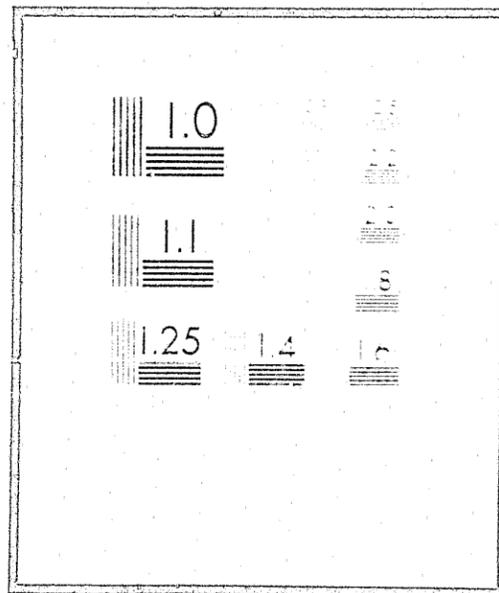


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CE TRAFFIC SERVICES

A HANDBOOK FOR GOVERNOR'S
HIGHWAY SAFETY REPRESENTATIVES

HIGHWAY SAFETY DIVISION
INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

13534

31

POLICE TRAFFIC SERVICES
HANDBOOK FOR

GOVERNOR'S HIGHWAY SAFETY REPRESENTATIVES

This publication was prepared under the International Association of Chiefs of Police, Contract DOT-HS-036-2-404, funded by the National Highway Traffic Safety Administration. The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration. The document does not constitute a standards specification or regulation.

HIGHWAY SAFETY DIVISION
INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

FOREWORD

The International Association of Chiefs of Police serves the law enforcement profession and the public interest by advancing the art of police service. Its staff of police management consultants, educators, highway safety consultants, researchers and systems analysts develop and disseminate improved administrative, technical and operational practices and promote their use in police work. Its aims are to foster police cooperation in the exchange of information and experience among police administrators throughout the world, to bring about recruitment and training of qualified persons, and to encourage adherence of all police officers to higher professional standards and performance in conduct.

IACP services are provided by professional staff composed of police administrators and specialists who frequently combine extensive experience with broad academic credentials in police administration, political science, sociology and law.

Because of IACP's long-term commitment to resolving the problems presented by the motor vehicle and its use, the National Highway Traffic Safety Administration contracted with the International Association of Chiefs of Police to develop this document which is designed to assist the Governor's Highway Safety Representatives in understanding some basic concepts regarding the provision of police traffic services at various levels. This document provides information which is fundamental in nature and it is not designed for use by police executives or students of police administration.

It is important to recognize that police departments do not exist in a professional vacuum. They function within a political environment. This compounds the problem for those with responsibilities in the field of highway safety and criminal justice. The late O. W. Wilson said "Traffic control overshadows in magnitude every other police regulatory task." Police control of highways, motor vehicles and people is not always consistent with the views of those in control of the local jurisdictions.

Consequently, the efforts of the Governor's Highway Safety Representative and the local police executives may meet resistance because traffic control is a large task and the number of people affected is great. The political forces which exist must provide support to any highway safety program. Functioning without that political support places the manager in a difficult role.

Staff participants in this effort include:

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Mr. Adam G. Johnson served as Project Director.

Others instrumental in the preparation of this document were Patricia A. Rael of the IACP's Field Operations Division who assumed the responsibility for editing, and Elaine Dalessandro and Jan Dodson who provided secretarial services in the preparation of this publication.

ACKNOWLEDGEMENTS

Efforts of this nature are difficult because of the volumes of material that could and should be included. The problems of developing a statewide police traffic services program are so broad in scope and complexity, that we believe no single volume or document can provide adequate guidance to that person with final program responsibility. The material included here then is offered only as a guide and not intended to be used as a total program reference. Because of the enormity of the task, the views of prominent police executives from all levels of government were solicited and included.

The National Highway Traffic Safety Administration also recognized the need to incorporate the views of active police executives and commissioned the Highway Safety Committee of the International Association of Chiefs of Police to provide guidance to the IACP staff in the development of this document. This Committee is composed of a cross section of well-qualified administrators from city, county and state police agencies. Each member brings to the Committee a distillation of many years of study and experience.

Continuous in nature, the work of this body is international in scope. Since 1935 this group has been an active, productive vehicle in terms of establishing significant positions related to the police involvement in the efficient and effective movement of people and goods. The Committee's objectives are to provide guidance to all persons dedicated to the improvement of police traffic management, develop more effective support and to encourage balanced, comprehensive highway safety programs at all levels of government.

We wish to acknowledge with deep appreciation the contribution of the members of the 1972 Highway Safety Committee.

Chairman: Harold W. Burgess, Superintendent
Virginia State Police

Vice Chairman: William L. Durrer, Chief
Fairfax County, Virginia

Secretary: Hudson R. Hamm, Director
Field Service Division
The Traffic Institute, Northwestern University

Members:

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George A. Murphy, President (1971-1972)
International Association of Chiefs of Police

Quinn Tamm, Executive Director
International Association of Chiefs of Police

In addition, the International Association of Chiefs of Police wishes to give a special acknowledgement to Mr. James W. Shumar, Chief Crime and Delinquency Advisor to the U. S. Department of Housing and Urban Development for his permission to adapt and include in this document his twelve step planning process for effective program evaluation.

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- II IACP - Policy: Specialization versus Generalization

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 - Discussion of Traffic Law Enforcement Standards and Rates
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- VII IACP - Policy: Training, Minimum Recruit for Law Enforcement Agencies
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- VIII Management and Police Traffic Services Questionnaire
 - IACP On-Site Data Collection Guide

BIBLIOGRAPHY

I

INTRODUCTION

This manual has been prepared to provide individuals charged with overall highway safety program planning responsibility with a conceptualization of the purpose, goal, and objectives of a police traffic service program. It is intended to explore the potential, limitations, and some of the problems confronting the police in the execution of their role within the total highway safety effort.

In addition to describing police traffic services and explaining its various functions and subfunctions, an effort has been made to provide the highway safety planner with a basic frame of reference in which to make decisions regarding police traffic-related projects.

The manual is designed to serve as a source of reference in defining programs, techniques and countermeasures utilized by the police to achieve their objective of reducing death and injury resulting from traffic accidents.

Scope and Objectives

This document has not been prepared for the professional police administrator as an operational guide for establishing an effective traffic law enforcement program. It is intended to acquaint the highway safety planner with sufficient general and technical information on which to make soundly based decisions on proposed police traffic service-related projects and make valid assumptions regarding the quality and level of Police Traffic Services (PTS) within his jurisdiction.

A final objective of this manual is the enumeration of several areas that have potential for upgrading the quality and level of Police Traffic Services.

Manual Development

This manual has been prepared under contract to the United States Department of Transportation by the staff of the Highway Safety Division of the International Association of Chiefs of Police (IACP). Instrumental to its development was the guidance and technical assistance provided by the IACP Highway Safety Committee. The Highway Safety Committee is a long-standing, energetic committee which counts among its many

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for the company's financial health and for providing reliable information to stakeholders.

2. The second part of the document outlines the specific procedures for recording transactions. It details the steps from initial entry to final review, ensuring that all necessary information is captured and verified.

3. The third part of the document addresses the role of the accounting department in this process. It highlights the need for clear communication and collaboration between different departments to ensure data accuracy.

4. The fourth part of the document discusses the importance of regular audits and reviews. It explains how these activities help identify errors, prevent fraud, and ensure compliance with relevant regulations.

5. The fifth part of the document provides a summary of the key points discussed. It reiterates the importance of accuracy, transparency, and regular communication in the financial reporting process.

6. The sixth part of the document offers some practical tips for implementing these procedures. It suggests ways to streamline the process and reduce the risk of errors.

7. The seventh part of the document concludes with a statement of commitment to high standards of financial reporting. It expresses the company's dedication to providing accurate and timely information to all stakeholders.

8. The eighth part of the document provides a list of resources and references. It includes links to relevant regulations, industry best practices, and internal company policies.

9. The ninth part of the document is a call to action, encouraging all employees to take ownership of their role in the financial reporting process. It emphasizes that everyone's attention to detail is essential for success.

10. The tenth part of the document is a closing statement, thanking the reader for their attention and expressing confidence in the company's future. It also provides contact information for further inquiries.

11. The eleventh part of the document is a final note, reminding the reader that the financial reporting process is an ongoing one. It encourages continuous improvement and adaptation to changing circumstances.

12. The twelfth part of the document is a signature block, where the author of the document has signed their name. This adds a level of accountability and authority to the document.

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16. The sixteenth part of the document discusses the various risks associated with data security. It highlights the potential consequences of data breaches, including financial loss and reputational damage.

17. The seventeenth part of the document outlines the company's data security policy. It details the measures in place to protect sensitive information and ensure compliance with data protection laws.

18. The eighteenth part of the document provides a list of best practices for data security. It offers practical advice on how to identify and mitigate potential security risks.

19. The nineteenth part of the document discusses the role of employees in maintaining data security. It emphasizes that every employee has a responsibility to protect the company's information.

20. The twentieth part of the document concludes with a summary of the key points. It reiterates the importance of data security and the company's commitment to protecting its information.

21. The twenty-first part of the document provides a list of resources and references. It includes links to relevant laws, industry standards, and internal company policies.

22. The twenty-second part of the document is a call to action, encouraging all employees to take ownership of their role in data security. It emphasizes that everyone's vigilance is essential for success.

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POLICE TRAFFIC SERVICES

Police Traffic Missions

Defining Police Traffic Services is not an easy task. There does exist some misunderstanding about its basic goals, purposes, and functions among laymen and practitioners. To gain an understanding about Police Traffic Services, it is necessary to look beyond the most visible and obvious function of traffic law enforcement. While an essential element, traffic law enforcement is only one of a complex series of functions that together make up the total concept of Police Traffic Services. Police agencies today have a wide range of interests in the highway transportation system. The totality of this involvement and a discussion of the significant changes that Police Traffic Services has undergone are presented throughout this document.

An oversimplified definition of Police Traffic Services would be: all activity performed by the police to assist in the safe, rapid and efficient movement of persons and goods on this nation's streets and highways.

A much more definitive and descriptive treatment of the subject was provided in a report prepared by the IACP on Police Traffic Responsibilities. In the report, the overall police traffic mission was categorized under a general classification of highway traffic management. The study goes on to divide the role that police play in highway traffic management into five separate mission areas—traffic supervision, information, public information and safety education, communication and management.

Traffic Supervision Mission. The activities included under this term are traffic accident investigation, traffic law enforcement and traffic direction and control. These three Police Traffic Services tasks or functions represent the basic operations performed by the police to achieve their primary objective of assisting in the safe and expeditious movement of traffic.

A fourth function has recently been added to the three traditional components of traffic supervision. That function is general motorist services which includes a wide variety of services to the motoring public such as giving information and directions, providing emergency fuel or mechanical assistance, giving first-aid or medical assistance, transporting motorists, or delivering messages. There has been increasing recognition that this aspect of Police Traffic Services is becoming an ever greater part of the police traffic responsibility.

Information Mission. Since highway safety programs are predicated upon the concept that hazardous actions and conditions are directly related to traffic accident causation and that correction or elimination of these actions or conditions will result in the prevention of traffic accidents, the knowledge of these hazardous actions and conditions is critical if effective countermeasures are to be implemented. To be effective, police traffic record systems must collect, compile, record, analyze, store and disseminate data from each of the four major categories of traffic record information: (1) driver, (2) vehicle, (3) highway, and (4) collision. And to be truly effective, records must satisfy three primary objectives:

- Operations
- Planning
- Evaluation

The police information mission must be capable of providing adequate data to a variety of users including engineers, legislators and educators, as well as private sector users such as insurance companies and private citizens.

Public Information and Safety Education Mission. This mission is not one that falls within the exclusive purview of the police. The purpose of this mission is to teach the individual citizen that traffic safety is a personal responsibility and should be accepted as such; to provide the information needed by the driver or pedestrian to allow him to protect himself from accidents; and to develop a broader understanding of the traffic problem in terms of engineering, enforcement, and education.

Many factors determine the extent to which a police department becomes involved in this mission including community demand, availability of other safety organizations (Safety Councils, etc.), departmental rules and regulations, talents and skills of police personnel, and the demand for other services.

Regardless of the degree of commitment to this mission, the police role in the area of public information should be centered on the activities of the police department, i. e., release of accident and enforcement statistics, providing information to the news media upon request, providing spokesman for appropriate meetings, and providing professional assistance and technical assistance to other organizations responsible for developing safety programs. However, it should be recognized that in many instances the police are the only local organized group with highway safety responsibilities and may by necessity have to expand their public information function beyond those activities directly related to their operation.

Communication Mission. The purpose of this mission is to maintain an effective flow of pertinent information throughout the department by all personnel and through appropriate channels so that the achievement of the total objective can be realized. The efficient movement of data in both directions between line personnel (execution level) and staff and administrative personnel (decision-makers) is essential. The information system of the police department is the critical link between stated policies and objectives and performance on the street and eventual achievement of those goals.

Management Mission. The police traffic management mission is the factor of control that directs the preceding missions toward the accomplishment of the primary objective of safe and efficient movement of traffic. Included in the management mission are all of the traditional administrative tasks of planning, organizing, staffing, training, directing, coordinating, reporting and budgeting.

Basic Police Traffic Services Functions

To further clarify the total police role in highway traffic management, we offer the following categorization of functions and tasks performed by the police while acting in a traffic capacity. While the functional classification presented here is not in complete agreement with all of the classification systems found in the literature, most of the variation or disagreement is semantical rather than substantive.

