are whether personnel feel that an important characteristic of an effective department is that it is willing to consider changing how it operates, whether personnel are skeptical about change, or whether they feel changes improve how the department functions.

3. Potential for Change

This dimension focuses on the perception by departmental personnel that the department has the capacity for dealing with change. The specific issues here are whether departmental personnel feel the department has been successful in the past in change attempts; whether there is a commitment to change in the department; whether personnel are resistant to change or not, etc.

4. Participation in Change Efforts

This dimension focuses on the perception by departmental personnel as to the amount of involvement there is by departmental personnel at all levels in planning for change. Specifically, this dimension focuses on whether personnel feel they have some influence on the changes that are made and are consulted by the command staff regarding these change efforts.

Relationships Between the Four Climate for Change Dimensions

Once we have looked at these dimensions of need for change, willingness to change, potential for change, and participation in change, the next important question becomes, what is the relationship or correlation between these four dimensions of climate for change?

Table 2 presents the intercorrelations between these four dimensions.

The data presented in Table 2 presents some very interesting results. Table 2 indicates that there is a fairly strong degree of association among the four different dimensions of climate for change. Specifically and probably the most important result in Table 2 is that the dimension of need for change is negatively associated with openness to change (r = -.26, p < .01), potential for change (r = -.57, p < .01), and participation in change (r = -.44, p < .01). What this means is that the greater the need for change as perceived by departmental personnel, the less departmental personnel perceived there to be an openness to change, a potential for change, and participation of noncommand staff in change decisions and attempts. (The reverse also holds, i.e., the greater the perceived openness to change, potential for change, and participation in change, the lower the perceived need for change.)

These results have some very important implications for change in, at least, the three police departments in this study. They are saying that the more departmental personnel perceive that there is a need for their department to change to meet the increased demands of society, etc., the less do they perceive that their department is really able to deal with change. Departmental personnel are potentially less able to deal with change in that they perceived that their department is less open to change; there is more skepticism about the success of change efforts, they feel that a characteristic of effective departments is that they are willing to change,
As a result, departmental personnel may be somewhat less likely to try to change. They may also be potentially less able to deal with change, because they feel that their department has less potential for change; they feel that they have not been successful in the past in change attempts; they feel that there is not much commitment to change within the department; and they feel that personnel in the department are resistant to change. Again, the result of this feeling may be that they may be less likely to attempt change or be able to work through the difficulties such as resistance that often accompany attempts to implement change. Finally, personnel may be less able to deal with change because departmental personnel indicate that, as the need for change increases, there is less participation by noncommand staff in change attempts. Involving more noncommand personnel by getting their suggestions or thoughts about a potential change is likely to make them feel more involved in the change process. By feeling more involved in the change process, they are likely to be less resistant to the change and are likely to feel more committed to working through the difficulties of implementing the change. For example, research on implementing change by Marrow, et al (1967) has indicated that the more organizational members are involved in the change process, the stronger their commitment to implementing the change (Kiesler, 1971).

The data in Table 2 also indicates that the openness to change, potential for change, and participation in change dimensions are all positively associated with one another. This means that the higher the openness to change as perceived by departmental personnel, the greater did they feel there was a potential for change and the greater did they feel that there was participation in change in their departments.

We have now discussed the relationship among the four dimensions of climate for change. The next question we will focus on is to see what differences there might be in perceptions on these climate for change dimensions at different organizational levels in the departments.

Differences Across Organizational Levels in Perceptions of Climate for Change

We were interested in finding out if there were differences in perceptions at different organizational levels as this would have some possible implications for change. If there were differences across organizational levels in the perception of climate for change, it may be somewhat more difficult to implement change as there would be disagreements as to the climate for change that existed in the department.

In this analysis, three different organizational levels were defined:

- **Level I** = Patrolmen and Detectives \( (N = 108) \)
- **Level II** = Sergeants only \( (N = 25) \)
- **Level III** = Lieutenants and above \( (N = 29) \)

Table 3 presents the mean scores on climate for change dimensions for each level. A simple analysis of variance was run across these
organizational levels for each of the four dimensions of climate for change. There were significant differences across the three organizational levels on only the openness to change ($F = 4.52$, $P < .01$) and participation in change ($F = 19.99$, $p < .001$) scales.

Multiple comparisons of the means for each of the three organizational levels were then performed for the openness to change scale (Table 4) and participation in change scale (Table 5).

From Table 4 it can be seen that personnel at Level III, lieutenants and above, indicated that they perceived the police department to be significantly more open to change than did patrolmen (Level I) ($p < .01$) and sergeants (Level II) ($p < .015$). One explanation of this result is that personnel of Level III in the police department are somewhat removed from "the street" and day-to-day contact with the community. Thus, they may be initially less affected by the change than sergeants and patrolmen. Therefore, they might not perceive some of the problems that could arise in implementing a change that patrolmen and sergeants might anticipate.

This finding also is important in that it may indicate that there is more potential resistance to change at the lower levels of the police department. Thus, even though command staff personnel are open to change, there still may be problems in achieving any significant change until some openness to change develops in the lower levels in the department.

Table 5 also indicates a significant difference in perceptions between command staff personnel—lieutenants and above (Level III) and patrolmen (Level I) and sergeants (Level II). Command staff personnel perceived significantly more participation in change decision by department personnel than did patrolmen (Level I) ($p < .100$) or sergeants (Level II) ($p < .001$). It may be that this feeling of little participation in change decisions explains, at least in part, why lower level personnel are less open to change. They feel they have little say in how these changes are going to affect them or are going to be implemented; thus, they are more reluctant to accept them.

Implications for Police Practitioners

The findings presented here seem to have several important implications for the police administrator. The negative relationship between the need for change and openness to change, potential for change and participation in change indicates that perhaps attitudes toward the change process may need to be changed before any actual change or innovation is attempted. It may be necessary to do a preliminary diagnosis of the department to identify peoples' attitudes toward the change process—what kind of climate for change exists in the department. The results of this diagnosis could then be used in several ways. First, if there were a very negative climate for change, i.e., little need for change, openness to change, etc., it would be important for the change agents first to try to create some more favorable attitudes toward
the change process—the kind of climate for change exists in the department. Without these attitudes, it may be more difficult to get people to accept the change or innovations that are proposed.

Secondly, if the diagnosis of the climate for change indicated that command staff was more open to change than the rank and file, the command staff could take some corrective action rather than assuming that the rank and file viewed the change process the same as they did. For example, they could try to identify the sources of resistance to the change and then attempt to provide the rank and file with some information that might reduce this resistance. The command staff might also potentially reduce resistance to change by involving the rank and file in the design of the change program. Being involved in the design of the change program is likely to give the rank and file a greater sense of control for what is happening to them and thus could reduce resistance.

The major implication here then seems to be that the police administrator needs to become a manager of change. He needs to learn more about the process of change, the type of change agent to use, and how to deal with resistance to change.

NOTES

1. This research was supported by a grant from the Illinois Law Enforcement Commission to the Graduate School of Management, Northwestern University. The assistance of Dr. John Bailey, Director of the Transportation Center, Northwestern University, and Mr. James Slavin, Director of the Traffic Institute, Northwestern University, in gaining access to the three departments in this study is deeply appreciated. The author is also indebted to the research assistance of John Likes in both the data collection and data analysis stages. Professor Harvey Juris also made some helpful comments.

BIBLIOGRAPHY


Table 1

<table>
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<tr>
<th>Response Categories</th>
<th>1 means</th>
<th>2 means</th>
<th>3 means</th>
<th>4 means</th>
<th>5 means</th>
<th>6 means</th>
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<tbody>
<tr>
<td>Need for Change</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Mildly Agree</td>
<td>Mildly Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
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<td>Openness to Change</td>
<td>Sometimes</td>
<td>Important</td>
<td>An important characteristic</td>
<td>it is always willing to change how it operates</td>
<td></td>
<td></td>
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<tr>
<td>Potential for Change</td>
<td>There is a strong commitment</td>
<td>Attempts to change how this Department operates don't have much effect on the Department's actual operation</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Participation in Dealing with Change</td>
<td>The command in this Department is open to suggestions for change</td>
<td>I feel that I don't have any influence on how changes are made in this Department</td>
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Table 2

Intercorrelations among Four Dimensions of Climate for Change for the Three Departments

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tbody>
<tr>
<td>I. Need for Change</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>II. Openness to Change</td>
<td>-.26*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Potential for Change</td>
<td>-.57* .36*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Participation in Change</td>
<td>-.64* .60* .54*</td>
<td></td>
<td></td>
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</table>

* p < .01

Table 3

Mean Level of Four Climate for Change Dimensions Perceived at Levels I, II, III

<table>
<thead>
<tr>
<th>Level</th>
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<th>II</th>
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<th>IV</th>
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<tbody>
<tr>
<td>Patrolmen</td>
<td>3.6</td>
<td>3.4</td>
<td>3.2</td>
<td>4.4</td>
</tr>
<tr>
<td>Sergeants</td>
<td>3.6</td>
<td>3.7</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Lieutenants and above</td>
<td>3.0</td>
<td>3.2</td>
<td>4.4</td>
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Table 4

Multiple Comparisons of Cell Means of Openness to Change Scale by Organizational Rank

<table>
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<th>Levels Compared</th>
<th>Difference Between Levels</th>
<th>Critical Difference for t 158 degrees of freedom</th>
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</thead>
<tbody>
<tr>
<td>I &amp; II</td>
<td>.184</td>
<td>NS</td>
</tr>
<tr>
<td>I &amp; III</td>
<td>.552</td>
<td>p &lt; .01</td>
</tr>
<tr>
<td>II &amp; III</td>
<td>.366</td>
<td>p &lt; .05</td>
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</table>

Table 5

Multiple Comparisons of Cell Means of Participation in Change Scale by Organizational Rank

<table>
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<th>Levels Compared</th>
<th>Difference Between Levels</th>
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<td>I &amp; II</td>
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<td>NS</td>
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<tr>
<td>I &amp; III</td>
<td>1.481</td>
<td>P &lt; .001</td>
</tr>
<tr>
<td>II &amp; III</td>
<td>1.214</td>
<td>P &lt; .001</td>
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The transformation of innovation into operational reality first encounters the obstacle of validity. What is a successful demonstration? Possibly no demonstration is successful in any ultimate sense in the criminal justice field. Or, to put it another way, no panacea has been discovered. This means that there are arguments against most of the changes we want to adopt, especially if they have been objectively tested. This is the major obstacle of promoting change, and many worthwhile ideas have died in the face of this. The national adoption of the Manhattan Bail Project is a prime example.

A second obstacle is the cost benefit factor. Nothing motivates legislators to adopt changes more than the promise of dollar savings. The fact that many innovations, if adopted, would, might, or could substantially increase costs or appear as though they might, can serve as a giant obstacle to change.

A third obstacle is disagreement on the objective which the innovation purports to achieve. On issues ranging from "coddling-criminal-type reforms" and methadone to bail or preventive detention, the decision-makers are split into liberals, moderates, and conservatives. This is related to the validity and integrity issues mentioned previously. This disagreement among the decision-makers brings into sharp focus such conundrums as security vs. openness, police effectiveness vs. human relations, institutionalized rehabilitation vs. community residence. It doesn't help to contend that one or the other antagonist is enlightened, for the evidence supports neither. Just to sight a few, I list the following:

- Educational level for ideal police officer
- Automobile patrol vs. foot patrol
- Civilian police review boards
- Assignment of police to areas of residence
- Guns vs. no guns

Public opinion can be a major obstacle to change. Its persuasive influence can support or intimidate police and other key officials. Both reformers and office holders use techniques of persuasion, such as public relations and public education devices to enhance their positions.

The ambiguities of preemption, especially among government agencies and levels of government, can also be a problem. A program, perhaps an unfunded one, is announced in Washington, D. C.; and states and cities hold up on their own plans often ignoring a master plan. Government agencies do the same at all levels, and it is a special type of "one upsmanship."

Jurisdictional ineffectiveness not only promotes inefficiency but also hampers reforms that require size and major expenditures. Similarly, size can contribute to polarization if the community is not
tied into the system. Consolidation of responsibility and decentralization of accountability are suggested, but they would be innovations.

Overcoming Obstacles to Change

The pride and ambition of the key officials in local government are the strong positive factors. Even where it appears that such persons are not professional in a formal training sense, e.g. where the person is a political appointee or the beneficiary of a seniority system, the desire to overcome shortcomings is often used to compensate for lack of complete professionalism.

1. Most office holders recognize that changes are essential. Those in government and private philanthropy who seek to stimulate or induce innovative thinking will find a warm reception for the most part.

2. Despite the fact that city hall has appointive power, a common alliance often occurs with the police department.

Competition for limited funds is a strong incentive for innovations. There is a "bargain sale" mentality involved, resembling the department store sale where garments are piled in disheveled array on counters to attract bargain hunters. The availability of block grant funds, thus, induces officials and communities to apply and in the process to stretch their own creative powers.

1. Quality control is almost impossible in the competitive format. The goal and victory are the winning of the funds and not whether the project is significant. The fund dispenser, more than usual, awards the best applications in a mediocre field.

2. The competitive format also attracts the greatest external pressures applied to the giving agency.

3. The competitive format, for these reasons and others, gives the lowest yield of significant innovations and experiments per dollar spent.

Negotiation and compromise will frequently permit an otherwise blocked project to continue.

1. The semantics of project goals are frequently irrelevant to the launching and execution of a well-designed project. Frequently a police project, e.g. civilian female receptionist aides in police precinct headquarters, will be perceived by the police for one purpose, improving community relations, and by the community for another, curbing abuse in the headquarters. Insistence by either that the other endorse his purpose can defeat the project.

2. Politicians are more likely to be supportive and, if need be, politically courageous when they are consulted or involved in a meaningful way. This opportunity arises when:
   a. Political clearance is required because of the police official's established working relationship.
   b. Local funding commitments are necessary.
   c. The length of the project requires it to be protected from drastic shifts in policy and leadership.

3. Preliminary studies and planning in a variety of ways can open doors for experiments and innovations otherwise blocked. This if no different from other types of government projects.
1. Distinguished experts or citizens committees make recommendations following study.

b. Existing recommendation, e.g. President's Commission on Violence, are adopted for action.

4. Law suits to compel action, e.g. attacking police tests, can offer opportunities for compromise settlements out of court.

Intermediary change agents, as perceived by a funding source, can often be used to advantage when their credibility is generally accepted. Hence, an application from a national police organization such as the International Association of Chiefs of Police (IACP), or a regional one such as the Southern Police Institute, or a local university may open doors otherwise closed. In an effort to carry this one step further, the Ford Foundation has created the Police Foundation as an independent $30 million organization designed to assist police departments to improve themselves. We hope that the Police Foundation will establish its identity and expertise with police and serve them better than the Ford Foundation could with comparable sums.

Creating an Environment for Change

The President's Crime Commission was a force for enlightened constructive change and as such strongly influences private and public attitudes toward reform. On the other hand, demonstrations by minority groups anti-war forces, and crime statistics, while occasionally stimulating constructive reform, have encouraged crackdowns and recommendations of repression, at least verbally. If I thought these opposed positions irreconcilable, then attending this conference would be futile. I do believe that most rational men can reach agreement on what to do about crime problems. Most of the mistakes made result from unilateral actions in the political arena.

The police are in an excellent position to assess certain phenomena of our criminal justice system. It appears from police spokesmen that the rank and file majority believe that stiff sentences should prevail. There are many judges who believe in giving the police what they want. But, what is the policemen's response to the fact that blacks are in prison in much larger numbers than their percentage of the population. In one southwestern state where blacks are 3 percent of the population, they are 40 percent of the prison population. In New York, blacks charge that whites are diverted after arrest through police discretion, plea bargaining, and probation with mostly Puerto Rican and blacks staying the route to prison. No evaluation of the facts would be more interesting or valid than that of the police.