Before discussing police traffic functions and subfunctions, it may be well to interject a qualifying statement regarding the inseparability of police traffic missions from the total public protection and crime prevention goals of most law enforcement agencies. While the traffic functions that are presented may appear to be isolated and separate activities, in reality they are only part of a total system and do not lend themselves to isolation and individual scrutiny. The question of inseparability of police goals, objectives, and functions is discussed in some detail in later portions of this manual, but it is worth mentioning at this point to avoid misinterpretation by the reader of the following material.

The following list identifies and briefly defines the seven basic functions which together comprise police traffic responsibilities:

<u>Function</u>	<u>Functional Basis or Definition</u>
Traffic Law Enforcement	Moving violation control
Traffic Control and Direction	Affects traffic flow directly
Traffic Accident Management	Activity connected with accidents only
Ancillary Services	Activity or service indirectly affecting traffic flow
Support	Any activity in support of field traffic functions
Justice Systems Interaction	Traffic-unrelated activity normally performed while on traffic duty
Regulatory Activities	Regulation of driver/vehicle status (not moving)

The three most widely known and visible services provided by law enforcement agencies in the efforts to achieve the safe and expeditious movement of traffic are: traffic law enforcement, traffic accident management, and traffic direction and control. The remaining four Police Traffic Services functions are less visible but are equally important.

Traffic Law Enforcement. This activity is specifically directed toward controlling the violation of traffic laws through various preventive patrol techniques and active enforcement.

Traffic Accident Management. Included under this function are all of the police post-collision activities such as the physical presence of police officers and equipment to provide assistance to the injured, to protect the scene to prevent further injury or property damage, and to prepare required accident reports accurately with information gained through various investigative and interview techniques. Also included under this subfunction is the taking of appropriate enforcement action as warranted by the circumstances of the particular incident.

Traffic Direction and Control. Another of the traditional police functions, this activity includes the physical presence of an officer to indicate to drivers and pedestrians what to do or not to do, to provide information and direction under a variety of circumstances, and to develop and implement plans to expedite the movement of traffic during everyday periods of traffic congestion, emergency situations, and unusual special events and occurrences.

Ancillary Services. This function includes the many diverse tasks performed by the officer that have an indirect effect on traffic flow. They include emergency motorist service, checking abandoned vehicles, identifying and reporting roadway and roadside hazards, providing public information and direction, locating and recovering stolen vehicles, and numerous other citizen-generated requests for assistance.

Support. Grouped under this functional heading are the many administrative and staff activities that support line or field operations. Key subfunctions include general administration, training, planning/budgeting, personnel management, records, communications, and other management and technical services.

Justice Systems Interaction. Activities included in this function are those tasks and missions performed by traffic police that may not have a direct connection with primary traffic objectives but interface in some manner with traffic duties. Examples of this type of activity are preparation of cases and testifying in court; service of court notices, warrants, and summonses; transportation of prisoners; and the general transportation of individuals and supplies. Another function included under this classification is the crime control aspect of an officer's responsibility. Two factors enter into the necessity for including crime control in a discussion of Police Traffic Services. First, traffic officers (men assigned to PTS duty) are frequently called upon to assist fellow officers in crime control activities. Second, it is not uncommon that a routine stop of a motorist

for a traffic violation will result in the discovery of some other form of criminal activity on which the officer must act. This concept of inseparability of criminal and traffic functions is discussed elsewhere in this document.

Regulatory Activities. The last of the seven basic Police Traffic Services functions encompasses the inspection and control of vehicles and the licensing of motor vehicle operators. The degree of involvement in these activities varies greatly from state to state and between police agencies within a given state. This action, designed to regulate drivers and vehicles in a non-moving status, includes driver licensing, vehicle registration, vehicle inspection, vehicle weight control, public carrier regulation, and commercial regulation (licensing and control of taxi-cabs, school buses, etc.). Where it is considered a part of police responsibility, these duties are most frequently carried out at the state level with state police or highway patrol agencies providing these services. However, depending on state statutes, some county and municipal law enforcement agencies do engage in this activity. The recent resurgence in popularity of the bicycle as a transportation and recreational vehicle has added another significant demand for regulatory and control activities by the police. The present trend toward governmental reorganization at all levels may well see a shifting of these functions from the police to other governmental entities such as departments of transportation.

Growth and Development of Police Traffic Services

As stated earlier, the traditional police function within the motor vehicle transportation system has centered around the traffic law enforcement, accident investigation, and traffic direction and control processes of Police Traffic Services. In today's highly complex and mobile society, the police officer's responsibilities have been expanded beyond the restrictive area of traffic supervision and have evolved into a more encompassing and comprehensive service which includes motorist service, public information, motor vehicle theft prevention and regulatory and other activities vital to the safe and efficient movement of traffic.

This increase in the level, scope, and quality of Police Traffic Services is tied in with a rather general and pervasive demand by the public for increased services by all agencies and at every level of government.

An important recent factor contributing to the expansion of police traffic services in this country was the enactment of the Highway Safety Act of 1966 and the promulgation of highway safety performance standards by the U. S. Department of Transportation. A principal feature of the Highway Safety Act is the provision of federal financial assistance to state and local governments for the improvement and expansion of their highway safety programs in accordance with uniform performance standards. Subsequent to this Act, the Omnibus Crime Control Bill was enacted in 1968. Together, these two far-reaching pieces of Federal legislation have served as a catalyst for the improvement of police policy, performance, and effectiveness in this country.

Police officials have long recognized that the traffic law enforcement process alone cannot provide the maximum in safe and efficient highway transportation. In addition to sound and effective Police Traffic Services, there is a need for a balanced program in

Supervisory and administrative police personnel play a vital role in an effective traffic law enforcement program. Management has the responsibility for planning, supervising, training, analyzing traffic records, and securing necessary cooperation and liaison with other related groups such as the courts, engineers, and state licensing agencies. The importance and emphasis top management place on the value of traffic law enforcement have a major influence on the quality and level of service.

Middle management or supervisory personnel also play an extremely important role in the total traffic law enforcement process. Their understanding, enthusiasm, and interest in the goals and objectives of a traffic law enforcement program often spell the difference between success and failure. The importance of the supervisor's task of insuring the proper application and deployment of manpower at those locations and times identified as having high potentiality for the occurrence of traffic accidents cannot be overemphasized. Too often, well conceived programs fail due to a breakdown at this critical link.

The basic purpose and primary objective of traffic law enforcement is the creation of a deterrent to violators and potential violators of traffic laws and regulations. The principal activity of enforcement is directed toward developing a negative or avoidance action on the part of the driver. This action is necessary because it is commonly agreed that most traffic laws have no moral stigma attached to their violation. Speeding and running a stop sign or a traffic light are not considered violations of a moral code as are the laws against rape, murder, or other heinous crimes. It is, therefore, a basic tenet and an underlying assumption of traffic law enforcement that people regularly violate the guidelines or rules promulgated to insure safe usage of the highways.

The ultimate aim of traffic law enforcement is voluntary compliance with traffic regulations on the part of drivers and pedestrians and to provide maximum mobility with minimum interruption. Enforcement activity should also be considered a process of educating the motorist into voluntary compliance with traffic laws. This educational process is most often achieved by creating an awareness of the consequences of violating traffic laws. Enforcement measures may be considered repressive in that they aim to deter potential violators by making the commission of a violation an unpleasant experience.

In effect, traffic law enforcement is a conditioning process whereby the individuals themselves, or through the experiences of friends or acquaintances, learn that violating traffic laws leads to an unpleasant experience (fine, jail, loss of license, etc.), and therefore, the mere symbol of authority or possibility of detection and apprehension results in the avoidance of similar situations in the future. Hopefully, this experience will result in a safer and more alert driver who will be spared a more unpleasant experience from a traffic collision.

Specialization versus Generalization. The decision to specialize is extremely critical to the police administrator because of its pervasive effect upon all aspects of the operation of the department. The concept of specialization involves the question of whether or not to divide the department into separate units based upon tasks to be performed and to what degree this should be done.

With respect to the areas of traffic law enforcement, accident investigation, and traffic direction, the determination principally involved is whether these functions and responsibilities should be in a separate division or within the purview of the patrol division. This determination is not of an either/or nature, but rather may contain varying degrees of specialization. There are many pertinent considerations involved in this determination. These include, but are not limited to, the following: size and sophistication of the department, training capabilities, size of geographical area to be served, necessity for ready availability of certain services, and dissimilarity of tasks to other duties. In addition to the broad categories identified above, there are also certain categories specifically relating to traffic that should be given consideration. These areas are traffic services, traffic volume, and congestion. Included within these categories would be questions involving accident frequency and volume of specific offenses, such as DWI's (Driving While Intoxicated).

In 1970, the International Association of Chiefs of Police adopted a policy regarding specialization in police traffic operations. The full text of this policy is included in the appendix.

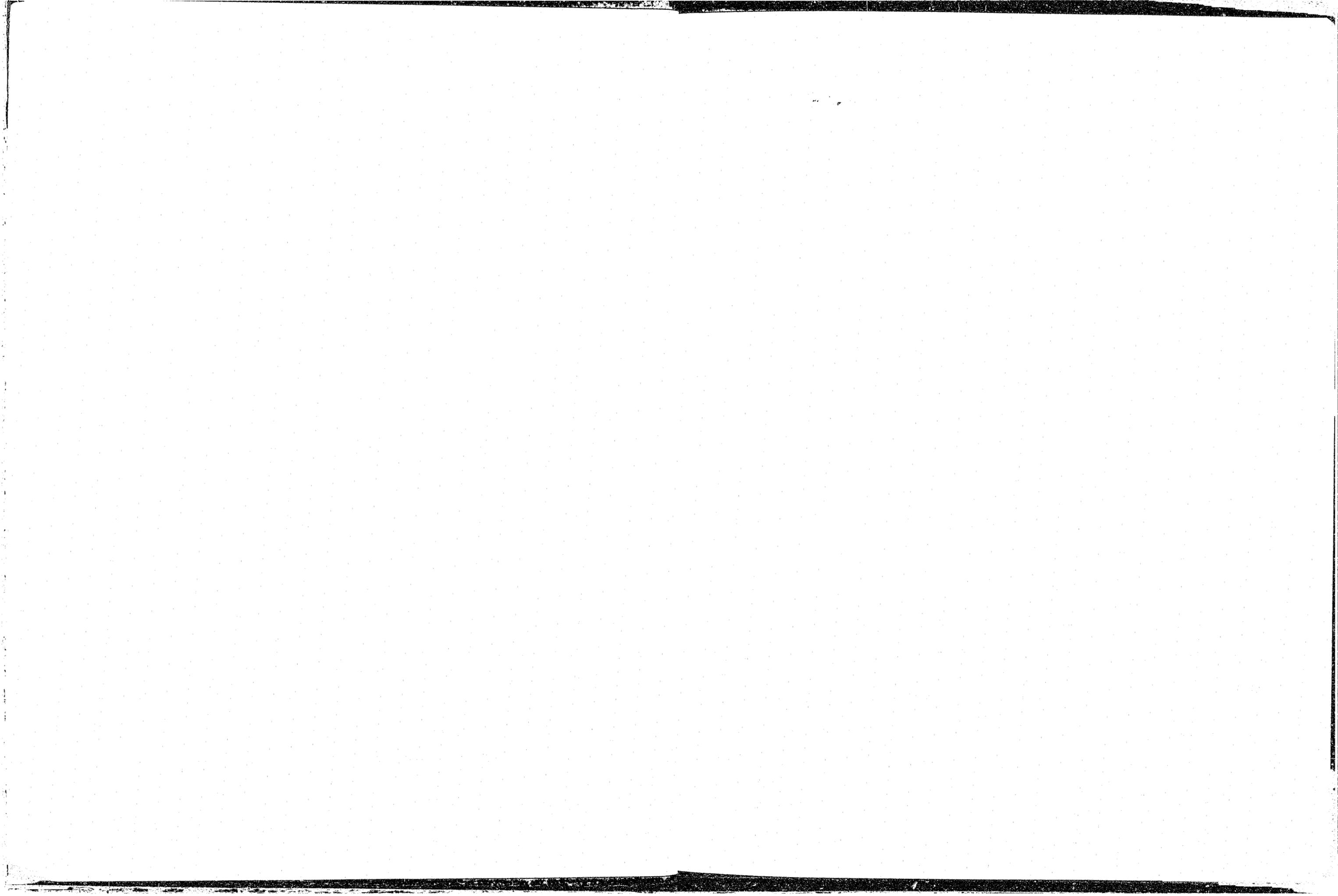
The purpose of this policy, in light of the vast number of complex variables involved, is to establish minimum standards for a specialized traffic unit designed to improve the functional operations of the police department.

As an initial step, the policy suggests administrative specialization and operational generalization. In other words, an agency should have at least one person with administrative responsibility who is trained in the area of highway safety management. The operational functions of Police Traffic Services would be performed by the patrol unit. However, even in this situation certain tasks which require specialized skill or knowledge such as accident investigation could be performed by officers assigned primarily to those tasks. Thus, the traffic division would, in some cases, consist of an administrative officer with overall management responsibility and a number of traffic specialists. The greater majority of the Police Traffic Services would be performed by the patrol unit under the supervision and control of the patrol division commander with functional support provided by the specialized traffic unit.

Another aspect of the question of specialization versus generalization involves the degree of use or nonuse of civilian personnel in the performance of the Police Traffic Services function.

There is one indisputable fact in the highway traffic safety picture—motor vehicle traffic accidents inflict on the American people enormous social and economic loss each year. As imperfect and given to varying interpretation as statistics are, the dollar figure attributed to traffic accidents is astounding. A report prepared by the National Highway Traffic Safety Administration estimated the annual costs of motor vehicle accidents at something near \$45 billion.¹ The reports estimates are based upon evaluation of

¹Societal Costs of Motor Vehicle Accidents, Preliminary Report, U. S. Department of Transportation, National Highway Traffic Safety Administration, (Washington, D. C.), p. 1.



In announcing the Selective Traffic Law Enforcement (STEP) demonstration project, the NHTSA identified the following deficiencies in present traffic law enforcement that contributed to the reduction of the effectiveness of the police traffic effort and were potential candidates for remedial activity:⁶

- Insufficient manpower resources
- Preemption of traffic services
- Lack of public and private community support
- Misapplication of resources
- Unsustained efforts
- Inadequate information systems
- Training deficiencies
- Ineffective or inconsistent traffic court policies and practices
- Inadequate enforcement of license withdrawals
- Public antipathy for general surveillance measures
- Inadequate remedial education

After carefully screening several sites against criteria designed to isolate and assist in the measurement of the effectiveness of various enforcement countermeasures, several STEP sites were selected and are now operational.

In addition to generating nationwide interest in Police Traffic Services, other stated objectives of the STEP projects are to serve as full-scale field tests of selective enforcement, measure the impact of various enforcement countermeasures, and to evaluate the costs and effectiveness of specific countermeasures.

The information, knowledge, and experience gained by police agencies through participation in demonstration projects such as STEP and the 35 Alcohol Safety Action Program (ASAP) will undoubtedly assist in the improvement of the quality of Police Traffic Services far beyond the immediate jurisdictions of those particular agencies. The evaluation of the countermeasures employed in demonstration projects as well as the hundreds of Police Traffic Services projects funded through individual state and community programs will eventually result in a body of knowledge and a cadre of people that will permit the identification and ultimate delivery of the level of Police Traffic Services needed within our highway transportation system.

⁶ NHTSA Memorandum, February 18, 1971.

Proposed Revisions of the Highway Safety Program Standards. In August 1972, the National Highway Traffic Safety Administration issued for public comment, eight Highway Safety Program Standards designed to achieve four primary objectives:

1. To upgrade the existing 18 standards with information, experience, and concepts developed since the initial standards were issued
2. To strengthen the evaluation provision to improve the assessment of state highway safety programs
3. To clarify national goals and incorporate more performance-oriented language in the standards
4. To "repackage" the standards in a manner that facilitates planning and implementation

Although issued for comments and subject to considerable modification, the proposed Standard N-6, Police Traffic Services, promises to provide substantive direction and guidance particularly in program evaluation. Once refined and finalized, the standardized items for comparison and analysis for individual and program productivity contained in the standard should result in more meaningful and useful data on the delivery of Police Traffic Services.

III

HIGHWAY SAFETY PROGRAM MANAGEMENT

Systems Concept

Our nation's transportation problem is a systems problem. Any other interpretation would be unrealistic. The effective operation of each of the system's components is critical to the success of the total system. There have been repeated efforts to improve various functions within the system with little attention given to interrelated problem areas. Consequently, the greatest degree of success has not been achieved. Optimum success, while a realistic goal, is probably far in the future. Most of the various components continue to guard their autonomy jealously, refusing to let others know what they are doing and refusing to acknowledge that they should be concerned with the other components of the system. The truth is, of course, that all of the managers of the components must be made to realize that maximum achievement is possible only if the system works and the system will not work if any of the links of the chain are weak.

The police may be as guilty as others in perpetuating this self-serving attitude. For many reasons, police service has traditionally been shrouded in secrecy. There is no justification for failing to inform the public of the police agency's enforcement program. Selective enforcement, for example, is an efficient means of obtaining the best results for the least possible cost. To deny the existence of such an effort for fear that it will be construed as a "quota" system is an unrealistic and, in the long run, a self-defeating policy.

The Governor's Highway Safety Representative

The Governor's Highway Safety Representative is without question in an unenviable position. He has considerable responsibility for the efficiency and effectiveness of statewide highway safety programs, yet his role is purely advisory in nature. He has no direct authority over the police administrator who represents the state, county, or local police department. Since there is no line of authority between the police executive and the Governor's Representative, his success or failure depends almost entirely upon the degree of mutual cooperation that exists. This is an important point and one that cannot be stressed too strongly.

Making management decisions under these circumstances, affecting a multiplicity of agencies, is, at best, burdensome. His greatest asset in terms of his position is the fact that he is provided with the authority and power of persuasion of the governor's office.

The Highway Safety Act of 1966 vested with the governor of each state primary responsibility for administration of the highway safety program. Each governor appointed a state official, designated as the Governor's Highway Safety Representative, to be responsible to and represent the governor in the conduct of the statewide traffic safety programs. The Secretary of the Department of Transportation cannot, under provisions of the Act, approve a state highway safety program unless the program:

- Provides that the governor of the state be responsible for the overall administration of the program
- Authorizes political subdivisions of each state to implement local traffic safety programs within their jurisdictions as part of the state highway safety program
- Provides that a minimum of 40 percent of all federal funds apportioned to the state under Section 402 of the Highway Safety Act will be expended by its political subdivisions in the development and implementation of local traffic safety programs

The Human Resources Research Organization pointed out in their document entitled Handbook for Project Directors Alcohol Safety Action Projects that the Governor's Highway Safety Representative can be expected to be concerned with:

- Directing the coordination of activity in all state and local operating agencies to assure that statewide program objectives are accomplished
- Directing project approval and evaluation in light of established objectives for the various state and local governments
- Directing program and project planning as related to program priorities
- Developing, promoting, and monitoring legislative action in all highway safety areas
- Generating and assisting in the maintenance of public support programs in highway safety
- Maintaining communication with other states to develop and promote interstate uniformity in program and legislative objectives

The Police

As we pointed out previously, the police responsibility as it affects the transportation system is broad in scope and complexity. Police officers, depending upon the type of

police agency they represent, may perform in the capacity of driver's license examiners, motor vehicle inspectors, traffic engineers, enforcement officers, paramedics, prosecutors, or administrative hearing officers, and in some cases, they may even have rehabilitation responsibilities. These diverse duties could well bring the police into a working relationship with the Governor's Representative's office under almost all of the standard areas.

Reportedly there are 40,000 separate and distinct police agencies responsible for law enforcement at the federal, state and local levels of government. The majority have regulatory responsibilities concerning the movement of people and goods. Obviously, these 40,000 law enforcement agencies are not equitably distributed among the three levels of government. Fifty law enforcement agencies exist at the federal level, 200 at the state level, and the remaining 39,750 agencies represent the myriad of counties, cities, towns, and villages that comprise our local government structure.¹

Police Management. Many variables affect the quality of police traffic services provided at the state and local levels. While it is true that few police agencies operate in an identical manner, many of the influencing variables and required management functions are substantially the same. To increase your understanding of the management process and special organizational problems that confront police administrators, the following brief review of some of the critical law enforcement management functions has been included.

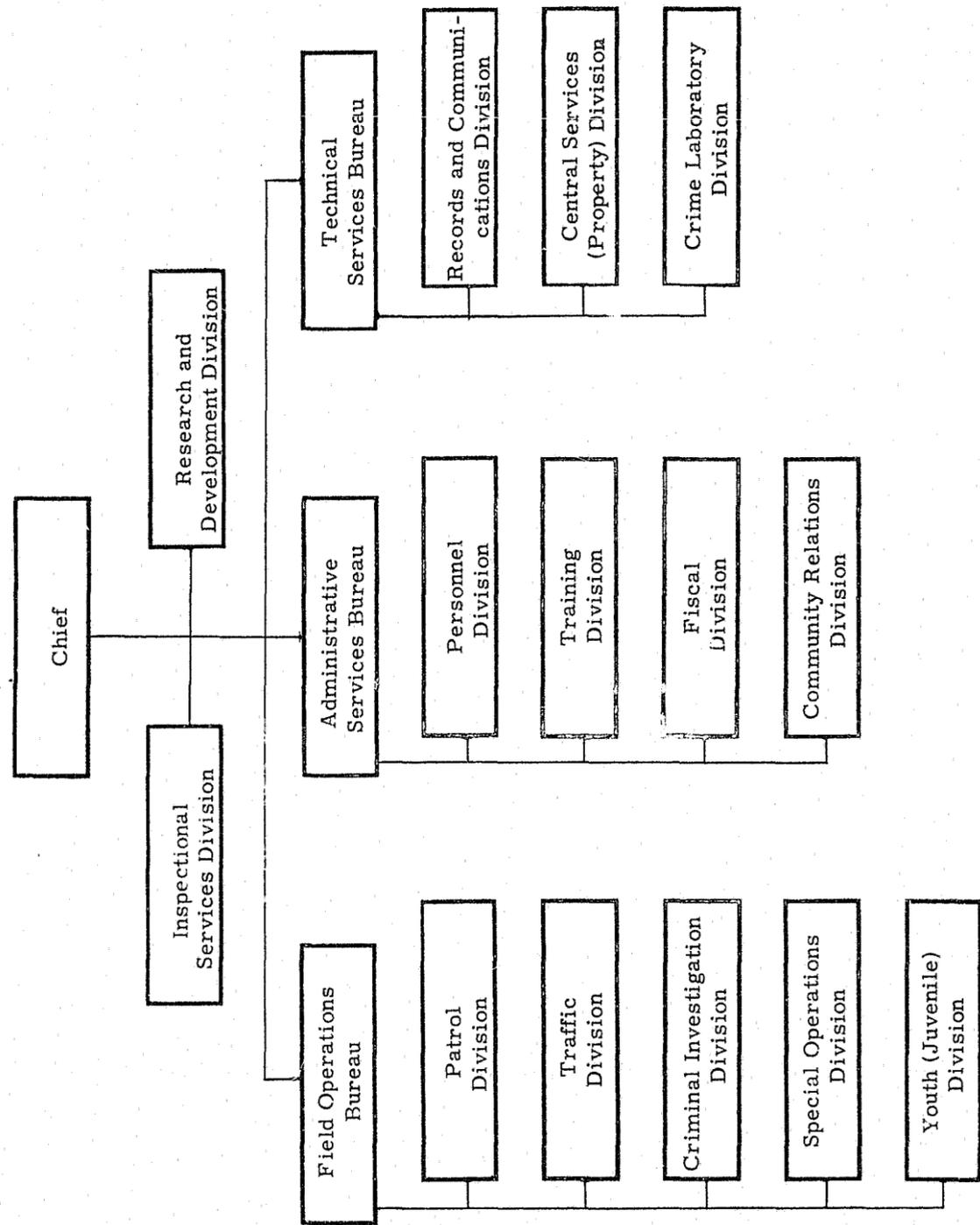
Organization. Organization is defined in the sixth edition of The International City Management Association's Municipal Police Administration as: "The arrangement and utilization of total resources of personnel and materials in such a way as to make easier and to expedite the attainment of specified objectives in an efficient, effective, economical and harmonious manner."

The majority of police departments are organized on the basis of three functional units or bureaus. These generally are: (1) Field Operations Bureau; (2) Administrative Services Bureau, and (3) Technical Services Bureau. Line functions are usually grouped under the Field Operations Bureau as shown in the accompanying chart.

The following are some basic principles of organization that influence the structure and operations of law enforcement agencies:

- Similar tasks should be grouped together. Departments should attempt to group similar tasks and functions. Because of size considerations,

¹ Task Force Report: The Police, (Washington: U. S. Government Printing Office, 1967).



it is necessary to balance areas of specialization and generalization.

- Tasks and functions should be clearly defined. The definition of each unit's tasks should be found in a departmental manual of policies and procedures. Problems that occur should not be problems of definition but rather the lack of conformity in the assigned tasks.
- Unity of command should be maintained. This principle should be followed by every unit within the department.
- The span of control should be reasonably limited. The number of subordinates under the immediate control of the single supervisor should not exceed seven or eight, particularly where the subordinates are dispersed geographically and temporally.
- Communications channels and lines of authority should be established. This principle is generally referred to as the chain of command, and it is just as important, if not more so, for the chief of police, his supervisors, and his immediate assistants as it is for subordinates.

Beyond the general principles of organization, police agencies are also faced with several special organizational problems that must be dealt with. Notable among these problems are:

- Internal Inspection. This is an essential administrative function involving a continuous review of departmental operation to insure compliance with departmental policies, procedures, rules and regulations.
- Uniformity of Operating Unit Designations. Inconsistent unit designations create confusion.
- Command Relationships. Rank structures are established to identify command relationships. Too often responsibilities are assigned without regard to rank structure creating misunderstanding and a responsibility-authority problem.
- Informal Organization. An important task of management and supervision is to recognize the existence of the informal organization and to direct it toward the achievement of the recognized goals of the formal organization. Too often, informal organization is looked upon with disfavor for fear that it will infringe upon the formal organization's authority. As a result, cliques form and develop their own goals and objectives. This usually results in inefficiency, social conflict, and a general breakdown of morale within the formal organization. When failure is experienced in an attempt

to follow formal, established channels, lines of communication are often bypassed, and unofficial channels develop which represent detours which have been developed because the official channels are found inadequate.

Patrol Administration and Operations

Most police agencies have several definable objectives—the protection of life and property, the maintenance of domestic peace and harmony, the detection of crime, the efficient and effective movement of people and goods, and the apprehension and prosecution of offenders. Every police agency undertakes a variety of activities in order to achieve these objectives. In departments that are competently organized and managed, every activity is either directly associated with the attainment of one or more of these objectives or exists to support these primary activities.

Almost without exception, the greatest numbers of men in a police agency are committed to the patrol function. You probably will find that approximately 70 percent of most department's sworn personnel are ordinarily assigned to the patrol division. Although not all of these men are directly involved in the patrol effort itself, the economic implications for department management in this assignment should be clear.

If members of the department assigned to the patrol operation do not perform in the most acceptable fashion possible, the department's management will in effect be saddling the community with a police service that is not only costly but also ineffective. Conversely, if members of the department assigned to patrol functions perform adequately, the department will not only succeed in its primary objectives but it will also be affording the community the maximum return for its police dollar.