Perhaps there are better illustrations, but the point is that police can help enormously to change the atmosphere by objectively assessing the criminal justice system. The defensive and hostile positions taken by police traditionally may not serve their purpose well. An experiment the other way could be revealing.

The community, especially in the inner city, may be experiencing a slow evolution towards support for crime fighting. The inner-city population must change its own atmosphere and communicate this concern.
more effectively to the larger community.

Political leadership, mass media, crime statistics and other factors affecting criminal justice can be honest and supportive of constructive change or honest and/or negative change.

The Role of Public Service Groups

Public service groups are most visible and successful when they undertake a certain mission which supplements the efforts of a criminal justice agency. This involves more than the use of private resources to accomplish criminal justice system ends, for the latter purpose could be met by providing earmarked funds to the appropriate criminal justice agency. Outsiders and experts from other walks on project staffs and studies add important and obvious dimensions.

They have the requisite flexibility to deal with the obstacles and to demand that certain ones be removed as their price of doing business. Those that cannot are doomed to failure, in my opinion.

They can establish credibility with the broad community. Critical studies, controversial positions, support for the agency, demands for funds, responsibility for demonstration failures are a few of the many ways that private service groups can serve.

Examples of Public Service Groups associated with the Ford Foundation, as well as with many other funding sources, including LEAA are as follows:

1. Criminal Justice centers: Harvard University, University of Chicago, University of California (Davis), Georgetown University, Vera Institute.

2. Other efforts: Southeastern Correctional Research Center, University of Pennsylvania, University of California (Berkeley).

3. Organizations: A sample of a few Ford-funded organizations active in change in the criminal justice system. They are as follows:

   - National Council on Crime and Delinquency
   - American Justice Institute
   - ABA Commission on Correctional Facilities and Services
   - NAACP Legal Defense Fund
   - American Bar Association
   - Institute of Judicial Administration
   - National Center for State Courts
   - National Legal Aid and Defender Association

The presence of public service groups is so evident that it is difficult to contemplate a just system without them. The system shows little capability or sensitivity for self-correction. Even the best agency heads, and some are here, are unable to bear the lion without outside support. There is a limit to the changes which can be effected solely by insiders. Indeed, performance by the best of the breed suggests a 10 to 20 percent achievement as the maximum for one administrator.

Conclusion

I have attempted to set down some rather obvious suggestions of how private groups, including foundations, assist the change process in the criminal justice system by stimulating innovation, overcoming obstacles within the system, and creating an environment of change. Illustrations have been used sparingly, although they exist in profusion, partly to avoid embarrassment, but also to underscore the eclectic nature of the observations drawn from my several years of
experience as a lawyer, prosecutor, and professional philanthropist. No effort has been made to be exhaustive or symmetrical, and this paper should be viewed as a first effort to articulate observed factors operative in the change process.

Scheduling Police Manpower by Computer

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Thomas McEwen, Assistant Director
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St. Louis Metropolitan Police Department

and

William Stenzel, Graduate Student
Philip Zwart, Associate Professor
Department of Applied Mathematics
and Computer Science
Washington University

Introduction

This paper reports recent developments in the St. Louis Metropolitan Police Department's program to devise improved work schedules for its officers. The improvements sought include (1) the achievement of manning levels each day and watch, which are proportional to the anticipated workload; (2) identical patterns of days worked and days off for all officers; (3) the capability, in designing the schedule, to control the lengths of periods of consecutive days worked (called work periods) and consecutive days off (called recreation periods), and to control the number and distribution of weekends off; and (4) a computerized schedule design procedure.

The research program, under way since January, 1968, has produced a new type of work schedule called a "proportional rotating
schedule" which incorporates all of the desired improvements. A test schedule was put into operation in October, 1970, in the department's 20-man Evidence Technician Unit. In December, 1971, after having operated successfully for 14 months, the schedule was updated on the basis of changes in the distribution of work over the week. A March, 1972, survey of unit officers, which shall be discussed, indicates favorable acceptance of the new schedule.

The 1972 Evidence Technician Unit Work Schedule

Proportional rotating schedules are illustrated by using the 1972 Evidence Technician Unit (ETU) schedule. The ETU, a component of the department's laboratory division, operates evidence collection vans around the clock, one in each of the city's three police field operations "areas." The vans, whose personnel perform preventive patrol activities between assignments, are dispatched to crime scenes when requested by beat patrol officers responding to the incident.

Under department regulations, officers receive two days off for every five days worked. Each man also is given six days off for paid holidays plus a three-week vacation each year. ETU officers rotate watch assignments after a specified number of weeks on each watch. An exception was made in the 1972 schedule for two officers attending school during the day watch (7 a.m. - 3 p.m.); one was assigned permanently to the afternoon watch (3 p.m. - 11 p.m.), the other to the night watch (11 p.m. - 7 a.m.).

Data on the 10,132 incidents to which the ETU responded in 1971 were used to construct the 1972 schedule. A table of the distribution of work over the week for 1971 is shown in Figure 1.

The total number of duty manwatches $T$, available each week in a unit of $N$ officers is given by the formula,

$$ T = 5N - H $$

where $H$ is the average number of manwatches per week lost to days off for paid holidays. For a unit of 20 men, $H$ is approximately two. Consequently, for the ETU, $T$ equals 98 manwatches. Using the information in Figure 1 as a basis, manwatches were distributed as shown in Figure 2. Vacations were scheduled on the day and afternoon watches, requiring that the manning levels on these watches be kept as high as possible.

The basic rotation and recreation schedule developed for the unit is shown in Figure 3. The schedule consists of an 18-week rotating schedule for the 18 officers who rotate watches, and a fixed schedule for the 2 officers permanently assigned to the afternoon and night watches. The schedule operates as follows: the 18 officers are assigned man numbers from 1 to 18 (based on their choice of vacations). During the first week of schedule operation, each officer works the schedule for the week bearing his number. For example, man 9 works week 9, a day watch assignment on which he works Monday through Thursday and is on recreation Friday, Saturday, and Sunday. On the second week of operation, each man advances to the next numbered week in the schedule,
**Figure 1**  
Percentage Distribution of ETU Incidents Over the Twenty-one Watches of the Week for 1971

<table>
<thead>
<tr>
<th>Watch</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day (7 a.m.-3 p.m.)</td>
<td>5.1</td>
<td>4.3</td>
<td>4.8</td>
<td>4.3</td>
<td>5.1</td>
<td>4.5</td>
<td>4.3</td>
<td>32.5%</td>
</tr>
<tr>
<td>Afternoon (3 p.m.-11 p.m.)</td>
<td>5.4</td>
<td>5.1</td>
<td>5.5</td>
<td>5.0</td>
<td>5.4</td>
<td>4.5</td>
<td>4.4</td>
<td>35.3%</td>
</tr>
<tr>
<td>Night (11 p.m.-7 a.m.)</td>
<td>4.1</td>
<td>4.3</td>
<td>4.5</td>
<td>4.8</td>
<td>5.3</td>
<td>5.1</td>
<td>4.0</td>
<td>32.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14.6</td>
<td>13.8</td>
<td>14.9</td>
<td>14.1</td>
<td>15.8</td>
<td>14.2</td>
<td>12.7</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Figure 2**  
Manwatches for the Twenty-one Watches Of the Week for the 1972 ETU Schedule  
(Total Manwatches = T)

<table>
<thead>
<tr>
<th>Watch</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Afternoon</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Night</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
Figure 3
Basic Rotation and Recreation Schedule
For The Evidence Technician Unit For 1972
(R = Recreation Day)

<table>
<thead>
<tr>
<th>WEEK</th>
<th>WATCH</th>
<th>MON</th>
<th>TUE</th>
<th>WED</th>
<th>THU</th>
<th>FRI</th>
<th>SAT</th>
<th>SUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NIGHT</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>NIGHT</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>NIGHT</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AFT</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>AFT</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>AFT</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>DAY</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>DAY</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>NIGHT</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>NIGHT</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>AFT</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>AFT</td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>AFT</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>DAY</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>DAY</td>
<td>R</td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>DAY</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>DAY</td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERM.</td>
<td>NIGHT</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>PERM.</td>
<td>AFT</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>

with man 18 rotating back to week 1. Continuing the example for man 9: he moves to week 10, which is a string of 7 working days on the night watch. After 18 weeks, each officer will have rotated through every week of the schedule and returned to his initial week. Since all officers share the same basic rotation and recreation schedule, their individual schedules are identical, with the exception that they lag or lead each other by some number of weeks.

The two permanently assigned officers have their own schedule; each works Tuesday through Saturday every week and is off Sunday and Monday.

A number of additional features of the ETU schedule, described below, were requested by the unit commander and designed into the schedule.

The Number of Consecutive Weeks on any Watch.--The number of consecutive weeks of assignment to any watch varies from a minimum of two on the night watch (weeks nine to ten), to a maximum of four on the day watch (weeks 15 to 18). The selection of these periods depends on:

1. The distribution of workload over the watches. Proportional rotating schedules make the duration of the assignment on each watch proportional to the workload. Thus, officers spend a greater proportion of their time on the busier watches.

2. The time required by officers to adjust to new working hours. Too frequent changes are fatiguing and disruptive of off-duty activities. Two weeks was considered the shortest acceptable assignment for the ETU.
3. The number of consecutive weeks of assignment to the busiest watch and/or whichever other watch is considered least desirable by the officers. This is of particular concern to the younger officers who get last choice in the selection of vacations and who, having to settle for the winter vacations, fear assignment to the least desirable watch for most of the summer. Four weeks was considered the longest acceptable assignment for the ETU.

These considerations motivated selection of a schedule in which officers rotate twice through all watches during the 18 week rotation period, making the average stay on a watch three weeks in length.

Inclusion of One Seven-day Recreation Period.--Once every 18 weeks, officers receive a 7-day recreation period. In the master schedule, this period runs from Friday of week six to Thursday of week seven. This feature, quite popular with the officers, gives each man a short vacation once every four months. For officers with winter vacations, the extended recreation period guarantees at least one week off during the warmer months.

Lengths of the Other Recreation Periods.--Because recreation periods of one day’s duration are considered unacceptable by the department, two days is the shortest recreation period included in the ETU schedule. The maximum acceptable length of recreation periods is controlled to some extent by the maximum work period permitted. As the length of the average recreation period on a given watch increases, the number of these periods decreases; and the work period lengths must increase to take up the slack. For the ETU schedule, aside from the seven-day recreation period, it was decided that the longest recreation period would be three days.

Maximum Number of Weekends Off.--The schedule gives officers five weekends off in the 18 week rotation period; that is, three Friday-Saturday-Sunday periods, one Saturday-Sunday period, and the weekend included in the seven-day recreation period. The schedule shows that each Saturday recreation day has been made part of a weekend off; hence, the maximum number of weekends off has been achieved.

Weekends off have been spread as uniformly as possible over the rotation period. Only once do weekends off occur on consecutive weeks; otherwise, the spacing between them varies from three to six weeks. Most weekends off occur just prior to the watch change points.

Watch Change Conditions.--Officers rotate watches in the sequence of night, afternoon, day. The last day of assignment to any watch is always Sunday, officers commencing their new assignments on Monday. An officer scheduled to work on both Sunday and Monday at the watch change point faces one of two undesirable situations; the number of off-duty hours between the Sunday and Monday assignments will be either eight or 32 (see Figure 4). An 8-hour interval does not give an officer adequate time to rest; a 32-hour interval is equivalent to a one-day recreation period.

Both situations may be avoided if either Sunday or Monday, or both, are included in recreation periods. Therefore, the ETU schedule has recreation periods immediately preceding or following five of its six watch change points. However, the change from the
Figure 4
Off-duty Hours Between Assignments For officers Working Sunday and Monday at the Watch Change Point

<table>
<thead>
<tr>
<th>Watch Change</th>
<th>Sunday Hours Worked</th>
<th>Monday Hours Worked</th>
<th>Off-duty Hours Between Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night to Afternoon</td>
<td>11 p.m. Sun - 7 a.m. Mon</td>
<td>3 p.m. - 11 p.m. Mon</td>
<td>8</td>
</tr>
<tr>
<td>Afternoon to Day</td>
<td>3 p.m. - 11 p.m. Sun</td>
<td>7 a.m. - 3 p.m. Mon</td>
<td>8</td>
</tr>
<tr>
<td>Day to Night</td>
<td>7 a.m. - 3 p.m. Sun</td>
<td>11 p.m. Mon - 7 a.m. Tues</td>
<td>32</td>
</tr>
</tbody>
</table>

Lengths of the Work Periods.--Work periods in the ETU schedule vary in length from five to eight days. Of the 15 work periods in the 18-week cycle, only one is eight days long. This represents a substantial improvement over other schedules in the department in which officers experience 11-day work periods about three times a year.

Vacations.--Vacations occur during either weeks 12 to 14 or 15 to 18 of the basic rotation and recreation schedule. The three-week vacation periods, one on the afternoon watch and the other on the day watch, are indicated by dotted lines in Figure 3. Prior to implementation of the ETU schedule, a chart showing the vacation period for each man number was posted for examination by the officers. Officers are ranked according to decreasing seniority and select their vacations in this order. The vacation selected then identifies the officer's man number. Vacation periods on each watch are non-overlapping so that manning will be reduced by no more than one man per watch during vacations.

Figure 5 shows the format in which the schedules were issued to the officers. Each schedule indicates the recreation days for the full year and the vacation period for the stated man number.

The Pros and Cons of Proportional Rotating Schedules

Certain features of proportional rotating schedules, useful for some applications but undesirable for others, are discussed next. The day watch on week 18 to the night watch on week one involves a 32-hour period between assignments.
Length of Assignment to Each Watch.—For any proportional rotating schedule, the length of assignment to any watch will depend on several factors, which are workload proportion on each watch, number of officers assigned permanently to watches, number of watch rotations in the rotation period, and its length. Usually the length of assignment will vary from watch to watch.

For the ETU schedule, watch assignments ranged from two to four weeks in length. The survey showed that at least three-quarters of the unit found this quite acceptable:

<table>
<thead>
<tr>
<th>Object</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><del>o</del>o<del>o</del>o variation</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Some watches too short</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Some watches too long</td>
<td>15%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Individualized Schedules.—Although the basic recreation and rotation schedules are identical for all officers, each ETU officer is always some number of weeks ahead of or behind each of the other officers. As a result, all officers do not change watches together and do not work with the same group each watch. In the course of a complete rotation through the schedule, every officer shares a number of on-duty shifts with almost every other officer in the unit.
Regarding their individualized schedules, about a quarter of the ETU officers responded unfavorably in the questionnaire:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object to working with different members of the unit each watch</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Object to changing watches at different times</td>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
</table>

**Lengths of Work and Recreation Periods.**—The procedure for designing proportional rotating schedules permits the lengths of work and recreation periods to be controlled to a great extent. In most cases, excessively long or short periods may be avoided entirely. The maximum number of weekends off may be given, and extended recreation periods may be readily included, if desired. On these aspects, most ETU officers responded favorably:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum work period of eight days is an improvement</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Lengths of recreation periods acceptable</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Object to seven-day recreation period</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Frequency of weekends acceptable</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>Desire more recreation periods with Saturday or Sunday but not both</td>
<td>7%</td>
<td>93%</td>
</tr>
</tbody>
</table>

**Overall Assessment of Schedule.**—Regarding their relative preference for the ETU schedule compared to other schedules under which they have worked, three-fifths of the officers responded favorably:

<table>
<thead>
<tr>
<th>Preference</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer ETU schedule to all others</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Generally satisfied with vacation scheduling for ETU</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Fair distribution of workload per man each watch</td>
<td>74%</td>
<td>26%</td>
</tr>
</tbody>
</table>

**The Computer Programs**

Input to the schedule design programs consists of data on the distribution of demand for service by hour or watch of the week, the number of officers to be scheduled, and the following design constraints (specified by the unit commander):

1. the minimum and maximum number of officers permitted each day on each watch
2. the starting and terminal hours for each watch
3. the minimum and maximum lengths of recreation and work periods
4. the length of the rotation period, and the number of rotations through the watches during the rotation period

A sequential procedure is used to design the schedules or to discover that the constraints are so severe that no satisfactory schedule exists. If no feasible schedule can be found for a given set of design constraints, the unit commander decides which constraints may be relaxed. The procedure is repeated until an acceptable recreation and rotation schedule is found. The final step is to design
the vacation schedule. The computer programs are being written in Fortran for the department's IBM 7040 and 370/155 systems.

Conclusions

In summary, the following features were achieved in the 1972 ETC schedule:

1. proportional manning by day and watch
2. identical basic schedules for all officers
3. rotating watch assignments for 18 officers and permanent assignment for 2
4. watch assignments ranging from two to four weeks in length
5. recreation periods of two and three days, plus one seven-day period
6. five weekends off in the 18-rotation period, the maximum number possible
7. recreation periods immediately preceding or following five of the six watch change points
8. work periods varying in length from five to eight days
9. adequately-scheduled vacations

Proportional rotating schedules should be applicable to many types of service operations besides law enforcement, including hospital nursing services, refuse collection, baggage handling, reservation operations, and toll collection. The computer programs being developed for schedule design allow construction and comparison of alternative schedules in a fraction of the time now required.

Besides providing better control of the lengths of rotation and recreation periods, these schedules may substantially increase efficiency through their capability to distribute manpower resources over the week more proportionately to the demand for service.

Banasik, R., "Block and Cyclic Scheduling for Radiologists (Physicians), Does It Work?" 40th National ORSA Meeting, Anaheim, California, October, 1971.


Clawson, C., and Henrickson, H. *Feasibility Study: Possible Adoption of a 4 Day-10 Hour Work Plan for the Patrol Division.* Research and Development, Seattle P.D.


Introduction

Police administrators are responsible for providing a police operation that serves the public needs. On the surface, this responsibility appears to be simple enough; however, the realities encountered in operationalizing it are enormously complex. It is the purpose of this paper to review and analyze urban policing and suggest methods that police administrators can use to improve the effectiveness of their police organizations.

If police organizations are to fully realize their objective of addressing community needs, we believe it is important that police administrators adopt a consumer-oriented philosophy and take steps to ensure that their organizations have sufficient exposure and flexibility to align themselves with the needs of their clientele.

Why Change Police?

The basic purpose of public administration in American society is to fulfill those needs of the community that cannot be met through individual action or private enterprise. The definition of community needs is arrived at through a process referred to as politics. By responding to community needs, the government gains the consent of
those who are served. However, this consent is not dependent on providing satisfactory responses for all unfulfilled citizen needs; it is also gained by the government providing an arena for controversy and conflict (Appleby, 1965, p. 334). It is through citizen interaction in this arena that the citizens arrive at the necessary cohesion to require governmental action, and the power of public officials is limited.

While the role of the police is to some extent defined by custom, culture, and law, it is constantly being redefined through the political processes. Therefore, police administrators must be cognizant of their political environments and provide organizations that are capable of making appropriate adjustments in their operations.

Political Responsiveness

Police administrators must participate in political processes because of their responsibility for ensuring police services that satisfy communities' demands for services and security. However, police officials do not have sufficient responsibility nor authority to adequately fulfill the demands of all citizens for police service and security. They share responsibility and authority with a variety of other organizations, governmental agencies, and social institutions.

Unfortunately, there are many police chiefs who display a willingness to accept total responsibility for objectives over which they have little control, such as reducing crime. It would be far more realistic to admit that the community, other governmental agencies, and a variety of social organizations share this responsibility.

Such recognition would enable police administrators to legitimately involve a much broader reservoir of resources in the solution of their problems.

Aside from the preceding question of responsibility and authority, the police organizational hierarchy, which should be designed to receive and respond to community needs, has evolved to the point where the political environment has little impact on it (Tullock, 1965, pp. 137-141). A police department must be capable of accurately receiving popular demands, injecting them with considerations of prudence, perspective, principle, and concern for individual rights, and responding to them. Therefore, the police organization cannot be evaluated solely on the efficiency with which it performs routine functions. It must be assessed by its ability to reconcile diverse community needs into a response that is tempered by concerns for the individual and legitimatized by community support (Appleby, 1965, p. 335). Appropriate change within police organization will not come through piecemeal efforts designed strictly to improve operational efficiency. It will come through organizational techniques that provide continuous monitoring of the total environment of law enforcement.

The Community Environment

Over the past two decades, the urban environments within which police organizations exist have changed drastically. The changes in demographic characteristics alone have been profound enough to stagger one’s imagination. For example, the racial composition of Dayton has
changed from 90 percent to 70 percent white. The average income of citizens has remained constant in a period of sharp inflation. The heterogeneity of our residents has increased.

The once powerful and stable middle class whites have been losing their power to a wide range of other groups. The carte blanche that was once given to the police to deal with social deviates has been withdrawn. The once illegitimate street people, radical groups, young people, and social deviates have become organized. These organized groups have been legitimized by such actions as the civil rights movement of the 60's, the increased attention to the demands of youth and minorities, and the reclassification of social behavior such as alcoholism and deviate sexual behavior among consenting adults as non-criminal.

Undoubtedly, the most significant influences that have changed the community environment for the police have been the Supreme Court and the educational system. For the first time in the history of society, a powerful government institution, the United States Supreme Court, actually took giant steps to guarantee both the political equality of men, as well as the subservient nature of government to men.

The educational system began to move in the same direction. Old authoritarian techniques and approaches have been replaced by individualized instruction that encourages self-motivation on the part of the student. Basic education has become universal, and continuous adult education has been accepted as a necessity. Schools have actually begun to deal with social information. They are recognizing the need to respond to students who are questioning the concepts of universal righteousness of the "American system."

The changes in community environments have caused police administrators to question themselves as to their clients, goals, organizational arrangements, strategies, and procedures. Police officials who have previously enjoyed the luxury of dealing with a well-defined power group are faced with pressure from groups that only a few years ago could not have commanded recognition from a passing police patrolman.

**Consumer Orientation**

Given the circumstances that have been described, it is not surprising that many communities are demanding better and different services; what is surprising is the community's reaction to the lack of police responsiveness. Public law enforcement officials have for a number of years monopolized the service of security of persons and property. The monopoly is now being broken. In Dayton, we have experienced competition from the Republic of New Africa, a Black militant organization, which provides limited patrol service. Recently, a former Dayton policeman, who is now operating a private security agency, submitted a proposal to a Neighborhood Priority Board, formed under the auspices of the Model Cities Program, to develop a private, special police force for a white working-class area of our city.

Our experiences in Dayton are not significantly different from those of other cities. The police monopoly is being broken by volunteer citizens' groups and private police who are attempting to provide
service on a neighborhood basis. We, the police, have now been placed in a situation where we can no longer "not give a damn." No longer can we count on the protection provided us by our positions as a monopoly. We must compete for citizen support.

The change process has always been crisis oriented in Dayton. Dayton is noted for originating the City-Manager form of government. However, it was not originated until after the great flood of 1913 and the threat of the NCR Company to relocate unless city government became more efficient. The destruction of the police monopoly may well generate the spark that ignites the demand for change within the internal structure of police organizations. If this occurs, police administrators may realistically be able to reorganize with the necessary support base to become consumer oriented instead of product oriented. What has been described as an occupational army may through market analysis become an agent for providing service.

Professional police administrators in the United States appear to have difficulty adopting a consumer orientation because of self-imposed collusion of ignorance. However, increasingly, chiefs are attempting to modify their approaches; and their efforts are resulting in their being heralded by community leaders, and at the same time, stifled by the internal structure of the police organization. The process of implementing change is always difficult; within police agencies, it appears to be an impossible dream. The agents of change have become anathema to most police agencies. The following are a few of the characteristics of the police sub-culture that stifle change.

Blind Chauvinism.--One of the areas of concern for progressive police administrators in law enforcement today is the blind chauvinism; i.e., that belief that the solution to the police problem is esprit de corps that permeates many police departments. Many of these chauvinistic individuals are more concerned about the length of a man's sideburns than the quality of his work. There appears to be an increasing hue and cry within some of these monolithic structures for more "spit and polish." The purpose of these comments are not to negate the importance of discipline but to place it in its proper perspective. Meaningful discipline and esprit de corps are the products of an organizational structure, which provides for the integration of the individual goals with the objectives of the organization. This does not mean the elimination of professional discretion or individuality.

We believe the level of chauvinism within a police department is directly related to the degree of authoritarianism present. Our value system is grounded in conservatism and dictates that crime be suppressed by whatever means necessary. Many police officers believe that the Constitution and civil liberties serve only to thwart their efforts. The work of William Vega indicated that most police officers see crime as the response of the individual, not associated with his environment. This value system of police conservatives enables them to disassociate the acts of individuals from society. Even well-read moderates find this value system difficult to accept.

A study performed by Smith, Locke, and Walker within the New York Police Department indicates that non-college police tend to be more
This provides a basis for assuming that the police would be more realistic if they had a broader base of experience. However, Vega has pointed out that even liberals are coopted by police organizations. Liberals within police departments either alter their beliefs to conform, drop out, or go underground. If this is the case; most police departments do not have a significant population of resident liberals. However, there is no more reason for all police officers to be liberal then there is for them all to be conservative; but police departments need employees who are representative of the communities they serve.

Many police officers, who work in urban areas, are removed from the problems that mandate change because they have spent most of their lives in environments and cultures removed from the lifestyles of modern urban citizens. They grew up in rural areas, small towns, or white middle-class neighborhoods. Their parents were blue-collar whites. After joining an urban police agency, they move to middle-class suburban communities where they do not have to confront the problems faced by the urban people they serve. They travel into the city to spend as much of their eight hours as possible isolated from their clients by a car, an office, and bureaucratic rules and status. They socialize mainly with other police; they fight for two-man cars which ensures they will be further re-enforced by a person with values like their own.

A police organization, in order to interact with a community, should have a diverse representation within its membership. If a rule-oriented police organization does not permit any officers to wear long hair or beards, is it not saying that there is something wrong or distasteful about people who do? Will such an organization provide the same quality of service to members of the community who wear long hair and beards?

Management by Abdication.--Another symptomatic problem associated area is management by abdication (MBA). This consists of rule-oriented management personnel who attempt to implement change through fiat while simultaneously abdicating responsibility for it. A MBA organization is rule-oriented as opposed to goal-oriented and responsibility for service is difficult to identify because the emphasis in on procedure as opposed to results. The vast majority of police organizations are structured along para-military lines of command and control. This approach requires specialization and the development of functional responsibilities which facilitates management by abdication.

Responsibility for providing police service in specific geographic areas of a city is difficult to identify in highly specialized police departments. Field lieutenants are normally held responsible for eight-hour time periods. Captains are responsible for bureaus such as investigation, operations, or records. Beat patrolmen share responsibility for police service with many specialized technicians. The order maintenance function and crime control functions have become the responsibility of specialized public relations units and crime control teams respectively, in many police departments. The only person within this type of framework who can be held directly responsible for police service is the chief of police. Thus, there is little or no impetus within other areas of the organization for
change. This has culminated in a situation in most areas where the chief of police not only makes the decision to change, but quarters the entire process. Change that occurs through this type of process has been compared by McBride to hanging ornaments on a Christmas tree (1971, p. 20). These ornaments are normally removed when the Christmas season is over and change that occurs through this process has a life expectancy directly proportional to that of the chief of police. Productive change on the other hand, results from a spontaneous process which is ignited when the conditions are right for it.

The rule orientation of MBA is one of the primary defects within police management today. The vast majority of police agencies have become secure within the classical organizational structure that has been described. The operation of such an organization is mechanical. The duties of members are described in detail, and there are hard and fast rules along with a hierarchy of superior officers to make sure procedures are carried out according to rules. Such a structure was created to give and maintain status based upon an individual's ability to follow departmental rules and regulations which are in many cases of questionable value and often are not flexible enough to respond to the changing needs of a heterogenous community. This became painfully obvious to us in Dayton when two police officers decided that they could better deal with a disorderly group by removing their firearms and placing them in the trunk of their car. Many individuals within the department reacted to this act with tremendous hostility because of a departmental policy that required police officers to carry their weapons at all times, both on and off duty. This rule has since been
change. This has culminated in a situation in most areas where the chief of police not only makes the decision to change, but quarters-backs the entire process. Change that occurs through this type of process has been compared by McBride to hanging ornaments on a Christmas tree (1971, p. 20). These ornaments are normally removed when the Christmas season is over and change that occurs through this process has a life expectancy directly proportional to that of the chief of police. Productive change on the other hand, results from a spontaneous process which is ignited when the conditions are right for it.

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Police chiefs are in the position of sitting on top of a giant pyramid. In this position, they are only able to cushion the police response not form it. The real power within the organization is at the operational level. The problem is that this level lacks the responsibility of direction and is not accountable to the community; therefore, it does not have to be responsive to it. The police chief, however, is normally in an appointed position and responsible to his community. The chief is in many cases attempting to direct change that operational personnel see no benefit in implementing. The change is usually goal-oriented as opposed to rule-oriented and therefore, threatening to the existing status quo and social relationships (Davis, 1968, p. 55).

The chief who attempts to bring about change is confronted by the phenomenon of MBA; i.e., rule-oriented management personnel who implement change through fiat while simultaneously abdicating responsibility for it. Change within this setting becomes damned as the child of the Ivy League Boys in Research and Development, who lack credibility and common sense, or of a starry-eyed chief, who has
somehow become misdirected.

Why does this situation exist? One reason is related to efforts to insulate police departments from the spoils system (Smith, 1960, pp. 316-317). This attempt to professionalize the police has at times backfired. If we look at James Q. Wilson's paper, "The Police and Their Problems: A Theory," we note that the professional model he describes involves a legalistic approach which strives to eliminate discretion. If this is taken in conjunction with the insulation of the police from the spoils system without any mechanism to realistically replace it, then the lack of police responsiveness to the community should be expected.

Role Confusion.--Role confusion is the symptom of another problem area within the police bureaucracy. Police officers at the line level have not been prepared to differentiate in response requirements. They are the product of a rule-oriented structure that provides "cookbook solutions" to problems (Fosdick, 1969, p. 313). Police officers are constantly confronted with demands from the community for varying types of service which they have not been trained to handle. This has resulted in a situation where police officers are threatened by the changing needs of the community. The status of police work is based upon law enforcement; the enforcement of the law has a certain aura of glamour associated with it. To be a public servant is to be less than an enforcer. Yet, police officers are confronted with a paradox since the community demands more service than law enforcement (Webster, 1970). Does a police officer enforce laws or provide service to the community? Since individual police officers have no direct responsibility to the community, and little or no contact with the political process, they are, in effect, free agents.