The patrol force of the police department is the hub of the police agency's operations. The better the patrol force functions, the less need there is for other specialized units. There is some danger in overspecialization. We see a trend toward a better trained, more efficient generalist assigned to the patrol operation. The more proficient patrol officers become in accident investigation, the less need there is for specialized accident investigators. Similar conclusions may be drawn in the fields of criminal investigation, juvenile, and vice control. It thus follows that the competence of the patrol force has a direct and important relationship with the basic organization and management of the entire agency. It is important to stress, however, that the type of problems to be solved will determine the need for specialization. From IACP's perspective, it is important that police agencies have specialized traffic law enforcement units. But we recognize that smaller agencies cannot always afford to develop specialists and to assign personnel to perform in a purely specialist capacity.

Traffic Specialist Units. If it is determined that a specialized traffic unit is required to provide service to the jurisdiction, certain guidelines should be identified and provided in written form. The principal missions of a traffic unit are:

- Accident investigation. Investigate all fatalities, those accidents resulting in injuries likely to result in death, hit-and-run accidents, and those accidents which are not easily explained by on-site observation.

- Accident Reporting. Report all accidents brought to the attention of the police agency.
- Traffic Law Enforcement. Selectively assign traffic personnel to enforce traffic laws which are being violated and contribute to the accident frequency. Based on several hundred management surveys of police operations throughout the United States, it appears that the average amount of enforcement effort conducted by traffic units amounts to 60 percent of the total departmental traffic law enforcement productivity.

Traffic unit commanders should be of sufficient rank to effect departmental policy, and they should be exposed to adequate training programs related to police traffic responsibilities and police traffic services.

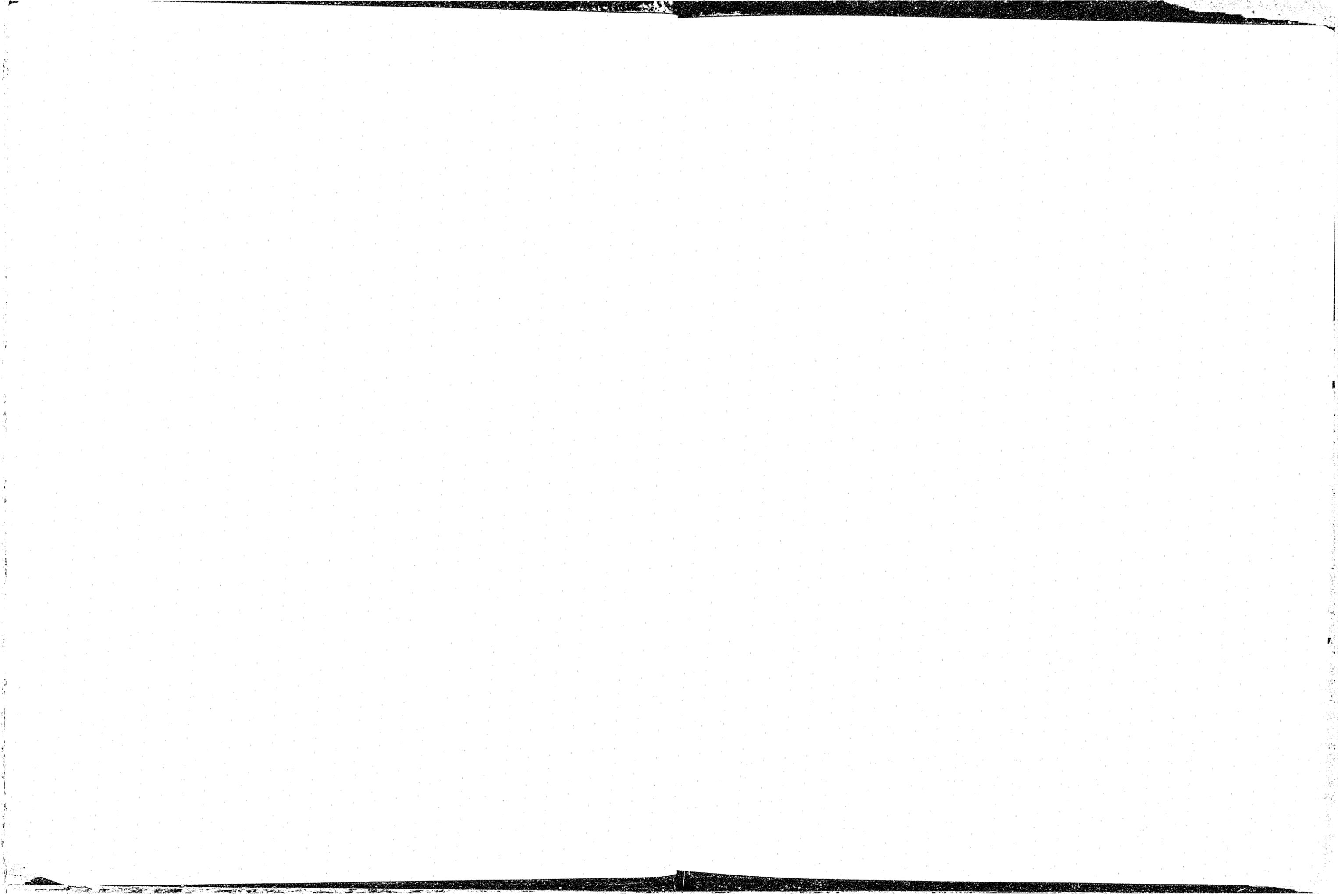
Overcoming Obstacles

Given the lack of direct authority between the Office of Governor's Highway Safety Representative and law enforcement agencies and the rather rigid organizational structure in which most police departments operate, it is imperative that lines of coordination and communication be established and maintained if the maximum realization of highway safety objectives are to be obtained. Techniques which have been employed to improve communications and promote cooperation between the two entities and found to be successful are:

Governor's Highway Safety Commissions. Many states have instituted state-level highway safety commissions composed of state officials with policy-making responsibility who meet regularly to review the state highway safety programs' progress and advise the Governor's Representative. These commissions provide the very valuable dual function of serving a source of technical expertise from the various disciplines to the agency responsible for coordinating the state's highway safety program and, at the same time, insuring that the agencies directly involved in highway safety activities are fully informed of the goals of the total program and activities being carried out by other agencies.

Representation on state highway safety commissions usually includes representatives of the state police, the department of motor vehicles, the department of education, the state health agency, the courts, the legislature, alcohol rehabilitation agencies, public information agencies, recognized state safety councils and citizens.

Statewide Highway Safety Commissions. Several states have developed systems of county or regional highway safety commissions to disseminate information and assist in program implementation. These commissions range from rather loosely organized, completely volunteer part-time efforts to highly organized professionally staffed operations directly funded through the Governor's Representative's office. Where these commissions have been established, the police at the municipal, county, and state level have almost universally responded and provided full cooperation in this decentralized management approach.



greater than our society is willing to pay. Therefore, accident prevention programs must be planned and executed only up to the level of restrictions acceptable by the American people. No traffic safety program can be successful without the support of the community. Either the program or the community's belief in it must be modified to the point at which the safety effort and public acceptance of it coincide. Thus, superior administrative planning and leadership—effective leadership of both public opinion and departmental personnel—is of extreme importance to the objective of traffic safety.

Yet the community is acquiescing to greater controls for the purpose of reducing the tremendous personal and economic losses suffered because of traffic collisions. Beginning with local ordinances setting maximum speeds and expanding to state vehicle code legislation, the restrictions have not only increased but also now include extensive federal requirements. Today, most jurisdictions require that safety headgear be worn by motorcyclists. Tomorrow, legislatures will require mandatory use of seat belts by occupants of other types of motor vehicles. Alcohol is involved in over one-half of the fatal accidents, and some advocate utilization of check points at which the sobriety of all drivers at the particular time and place would be ascertained as a countermeasure. Since public interest in traffic safety is growing, it may be possible through public education and leadership to gain wider acceptance for this procedure if, for example, prosecution only for intoxicated driving were to be permitted as a result. Fortunately, traffic safety is far from being last in the community interest and, with concentrated effort, its position can be improved.

The police must exert every possible effort to supply public leadership and fulfill their vital role in the promotion of traffic safety as a goal vital to the community interest. It is impossible to gain public support and compliance with legislation if the purpose and importance is not understood by the people.

Police Highway Safety Objectives

The following recommendations by the President's Task Force on Highway Safety list some of the objectives toward which police executives should work through legislation, departmental policies, and public education:

1. Enactment of statutes requiring that vehicles owned by persons who have been convicted of driving while intoxicated or whose driving privileges have been suspended display coded license plates.
2. Passage of legislation permitting or requiring that vehicles driven by unlicensed persons who are involved in accidents be impounded or the license plates be revoked.
3. Adoption of uniform enforcement manuals to guide state and local police, especially in the regulation of minimum and maximum speeds over standard classes of roadways.

4. Elevation of the degree, effectiveness, and uniformity of traffic law enforcement.
5. Legal authorization for and utilization of automatic violation recording devices by which offenders can be prosecuted without the necessity of testimony by witnessing officers.
6. Use of computers by all police agencies involved in traffic law enforcement to aid in the apprehension of and denial of vehicle and driver licenses to scofflaws who avoid prosecution by failing to appear before judicial officers.
7. Immediate availability to magistrates of driving and violation records of persons found guilty of traffic law offenses.
8. Passage of legislation permitting pre-arrest testing by officers to ascertain the degree of alcoholic influence being experienced by drivers.
9. Enactment of statutes prohibiting motor vehicle operation by persons with a specific blood alcohol concentration without reference to intoxication or being under the influence.

Presence Plus Contact

"Presence Plus Contact" are the key words describing effective police efforts toward traffic accident reduction. It would be difficult to find a motorist who does not re-check his driving operation when he becomes aware of the presence of an officer in his immediate vicinity. This is the reason traffic experts advocate the use of marked and highly visible police vehicles for traffic law enforcement. What is more difficult to assess is the duration of the "halo effect"—careful and lawful driving in the suspected presence of officers. Hardest to evaluate is the effectiveness of enforcement contacts by officers in reducing accidents and violations on the part of those violators who are actually apprehended. Various enforcement programs over the years have proved successful in accident and violation reduction, but the proportional operation of presence and contact on motorists' behavior has escaped precise measurement.

Traffic law enforcement actions taken by officers vary according to the seriousness of the violation and what is permitted by statute and departmental policy. Physical arrest—taking violators into custody—is reserved for the more serious offenses, when it appears unlikely that the offender will not voluntarily appear before a judicial officer, or when the hazardous driving may continue upon immediate release. Dependent upon the jurisdiction, serious violations are cause for incarceration by statutory requirement, departmental policy, or the arresting officer's discretion.

A summons or citation is a document issued by officers to violators for less serious offenses. It is a notification to the defendant both of the offense with which he will be charged and of where, when, and before which judicial agency the matter will be heard.

The vast majority of traffic violations are handled by this method because it is the most efficient procedure for the offenders and the agencies within the criminal justice system.

The written warning, while not permitted or advocated in all jurisdictions, is the third enforcement action utilized by enforcement officers. This procedure is followed when the violation is not serious and/or when the motorist's faulty operation appears to be one which will not be repeated. While written warnings can be issued for either rules of the road or faulty equipment violations, their use as a corrective measure with a built-in follow-up procedure for defective equipment is more common. (See "Administrative Guide for a Program of Written Warnings in Traffic Law Enforcement," Highway Safety Policies for Police Executives, included in the appendix.)

Verbal warnings is the last common enforcement action. Used in situations similar to that under which written warnings are issued, the verbal warning is different in that no official documentation is made of the incident, the driver's record is not affected, and there is no action to ascertain whether or not the problem is corrected. The threat of negative sanctions is minimized, the purpose being more to educate and correct the unlawful or unsafe conduct which had been observed. In fact, it has been suggested that this type of contact should be termed something akin to "driver improvement discussion," or "officer's educational effort" to more effectively point up its purpose.

Regarding enforcement, the police must attempt to achieve in the public's mind that traffic laws and departmental policies are reasonable and necessary, that the police are omnipresent, that violations will be observed, that enforcement action will be taken, and that necessary corrective actions by the courts and administrative agencies will be swift and sufficient to assure appropriate future compliance.

Especially in primitive cultures, the notoriety and negative opinions of others within the society are sufficient to cause most deviants to conform to the requirements of the community mores. While it is not as easy to bring the identity of violators to the attention of a considerable segment of the community in modern societies, restraint in this way is possible upon lawbreakers to a certain extent. Every motorist who is stopped by an officer suffers in this regard to some degree. If he must also appear before a magistrate even at a window before a court clerk or write a letter to the court, he is again reminded that he has been picked out of the motoring public as someone deserving special attention. Should the proceeding be coupled with scrutiny by a magistrate and followed by punishment and/or traffic school, his exposure to others as one who is different from the majority of highway users is even more obvious. Punishment, either directly imposed or by a psychological drubbing, is effective in causing behavioral changes for the vast majority of traffic law violators.

An effective police program for traffic safety and control aims for both accident reduction and public acceptance. The enforcement methods available to the police should be judiciously and artfully applied so that the end result is the greatest reduction in violations at the least possible economic and social cost—an efficient operation directed at specific goals.

Hazardous violations are accident causative, and the more violations committed by a group of drivers the more accidents they will have. Voluntary compliance by as many motorists as possible is essential to significant accident reduction, and this cooperation can be obtained by enforcement which is both efficient and effective.

A reduction in violations can be accomplished by the combination of placing more officers on the highways and increasing the number of enforcement contacts with highway users. Although all types of motorists are not equally affected by increased police traffic activity, when the level of enforcement is sufficiently increased all will respond to some degree. It is "punishment" for most people to be merely stopped by an officer whether or not further administrative or judicial proceedings follow. Simply put, it is troublesome to be caught committing a traffic offense by officials of the criminal justice system. Therefore, the responsibility of the police in the traffic safety program is to apprehend as many true violators of hazardous offenses as is possible with the resources available and to bring about the belief among those not observed that they are about to be recipients of the special treatment of community condemnation. The result will be a decline in violations with a commensurate reduction in traffic accidents.