Police officers respond to the community as enforcers of the law. If there is any conflict in values, they become confused and respond in the manner in which they have been trained. They enforce the law without regard for the consequences. Enforcement of the law, in many cases, such as in Detroit in 1967, may result in disorder. However, the rule-oriented structure allows for no variance in response. Priorities are left to the individual officer and are affected by each officer's bias and values. The result is periodic chaos and an inability to understand why. The line-level officers who provide the services receive only the gut-level dissatisfaction of the street people, "The man is a pig." Yet, the "man" did his job. He enforced the law. The individual officer has not been prepared to analyze his job but has been provided with an overabundance of defense mechanisms (Vega, p. 17).

The police bureaucracy has been too effective in insulating people below the chief administrator from the conflicting changes and competing demands of the public. Seldom does a police officer below the chief have to face the demands of legislative officials, pressure groups, and private citizens with which the chief must deal. This type of conflict is normally almost entirely handled by the chief executive because of his position at the apex of the classical hierarchical structure. Given the dynamic nature of modern society, the chief is constantly subject to pressure in this position. When the chief decides that he must modify his organization to respond to his citizens,
the members of the organization refuse to support him. Chiefs need not wonder why they are denied employee support; the chief has effectively insulated his subordinates, and they have not had to suffer through the confrontations and conflicts that have caused him to change. Ex post facto attempts by the chief to educate his subordinates to the reason for his deciding to change are usually not successful. The lower they are in the bureaucracy, the more insulated employees are from the problems faced by the chief and the less supportive they will be for significant changes that affect their behavior.

Conclusions

Obviously, without a well-defined approach to overcoming the restrictive aspects of the police sub-culture, a chief of police will not be able to ensure his citizens of an organization that will be responsive to their needs.

The characteristics of the police sub-culture and the characteristics of the police bureaucratic structure are basic reasons why the system is not satisfying community needs. An analysis of these factors suggests that the system, as it is currently arranged, will never be effective in identifying its goals and developing strategies for providing environmental security for urban peoples. The police structure itself must be changed; however, we need to recognize and admit to ourselves that speeding up the processes of justice, increasing the number of gimmicks, and improving the hardware available to the police will not produce the needed change. Such modifications are frequently used by police administrators and planners to con their potential critics into believing that progress is being made. These changes are nothing more than camouflage to conceal the real problems and diversionary tactics to keep attention off the critical shortcomings of the present system.

Most well-meaning police administrators rely on this cosmetic approach simply because they feel hopelessly hamstrung and impotent. Our experience and education have prepared us to be a cog in the police bureaucracy and defend it against all suggestions of inadequacy. We usually are not familiar with even the most superficial information about changing social organizations. Although police administrators have tried to resist and be their own men, they have been indoctrinated with the basic axiom of a police bureaucracy, "Those who do nothing do not encounter trouble as often as those who take action frequently."

The closed police sub-culture, the closed personnel system, the ambiguous nature of the community demands, and the pressure of the members of the police bureaucracy are eventually sufficient to convince a police manager of the wisdom of following the party line. As Sayre and Kaufman pointed out after observing the New York City Police Department, "In the end, whatever the dash and determination at the beginning, the commissioners yield to the necessity of being merely a spokesman and the advocate rather than the leader and the innovator" (1960, p. 292). The police executive usually decides that his personal security and comfort will be seriously affected if he pushes organizational changes that are in the best interest of society. Administrators normally yield to the pressure and relax—confident
in the knowledge that they are supported by the bureaucracy and many powerful social groups.

It is imperative that we stop kidding ourselves and assume the risks associated with being change agents. We must focus on re-structuring our organizations to achieve a stronger link between the environment, our constituency, and our employees. To do this, we need to evaluate the techniques available to us to obtain sufficient support from our personnel to establish an effective police organization.

Establishing Support for Change

The traditional assumption that a chief of police has the power to make changes because he also has the formal authority is invalid. As Bernard has pointed out, the power of an administrator is restricted by what his subordinates consider legitimate (1968). Subordinates who want to restrict a manager's authority have at their disposal such techniques as work slow-downs, speed-ups, "by-the-rules" activities, communication disruption, distortion, and actual sabotage. They have the ability to accumulate support outside the organization and to focus sufficient pressure or legal attention on the administrator to neutralize or remove his authority. Therefore, the administrator has to deal with the problem of keeping his personnel from denying him the power to operate. Although desirable, their support is not absolutely essential, but an administrator who does not have employee support must be able to neutralize large-scale employee attempts to deny him the power necessary to keep the organization open and flexible.

The administrator has a variety of methods, which should be considered in developing strategies to get support or to neutralize employees' resistance to change. These techniques include rationality and indoctrination; rewards and threats; cooption and replacement; and camouflage and diversionary tactics. The ability to use these methods successfully depends on the administrator, as well as the situation. However, before employing them, a chief needs to recognize that organizations are complex in interrelations. A movement intended to achieve one purpose will inevitably have repercussions. Each action taken by the chief will be accompanied by a reaction. The chief will often be surprised by the unanticipated changes he sets in motion, and he must be prepared to absorb the heat. However, this is an occupational hazard which a police administrator must constantly face.

Rewards and Threats.--These traditional tactics are used extensively by police officials, although one has to admit that the emphasis has always been on threats. From the first time a police recruit enters a training program until the day he retires from the police field, he is constantly told what will be done to him if he does not conform to the expectations of his supervisors and "superiors." This causes some people to suspect that police officers have become insensitive to other types of motivation.

The limited research available suggests that reward, particularly psychological rewards, are much more effective than threats (Argyris, 1965). Most police administrators have a variety of threatening units designed to identify undesirable organizational deviates and punish
them; however, there is a need for units and procedures designed to identify desirable deviates and reward them with praise and publicity.

**Rationality and Indoctrination.**—Police administrators have traditionally utilized indoctrination to change the behavior of their subordinates. The "training" which is designed for the indoctrination is structured to restrict criticism and questions from the "trainees" (Frost, 1959; Greenwood, 1972; Saunders, 1970). Trainees are required to submit to instructors who degrade and insult them in such a way as to damage their self-confidence. The indoctrination that is often carried out as police training is designed in a way that in many instances will destroy the individuality of police officers. This forces a new police officer to yield to being an unthinking member of a group that is dependent on its "superiors" for decisions and guidance. The counter-productiveness of this approach to change is increasingly apparent.

People resist this type of indoctrination; they reject conclusions that are forced on them by authorities. People who have low opinions of themselves tend to be more closed and suspicious than people with good self-concepts. People who are constantly approached as if they are mentally retarded tend to develop behaviors that resemble that of a mental incapacitated person. Therefore, while one-way indoctrination may have a short-term impact on changing behavior, it will probably be counterproductive in the long run.

Rational discussion of problems and alternatives by all people in the organization will be more likely to establish an adequate environment for change. This approach, however, does not give the orderly appearance of efficient operations because it cannot be carried out without conflict (Coser, 1964). People who have apprehensions and questions about the changes can express their feelings and fears. All ranks argue and debate; they negotiate and compromise; and they each can have an impact on any changes that occur. At the same time, their individuality and worth is reinforced; they learn that they are important and their opinions matter. Such self-confidence and security makes them more open to change.

Although both indoctrination and rational discussion can be used to obtain support for change, we believe rational discussion is far superior to the traditional indoctrination approaches.

**Cooption and Replacement.**—The chief administrator can consider using the two techniques of cooption and replacement to ensure that resistance to his authority does not damage his ability to keep the organization receptive to productive change. Cooption can be achieved by identifying the informal employee leaders who are critical of his efforts and placing them in positions where their responsibilities conflict with their rhetoric and actions. Once such a person is in a position where he has access to more information and is subjected to the pressures of responsibility, he will usually condition his behavior and attitudes. Even those people who are not completely co-opted may have their effectiveness as critics neutralized because of their changed relationship to their peers.

Another approach that has been used often by traditional change agents involves replacing employees who have been inside the system.
for a long period of time with professionals from outside the organization (Bennis, 1966). This approach is not to be confused with nepotism nor amicis that in the past has been utilized by well-meaning administrators. Replacement provides at least five advantages to the change oriented administrator: (1) it reduces the number of people who refuse to support an open viable system; (2) it provides people with greater competencies than are available within the organization; (3) it increases the status of the organization in the eyes of the public; (4) it opens windows into the organization to outsiders; and (5) it provides employees who have stronger loyalties to the chief than to departmental sub-culture and its politics. Obviously, unlike amicism and nepotism, this strategy involves more than simply bringing in an outsider who will support the programs of the chief administrator.

The persons who are selected as replacements must be extensively evaluated to ensure that they are professional enough to stay above the protective devices of the old-line police bureaucrats. They must be highly competent and have adequate credentials to guard against the possibility of being discredited by those resistant to change. They must be loyal to concepts of democracy and secure in their commitment to establishing consumer-oriented police organizations that address the needs of the community.

It is important that the replacements be given positions where they can provide support for the chief administrator. A replacement who is placed as an editor of reports or an accountant has little impact on the organization and provides little support for the chief; however, an administrative assistant or a bureau commander has much more potential. It is also important to consider the organizational problems that such replacements will cause for the administrator. This approach involves changes of significant enough proportion that they may cause seriously damaging counter-reactions.

Once a replacement is within the organization, the administrator will have to support and protect him, because the bureaucracy will deal harshly with him. The old-line police bureaucrats are neither naive nor stupid; they will understand what is happening to their strength in the department, and they will attempt to discredit and destroy the interloper. The insiders have the advantages of knowing the existing system and the people who staff it; and they can use this knowledge to stifle the outsider. Insiders may deliberately complicate the paper work and restrict the channels of communication for the outsider so that many of his early efforts will have to be devoted to protecting himself rather than achieving organization goals. Therefore, while the chief administrator will reap benefits from the presence of the outsider, he must be prepared to devote considerable attention to protecting him, and accepting his advice over the objections of the tradition-bound insiders.

Camouflage and Diversionary Tactics.--It appears to us that informal consensual groups, such as exist in a police department subculture, usually cannot pursue several causes at the same time. Therefore, the chief who wishes to make changes that are likely to generate hostility among his employees can time the changes to occur at a time when the employees are already engaged in an emotional battle. For example, if the police are tied up in a
battle with a pressure group that is attempting to implement a police review board, the chief can take advantage of the situation and use it for cover while he strengthens internal control procedures and he may even be able to win internal support by attacking the police review board concepts as an evil conspiracy which will damage police.

Obviously, the techniques of camouflage and diversion should not be crudely manipulated in an unethical fashion. Our point is that they offer ways of using undesirable situations to the chief's advantage, but he certainly should not be identified as the instigator of the proposals which he uses to his own ends. In the past, whether intentionally or unwittingly, administrators have utilized these techniques to win support for themselves and their programs. Therefore, we have observed their effectiveness.

Conclusion

As with any management action, the preceding methods can be abused by an unethical administrator. Prior to a decision to use them, the chief should explore the ethical questions involved. However, they can be both effective and ethical approaches to winning support for organizational changes.

Such extensive efforts to obtain support for organizational change is probably unwise unless the chief administrator has a strong commitment to the need for making his organization more client-oriented. In the following section, we will discuss our thoughts concerning the general direction of the change need in urban police organizations if they are to become truly consumer-oriented public agencies.

Structuring for Change

The police administrator who wants to develop a consumer-oriented police department and establish the potential for continuous change within his organization, cannot assume that once he obtains internal support for change that progress will automatically continue. Unmanaged change may be counterproductive. The world has pollution, wars, inhuman and inefficient governments, racism, and alienated people as stark testimony to the problems that can result from unmanaged change. However, at the same time, it is also important to recognize that in our society, no public administrator has the authority, power, or resources to completely control change (Katz and Kahn, 1967, pp. 390-452).

Due to past definitions of the responsibilities, roles, and boundaries of governmental agencies, a police chief constantly finds that he does not have sufficient direct control to force his department to receive and fulfill the needs and demands of the public. For example, most people are insisting that the police make their communities safe and secure places. However, community security can be more of a state of mind than a physical reality. The quality of a person's security is directly associated to his personal feelings of freedom from danger. A person who is thirsty, hungry, cold,
lonely, or paranoid may never feel that his community is a safe place. Although a police department can enter into cooperative arrangements with mental health and welfare agencies to solve some of these problems, it does not have the knowledge nor the resources to eliminate all of them. Therefore, a chief will usually have to be satisfied with a somewhat less than perfect solution to community needs.

The important point is that a police administrator has to approach the problems pragmatically rather than normatively. He should attempt to define and map the limitations imposed on him and his organization. If he cannot possibly work within these limitations, he should attempt to develop techniques and plans for their elimination. And, while he cannot possibly control his organization as precisely as he can aim a rifle, he can be expected to ensure that his department generally moves in the direction of identifying and responding to the needs of the citizens in his jurisdiction. Since he does not have complete control nor a perfectly defined set of objectives and priorities, he will have to rely on gross, trial and error efforts which result in rather disjointed, lurching change rather than a mechanically smooth operation. Initially, the chief should attempt to modify the philosophy and approach to organization and management, but eventually he will have to completely restructure his organization along different lines than have traditionally been utilized. The following are modifications that chiefs should be considering.

**Opening the Organization.**—The police sub-culture that we spoke of earlier appears to be the result of the closed, routinized nature of police organizations and their operations (McNamara, 1967). The organizational and administrative incest that has developed because of this system has resulted in a like-minded group of employees in police departments. The chief administrator can facilitate change by initiating steps to open the police department to outsiders (Bennis, 1966, pp. 113-130). He should make certain that the outsiders are not restricted exclusively to low-level, non-policy making positions where they will be without influence. They should be built into the organization as full-fledged members, helpers, observers, and advisors. To be effective as change agents, they need to be utilized in such a manner that they can interject fresh points of view at all levels of the organization, challenge existing methods and activities, and provide the public with windows into the police department.

Such an opening of the system will serve to unfreeze many of the previously unchallenged notions and procedures, and it will facilitate re-establishing the police as a part of their communities.

**Supporting Tolerance.**—As we previously suggested, one of the major reasons why police personnel find it so difficult to change is their intolerance of deviation from what they have learned is normal (Gardner, 1965, pp. 67-75). Personnel in a bureaucracy have been taught to define their environment in simplistic terms of good or bad, black or white, right or wrong. In most police departments, they sorely need to be conditioned to accept and tolerate differences.

The chief can facilitate the conditioning of his personnel by removing the organizational obstacles to individuality such as hair policies, height requirements, clothing restrictions, etc. Assuming
the organization can tolerate more substantial pressure, he might go even further and deliberately select people for employment who do not meet the stereotypes of police employees that have developed. Police departments need liberals, conservatives, blacks, whites, young, old, fat, skinny, males, females, intelligent people, average people, and shades in between. A chief who recognizes the value of tolerating differences among people and establishes conditions for the spread of such tolerant attitudes establishes the conditions necessary for moving his organization toward an effective consumer-oriented department.

Reducing Organizational Rigidity.--The rules, values, habits, and customs of police organization make them stable, unyielding structures that have difficulty adopting a consumer orientation. In order for client-oriented organizational change to occur, this irrational rigidity must be loosened. Methods for modifying the restrictions that have created the problem have to be developed. By reducing the support for rigidity, police personnel can be conditioned to accept ambiguous situations (Watson, 1971, pp. 745-765). Such simple things as changes in physical layouts, procedures, rank structures, uniforms, color of equipment, and the systematic, periodic shuffling of personnel might be a part of the conditioning processes.

Sections of the rule book might be suspended. Policy-making groups consisting of representatives from all ranks of the organization and citizens could be set up to continuously up-date policies. Task forces can be utilized to handle temporary situations, and after they have completed their assignments, they could be returned to their normal assignments. Lower ranking officers or civilians could be assigned to chair temporary study groups that have representatives from all ranks of the department. Exchanges of personnel with other agencies can also be used. Although no single action will break the rigidity of a police organization, the frequent use of a variety of these techniques will have a significant impact.