Some studies have indicated that driver education programs required by traffic courts of violators are effective in reducing recidivism, at least for the majority of defendants. It is reasonable to assume that part of this success is due to the greater length of time which the violator must expend because of his offense, part to his sense of involvement in the traffic safety movement through his participation in the classes he attends, and part to his exposure to a certain degree of notoriety because of his forced membership in a group of "social outcasts." A Tucson study which compared the effectiveness of written warnings with citations indicated that the motorists who had received citations had fewer violations and accidents in the future than those initially warned. That the written warnings were less effective may be related to the much shorter time involvement and lesser notoriety than those receiving the more severe enforcement action.¹

Several studies indicate that speeds decline and motorists are on their best behavior when in the suspected presence of the police. This condition seems to prevail for about three miles under usual conditions and then dissipates, although the duration varies according to the severity of the enforcement symbol introduced into the environment. Most effective in speed reduction was the marked police vehicle parked behind an apparent violator's car to stimulate an enforcement contact in progress. To the police officer this may appear peculiar because his experience tells him that it is most unusual to leave one violator in order to pursue another, but to the motoring public the situation is otherwise. Least effective, of course, was the presence of an unmarked police vehicle. Disturbing, but understandable, is the slight effect of the moving patrol vehicle. Such can be explained by noting that parked police cars are passed by all traffic proceeding along the road, but moving police units can be seen only by those who meet (especially on undivided highways), pass, or are overtaken by the enforcement symbol. The best patrol procedures would appear to be those of parking frequently and conspicuously at high accident frequency locations during the times at which they are most likely to occur and patrolling at the slowest possible speed without causing congestion or producing a potentially hazardous condition. These two practices are utilized in order to effect the maximum use of the enforcement symbol's ability to favorably change driving performance and yet cover the assigned beat.

¹ It must be noted that much remains undone in the measurement of the effects of citations, arrests and warnings. One study alone should not be the only basis for decisions as to the effects of various enforcement countermeasures.

Studies on the Effect of Traffic Law Enforcement

The Effect of Presence. In The Effect of Enforcement on Driving Behavior by R. Dean Smith, the results of a study done on a two lane road, a rural highway with 65 MPH speed limit and a traffic volume of 100 to 200 vehicles per hour, the findings were summarized as:

1. The presence of an enforcement symbol has a significant effect upon the speed at which vehicle operators travel between points within a test site.
2. The conspicuously marked patrol vehicle, moving with the predominant traffic flow within a test site, has a greater immediate effect on speed between observation points within a test site than any other symbol tested.
3. Regardless of the symbol introduced into the highway segment studied, the greatest, immediate effect is observed when the symbol is positioned at or operated from the side of the roadway carrying the predominant traffic volume.
4. The immediate effect of the marked enforcement symbol is maintained for a distance greater than three miles.
5. Both the marked and unmarked symbol had a significant effect on reducing the number of vehicles over the speed limit after exposure at one site. At other sites no significant reduction was observed for the unmarked symbol.²

A Study of the Effects of Law Enforcement on Traffic Flow Behavior by the Institute for Research in Public Safety of Indiana University reported, after studying the results of introducing police vehicles into the traffic environment, that their results could be summarized as:

..... It is evident that traffic tends to slow down in the immediate vicinity of any type of stationary enforcement activity; however, the present literature indicates that this influence is short-lived and is essentially dissipated within three miles on either side of the activity. This reduction in speed is generally accompanied by a corresponding reduction in the number of vehicles exceeding the speed limit as well as a reduction in the headway between vehicles. Moving enforcement activity on open highways appears to have few measurable effects. The findings for moving enforcement vehicles generally imply that this type of activity causes no significant decrease in either the average spot speeds or

² R. Dean Smith, The Effect of Enforcement on Driving Behavior, International Association of Chiefs of Police, (Washington, D. C., June 1962), p. 3.

the number of drivers exceeding the legal limit; however, increasing the level of this activity does produce a statistically significant decrease in the variance of the speed distribution; that is, the vehicle speeds tend to group more closely around the average.³

In the Effect of Increased Patrol on Accidents, Diversion, and Speed, by Robert P. Shumate, these conclusions were noted:

1. The addition of patrol units to a given stretch of highway reduces the frequency of fatal and injury accidents up to the point where the quantity of patrol units reaches a ratio of one unit for each 13 miles of highway. When a ratio of one enforcement unit to 26 miles of highway is reached the frequency of accident occurrence shows no significant change.
2. Reductions in frequency of accidents tend to be more pronounced during the second year of effort indicating a possible cumulative effect.
3. Property damage accidents do not show as consistent reductions as fatal and personal injury accidents. This may be attributed to the fact that property damage accidents are more susceptible to changes in the completeness with which they are reported.
4. Substantial increases in the number of patrol units assigned to a given stretch of highway does not cause an appreciable proportion of motorists to change their travel habits even though there is an alternative route available.
5. The proportion of passenger vehicles exceeding the legal speed limit is reduced after the assignment of enforcement units to a stretch of highway.
6. The proportion of trucks exceeding the speed limit is normally quite high. The addition of patrol units does not produce significant reductions in the proportion of trucks exceeding the speed limit.
7. Average vehicle speeds are not significantly affected as the result of adding patrol units.
8. There is some indication that vehicle speeds tend to group more closely around the average when additional patrol units are placed on a given stretch of highway.⁴

³ Kent B. Joscelyn, et al, A Study of the Effects of Law Enforcement on Traffic Flow Behavior, Indiana University, (Bloomington, Indiana, January 1971), p. 24.

⁴ Robert P. Shumate, Effect of Increased Patrol on Accidents, Diversion, and Speed, The Traffic Institute, Northwestern University, Research Project R13, p. ix-x.

In this study, instead of introducing a marked patrol vehicle into the environment for a short period, an ongoing program of increased road patrol was studied as it related to the changes in the accident rates. The assignment of manpower was measured in relation to the length of highway covered by the units. Enforcement strength was based on the probable frequency with which drivers traveling the given study area could expect to encounter a patrol vehicle, expressed in the fraction of units per mile of roadway (or multiplied by 1,000 in order to produce whole numbers) by dividing beat miles into the number of units assigned. Such a step was an important one because it provided relatively specific determination of the quantity of enforcement effort by relating units to miles of highway—the level at which presence was maintained was therefore ascertainable. When presence thus became measurable, changes in the quantity of enforcement could then be related to changes in the accident experience.

The California Highway Patrol has reported two programs entitled "Operation 101" and "Operation 500" in which a different method of determining presence was utilized. Under these studies of increased enforcement, the variation in quantity of enforcement was measured by the number of men assigned per mile per 100,000 vehicle miles of travel through that area.

Prior to the implementation of these operations, the California Highway Patrol had utilized Special Enforcement Units (SEU) to greatly increase enforcement pressure in high-accident locations to accomplish accident reduction. SEU was a success, sometimes startling, but the question unanswered was, could the same result be produced with fewer men? Operations 101 and 500 were constructed to provide a reliable formula by which accident rate changes could be predicted through the addition of specific quantities of manpower to certain traffic environments. The result was that, "Where the level of manpower was maintained at a level of 4.0 men/per/mile/100,000 ADT, there was a significant reduction in accidents during the study period."

One innovation was the use of violation survey teams comprised of experienced officers observing and tabulating hazardous violations from parked positions in unmarked cars along the study routes before, during, and after the application of additional manpower to that area. If it is true that accidents are a function of violations, then a reduction in offenses in an area will result in a declining accident rate. For the most part, the results of increasing patrol strength was followed by fewer violations and accidents, especially of some types. The programs were considered a success.

Important for the police administrator to consider in planning manpower assignment for accident reduction is the type of highway involved in his effort. The reports which studied the effects of the introduction of marked patrol cars on motorist behavior were conducted on undivided roads. Therefore, the enforcement symbol was visible to passersby no matter what their direction of travel. As would be expected, the effect of a particular level of manpower assignment is lessened as the proportion of freeway in an area of study increases. The volume and type of traffic, the area adjacent, and the highway design all affect the quantity of enforcement pressure necessary to cause presence to be felt, violations to decline, and accidents to be reduced.

Of critical importance for the administrator in planning an effective accident reduction program through law enforcement is that of including in his program measures of the quantity and effect of the police effort with which to evaluate it. Be his choice enforcement units per mile of roadway, officers per traffic volume, in-view hours, or other method, he must be able to determine a relationship between enforcement level and accident experience. In the event such measurement criteria are not included in the plans, it will be impossible to determine the enforcement quantity which is cost effective.⁵ The effect of enforcement can be judged by the proportion of enforcement contacts for leading accident causing violations and their conviction rates, the decline of observable violations by unobtrusive inspection teams, the positive and negative reactions to the program by the community, and, most importantly, changes in the number, type, and severity of accidents experienced.

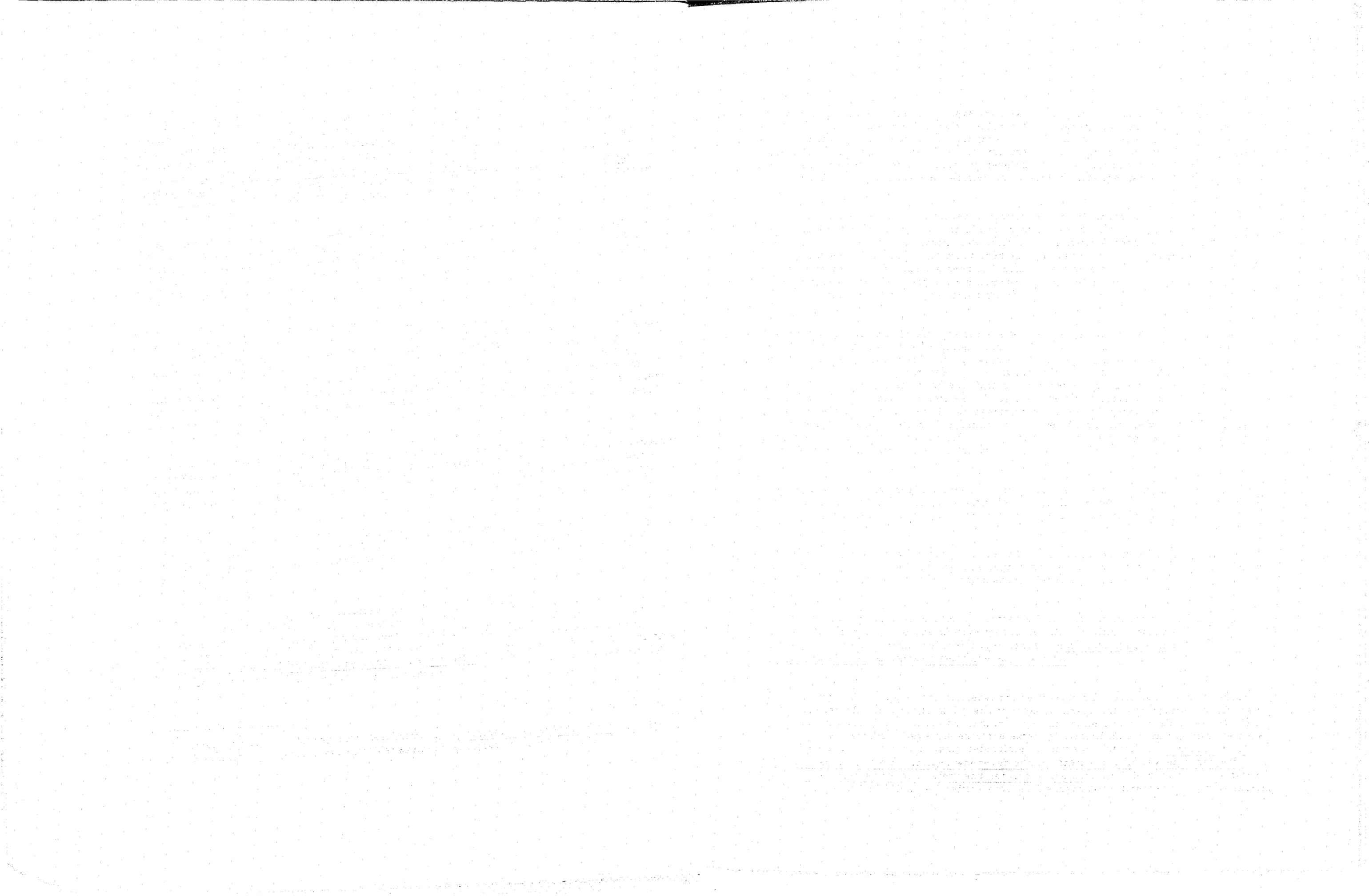
Selective Enforcement

Selective law enforcement procedures are not of recent origin. Police administrators have been utilizing the concept for centuries, in criminal and traffic law enforcement activities, when directing that special attention be directed toward the time, area, and type of violation that warrants primary consideration. Police officers at operational levels also utilize the concept, frequently without realizing they are doing so. Once becoming familiar with a certain area or beat, they tend to direct their energies toward certain problems at certain times and locations.

There are two basic assumptions which must be accepted before selective enforcement of traffic laws can be considered as a valid approach to accident reduction. The first is that enforcement action against accident-causing violations by the police does deter highway users from the reckless, careless and incompetent driving practices which are prohibited by statutes. The second assumption is that this results in traffic accident reduction from the rate that it would be without such enforcement. That these are valid assumptions is not only generally accepted, but various enforcement programs have proved successful in reducing accidents.

The ultimate goal of selective traffic law enforcement is to reduce traffic accidents by systematically improving the manner in which available police manpower and equipment resources are utilized. However, sufficient resources, both personnel and material, must be allocated, and the effort must be properly managed. Maximization of resources is achieved through the scientific, geographical/chronological assignment

⁵As accidents decline in number and severity after the implementation of an effective enforcement program, the community can be informed not only in lives and injuries, but also in dollar amounts how much they have benefited. The accident experience, which would have been expected without the new enforcement can be calculated, the difference between that amount and actual losses can be determined, and this can be compared with the additional expenditures in manpower and materials. It must be remembered that the additional outlay may be only administrative, time expended studying and planning the efficient use of manpower and resources already available rather than putting more units on the street. See NHTSA publication, Societal Costs of Motor Vehicle Accidents for a guide to cost benefit computations.



individual officer performance on a broad base of Police Traffic Services activities should result in increased understanding and acceptance.

The reduction of traffic accidents is perhaps a too generalized statement of the objective of selective enforcement to be meaningful and it may be helpful in understanding the selective enforcement rationale to consider the technique in another frame of reference.

Traffic accidents are most often the result of aberrant driving behavior, and it follows that a most desirable goal for all police jurisdictions would be create a climate of compliance with all laws governing the operation of a vehicle by motorists. Some contend that our culture is based upon a system of reward and punishment. Relationships between a child and parent, student and teacher, employee and employer are all founded on an understanding that good performance merits a reward, while bad behavior will result in punishment. If one accepts that the structure of American society as well as our police and judicial systems rests on this cultural constraint, then in the simplest terms, it is axiomatic that intentional unlawful acts by drivers can be discouraged by fair, consistent enforcement.

Most states are convinced of the importance of identifying problem drivers, and toward this end have created point systems. The value of a point system is directly proportional to the quality of each agency's traffic law enforcement program. Accordingly, one of the more important objectives of enforcement attention to accident-causing driver behavior is the identification of these problem drivers. Although the threat of apprehension with punishment will inhibit most drivers from indulging in unlawful acts, there will always be a significant number of emotionally inadequate or improperly trained drivers who should have their driving privilege curtailed.

The selective enforcement program should cause the motorist to believe that traffic officers are everywhere and that if he violates a law he will be apprehended. Such a program, operating in concert with an enlightened traffic court, will most certainly encourage the development of a climate of compliance by causing drivers who are traffic-violation prone to anticipate apprehension and the application of judicial sanctions.

When all factors leading to this "climate of compliance" are not present, however, and particularly when they are present in one jurisdiction and are lacking in another, our point system may tend to have the ultimate effect of discriminating against one group of drivers while favoring others. Consider this excerpt from an article by Richard Zylman.⁷

⁷Richard Zylman, "Drivers' Records: Are They a Valid Measure of Driving Behavior?" Accident Analysis and Prevention, Volume 4, (Pergamon Press, 1972), pp. 343-345.

Visualize two communities of similar size situated on the same expressway but some miles apart in the same state; City No. 1 is a center of commerce, education and light industry with a preponderance of middle to upper income families. The judge participates regularly in state, regional and national programs designed to make the court systems more efficient and responsive to the needs of the community. Among his many accomplishments he instituted a driver re-training school for traffic offenders. The Prosecutor fills his position on a full-time basis, maintains liaison with the police and has an assistant whose principal duty is to expedite misdemeanor cases. There is an expert witness available when needed to testify in a DWI case. The Police Chief holds degrees in public administration and police science. All recruits receive 15 weeks of basic training and regular inservice training annually. The promotion of personnel is contingent on their willingness to attend college on at least a part-time basis—which the community pays for. They have a Traffic Division comprising about 30 per cent of the force with an Inspector in command. All data are stored and tabulated mechanically and there is almost daily contact between the Traffic Division and the staff of a fully accredited Traffic Engineer. They have a certified breath-test instrument and several qualified operators. An effort is made to report all collisions and an imaginative program has been developed to relate enforcement to the kinds of behavior that cause collisions. It is a foregone conclusion that failure by officers to perform their assigned duties will be cause for disciplinary action.

City No. 2 is noted for its heavy industry; its population is preponderantly blue collar and family income tends to run from the middle to lower brackets. The judge holds his position by virtue of his association with the power structure in the community and does not have the funds to attend outside conferences. The Prosecutor performs his duties on a part-time basis. The Chief of Police worked his way up through the ranks and holds his position by virtue of seniority—he is looking forward to retirement within a few months after being appointed chief, thus following the practice of his predecessors. Because of a lack of trained personnel, supervision is lax and because of the local political situation, discipline within the department is almost non-existent. They have a "Traffic Lieutenant" who doubles as a traffic engineer. He is responsible for the radar team, two accident investigation cars and the crew that paints yellow lines and maintains the traffic signals. The records bureau is manned by a disabled Sergeant and a clerk, neither of whom received training in the keeping of records or their potential usefulness. All filing and any tabulations are done by hand. Although the law says that any collision resulting in \$100 or more in damage should be reported to the state, the men generally avoid such reports by estimating damage at \$99 and tell the involved parties to exchange names. Reports are filed only if the vehicles are towed away (mainly to keep track of which wrecker service should be called next) or if an injured party is taken to the hospital. In fact, people in the community have become used to handling their own collisions without calling the police. Traffic law enforcement consists mainly of collision-involved cases "if the other party wants to sign a complaint" and radar cases which result mainly from work on the four-laned boulevards. (Most of the citations are issued to out-of-town commuters passing through.) They have a breath-test instrument but it hasn't been used in recent months because the court was "throwing them out". (The instrument is now in the corner of the broom closet under the mops.)

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and provide streamlined reporting methods are a necessity in the real world of urban and rural policing.⁸ Obviously, it is of the utmost importance, when comparing one location with another, to determine if one is "reporting" and one is "investigating."

The use of structured statement forms⁹ can significantly reduce the amount of time expended by an officer at the accident scene. The format of these questionnaires enables each principal to complete his own statement of facts relating to the collision. The answers to the series of questions will assist the persons involved in settling the civil issues that often establish the elements of a vehicle code violation. The following reporting procedure is recommended when structured statements are used:

1. Determine the severity of the accident and request additional help or equipment if needed. Order tow service if indicated.
2. Obtain driver licenses from drivers.
3. Provide each driver with a structured statement form. Instruct each person to fill out the form and explain that you will review the forms with each driver when they are completed.
4. Check vehicle brakes and other equipment such as lights, wipers, steering gear, when appropriate. Note any defects in the description of accidents only when they are determined to have contributed to the collision.
5. Complete accident report while statement forms are being filled out by each driver.
6. Include in the description of the accident and circumstances leading to it any pertinent environmental factors that, in your opinion, contributed to the accident (lighting, bad conditions, defective vehicle, etc.).

Negative Influences. A program to reduce accidents through selective enforcement must be planned to eliminate, compensate for, or reduce to an acceptable minimum the following negative influences:

⁸ See appendix for example of general order on traffic investigation policies.

⁹ See appendix for example of a structured statement form.

1. Budgetary Inadequacies. Sufficient personnel and materials must be provided to produce that level of traffic enforcement at which accidents are significantly reduced. In addition, the expenditures must be cost effective, and this objective is achieved by enforcement pressure assigned in proportion to the accident experience by time, space, and accident causing violations.
2. Unqualified personnel. Both staff and line personnel must be trained sufficiently to produce both quality and quantity. Personnel with above-average qualifications should be given top consideration in the selection process. Officers selected for assignment to a selective enforcement program should be given thorough training in all those procedures designed to reduce the number of accident-causing violations.
3. Insufficient coordination of purpose and effort among police, courts, other administrative agencies, and the community. The triple thrust of enforcement, engineering, and education is necessary, and education not only of the public but also that aimed at other public agencies. Without the cooperation of prosecutors, courts, and licensing authorities, a selective enforcement program engaged in by the police alone is bound to be less than successful. Without the support of the community, the program may well produce a negative effect on police-community relations.
4. Insufficient and unreliable data base on which the program is founded. An adequate selective enforcement program can never be successfully planned without information by which administrators can accurately determine the time, place, and violations involved in their accident problem. Without such information, resources will be wasted and the accidents will not decline to the degree desired.
5. Inadequate driver education or training program available for offenders. Whether or not the police are assigned responsibility for this part of a successful accident prevention program, the administrator should consider its effect and availability when planning the selective enforcement program.

Selective Enforcement Checklist. The following is a basic checklist for a

selective enforcement program:

1. Through the use of accident investigation records, traffic volume counts, and violation surveys, determine the locations (by intersections, sections of major roadways, patrol beats, census tracts, or other suitable measures), times (by day of week and hour of day), and causative violations involved in the jurisdiction's accident experience.
2. Determine enforcement priorities by the evaluation of accident severity and volumes.
3. Determine the countermeasures most effective against the various accident problems.
4. Advise the community, courts, licensing agencies, highway authorities, remedial driver education organizations, legislative and executive leaders, and departmental personnel of the program and explain its methods and purpose. The message should be conveyed by personal contacts, written explanations, and media presentations.
5. Coordinate the selective enforcement program with courts, corrections, remedial driver education programs, and licensing officials.
6. Provide special, intensive training to those departmental personnel who will be assigned directly to the program, and expose other members to training sufficient to bring forth effective contributions from them when their other assignments do not prohibit it.
7. Assign selective enforcement personnel at the times and places of high or severe accident experience for the purpose of taking enforcement action against those violations which are accident causative, utilizing the countermeasures determined most effective for the individual problems.
8. Periodically evaluate the selective enforcement program, including: goals and objectives; changes in the accident experience by number, type, severity, causative violations, time, and location; changes in the numbers and types of violation apprehensions; and the positive or negative community opinion of the police and the program.

Police Traffic Law Enforcement Countermeasures

1. Special emphasis on enforcement of driving while intoxicated and other statutes restricting drinking and driving, such as: training, in the operation of testing devices; training to develop the skill to detect and recognize with accuracy those persons who are under the influence of alcohol; efficient yet thorough procedures to assure speedy processing of those apprehended so that officers can quickly return to patrol; assignment of personnel at the times and places alcohol-related accidents and offenses are occurring; coordination with courts and prosecutors to assure speedy trial, including procedures for both pre-trial and post-trial referral to treatment and correction.
2. Coordination with courts, licensing authorities, and educators to provide driver education and training courses to offenders and accident repeaters whose problems are amenable to remedial action by educational efforts.
3. Utilization of special techniques and devices for observation, procurement of evidence, and unobtrusive surveillance, including radar and other speed computing devices; television and photographic devices operated either automatically or by attending personnel to record evidence of violation to be viewed by both the offender and court; air observation; highway safety lane inspections; and special assignment of personnel for surveillance and detection of those who continue to drive when their license to do so has been restricted, suspended, or revoked.
4. Establishment of speed enforcement tolerance policies for the guidance of personnel in the enforcement of both minimum and maximum speed limits, and construction of the policies so that different types of highways are assigned appropriate tolerances.
5. Establishment of enforcement policies to guide officers in the use of the appropriate type of enforcement action (incarceration, citation, written warning if used, or driver improvement discussion) to be taken for specific offenses or classes of violations.
6. Training of personnel in the latest accident investigation techniques, and acquisition of or providing the availability of investigation specialists (speed from skidmark experts, truck and heavy equipment specialists, and forensic scientists) at all hours to be called to assist in the investigation of especially severe or unique accidents.

7. Especially in urban areas where the pedestrian and/or bicycle accident experience is likely to be high, the selective enforcement program should include goals designed to reduce such accidents, including: selective assignment of enforcement personnel; public education to alert the community that the intoxicated, the young, and the elderly are the most prone to be involved in this type of accident, and where and when the greatest danger lies; and coordination with highway safety engineers to reduce the exposure of pedestrians and/or bicyclists to motor vehicle traffic.
8. Assignment of selective enforcement personnel at the times, at the places, and for the purpose of enforcing those violations determined to be accident causative.¹⁰

Selective Enforcement Assignments

The following is a summary of selective enforcement assignments:

1. Listing intersections and/or sections of roadway by accident experience
 - a. Compile a list of intersections and/or sections of roadway on which accident experience is unusually high in frequency.
 1. The list should be sufficiently long to include the majority of the accidents experienced, but short enough to be manageable.
 2. The list should ordinarily include only a relative small percentage of those intersections and roadway sections within the jurisdiction.

¹⁰ Most writers on the subject qualify their remarks by stating that action should be taken against all observed violations, but with special emphasis on those which are accident causative. There is merit to this approach in that the more contacts officers make, the more violations they will discover, and the more their presence will be felt. However, should officers truly take action against all violations, they would then be wasting their time with many offenses not connected with the jurisdiction's accident experience. The solution is that of proper control by first line supervisors who should make certain that a relatively small portion of enforcement actions are against non-hazardous violations, yet the level of contacts remains high; and enforcement policies which specify that personnel use enforcement actions of short duration when observing violations not highly related to accident causation.

- b. After determining the traffic volumes of the intersections and sections of roadways with high accident experience, compare their accident numbers with their traffic volumes to determine their accident rates. Compile a list in descending order according to accident rates.
 - c. Compile a list delineating by shift those locations with high accident frequencies and rates.
 - d. To the list delineating high-accident locations by shift, add high accident causative violations for those accident locations either individually or by grouped locations.
2. Providing personnel with selective enforcement information and assignments
 - a. Provide supervisory personnel with frequency, rate, time, and violation lists for the areas within their jurisdictions.
 - b. Require supervisors of traffic personnel to assign their units primarily to those places, at those times, and for the enforcement of those accident causative violations as are indicated by the frequency, rate, time, and violation lists.
 - c. Provide all patrol and traffic units with lists indicating those high-accident locations and causative violations within their area of assignment during their shift. See example of Selective Enforcement Bulletin included in the appendix.
 3. Determining effective level of enforcement
 - a. Establish appropriate reporting procedures to obtain information necessary to determine level of enforcement presence by units per mile of roadway, officers' in-view/location hours, units per traffic volume, or other method.
 - b. Compile data comparing personnel presence to accident experience in relationship to time and place of accident experience.
 - c. Establish appropriate reporting procedures to obtain information necessary to determine level of enforcement contacts by type (arrest, citation, etc.) and violation.