Improving Communications.--We have previously mentioned the communications problems in a police bureaucracy. These problems are caused by formal ranks and informal status differences, concerns for personal security, chains of command, complex communications methods, and many other reasons. However, regardless of the specific reason for the problems, a consumer-oriented organization needs numerous, open channels of communications. A chief administrator can facilitate the development of a dynamic organization by establishing new methods and channels for communications. Task forces, departmental ombudsmen, information specialists, departmental meetings, team efforts, personnel rotations, shortening the chain of command, decentralization, improved communications equipment, and less emphasis on authority and status in running the organization, are all techniques that can be used for improving communications and facilitating change.

Reducing Reliance on Formal Authority.--Close supervision and autocratic methods stifle consumer-inputs and change within a police organization. Top down pressure for change is not sufficient. Participation in decision-making and the use of persuasion and negotiation are more effective than authority in up-dating organizations.

A chief should take steps to increase the participation in organizational processes and decision-making. This would entail softening
his reliance on authority. He can utilize his personnel where they are competent to perform regardless of rank in supervisory and staff positions. He can systematically consult with departmental personnel of all ranks before making important decisions. He can encourage managers and supervisors to assume a teacher-student rather than a master-slave relationship with their subordinates.

Establishing a Centralized-Decentralized Organizational Model

Obviously, the preceding techniques can be implemented by making modifications in the existing classical organizational model used by the police. However, for a truly responsive client-oriented organization, these changes alone will not be sufficient. Eventually, police administrators must make relatively drastic changes in their organizational structures. We predict that if voluntary changes are not made by police administrators, the new power groups will force change on the police departments as they are currently attempting to do in Berkeley, California.

As we have pointed out elsewhere, American cities have changed most importantly with regards to attitudes, values, expectations, and power diffusion. The increased activism and power of minority groups emphasizes the impracticability of a police department establishing one set of priorities for an entire city. Different communities have different opinions about what actions police should take in fulfilling specialized needs. Aside from the problems caused by the insulated nature of the police operations and the inflexibility of the police bureaucracy, there is no rational reason why the police cannot respond to the differences in communities within their jurisdiction.

Police agencies are governmental units. They have no sacred goals or priorities that cannot be changed if such a change better serves their citizens. Police agencies should be dedicated to the principle of the greatest good for the greatest number. It appears to us that a properly decentralized police structure with professionally oriented personnel would enable the police to provide a more responsive police service.

Proper decentralization does not entail turning over control of the police to an elected community board or commission. Obviously, this has not worked successfully in the past. We believe a need exists for a police structure, which has community participation in priority making and policy development and at the same time, is centrally coordinated to ensure a consistent quality of policing efforts throughout the jurisdiction. Centralized coordination is necessary to prevent abuses such as discrimination by the police in one community against people who live in another area and to guard against the disjointed fragmented approaches that are so common in many areas. This approach facilitates controlled decentralization through a Centralized-Decentralized Model.

This Centralized-Decentralized approach to organizing police involves centralizing all of the support and staff functions and decentralizing the operational or service delivery activities of the police. The support activities could be arranged to facilitate the efforts of the various decentralized operational activities without rigidly dictating operational priorities or policies. In order to be effective in
coordinating the field activities, the centralized support operations will need the authority to establish minimum reporting and communications standards as well as the obligation to compare the operational units that are assigned to various communities. In addition, the centralized support section could be given the responsibility for defining community needs, assigning operational personnel to the communities, providing information and intelligence to the operational teams, and assisting the community teams with training and personnel improvement.

The operational units would consist of teams of officers assigned to a well-defined geographic area with enough homogenous elements to be considered a community. Each team would be given the responsibility and authority to work closely with their community to define their problems and needs and to provide the appropriate police services. Obviously, the team would be required to observe the same ethical, legal, and financial limitations that would govern all teams. The teams would be staffed by people with complimentary skills to ensure that each team would be able to handle the variety of problems they would be expected to face. Hopefully, the members of each team would be generalists-specialists, in other words, every officer would be expected to perform all types of police work, but at the same time, have highly developed skills in one or two areas which would directly aid in eliminating problems in the specific geographical area to which he has been assigned.

Within well-defined boundaries, the internal management of each team could be left largely with the team. The procedures used by the teams could be left basically up to the members of the teams, who would be required to work them out with the community. Even the work assignments of team members could be within the authority of the team rather than a central authority. The chief and his centralized staff could evaluate the teams on the extent to which each achieved its objectives rather than the extent to which its members follow universal, internal rules or standard operating procedures developed for the entire police organization.

This type of centralized-decentralized organizational arrangement can be considered analogous to the arrangement utilized in a hospital, except it makes provisions for community input that is not utilized in the hospital model. The chief and the support section is analogous to the hospital administrators and the supportative services of the hospital. The teams of police officers are analogous to medical and surgical teams that work in the hospital. The hospital administrator coordinates the surgical teams and provides them with support personnel and equipment, but he does not become involved in the actual operations. These operational activities are the responsibility of the medical and surgical groups. Similarly, we would leave all but the broadest priorities and methods of performing the police job up to the teams of police officers and their clients; and we would organize a professional staff of technicians to provide them with high-quality support and coordination.

Obviously, this approach depends on highly competent, sensitive employees who are dedicated to serving their citizens. However, we believe that this Centralized-Decentralized Model will result in a more effective and dynamic police operation. In Dayton, we have been
experimenting with this concept under an LEAA Grant. The initial evaluation of our efforts at decentralization indicates that the citizens in the Fifth District, the decentralized area, believe that their policemen are more responsive to their needs than citizens in other areas of the city. We have also found that the citizens in the Fifth District feel more secure with the police responses being provided at the community level than the citizens in our control group (Dayton, 1971). This has been accomplished while maintaining the same level of effectiveness in achieving our organizational objectives, as we have with the highly centralized operation in other areas of Dayton.

This approach seems to be the most effective in involving citizens and police officers in establishing objectives and priorities for police. The Centralized-Decentralized Model is dependent on community meetings and discussions between police officers and the citizens they serve. Through this type of interaction, an acceptable consensus concerning the police role and goals can be developed. Changes will be acceptable to the police because of their involvement in the process. Ultimately, this approach will provide a dynamic, professional, consumer-oriented police operation that will result in a higher level of service and greater security.

Conclusion

Police administrators are responsible for providing a police operation that serves the public needs. On the surface, this responsibility appears to be simple enough; however, the complexities involved in operationalizing it are enormous.

The democratic political process is an appropriate device for providing a police organization with information about public needs, but police organizations have become so removed and insulated from the political processes that the service they provide is at times almost totally unrelated to citizen problems. Even in those situations where the chief of police is sensitive to the problems and needs of his citizens, he alone cannot decipher sufficient information to determine the appropriate priorities for his organization to address. In addition, due to the inherent rigidity of a modern police bureaucracy, the chief's ability to initiate organizational change is severely limited.

If police organizations are to fully realize their objective of addressing community needs, it is essential that police administrators adopt a philosophy supporting a consumer orientation and take steps to ensure that their organizations have sufficient exposure and flexibility to align themselves with the needs of their clientele.

Our experience indicates that an administrator should consider a number of factors in preparing his organization for change. First, he should take steps to neutralize resistance and establish support for change among his subordinates. Among the techniques that can be utilized for reducing resistance are (1) rewards and threats, (2) rationality and indoctrination, (3) cooption and replacement, and (4) camouflage and diversionary tactics.

Second, he should take steps to structure his organization to facilitate consumer-oriented change. In developing a new structure, he should consider emphasizing the following: (1) opening the
organization, (2) supporting tolerance, (3) reducing organizational rigidity, (4) improving communications, (5) reducing reliance on formal authority, and (6) establishing a Centralized-Decentralized Organizational Model.

Administrative actions to facilitate the development of dynamic police organizations will create difficult problems regardless of the approach utilized. Outsiders may criticize the organization for its disjointed appearance. However, as John W. Gardner has pointed out, "... creative organizations or societies are rarely tidy. Some tolerance for inconsistencies, for profusion of purposes and strategies, and for conflict is the price of freedom and vitality" (1965, p. 70).

Although we believe the methods we have suggested will, in the long run, be most effective, they will not provide a completely smooth transition from a traditional police bureaucracy to a new organizational design. They will most likely cause frustration for police officers involved. Initially, officers will demand that they not be subjected to such threatening techniques; they will insist on stronger rules for personal security; they will plead low morale; and they may be disruptive to the organizational processes in an attempt to emphasize their dissatisfaction with the responsibilities they are asked to assume. However, we believe that the probability that these techniques will pay off in developing a more effective, consumer-oriented police department where police can achieve a higher level of work satisfaction and professionalism, makes it reasonable for administrators to assume the risks involved.

BIBLIOGRAPHY


NOTES

1. We undertook this paper as three practitioners who have been heavily involved in attempts to improve urban policing. The material we have developed is based on both personal experiences and our interpretation of the implications of the research findings. Although we are indebted to many people who have reacted to the ideas expressed herein, we are particularly grateful to Mr. Edward A. Lettus, a Research Associate on the Dayton/Montgomery County Pilot Cities staff. Mr. Lettus devoted a tremendous amount of his time to collecting resource material, reacting to our ideas, and editing the various drafts of the paper. We sincerely appreciate his efforts.


DEMONSTRATION PROJECTS AS A STRATEGY FOR CHANGE (1)

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Introduction

In order to gain more knowledge about demonstration projects as a strategy for inducing change in police institutions and in order to develop funding criteria for innovations, the Police Foundation in January, 1971, undertook a two-part, three-month research project.

First, we looked closely at eight significant innovations tried in police departments in the past five years. Most of these innovations began as demonstration projects. Case studies were written on each project as a means of learning whether there were certain factors which make a project more likely to become a permanent part of the institution or at least survive once the original funding had run out. Whether the success or failure of a project was due to the inherent strength or weakness of the original idea, the project design, general support or resistance of the department's leadership to accept change, or some other factors were also major considerations.

As a second part of the study, we planned field visits to 11 additional police departments to question top command officers about each of the eight projects. We wanted to know the degree to which
these demonstration projects have influenced changes in other
departments and the reasons.

Selection of Projects and Cities

The following projects were included:

- **Detoxification Center, St. Louis**
  - Established a 30-bed center to remove alcoholics from the criminal justice system.

- **Family Crisis Intervention Unit, New York City**
  - Trained an 18-man unit to handle family crisis calls more effectively.

- **Police Fleet Program, Indianapolis**
  - Provided patrol cars to officers for use off-duty as well as on-duty.

- **Police Juvenile Attitude Program, Cincinnati**
  - Developed curriculum for junior high schools and police academy.

- **Police Receptionist Program, New York City**
  - Placed low-income women as receptionists in neighborhood precinct houses to handle "non-police" matters.

- **Psychological Assessment of Patrolman Qualifications, Chicago**
  - Administered battery of psychological tests to police officers to find better screening devices.

- **Helicopters as Patrol Vehicle**
  - Utilization of helicopters for patrol and other operational (and non-operational) purposes.

- **Team Policing**
  - Reorganized patrol into small groups of officers assigned to one geographic area with purpose of increasing interaction with each other and community.

Our original reasons for selecting the projects were, in many cases not supported by the more detailed information unearthed by the case studies. The projects selected, and the reasons for selection were: The Family Crisis Intervention Unit because it was based on a good idea but didn't survive as a demonstration in the host department; the Police Receptionist Program was studied because it was a good idea, but it had attracted little attention; the Chicago psychological tests and the St. Louis Detoxification Center were chosen because they were good ideas but had not been widely replicated by other departments; the Indianapolis program because it was a poor idea which had attracted a lot of publicity; Cincinnati because it had been widely publicized by LEAA; helicopters because they represented a technological innovation; and team policing because this concept was a focus of considerable debate and little understanding.

The field work for case studies revealed that in most instances our original reasons for choosing the projects were incorrect. After a close look, the Indianapolis project had interesting, positive results; the Chicago test program had some flaws in the design; and the Cincinnati project was little known outside of Cincinnati. More than anything else, the study pointed out how great the need is for better standards for evaluating projects, better final reports, and better dissemination techniques. It is no wonder that police administrators had difficulty knowing which projects to pursue, and which projects to ignore.
All projects, with two exceptions, were started as a result of either OLEO or LEAA grants. One project, the Police Receptionist, was funded by the Ford Foundation while another, the Indianapolis Police Fleet Program, was funded entirely by city funds.

To test the impact these projects had on other police departments, 11 additional cities were selected to provide geographic distribution as well as a representative cross section in terms of the perceived willingness to innovate. The cities were:

**Field Teams**

Two field teams visited 23 police departments to gather material for this study: one team was assigned to visit the departments originating the demonstration, and the other was assigned to test the impact in 11 additional cities.

To develop the case studies, the first team sought to identify the originator of the project idea: Was it someone in authority in the police department or city? Someone in a funding agency? Someone from the community? Having identified the originator, the team interviewed the originators, participants and officials connected with the project while it was on-going. The team also interviewed the present top commanders of the host police department. The first team was headed by the author with the assistance of Robert Walters.

The second team, which visited eleven cities to assess the impact of these demonstration projects, consisted of Peter Libassi, the then Executive Vice President and Special Advisor to the Chairman, National Urban Coalition, and Norman Kassoff, Law Task Force, Miami Urban Coalition, former staff member, International Association of Chiefs of Police and former lieutenant in the Miami Police Department. One or both of the second team members visited each city.

**Definition of Demonstration Project**

For the purposes of our study, a demonstration project was defined as an action planned to prove that an innovation is an improvement with the additional express purpose of convincing others that the innovation should be duplicated. Demonstration projects have evolved because of the need to find new solutions to social problems without extensive experimentation. Demonstrations generally proceed from the belief that the innovation will work. An experiment, on the other hand, proceeds from the identification of a problem and the controlled testing of alternative ways of dealing with it. As a basic example, take patrol as a crime-control strategy. The demonstration approach to the problem, as in the Syracuse Crime Control Team Project, begins with the premise that the innovation, the permanent assignment to a limited geographical area of a small group
project's champion, a professor at a university, was outside the power structure of the department and the city. The initial success of the project was heavily dependent on the good will of the police commissioner. When his support was withdrawn, the project failed to be expanded beyond the original 18-man unit, even though evaluated a "success."

3. The lack of a planned approach to make the project an integrated part of the department's operations.--A good example of this is the Police Receptionist Program which, from the outset, depended on people recruited from outside the department and hired outside the civil service system. Further, line commanders and officers were not required to use these people fully in their precinct operations. The ultimate result was that the project's continuation hinged on its approval as an item in the police discretionary budget—and usually "discretionary" can be interpreted to mean "expendable."

4. There were serious shortcomings in the kinds of information disseminated about the project and in the ways in which the information was disseminated.--Reports written by the project directors usually succumb to the temptation of telling only the good parts and leaving out the bad. Or, as was the case of the Syracuse Crime Control Team Project, which was the subject of a fairly detailed evaluation, the report was not widely distributed. Instead, most police administrators had learned of the project only through the General Electric Company's advertisements which (perhaps understandably) emphasized the good side, and did not reveal difficulties.

5. Managers in police departments are not sophisticated enough to sift out the good projects from the bad and as a result the "demonstration" effect is often wasted.--First, it was evident that many of the chiefs in the eleven additional cities we surveyed had never heard of the eight projects. In those that had heard of the project, that was about all. Detailed information was usually not available and in those instances where it was available, the chiefs had not taken initiatives to get more detailed information.

Second, even if the police chief had heard of the projects, it was difficult for him to judge its applicability to his department. Thus, this weakness probably explains why our survey revealed little correlation between the quality or significance of the projects and the police knowledge of the projects. Those projects with high public visibility, helicopters and the Indianapolis Car Plan, were best known. Projects which dealt with fundamental organizational issues, Dayton Team Policing, Syracuse Crime Control Team, were least known and rarely understood. Any psychological test was equated with the Chicago variety. The Crime Control and Neighborhood Police Team concepts were equated with geographic or precinct decentralization; Jersey City was proud that the centralization movement of the 50's and 60's had not affected it and felt they were up-to-date now with their six precincts.

Third, the more sophisticated chiefs pointed out that because the original demonstrations did not contain adequate evaluation criteria or objective data, responsible judgments based on the report were impossible. As a result, good projects were rejected and inappropriate projects were pursued. This failure probably explains in part why hardware innovations were most easily transferred:

a. The companies which sell helicopters bombard police departments with advertisements, salesmen, and promotional gimmicks, thus helping to fill the communication gap.

b. It takes less planning ability and less time for a police department to write a proposal and get the money under the LEAA program for a helicopter than for a team policing effort.

c. A piece of hardware is less threatening to a police department while still enabling it to project an image of progressiveness.

For example, the use of new hardware, whether it be a computer or a helicopter, generally doesn't require major organizational or personnel changes.
For a demonstration project to succeed according to the traditional criteria, the idea must be good, the leadership committed and skillful, the managers able to plan and evaluate, and the material and means of dissemination adequate.

It is not surprising, therefore, that most demonstrations fail, but what is surprising is that the criteria must be met in sequence. In the original or host department, if the original idea is not fully developed, such as the psychological exams in Chicago, the entire project will not measure up to its potential and no amount of leadership or careful planning can save it; if the original idea is good, but it fails to be championed by an effective leader, as happened in New York with the Family Crisis Unit, no amount of publicity or skillful management at a lower level can institutionalize the project. If the idea is sound, the leadership committed and skillful as was true in Indianapolis, but the planning weak, then the project will always be a qualified success.

The obvious conclusion is that designing a good demonstration project which proves to be an improvement, becomes institutionalized in the host department and replicated by others, is very difficult. The demonstration strategies, as exemplified in these eight projects, weren't good enough, even though most of the projects are examples of the best innovations undertaken by the police. Therefore, any funding agency trying to help improve the police must be both cautious and flexible in its strategies. It should be cautious by developing and sticking to a set of criteria which build upon the successes and failures of past projects; it must be flexible by requiring a policy of on-going or formative evaluation which enables the funders and the police department to evaluate a project constantly while it is progressing and to modify it at any point it fails to measure up to these new criteria.

Recommendations for Action Project Criteria

Assuming that the idea represents an innovation worth testing, our examination of past demonstration projects suggests the project is more likely to succeed if a number of important criteria are followed. These include:

1. **Projects should form an integral part of the department's overall program of improvement.**
   The traditional demonstration project in police departments have failed more often than they have succeeded, largely because the funding agencies were not careful to fund only those projects which form an integral part of a police leader's overall, long-term program of department improvement. Demonstrations which are funded as frills or ornaments are a short cut to false expectations and failure.

2. **The personal commitment of a core of police leaders within the department.**
   A police leader may use demonstration projects as a way of proving his ability to himself, his men, and the community. Chief Winston Churchill of Indianapolis, for example, identified with the car fleet project, saw the project as his way of doing a better job for the community and for his men. This is not always the case. Police Commissioner Howard Leary, while he considered the Family Crisis Intervention Unit Project excellent, never really thought of it as his way of improving the police. Even now when asked about the project, he recalled, "Oh! yes, that was the project started by that doctor." This does not mean that every idea for a project must come from the police chief or from inside the department.
Indeed, the Indianapolis idea came from the city's Public Safety Director and was then championed by the Chief of Police. It does mean, that for maximum impact on police leadership as well as for maximum chance of success in its own right, the project must be addressed to a problem of prime concern to the top leader. He must not agree to go along on a project, such as team policing, just because the funders want it; the technical expertise is available in some outside institution; the mayor is enthusiastic about trying something new or because he wants the publicity. He must understand and be committed to finding a better solution to the problem the project addresses.

Moreover, a project will have a better chance of survival if it has been championed and planned by a core of police and community officials, not just by the police chief himself, who may be gone in a year. Because this support was lacking in most of the projects studied, it is not surprising that one new chief, when asked about a project undertaken with some fanfare by his predecessor, "... to my knowledge, it was never implemented here."

b. The project idea should also satisfy some need of the rank and file.—The average policeman finds it increasingly difficult to respect himself and his job. He feels unrespected, underpaid, more like a cog in the revolving door than like a public servant. Projects which can help alleviate the problem have a much better chance of being institutionalized. Because of the Indianapolis project, the morale of that patrol force was increased substantially, even though this was not an original objective. This improvement alone probably makes the project worthwhile. The Family Crisis Intervention Unit was also successful, at least in the short run, in this respect. The men in the unit felt more professional, prouder of their jobs; moreover, they felt more secure in their own ability to handle a crisis effectively. Even several years after the funding of the project stopped, the rank-and-file officers involved would like to see it expanded. In short, the project has a momentum of its own.

c. The project should also satisfy need which the police leader and the funders consider to be of concern to the community.—If this criterion is applied alone, all of the projects studied could be considered successful although the Receptionist Project was more obviously directed at a community concern than was the psychological testing of policemen. It is interesting to note that although almost every one of these demonstration projects deal with problems common to every major city, the twelve departments in our survey had totally different reactions: There seemed to be no systematic way for a police chief to ascertain which problems were the most serious in his community. For example, we found that police leaders though detoxification centers were not needed in Jersey City, Elizabeth, or Gary, where the chief claimed "public intoxicants are no longer a problem" while, on the other hand, a detoxification center is being developed in Cleveland and is considered to be "needed" in Newark.

These differences and the others concerning family crisis, juveniles and receptionists reported in the survey would have been more understandable if the leaders had indicated that while these were serious problems in their cities, there were other
more serious pressing problems. Unfortunately, the survey showed that there was only the most
intuitional basis for these judgments and no
formal mechanisms by which a chief was keeping
 abreast of community needs.

Since the support of the leadership, the rank
and file and the community are all required for
the long-term success of a project, it is highly
desirable for the project to offer something to
all three groups. Therefore, the needs of all
three have been included as one criterion.

3. The projects should be structured to ensure
serious continuing commitment from a core of
department leadership.--When a project's champion
has no authority within the department, the pro­
ject is less likely to be institutionalized.

Three projects were intrinsically weak in this
respect. The Family Crisis Intervention Unit,
the Cincinnati Juvenile Attitude Program,
Chicago Psychological Assessment of Patrolmen
Qualification all had project control outside
the police department. The main responsibility
for drafting the proposal, designing the project,
and helping to institutionalize the innovation
was outside the police department.

If police departments are to become more re­
sponsible to the community, obviously the
involvement of outside experts is something to
encourage; and it is to the credit of these police
leaders involved in these projects that they were
willing to seek the support of academics.

But, the likelihood of long-term impact of these
projects would have been increased if the police
department had had significant joint responsibility
for project design, management, and operations.

Moreover, a review of these projects discloses that
the more responsibility the police department or
the city bears in finances, man-hours and equipment,
the more likely the department is to make a long­
term commitment. This commitment can preserve a
project even when top leadership in the department
changes. In St. Louis, for example, because the
police department itself invested considerable
energy and resources in the detoxification center,
it would have been more difficult if a new ad­
ministrator had wished to drop the project. In

4. The project should be designed to ensure that
the innovation is fully integrated into the
department.--Project designers should consider
from the very beginning how best to ensure
that the successful demonstration will be
maintained on city funds. Too often, the
designers only consider the short-run and
as a result when the funding money runs out
so does the project. The project should
not be a frill, an appendage which gives
everyone the feeling of change, of exper­
imentation, when in actuality, it is nothing
more than an experiment. If the police
department doesn't really want changes in
the area with which the project deals, but
wants to appear progressive, then it learns
how to develop a facade of innovation. The
Chicago Psychological Assessment Project is
an example of this phenomenon. The depart­
ment claims it has a scientific system of
weeding out the psychologically unfit and
the press is given lengthy description of
the various psychological tests the depart­
ment gives to recruits as a result of the
federal project. What is not mentioned is
that most tests and certainly the most
scientific are given after a recruit is
already accepted into the force and that
not one applicant
The police

In New York, however, the police department had
only a minimal investment in the receptionist
program so it will not be surprising if the
project is dropped by the new leadership in
favor of a new project.

In New York, the inspector in charge of
planning and research was enthusiastic
about the receptionist program but said,
"It seems as though as soon as a demon­
stration project has been evaluated a
success, it is time for the money to stop.
It probably would have been better not to
have raised people's hopes in the first place."
Another official supported this viewpoint and
added, "The department is just as much at fault
as the funders. The leadership of this department
likes demonstration projects because it gets the
department good publicity and the public thinks, "my, what a progressive department we have."
If the department's leadership were really behind this project, they would reorganize the precincts so that there would be enough money to have a receptionist in every precinct at least during the peak hours. Of course, that is asking the department to make a real change. An experiment is one thing, a change is something else.

Funding agencies must avoid encouraging such charades of progressiveness. One possible way is to put conditions into the grant; refuse funding for a testing program unless the department agrees to use the exams when they are intended to be used. The better solution is to consider projects only as an integral part of an overall strategy of change; thus, projects will have higher possibilities for success in cities where major efforts are already underway to improve the entire institution and where the police leadership is committed to finding new solutions.

5. Evaluation component is integral to design of project and must not be considered as an afterthought. When a police leader closely identifies with a "demonstration" and proclaims it in advance as "his way of improving things," he is not that interested in objective evaluation. In fact, he is threatened by any evidence the evaluation may reveal which is critical of "his project." But, for a demonstration to be of real service to the police and the public, it must contain three evaluation elements: a clear statement at the onset of project objectives; a research design which reflects these objectives—to make it possible to learn whether the innovation made a difference; and a constant flow of information which will enable the planners to modify the project is necessary.

All of these points are critical. If the project doesn't have objectives and a research design then no one will ever know whether the project, in fact, was an improvement. For example, in projects such as the Indianapolis Car Plan and the New York Receptionist, where the evaluation components were non-existent, the projects are, at best, qualified successes. Furthermore, without a formative evaluation component, a project does not have as good a chance to succeed. For example, once the Office of Law Enforcement Assistance staff realized that the design of the Chicago Psychological Assessment Project was weak, they should have worked with the project directors to have the design modified. The best design is one which encourages flexibility based on the evaluation and on the changing conditions for which the project was originally designed.

This flexibility means projects with clearly stated objectives for each phase should be funded in phases. With phased funding, ongoing evaluation becomes essential. If the data reveals that the objectives of the project are not being met, then funding may be refused from phase one to phase two. Or, if the information reveals that the originally-stated objectives of the project are not leading to improvement, then the funding agency and the department may decide to back up and redefine the objectives.

A funding agency should also apply this same flexibility to its own strategies. The survey and analysis of the eight projects provided valuable and sobering evidence of the difficulty and complexity of bringing about change and improvement in the police service. It is, therefore, essential that agencies maintain an ability to be objective and re-analyze its strategies as it proceeds with its programs.

6. Responsibility for the dissemination of information must not be exclusively that of project directors. The project directors of demonstrations, particularly when outside the police department, usually find it to their advantage to promote their innovation, regardless of its demonstrable worth. Moreover, highly technical reports are often written, such as the Chicago Psychological Assessment Study. This report is filled with references to intercorrelations, moderator variables, and multiple regression analysis, but does not deal with the equally important issue of how the tests were actually used by the department.
In addition, as we learned in the city surveys, most police administrators are not influenced by reports of projects. They feel more comfortable learning about projects in conversations. Once they learn about a project, moreover, they need assistance to find out whether it would be applicable to their city. Funding agencies should, therefore, follow the lead of the commercial outfits promoting hardware devices and take care to disseminate information about promising innovations, either through sponsoring salesmen, providing technical assistance to inquiring departments, or by holding small workshops.

The following are the recommended criteria:

Does the project form an integral part of the department's overall program of improvement?

Does the project deal with those problems and needs of the police leadership, the police force, and the community which both the funding agency and the department's leadership deem important?

Is the project designed to ensure serious commitment from the leadership of the police department?

Is the project designed to ensure that the innovation is fully integrated into the police department?

Is the evaluation component integral to the design of the project?

Does the responsibility for the dissemination of information rest with "objective" bystanders?

In conclusion, action projects can be a useful strategy for changing a police department if funded as an integral part of a long-term program of police department improvement and not just because it represents a new idea or an opportunity for funds. Otherwise, departments will have projects like ornaments on a Christmas tree and create a facade of progressiveness which raises expectations but does little to improve police service or knowledge about how to do so.

Demonstration projects are not a panacea to police improvement, but if the recommendations are followed, they can be one of several useful strategies to encourage change and hopefully improvements in police departments.
INTRODUCTION

The future of the police service in America will be determined, not by technological advances, but by the character of its leaders and the strength and quality of its advances and supports...yet, the compensation, promotional opportunities, and recruitment practices of most police departments are unequal to the task of obtaining and retaining the required number and caliber of administrative, professional, and technical personnel (Brandstatter, 1970, p. 438).

This pointed statement is one of many with the same persistent theme. Another example comes from the Task Force Report on the Police of the President's Commission on Law Enforcement and Administration of Justice (1967):

Widespread improvement in the strength and caliber of police manpower...are the basic essentials for achieving more effective and fairer law enforcement... The failure to establish high professional standards for the police service has been a costly one, both for the police and for society (p. 120).

Over fifty years ago, the focus of the police administration problem was recognized as one of personnel practices (Fosdick, 1920). Through the years leaders in law enforcement have agreed, calling for higher standards of police selection, training and career development. Yet, there is little indication that these points are understood or accepted by the general public or elected officials. The major focus of the police problem, the question of personnel administration, is most often ignored in public discussions of crime and improving law enforcement (Saunders, 1970).

A young man entering police service today is faced with a "hodgepodge" collection of personnel practices related to his career. He does not know what skills he has that are best suited for specialized police work. He is uncertain of the method used to get ahead and obtain the kind of job in which he is interested. He is even uncertain whether a method exists at all that provides for his career opportunities. Police agencies have spent money and effort identifying administrative needs, but have generally neglected individual career development.

Study Objectives

This project was conducted to develop and demonstrate a method for building improvements into the career program of a police department so that career paths will incorporate requirements for change to meet future needs in police work. The methods, findings and recommendations for this study were developed at one demonstration site, St. Louis Metropolitan Police Department, and were conceived, carried out and described in a manner to encourage other cities to adapt components and methods of the proposed career programs. In order to accomplish these goals, the following, more specific objectives, were developed.

- Develop information concerning the present personnel flow within the St. Louis Police Department.
- Identify career fields as they now exist in the Department.
Determine present scope of career program development.

Develop information concerning the future role and career expectations of police officers so that requirements for change in career planning can be anticipated.

Develop specific programs for reorganizing career paths.

Identify obstacles and forces facilitating implementation of new and revised career programs.

Determine methods for establishing a Department mechanism to continue periodic reviews of future police requirements so that additional information can be used to update the career planning process.

To facilitate accomplishment of the project objectives, the American Institutes for Research established a permanent research unit in the St. Louis Police Department. The study was seen as a collaborative effort, and involved joint planning and review of the study's activities. Through close coordination with Department officials, the resulting guidelines for future career paths planning have been made to reflect police needs and operations.

Study Methods

The following project plan was developed in four phases to collect and analyze all relevant data and information for the study.