- d. Compile data comparing personnel enforcement actions with violations which are accident causative.
- e. Compare enforcement presence and contact with frequencies, rates, severities, locations, times, and causative violations indicated by the accident experience.

Accident and Enforcement Rates and Indices

A jurisdiction's accident violation and enforcement experience can be studied in various ways to achieve insight into the seriousness of the problem, to develop and evaluate appropriate countermeasures, and to compare the effects of enforcement actions after their implementation.

Rates, Ratios, and Figures Involving Accident Severity.

1. Standard ratios used nationally
 - a. Fatalities per 100 million motor vehicle miles
 - b. Fatalities per 100,000 population
 - c. Fatalities per 10,000 registered vehicles
2. One accident with multiple deaths in a small jurisdiction would severely affect its ratios and indicate an extremely large, but misleading, increase in its fatal accident experience were the ratios to be based on fatalities, rather than fatal accidents. Ratios which may be used in smaller jurisdictions wherein the accident experience in gross numbers is sufficiently small that other ratios are more meaningful
 - a. Fatal accidents per million motor vehicle miles
 - b. Fatal accidents per 100,000 population
 - c. Fatal accidents per 10,000 registered vehicles
3. The Accident Reporting Ratio compares the number of crashes of which the police are aware with the number of fatal accidents, and is stated, for example as 1/50/100, meaning: (a) Fifty injury accidents per fatal accident, and (b) One hundred property damage accidents per fatal accident.

4. Gross figure totals
 - a. Total of reported accidents
 - b. Total of fatal accidents, and total deaths resulting
 - c. Total of personal injury accidents and total of those injured
 - d. Total of property damage accidents
 - e. Total dollar amount of property damage. This is rarely recorded, but is suggested so as to reflect (along with a reduction in deaths and injuries) the effectiveness of an accident reduction program in diminishing the severity of crashes.

Accident Statistics by Other Distinguishing Characteristics.

1. Accident classification, such as motor vehicle involved with: other motor vehicle, train, pedestrian, noncollision, etc.
2. Relative movement of involved vehicles such as head on, rear end, and right angle.
3. Highway characteristics, such as number of lanes, one-way, limited access, business, residential or open district, intersection, curve, etc.
4. Roadway and environmental characteristics, such as fog, rain, snow, chuck holes, darkness, etc.

Accident Statistics by Causative Violations Involved.

1. Violations involving the physical condition of persons involved in the crash
 - a. Intoxication caused by conscious ingestion of alcohol, drugs, and other materials

- b. Uncompensated physical illness or disease, which causes psychomotor debilitation of which the person is aware, and which prevents competent vehicle operation, such as epilepsy and defective vision
 - c. Temporary physical incapacity, of which the person is aware, such as fatigue to the point at which the individual falls asleep for short periods but continues to operate a vehicle
2. Violations involving the mechanical condition of the vehicle of which owner/driver is (or is held to be) aware
- a. Restriction of the operator's vision such as inadequate headlamps, defective windshield or other window, ineffective wipers, etc.
 - b. Inoperative or defective devices designed to provide warning or information to other highway users such as, taillights, brake and signal lights, etc.
 - c. Mechanical defects affecting vehicle control such as brakes, suspension, tires, etc.
 - d. Defects which prevent drivers from remaining in proper control of a vehicle such as exhaust systems which permit entry of gases into the passenger compartment or grossly unbalanced loads
3. Violations involving rules of the road offenses and actions required to minimize traffic conflict and contact
- a. Speed violations, both minimum and maximum
 - b. Right-of-way, traffic sign and signal, and turning movement
 - c. Appropriate positions on roadway for meeting, following, overtaking movements, and turning
 - d. Inappropriate parking or stopping which results in conflict sufficient to increase the possibility of contact by other traffic

- 4. Violations not of themselves hazardous but frequently associated with accidents
 - a. Driver unlicensed because of lack of skill or under suspension or revocation caused by serious accident or violation record
 - b. Motor vehicle theft
 - c. Hit-and-run offenses

Rates, Ratios, and Figures Involving Enforcement Level and Effect.¹¹

- 1. Accident Investigation Rate. Percentage of known accidents which are investigated. (Expressed in whole numbers without percentage signs.)
- 2. Accident Arrest Rate. Arrests per 100 accidents investigated.
- 3. Hit-and-Run Clearance and Arrest Rates. Percentage of hit-and-run cases cleared through investigation; percentage of hit-and-run cases resulting in arrests. (Expressed in whole numbers without percentage signs.)
- 4. Enforcement Index. The number of convictions with penalty for hazardous violations, divided by the number of fatal accidents and injury accidents. The Enforcement Index is the principal measure of the level of accident reduction enforcement. The index involves quality (convictions with penalty) and is indicative of quantity in that enforcement contacts will always exceed convictions.
- 5. Hazardous Violation Conviction Rate. Percentage of hazardous violation arrests resulting in conviction.
- 6. Because of the large percentage of urban pedestrian fatalities it is recommended, although the practice is uncommon, that enforcement indexes or accident ratios be utilized to indicate pedestrian accident/enforcement relationships. For example:
 - a. Pedestrian convictions (or arrests) for hazardous violations per 100 pedestrian accidents.

¹¹ Additional information concerning Standards and Rates are contained in the appendix.

- b. Pedestrian accident arrest (or conviction) rate.
Percentage of pedestrians involved in accidents who are arrested or convicted for hazardous violations.
- c. Driver/Pedestrian/Accident Responsibility Ratio.
Percentage of drivers held responsible by police investigations for motor vehicle-pedestrian accidents.

7. Alcohol Enforcement Index. An adaptation of the standard enforcement index utilized at Alcohol Safety Action Program (ASAP) sites to measure total program effort.

$$\text{Alcohol Enforcement Index} = \frac{\text{Convictions for Driving While Under the Influence and/or Driving While Ability is Impaired}}{\text{Number of Personal Injury (Fatal and Nonfatal) Alcohol-Related Motor Vehicle Crashes}}$$

V

INFORMATION AND REPORTING SYSTEMS

Information Systems

The annual cost of resources needed to provide police manpower and services in the United States is estimated to be in excess of four billion dollars, yet the efficient allocation of these resources is still largely dependent upon the experience and technical expertise of the individuals responsible for the justice systems of each jurisdiction. In many locales, data systems are inadequate and do not provide for management needs. Moreover, current manpower and resource allocation models are based on highly abstract and conceptual theory or incomplete local empirical data. This severely limits the capabilities to perform comparative evaluations and optimal resource allocations.

Inadequate information systems are the result of many problems, ranging from deficient organization of files and inadequate file management, compounded in some cases by insufficient numbers of personnel, a rapidly expanding volume and variety of records, and a lack of technical equipment to enhance storage capability. A variety of differing field reporting systems and concepts compounds the problem. Directly related problems include the fragmentation of records activities, duplication of records and files, and excessive time delays in processing case identification records.

There is a duality of purpose in establishing and maintaining an effective traffic records system. First, an effective system should provide information rapidly and accurately to field personnel who are performing primary police traffic functions. Second, but no less important in terms of long-range effectiveness of the agency, the system should routinely provide compilations of data for management's use in the decision-making process. Without a substantial data base which accurately reflects activity on a continued basis, generated from both internal and external sources, a traffic division commander cannot intelligently allocate human and material resources in a manner designed to accomplish his primary function—the reduction of traffic collisions.

Before records become records, however, the information must be collected, classified, and stored. The system utilized to accomplish this task need not be overly complex, but it must contain certain minimum components to accomplish the task it is designed to do.

Before management can properly carry out this task, it must ascertain that proper collection devices exist. An essential part of any management information system is

the process of summarizing both administrative and operational facts so that trends can be identified and comparisons made to review weaknesses for the purpose of developing plans and programs.

Data Processing Equipment

The use of data processing equipment provides flexibility, speed, and accuracy in the compilation of data for monthly reports, summaries, and statistical studies so essential to a progressive Police Traffic Services program.

Tabulating equipment is generally considered essential for the compilation of statistical summaries in police departments of more than 150 sworn officers. While such equipment is admittedly desirable in smaller departments, it is not essential since all data may be tabulated by clerks, either by continuous daily entries on master sheets or by reference to the original records and indices at the time of compilation. The use of master sheets should be reserved for very small departments, in that they represent unusual opportunity for errors that are difficult to locate without extensive and time-consuming review.

Management Information Reporting System

The Daily Report. There are two types of daily reports. One is the individual officer activity log, or daily activity report, upon which each officer reports his daily activities in all areas including traffic activities, citations, hours spent in court, and so forth. The other is a consolidated daily report which is an essential document in all but the smallest departments. The police administrator and commanding officers need current information on major crimes, accidents, arrests, and available manpower. This information should be tabulated in convenient form as a daily summary and placed on their desks prior to the beginning of the work day. Copies of each of these daily reports are contained in the appendix.

The Monthly Report. This report consists of activity summarized, on a monthly basis, for purposes of comparison and to determine required changes in departmental efforts. A sample monthly report is included in the appendix.

The monthly report should include:

1. Statistical summaries of complaints and other cases
2. Arrests
3. Traffic accidents and enforcement
4. Juvenile offenses

5. Laboratory accomplishments
6. Identification - records activities
7. Personnel matters
8. Maintenance costs and other expenditures

Specialized Reporting. Keeping regular monthly statistics may not be necessary for certain administrative matters. For example, showing the progress of personnel recruiting may be necessary only every six months or so or if there is a shift in trend.

The Annual Report. This is, primarily, a summary of monthly reports. Data not considered important enough to compile on a monthly basis is usually not compiled on an annual basis.

One purpose of the annual report is to provide a comparison with the year just passed and five year comparisons are, usually, extremely valuable.

Spot Maps. Spot maps are useful to indicate locations of police hazards and to furnish supervisors with evidence of weaknesses in police service.

Analysis of the locations of crime and accident hazards on spot maps aids in the direction of enforcement efforts and shows the administrator and supervisor where attention is most needed.

Surveys of traffic hazards supplemented by spot maps frequently reveal highway accident-inducing factors that may be eliminated by regulation or change in roadway design.

Graphs of Accomplishment. Graphs showing accomplishments of the department or traffic division are valuable in stimulating interest in the job, in developing competition, and in directing attention to operations in which the department or division appears to be weak. These charts and/or line graphs may or may not be used and displayed for purposes of public reporting.

Planning, Policy, and Procedure

The act or art of planning is an inseparable part of the administrative process and is essential to the successful conclusion of any serious undertaking. Planning is the keystone of administration and is essential for the development of improved practices and procedures as well as for their application in actual operations. It is necessary that it be done at all supervisory levels since each supervisor must determine how to accomplish tasks and ascertain needed resources and procedures.

Planning may be defined as the gathering and analyzing of facts to determine present and future needs and then developing procedures and resources to meet those needs. The plan is the detailed outline of the procedure to be used.

Planning normally results from an established administrative policy and usually results in the establishment of new policies and/or procedures to effectuate the plan. Thus, there exists an intertwining casual relationship among planning, policy, and procedure. As a result, it is necessary to discuss policy and procedure in order to understand the scope of planning.

Policy usually refers to a broad statement of principle which provides the framework within which more detailed procedures can be drafted. Thus, policy does not establish fixed rules nor does it set forth specific procedures of performance.

Policy should be reduced to writing and should become a part of duty manuals, general orders, and instructional material. The methodology employed in the development of policy is very important because of its significant effect upon the impact of the policy within the broad scope of the total police operation. The actual research and work behind the policy may be performed by a staff officer or planning groups, but the process should include all ranking supervisors who might be affected by the policy. This "review and comment" process provides an opportunity for commanders to contribute to the final product and permits review and discussion which would support the policy.

A procedure is more specific than a policy and describes a method of operation. It usually permits some flexibility within certain constraints. Procedures are normally an outgrowth and expression of the intent of a particular policy.

The more specific and restrictive a procedure becomes, the closer it comes to being a rule. Rules and regulations are designed to cover situations in which no deviations or exceptions are permitted. Rules tend to inhibit individual discretion, initiative, and judgment, and therefore, should not be utilized as a means of expressing administrative intent except when absolutely necessary.

This area of planning, policy, and procedure is extremely important and vital to the successful operation of a Police Traffic Services program. It may be stated

unequivocally that without proper planning and the development of policies and procedures to effectuate those plans, any program is doomed to failure. Attached as an appendix item is an example of an operationally sound state level traffic law enforcement policy.

Written Directives

All orders or directives should be reduced to writing. Failing this, the tasks of the administrator, commander, supervisor, and operations-level personnel would be impossible to complete. Modern police management is more complex than ever, and the threat of administrative thinking being misinterpreted as direction flows from level to level is very real. The administrator's job is to determine goals and to set policy; the commander's job is to take the goals and interpret them; the supervisor's task is to see that the job gets done; and, of course, the job is actually done, in most cases, at the operations level. Unless directives are reduced to writing, the administrator should not wonder why his goals are being misinterpreted, or why supervisors are not supervising. A basic management tenet is that each person, no matter where he is situated within the organizational structure, has a right to know exactly what is expected of him or her.

In evaluating the effectiveness of any organization, one cannot overlook the written directive system. Efforts to improve the system of issuing written orders should seek the following goals.