Phase I.

Initial activity involved the orientation of the research staff to the St. Louis Metropolitan Police Department's career activities.

A project task force made up of Department personnel was established to review the career information that was being obtained and to assist in determining methods for establishing new career programs.

Information and data on personnel flow and specific career programs as they existed at the time they were collected.

Phase II.

An interview format was developed to collect information concerning career histories, future role and career plans of policemen. Over 215 commissioned officers, from all ranks and job functions in the Department were interviewed.

Phase III.

A career questionnaire was constructed to sample opinions about the present career system, personal career expectations and to trace ideal career paths through the Department. The questionnaire was administered to over 1,000 officers representing a majority of the Department's 2,232 commissioned personnel.

Analyses of the interview and questionnaire data were completed using the discriminate function technique and other procedures. Results illustrated typical career paths within the existing system. In addition, recommendations were made for new and modified career programs.

Phase IV.

The Department's project task force assisted in developing new career paths programs.

A Department mechanism for continuing periodic reviews of the career planning process was developed.

Study Results

In the project data, two major results are noted: first, a basic career orientation is lacking for majority of officers; and second, a true career paths system, as such, does not exist at the present time.
A sense of career growth and opportunity is missing for many recruits entering a police department. Data showed that they do not have specific career objectives at the time they enter the department. There are several assignment areas a recruit could enter, but typically he does not have the proper information or he lacks certain skills for getting the assignment he wants or in which he might best serve the department.

Related to this is the finding that a career paths system, as such, does not exist. The movement of officers from one assignment to another is often determined by conditions of visibility, availability, friendship and the like, and affected by methods of choice varying greatly from one unit to another. That is, one division in the department may have a certain process for choosing men for its unit, but another division's process may be completely different. As a result, the available pool of candidates, and ultimately the quality of decisions is lower than it would be with a more systematic and universal approach.

What is needed, then, is more specific career path information, and greater consistency in the way it is used by management and the individual policeman. This would help establish the concept that the young recruit has a "career with a future," and later practices would justify that expectation. It would provide a department with a means for utilizing manpower more efficiently.

A Model Career Paths System

From the information developed in the course of this research, a model career paths system was constructed. It is represented in four major phases of career growth: orientation, placement, mobility and development.

First, when a young recruit joins a police department there needs to be a mechanism for developing a career orientation. He must be made to feel he has a real opportunity in the department. The second phase of a career system, placement, requires that recruits be placed in the assignment channels that best match their skills with job requirements. The third phase, mobility, should provide the opportunity to advance within rank or specialty grades. Finally, there should be provision for a "career development office" in a police agency. This office should make and maintain the inventory or skills, training and experience of the total force. By providing information and recommendations it can contribute to better decisions about selection, training and assignment.

Career Paths Program Recommendations

The career paths project activities in St. Louis generated four specific program recommendations. These represented best estimates according to the data, of important need areas for this Police Department. However, the recommendations have been presented in a basic form since they are considered broad enough for any police agency to consider.

1. Career Orientation Program - establish a one- or two-day career orientation program shortly after a recruit joins the department to explain further educational opportunities, various requirements for assignments, and personnel record keeping procedures.
2. Career Placement Program - institute a placement research program to identify the unique task requirements of major assignment channels, and make an inventory of the department's manpower skills and interests. Based on this research, a placement program could be established within a department's personnel division.

3. Career Mobility Program - create a multiple grade system within the department, especially for the patrolman rank. The number of grades and corresponding salary ranges could be determined by a special study committee. A multiple grade system should also identify different levels of responsibility according to the rank grades that are developed.

4. Career Development Program - create a "career development office" in the department which would have responsibility for identifying career development opportunities, keeping records on those who have attended such training programs, and making assignment recommendations based on individual skills and training.

Conclusion

It is important to consider this type of police personnel research in its proper context. Career paths research has been a generally neglected area of police personnel development. There is a lack of basic job-related data for policemen, including good role and task analysis information. Because of these limitations an analysis of police career paths cannot yet accurately describe career movement patterns or identify specific criteria for evaluating their related effectiveness.

Taking these limitations into account, this project was directed at developing a model career paths system in the St. Louis Police Department. The intent of the research program was to provide methods for examining career structure and movement patterns, beginning at this baseline. With this impetus, it is hoped that future efforts can refine criteria for charting specific career paths through a police department so that the development and utilization of individual skills can be further maximized and organizational effectiveness further improved.

Other police agencies can take advantage of these suggested career paths programs. The recommendations are broad enough to be adapted to almost any police setting. The experience and guidelines offered should make it easier for other police departments to move into this area, meet the requirements and accomplish the objectives presented here.
Introductions

With the growing emphasis on improved services, cost/effectiveness, management by objectives, increased outputs, and the like, we find police managers more than ever before willing to experiment with programs, practices, and policies. The expanded use of technology and externally designed efforts to close the so-called gap between the police and their clientele are, in most cases, today actively pursued. We are now able to witness the beginnings of internally based changes to enhance organizational achievements while supporting the police officer's desire for better working conditions. The four-day/forty-hour workweek is one such attempt to improve departmental effectiveness and individual job satisfaction.

Local law enforcement has relied upon private industry’s growing use of the 4/40 for their rearrangement of the traditional work week. Briefly, under this new schedule, working hours are set to permit...
overlapping of patrolmen shifts, thus increasing field patrol deployment during peak activity periods. A few departments have extended the 4/40 into other functional areas such as investigation.

Preliminary studies indicate that the plan generally increases arrest rates, often is more economical than the traditional 5-day/8-hour workweek and leads to improved morale among police patrolmen. Among problems generated by the 4/40 plan are the need it creates for additional personnel to bolster overworked staff and auxiliary functions, the difficulty of providing sufficient patrol vehicles during peak activity hours, and the usual individual personnel problems involved in re-adjusting a man's work schedule. The remainder of this article reports on the major findings of recent studies of the 4/40 in about a dozen police departments in Southern California.

Background

The Huntington Beach (California) Police Department (HBPD) studied the concept of a 4-day/40-hour workweek, referred to by them as the "10-plan", in order to balance manpower scheduling with called-for services (Robitaille, 1970). It was formulated and implemented in the HBPD patrol division on a 90-day experimental basis on February 1, 1970. Several positive effects were realized, and the 4/40 was retained permanently. Shortly thereafter, this work schedule was adopted by numerous police agencies in Los Angeles, Orange, Riverside, and San Bernardino counties.

The 4/40 workweek is conceptually a fairly simple reallocation of work hours, so that an employee will work 40 hours in 4 days. The original number of work hours is maintained, for the most part, but because the hours are grouped differently, there is a change in the

impact of the hours on the performance of the agency and the usability of employees' leisure time. In law enforcement, the basic application of the 4/40 involves reducing the graveyard shift during light activity periods, increasing the number of personnel assigned to the evening shift during peak activity hours, and changing the traditional working hours of the day shift (see Figure 1). This allows overlapping of shifts and a greater number of personnel during peak activity periods. Most agencies studied indicated peak activity somewhere between 8:00 p.m. and 3:00 a.m.

The 4/40 workweek is a new concept in law enforcement, and, therefore, its effects are just beginning to be understood. The 4/40 plan should raise such questions as:

- What is it for?
- How does it work?
- Is it beneficial?
- What are the drawbacks?
- How should a 4-day conversion be handled?
- What will future effects be?
- Will it work?
- Who's doing it?
- What reasons dictate adoption?
- Will it cause personnel fatigue?
- What happens to morale?
- What are the effects on domestic life?
- Is it practical during emergencies?

The potential benefits are:

- It increases field patrol deployment during peak activity periods.
- It increases the efficiency of the patrol division and ultimately of the department.
- It increases department morale.
- It is more economical than the 5-day, 8-hour workweek.
- It does not increase personnel off-duty problems.
Growing enthusiasm over the 4/40 led to two research projects that were conducted in the Department of Criminology, California State College at Long Beach in June, 1971. This article presents portions of the findings. Admittedly, the results are limited to a few agencies in Southern California, but it is believed that the data has significance for all law enforcement agencies either currently on a 4/40 plan, or now in the process of evaluating it.

To begin with, the Long Beach Police Department (LBPD) established the 4/40 plan in their Patrol Division on February 1, 1971. The most salient finding was that 202 out of 205 patrolmen replied that they thought the 4/40 plan benefitted the LBPD. The survey covered 56 employees on Watch 1, 54 employees on Watch 2, and 112 employees on Watch 3. A total of 222 employees were considered. Not all questions were answered by every employee, but the general response rate was very high. Table 1 depicts the reasons patrol officers either liked or disliked the 4/40 plan. As an example, when considering the plan in relationship to their educational goals, only 12 stated that the plan hindered their further education as compared with 77 who said the plan enhanced their educational objectives. In turn, Table 2 reports the degree of satisfaction or dissatisfaction with the 4/40 plan as compared with the typical workweek. Table 3 shows the perceived changes in police effectiveness.

Examination of the number of arrests during the trial period was made with particular reference to the high-incidence hours of about 8:00 p.m. to 3:00 a.m. Table 4 shows that total patrol arrests in 1971 increased 20 percent over 1970 for these hours as compared with

<table>
<thead>
<tr>
<th>Time</th>
<th>Watch I</th>
<th>Watch II</th>
<th>Watch III</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.m.</td>
<td>Patrolmen</td>
<td>Sergeants</td>
<td>Lieutenants</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>p.m.</td>
<td>Patrolmen</td>
<td>Sergeants</td>
<td>Lieutenants</td>
</tr>
<tr>
<td>11:00</td>
<td>14.40</td>
<td>3.71</td>
<td>0.71</td>
</tr>
<tr>
<td>12:00</td>
<td>14.30</td>
<td>2.14</td>
<td>0.71</td>
</tr>
<tr>
<td>1:00</td>
<td>14.20</td>
<td>2.14</td>
<td>0.71</td>
</tr>
<tr>
<td>2:00</td>
<td>14.10</td>
<td>2.14</td>
<td>0.71</td>
</tr>
<tr>
<td>3:00</td>
<td>14.00</td>
<td>2.14</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Table 1: Typical Police Patrol Schedule, 4/40 Workweek, and Average Number of Employees on 10-Hour and 8-Hour Shifts.
the arrests made during the overlap hours of 10:00 p.m. to 3:00 a.m., which showed an increase of 34 percent over 1970. Finally, Table 5 indicates the average daily sick and injured increased 58 percent over the trial period of 1970. Further, Table 6 shows that the average daily absenteeism for the trial period increased 45 percent over the 1970 period. Obviously, absenteeism and sick leave in 1971, when compared to the same months in 1970, appeared to rise substantially.

However, follow-up studies on 4/40 should recognize that the absenteeism percentage is logically greater because under 4/40 plan there are 4/7ths of personnel on duty by definition of the plan. The researchers plan to conduct a follow-up study of this phenomena. In general, it can be concluded that:

- Overtime hours were reduced.
- Increased officer morale.
- The 4/40 plan increased the number of arrests.
- The 4/40 plan did not reduce overall filing-reporting time, since more incidents were observed and reported and more reports were taken.

### Table 1 - Analysis of Police Officers' Reasons for Deciding to Continue with 4/40

<table>
<thead>
<tr>
<th>Reason (Hypothesis)</th>
<th>Example</th>
<th>No. who favor</th>
<th>No. who oppose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational.............</td>
<td>Enhance educational aims</td>
<td>77</td>
<td>12</td>
</tr>
<tr>
<td>Health..................</td>
<td></td>
<td>168</td>
<td>19</td>
</tr>
<tr>
<td>Value Expectation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial..............</td>
<td>Overtime, moonlighting</td>
<td>126</td>
<td>88</td>
</tr>
<tr>
<td>Leisure.................</td>
<td>Increases leisure time for social and family activities</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Social Pressures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community relations.....</td>
<td>Able to do more in community relations in 10-hour day</td>
<td>154</td>
<td>16</td>
</tr>
<tr>
<td>Public relations........</td>
<td>More interaction with citizens</td>
<td>157</td>
<td>58</td>
</tr>
<tr>
<td>Job effectiveness.......</td>
<td>Higher morale, better reporting, better prelims.</td>
<td>188</td>
<td>7</td>
</tr>
<tr>
<td>Benefit to department...</td>
<td>Higher morale, more arrests</td>
<td>202</td>
<td>3</td>
</tr>
<tr>
<td>Benefit to community...</td>
<td>More in field in peak hours</td>
<td>199</td>
<td>7</td>
</tr>
</tbody>
</table>

### Table 2 - Comparison of 4/40 Plan with 5-Day Plan

<table>
<thead>
<tr>
<th>Choices</th>
<th>Response</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>222</td>
<td>100</td>
</tr>
<tr>
<td>Better or much better</td>
<td>208</td>
<td>94</td>
</tr>
<tr>
<td>Same</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Less or much less</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 3 - Policing Effectiveness in 4/40 as Perceived by Those Who Indicated Early Opposition to Plan

<table>
<thead>
<tr>
<th>Viewpoint</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community relations</td>
<td>50</td>
</tr>
<tr>
<td>Public relations</td>
<td>50</td>
</tr>
<tr>
<td>Job effectiveness</td>
<td>60</td>
</tr>
<tr>
<td>Department effectiveness</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4 - COMPARISON OF TOTAL ARRESTS BY PATROL DIVISION, FEBRUARY, MARCH, AND APRIL, 1970 AND 1971 PEAK HOURS

<table>
<thead>
<tr>
<th>Hour</th>
<th>1970</th>
<th>1971</th>
<th>Difference</th>
<th>% increase (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>247</td>
<td>285</td>
<td>+ 38</td>
<td>4</td>
</tr>
<tr>
<td>2100</td>
<td>248</td>
<td>291</td>
<td>+ 43</td>
<td>17</td>
</tr>
<tr>
<td>2200</td>
<td>349</td>
<td>322</td>
<td>- 27</td>
<td>(8)</td>
</tr>
<tr>
<td>2300</td>
<td>323</td>
<td>364</td>
<td>+ 41</td>
<td>13</td>
</tr>
<tr>
<td>2400</td>
<td>291</td>
<td>433</td>
<td>+ 142</td>
<td>49</td>
</tr>
<tr>
<td>0100</td>
<td>297</td>
<td>452</td>
<td>+ 155</td>
<td>52</td>
</tr>
<tr>
<td>0200</td>
<td>333</td>
<td>475</td>
<td>+ 142</td>
<td>43</td>
</tr>
<tr>
<td>0300</td>
<td>266</td>
<td>297</td>
<td>+ 31</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: LBPD arrests.

Table 5 - AVERAGE DAILY SICK AND INJURED

<table>
<thead>
<tr>
<th>Month</th>
<th>1970</th>
<th>1971</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>6.18</td>
<td>8.14</td>
<td>32</td>
</tr>
<tr>
<td>March</td>
<td>5.84</td>
<td>8.77</td>
<td>50</td>
</tr>
<tr>
<td>April</td>
<td>5.30</td>
<td>10.53</td>
<td>99</td>
</tr>
<tr>
<td>Total</td>
<td>17.32</td>
<td>27.44</td>
<td>58</td>
</tr>
</tbody>
</table>

Source: Monthly statistical report, Long Beach Police Department.

Table 6 - AVERAGE DAILY ABSENTEEISM

<table>
<thead>
<tr>
<th>Month</th>
<th>1970</th>
<th>1971</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>92.10</td>
<td>130.92</td>
<td>42</td>
</tr>
<tr>
<td>March</td>
<td>90.44</td>
<td>134.61</td>
<td>49</td>
</tr>
<tr>
<td>April</td>
<td>92.70</td>
<td>133.69</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>275.24</td>
<td>399.22</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: Monthly statistical report, Long Beach Police Department.

Survey Findings: Twelve Police Departments

During the spring of 1971, it was determined that at least 12 law enforcement agencies in the counties of Los Angeles, Orange, Riverside, and San Bernardino were currently working on a 4/40 plan. The 12 agencies served cities ranging in size from approximately 22,000 to 124,000 population, geographically located from the ocean to the desert, and classified as residential-recreational to residential-industrial communities. The summary of the 12 law enforcement agencies begins with the least populated city (see Figure 2). All data were derived from an administrative and patrol questionnaire utilized during the study.

Results of the Administrative Questionnaires

All 12 administrators were asked identical questions, utilizing a structured, open-ended form of question. The following is a synopsis of the answers from the respondents:

1. What was your initial opinion of the 4/40 plan? The majority of the responses were favorable, with some skepticism and reservations noted.

2. How are "recognized" holidays handled under the 4/40 plan (pay, time off, etc.)? Some departments have continued with systems similar to those in the past, while others have made modifications that have been acceptable to the personnel. Only one department is encountering any difficulty in this area.

3. Has the 4/40 plan affected absenteeism (sick leave)? Departments operating under the 4/40 plan for brief periods feel that there is no change or cannot tell at this time. Departments operating for the longest periods of time feel that absenteeism has decreased. (This finding is at variance with LBPD's).

4. How has the 4/40 plan affected overtime expenditures? All departments involved feel that end-of-shift overtime has decreased.
5. Financially, is the 4/40 plan more expensive than the 5-day, 40-hour plan? A consensus of all the departments was that the 4/40 plan did not increase financial expenditures over that of the traditional workweek.

6. Was additional equipment necessary to implement the 4/40 plan that was not needed in the past? The majority of departments did not require additional equipment to implement the 4/40 plan but did find that more units were desirable for continuation of the plan.

7. Was recruitment considered when you adopted the 4/40 plan? Recruitment was not considered by the majority of departments.

8. Has "down" time for "required" services (repair) been affected by the 4/40 plan? A few departments feel that units are "down" more than in the past, but the majority observe no significant change.

9. In your opinion, has "moonlighting" increased because of the 4/40 plan? None of the administrators interviewed indicated there was any change in the amount of "moonlighting."

10. Administratively, would the department like to return to a 5-day, 40-hour/week? All administrators stated that they would not like to return to the traditional 5-day, 40-hour workweek.

11. Was it necessary to establish a court liaison officer or any other new positions? A few departments already had court liaison officers, but none found it necessary to establish any new positions prior to, or after, implementation of the 4/40 plan.

12. Has the 4/40 plan affected the availability of personnel for court appearances and/or emergency situations? None of the departments noted any change.

13. Would an increase in morale be a sole justification for retention of the 4/40 plan? Although morale was a factor, it could not be the sole justification for retention.

14. Has there been a noticeable change in cooperation among officers on the same shift (small groups, cliques, etc.)? The majority of departments have detected a noticeable change, but there are conflicting statements as to benefits. Statements from the administrators tend to give more weight to beneficial aspects of the interaction.

15. How has the 4/40 plan affected the morale of the department? Each administrator interviewed, with the exception of one, reported morale has increased after implementation of the 4/40 plan.

16. Are there any current problems created by the 4/40 plan that you feel are unsolvable? The administrators reported that generally all problems created by implementation of the 4/40 plan are solvable, but there are problems that are unique to the plan.

17. In your opinion, how does the city manager feel about the 4/40 plan? All the administrators felt that the city manager was in favor of the 4/40 plan.

Results of the Patrolmen Questionnaire

The following paragraphs show the percentage of positive, neutral, and negative responses to each of the structured questions administered to the personnel included in the 4/40 plan. Responses were scaled from very positive (5) to very negative (1). Positive responses are a combination of 5 and 4 on the question scales. Neutral responses correspond to a 3 on the scale and can indicate that a respondent either has no opinion or there was no change, and negative responses are the combined 2 and 1 scores on the question scales.

There were a total of 292 completed questionnaires. The total responses to these questionnaires for all law enforcement agencies were combined, and when the positive or negative responses to each question exceeded 200 (68%), the answer was considered very positive or very negative.

1. Officers demonstrated a very favorable initial feeling toward the 4/40 plan. Positive, 88.0%; neutral, 6.5%; negative, 5.5%.

2. Officers found the extra day off afforded by the 4/40 plan very useful to them. Positive, 92.5%; neutral, 4.5%; negative, 3.0%.
3. The 4/40 plan was considered very adaptable to educational goals. Positive, 68%; neutral, 25%; negative, 7%.

4. Working 4/40 hour shifts increased the ability to perform tasks. Positive, 63%; neutral, 32%; negative, 5%.

5. The 4/40 plan had a very favorable effect on morale. Positive, 86%; neutral, 10%; negative, 4%.

6. Court appearances were deemed to be an increased hardship under the 4/40 plan. Positive, 35%; neutral, 42%; negative, 23%.

7. Officers noted very little difficulty in utilizing additional off-duty time. Positive, 35%; neutral, 3%; negative, 4%.

8. Officers felt that their co-workers had a very favorable opinion of the 4/40 plan. Positive, 94%; neutral, 5%; negative, 1%.

9. Moonlighting reportedly did not increase or decrease since implementation of the 4/40 plan. Positive, 17%; neutral, 69%; negative, 14%.

10. Departmental efficiency has increased very much under the 4/40 plan. Positive, 78.0%; neutral, 16.5%; negative, 5.5%.

11. Greatest Advantages to Department and Personnel
   a. Deployment (category includes more men at peak hours, greater flexibility, better coverage, etc.). Most frequently listed advantage. Cited by 218 respondents (71%).
   b. Time off (category includes more time to be with family, to attend school, to relax, for hobbies, and to recoup and recharge for work). This category was the next most frequently listed advantage, with 132 responses (45%).
   c. Morale. A total of 43 respondents (15%) listed increased morale.
   d. Decreased response time to calls (category encompasses decreased response time for assisting units and greater officer safety). A total of 19 respondents mentioned this advantage (6%).
   e. More time to handle calls properly and do improved reports. Listed 11 times as an advantage (4%).

12. Respondents felt that the 4/40 plan was slightly more flexible in allowing men to perform off-duty activities. Positive, 28%; neutral, 26%; negative, 46%.

13. Efficiency was believed to be slightly increased on tour of duty as a result of additional 2 hours per shift. Positive, 44%; neutral, 44%; negative, 12%.

14. Officers reported no significant shortage of patrol units at the start of a tour of duty under the 4/40 plan. Positive, 37.5%; neutral, 27.0%; negative, 35.5%.

15. No appreciable shortage of units indicated by the respondents under the 8-hour plan. There were 129 "Yes" (57%) and 99 "No" (43%) responses to this question.

16. Evidence shows that the officers' financial status has not been affected. Positive, 23.0%; neutral, 66.5%; negative, 10%.

17. Results indicate that the patrol division is very flexible under the 4/40 plan (e.g., deployment of personnel, emergency callouts). Positive, 69%; neutral, 24%; negative, 7%.

18. Respondents felt that the 4/40 plan had a very favorable effect on their personal life. Positive, 77%; neutral, 17%; negative, 6%.

19. Greatest Disadvantages to Department and Personnel
   a. No disadvantages. Seventy-two respondents (25% of those polled) indicated that the 4/40 plan had no disadvantages.
   b. Shortage of patrol units. Fifty-three officers (18%) reported this as a disadvantage.
   c. Court appearances. Cited by 34 respondents (11%) as a disadvantage.
   d. Scheduling problems (category includes a wide range of problems related to the change of scheduling; i.e., vacation relief factor, educational scheduling, less time with family during workdays, etc). A total of 27 officers (9%) reported the scheduling factor as a disadvantage.
e. Longer hours (category encompasses lowered efficiency due to longer workday, increased fatigue, potential for accidents resulting from fatigue, etc.). Cited by 27 (9%) of those polled.

f. Lack of adequate supervision (category includes lack of sufficient number of field sergeants, weakened lines of communication and supervision, etc.). Fourteen officers (4%) were in this category.

g. Shortage of personnel. Nineteen responses (6%).

20. Officers overwhelmingly indicated that they would be very much opposed to returning to a 5-day/40-hour week. Positive, 15%; neutral, 7%; negative, 78%.
Conclusions

The greatest single justification for the 4/40 plan has been its flexibility in allowing for shift overlap and subsequent increased manpower distribution and deployment commensurate with periods of high crime activity. The enlarged work load created by this deployment is reflected in a higher arrest rate and production of the patrol personnel as measured by statistics of all departments surveyed. This improved production of patrol personnel, while desirable, has created corresponding stresses and burdens in other areas of the police organization. The most immediate result has been the extra work load placed on those members of the department not currently on the 4/40 plan, such as the detectives, dispatchers, auxiliary, records, etc.

Yet, the 4/40 plan will increase the efficiency of the patrol division and ultimately of the department. Further, it will increase work output, arrest rates, manpower for evening shift, and work loads in supportive divisions (investigation, records, etc.).

The surveys show that personnel in the age category of 35 and over are more fatigued because of the 4/40 hour shifts and the effects of the 4/40 plan in general. Coincidentally, a similar percentage in this category was less opposed to returning to the standard work week. This will be a problem, and plans should be designed to alleviate it if an agency adopts the 4/40 plan.

Agencies will have to hire extra supportive personnel or streamline operations and reporting procedures to accommodate the increase in work loads. Most of the agencies studied are budgeting for more supportive personnel as a result of this increase. Reports are more thorough and comprehensive, resulting in more criminal complaints without further investigative work and more convictions without the appearance of officers to testify. Overall, the effectiveness of the department will increase. However, administrators considering adoption of the 4/40 plan should realize that this improvement should be qualified to the extent that there may be some areas within the department where operations might be adversely affected.

The 4/40 plan will increase department morale. Favorable publicity and the concept of a 4-day work week seemed almost automatically to ensure a favorable introduction for the 4/40 plan within the departments surveyed. After the 4/40 plan had been in operation for a while, some of the initial enthusiasm seemed to subside. Nonetheless, personnel in all departments and by all measurements felt that morale had significantly increased. Relatedly, it can be expected that law enforcement agencies desiring to implement the 4/40 plan in the future must be prepared to make the change permanent. The benefits accruing to the personnel will not easily be reversed, as reflected in the strong opposition to a return to the standard workweek. Departments attempting to return to a 5-day week may find the change fraught with difficulties. Based on the magnitude of the 4/40 plan’s impact on morale, those departments that succeed in reverting to a 5-day week may be faced not only with severe morale problems, but a resulting personnel exodus.

This study developed no conclusive evidence to indicate that the 4/40 plan was more or less economical than the 5-day/40-hour workweek. An increase in expenditures for patrol units and additional supportive personnel, however, may affect dollar requirements. The 4/40 plan then may be more expensive, less expensive, or may not affect the financial status of the agency, depending on the agency itself.
An effective means of minimizing the adjustment of personnel to greater off-duty time would be a thorough orientation program prior to adoption of the 4/40 plan, thereby informing personnel of the probable affects on their personal lives. Departments that have used this approach have had minimal problems. Some major indicators show that the 4/40 plan may alleviate off-duty problems. The extra day off seemed to be the nucleus, the energizing component, and source of all personnel benefits acclaimed by the officers.

Importantly the repetition of responses, extolling the positive effects of the 4/40 plan on all aspects of officer's lives cannot readily be minimized by those administrators still operating under the classical workweek. In an age, where strikes by public employees are becoming a reality, the 4/40 plan may serve to appease grievances and complaints about working conditions that prompt such strikes. It is conceivable that police administrators who are not convinced that the benefits of the 4/40 plan for their departments justify its implementation may yet adopt the plan to provide personnel benefits to an occupation long beleaguered and neglected.

Overtime, according to police administrators, has decreased, especially in the areas of shift replacement and expenditures due to extended shift overtime. However, personnel working under the 4/40 plan feel that it does not affect their income.

The 4/40 Plan: Problems to Be Solved

As mentioned earlier, a definite and, in some instances, an urgent need has developed for additional personnel to bolster overworked and, perhaps as a consequence, less efficient staff and auxiliary functions.

One department has indicated that this may be the unsolvable problem of the 4/40 plan, if city officials will not provide personnel to meet the level of services required.

Shortage of mobile equipment, patrol cars, always has been somewhat of a problem, even under the 5/40 plan. Implementation of the 4/40 plan did not greatly increase the need for more patrol cars, with the possible exception of the beginning of the shifts during peak activity hours when deployment of personnel is the highest. Additional patrol cars would solve this problem; however, during the light activity hours when deployment is light, these extra vehicles would not be in service. Hence, police administrators must convince city officials that, while some of these vehicles are not in service continually, efficiency is not necessarily decreased. While the extra cost of obtaining more patrol cars would be increased initially, over the long run this cost would not increase significantly because during light activity hours the vehicles would not be running. Therefore, cars would be serviceable for a longer period of time. The main benefit of the 4/40 plan, which is increased deployment during peak activity hours, has been impaired because of this lack of patrol vehicles during this time. It is true that more patrolmen are in the field during this time, but very often the patrolmen may be forced to double up because of lack of vehicles, thus defeating some of the objectives of the 4/40 plan (more on-site violations, response time reduction, etc.).

Another effect of higher production and arrest rates had led to a significant increase in court time for patrol officers. Police administrators should consider the detrimental effects of increased
court time thrust upon the officers because of the 4/40 plan. Pro-
visions should be made to alleviate the hardships of court appearances
lest they become a serious drawback to the 4/40 plan. In addition
to the methods discussed, a court liaison officer could be created to
deal with subpoenas and to call the officers three-quarters of an hour
prior to the time they will actually testify. In smaller communities,
where a liaison officer is impractical because of the smaller caseload,
closer coordination would be required with the city or district
attorney. This will reduce the number of court appearances, reduce
overtime expenditure, and allow the officer to return to his next
shift rested.

Scheduling problems arising from the 4/40 hour shifts and shift
overlaps have created several additional problems. Some personnel
find the 4:00 p.m. to 2:00 a.m. or 8:00 p.m. to 6:00 a.m. shifts
distasteful, and there is little remedy for this. Problems arising
from 10-hour shifts—decreased time with the family, conflict with
educational scheduling, and increased fatigue—cannot be readily
alleviated by the departments. Individual officers will have to
take it upon themselves to adapt their domestic, business, and edu-
cational lives to the scheduling of the 4/40 plan. Smoother function-
ing of the 4/40 plan will depend to some degree on how well officers
are able to make this adjustment.

Holidays and vacation relief may also be scheduling problems.
Small departments have experienced problems in maintaining sufficient
personnel on some shifts because of holidays, vacations, or sick
leave. Small departments tend to be less flexible in adjusting
personnel to satisfy the relief factor. Furthermore, few departments
have experienced emergencies requiring the full use of manpower.
Unrestricted living radius and the probably increased use of the
three days for out-of-town holidays may mean a personnel shortage in
an emergency. Therefore, problems will continue, especially for
smaller departments, unless appropriate adjustments are made. Cities
could pay for holidays in lieu of giving days off. Holidays and
vacations will continue to be a scheduling problem unless adminis-
trators take steps to adequately project the relief factor under the
4/40 plan and make appropriate scheduling adjustments.

Finally, the additional day off under the 4/40 plan may leave
officers ill-informed about certain criminal activity upon returning
to duty and may also result in less exposure between officers and
field supervisors. To help alleviate this problem, more extensive
briefing sessions can be held and additional field supervisors
acquired. Briefings should not be limited to only the past 24
hours, but extended to include the last 3 days.
END