1. Systematic classification of written directives
2. Standard format
3. Adequate reference indexing system
4. Centralization and restriction of authority to issue written directives
5. Adequate distribution to insure all personnel affected by a written directive are fully acquainted with its contents
6. Restricted distribution of those directives which affect limited numbers of personnel or units
7. Uniformity and control of numbering and indexing systems
8. Provisions for transferring directives into manual form

9. Inspection to insure that the system is maintained according to specifications and that the contents of directives are understood and followed

Written directives should take one of the following forms:

1. General Orders - Permanent directives of policy and procedure affecting more than one subordinate unit
2. Special Orders - Directives affecting only a specific segment of the organization or statements of policy or procedure regarding a specific circumstance or event which is of a temporary or self-cancelling nature
3. Personnel Orders - Announcements of changes in the status or movements of personnel
4. Instructional Material - Instructional and training material which is usually found in manual form in many police organizations
5. Memoranda - Transmitters of information of interest but not necessarily directive or to provide written direction at levels of command not authorized to issue general or special orders

General Order Indexing and Manuals. The format to be discussed for general orders will permit the development of a General Duty Manual with sections dealing with certain topics and an extensive cross-indexing system. The quality of the index is the key to such a manual and a good one will expedite reference to the material contained therein. The General Duty Manual should also contain much of the general rules and regulations content.

Binders to contain manuals should be provided in sufficient quantities to each office. They should be heavy-duty three-ring binders with lifters and lettered dividers of heavy card-stock. Rings of 1-1/2 inches or more in diameter are most suitable. The binders should be appropriately labeled and numbered, and a record of assigned numbers should be kept in some central location to assure control.

Authority for Indexing and Numbering. Proper cross-indexing is important; therefore, responsibility should be placed at each level to assure uniformity and consistency. Similarly, the authority and responsibility for numbering general orders and assigning them to sections should rest in one place at each level to assure that two orders do not receive the same number, section assignment, etc. For this reason,

it is suggested that Research and Development be responsible for indexing and assigning numbers to all general orders and that at the two lower levels some individual or unit be assigned similar responsibility. The cross-index system is provided so that one may be able to refer to an order under a number of possible headings and find it.

Dissemination of Orders. Everyone affected by an order should receive a copy of it and should be required to acknowledge in writing its receipt and that the contents are understood. Therefore, everyone subordinate to the issuing authority would receive a copy of a general order, and everyone affected by the other types of orders would receive copies. A dissemination system should be developed to meet these requirements.

Special Orders, Personnel Orders and Memoranda. Special orders, personnel orders, and memoranda need not be classified, indexed, and installed in binders in the same manner as general orders because they relate to specific matters. Therefore, they can easily be integrated into the administrative filing system.

Research, however, should have a master file of all orders and memoranda for reference and documentation purposes.

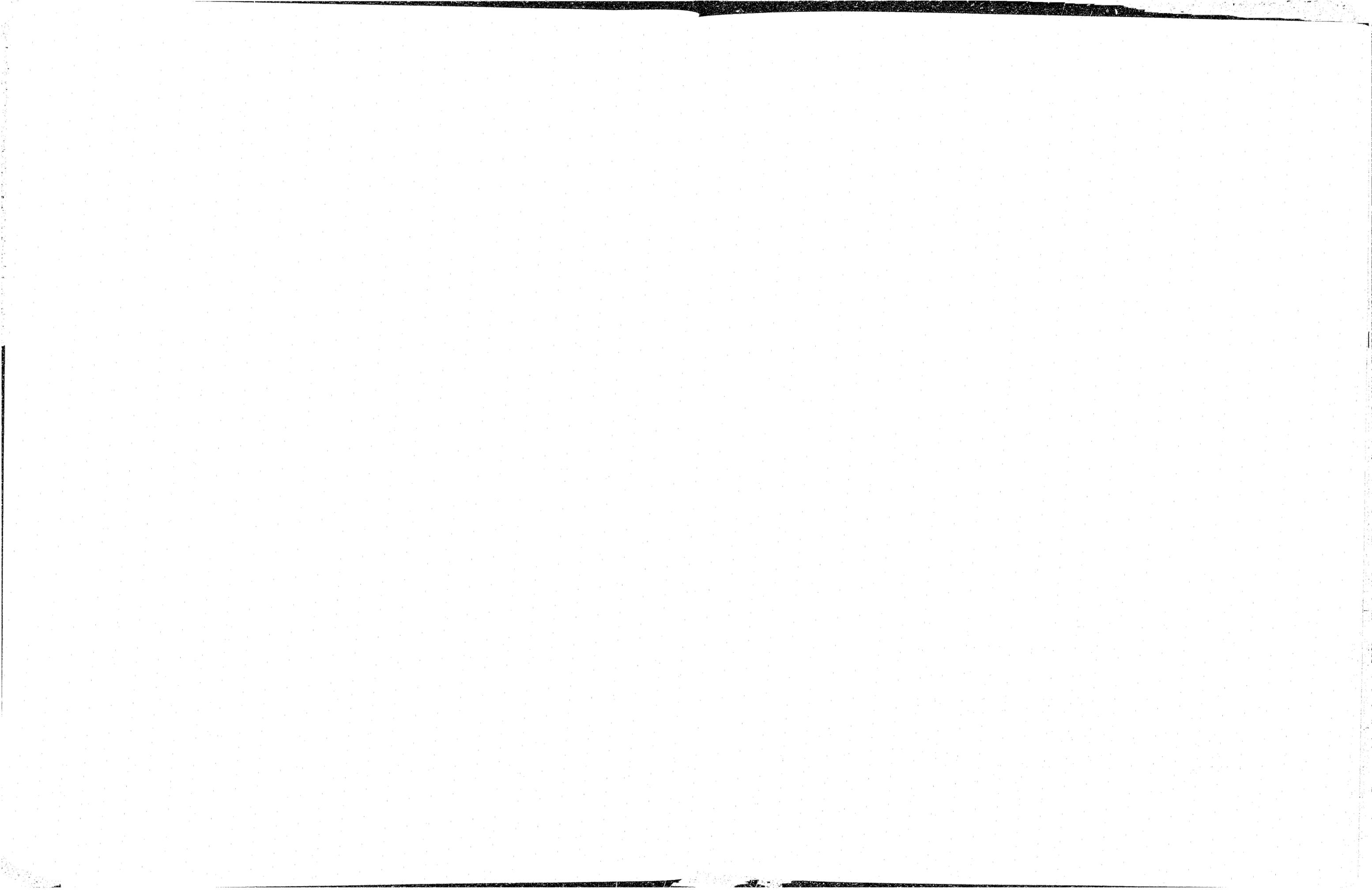
Review. The proposed system requires an annual review of orders that are not self-cancelling or otherwise of an obviously temporary nature. This will assure that policies and procedures are systematically reviewed and kept current. It will also facilitate the development of manuals where all orders and instructional material relating to a given procedure will be in one place. For example, reporting procedures and filing practices would be stated in the form of specific manuals rather than in the General Duty Manual.

Inactive or irrelevant orders can be purged from the active files during this review.

Revision. When all or part of a general order is revised, it will retain the original section number, and the fact that it has been revised and the date will be noted on the affected pages. When only part of a general order is revised, only the affected pages need be rewritten and the revision information noted. The obsolete material should be removed from the manual and destroyed.

Advantages of This System. The presented program has the following advantages:

1. Provides for centralization and restriction of authority to issue written orders to minimize conflicts and deviation from accepted policy and procedure and duplication of written instructions



5. Use of public facilities and equipment and expenditure of public funds.
6. Relationships with other agencies and citizens (the latter including punitive and nonpunitive contacts).

B. Special Orders - Special orders are issued to announce policies or direct procedures concerning a specific circumstance or event, or policy or procedure which is of a temporary or self-cancelling nature, or involving only specific segments of activities. The following are examples of proper subject matter for special orders.

1. Specific instructions to accomplish a particular objective. Once accomplished, there will be no need for continuing instructions.

Examples:

- a. Renumbering or assignment of police vehicles.
- b. Assignment of working hours for specific commands.

2. Temporary procedure designed to cover a special occurrence or event which is of a temporary or short-termed nature.

Examples:

- a. Instruction for the use and deployment of manpower to a particular public gathering such as a parade route; including the assignment of individual duties. (Note: The general policy and directive for this type of duty should be contained in a general order.)
- b. Authorization to change from winter to summer uniform and vice versa. (Note: Permanent uniform specifications should be detailed in general orders.)
- c. Assignment of and special instructions for personnel in training programs, firearms qualification, etc.
- d. Periodic records destruction dates and special instructions for the date concerned.
- e. Annual budget preparation deadlines and special instructions for the year contemplated.

3. Directives to a specific unit or units which do not influence the operations of others and for which no organizational change is needed.

Examples:

- a. Maintenance of police-owned firearms inventory lists.
- b. Special evaluations of personnel in a particular unit.

C. Personnel Orders - Personnel orders announce the following in the order indicated.

1. The appointment of new personnel.
2. The assignment or transfer of members from one unit to another.
3. The promotion or demotion of personnel.
4. Suspension, dismissal, and restoration to duty.
5. Termination by resignation or retirement.

D. Instructional Material - This category should include instructional and training material usually found in manual form. The tone and form of instructional material is less rigid and more flexible than in general and special orders. Instructional material can include training guides and training bulletins. This material should form most of the bulk of manuals.

E. Memoranda - Memoranda may be issued for the following purposes:

1. To disseminate information or instructions which do not warrant a formal order.
2. To direct the actions of subordinates in specific situations or circumstances under a level of command not authorized to issue general or special orders. Such directions shall not deviate from or conflict with established policies and procedures as documented by higher authority.
3. To explain or emphasize portions of previously issued orders.
4. To inform members of actions or policies of other agencies.

II. Issuing Authorities

A. General Orders - General orders may be issued by the following levels of command.

1. General orders are issued by the chief of police to announce organizationwide policies and procedures which are applicable for the indefinite future.

- B. Special Orders - Special orders may be issued only by those authorized to issue general orders.
- C. Personnel Orders - Personnel orders may be prepared only at the direction of the head of the Organization.
- D. Instructional Material - Instructional material designed to be incorporated into various manuals should be approved by the Training Division and by Research and Development.
- E. Memoranda - Memoranda may be issued by the head of the organization and other authorized command personnel.

III. Distribution of Written Orders and Memoranda

- A. Initially general orders will be issued in manual form to various officers.
- B. All personnel will be issued individual copies of all written orders and memoranda affecting them and they will then be held responsible for knowledge of and compliance with the contents of such orders and memoranda.
 - 1. Special orders, personnel orders, and memoranda will be distributed only to units affected. However, copies of all written orders and memoranda shall be sent to Planning for filing in a master file.
- C. The distribution shall be noted on each order.

IV. Preparation of Written Orders

- A. General and special orders issued at any level of command shall not conflict with established policy and procedures directed by a higher authority.
- B. All orders and memoranda will be stated in precise and positive terms with grammatical accuracy.
- C. Whenever applicable, all orders and memoranda shall carry notations directing attention to other published documents which are related. An order or memorandum which rescinds or supersedes other orders, rules, memoranda, etc., will carry the identifying notations (order number, rule number, etc.) necessary to connect them.

V. Indexing and General Format

- A. Orders and memoranda shall be numbered consecutively with a prefix consisting of the last two digits of the year, i. e., 73-1, 73-2, etc. In addition, each general order shall receive a section code consisting of letters and numbers.

- 1. The letters indicate the section of the General Duty Manual in which that order should be placed.
- 2. The number designates the position of the order in the lettered section.
- 3. All general orders shall be indexed and assigned section codes by Research and Development.

- B. All written orders and memoranda shall conform to the format of this order as closely as possible. All orders and memoranda will also indicate their effective date and a number will be obtained from Research and Development prior to its issuance.

VI. Cancellations

- A. All general orders, special orders, instructional material and memoranda which are not self-cancelling shall be reviewed yearly by Research and Development after the original date of issuance to determine if:
 - 1. They should be cancelled.
 - 2. They should be incorporated into a manual.
 - 3. They should be revised.
 - 4. They should be continued in their present form.
- B. Cancellations and incorporations into other manuals shall be effected by a special order.
- C. Reviews of orders and memoranda shall be conducted by Research and Development.

VII. Effective Date

This order is effective _____, 197_____.

(Signed by head of organization)

Distribution:

All personnel
All functional and geographic units

I have read the above order and fully understand it.

Signature

Date

General Order 73-2

Exhibit II

Index as:

General Duty Manual
Duty Manual
Manual, General Duty

SUBJECT: GENERAL DUTY MANUAL

The purpose of this order is to implement the General Duty Manual and to explain its features, organization, and use. This manual contains all general orders in a codified form, as well as existing rules and regulations.

All personnel are responsible for knowing and carrying out the provisions of all general orders.

This order consists of the following numbered sections.

- I. COMPOSITION OF MANUAL
- II. FORMAT OF GENERAL ORDERS
- III. MAINTAINING THE MANUAL
- IV. ISSUANCE OF NEW INDICES AND PERIODIC INSPECTIONS
- V. EFFECTIVE DATE

I. Composition of Manual

A. Alphabetical Index

1. An extensive alphabetical cross-index system notes the location of any order or subject in the Manual. Use of this index should assist the reader in locating material rapidly.

B. Control Code Index

1. The Control Code Index lists each order in the Manual consecutively according to its number of publication. (Example: 73-1, 73-2, etc.). This will usually be a chronological listing by date of publication.

C. Lettered Sections

1. The Manual is divided into lettered sections. Generally, orders contained in each section are related to each other, but because many orders are concerned with more than one subject, no specific attempt has been made to adhere to rigid

topical classifications. Orders have been placed in lettered sections in order to permit flexibility and easy location.

II. Format of General Orders

A. The upper right-hand corner of an order contains the section code (Example: B-3) and the date of publication.

1. The section code indicates the lettered section and the position of an order in that section.

B. The upper left-hand corner of an order will identify the order as a Headquarters General Order and also show the consecutive number of issuance. (Example: 73-1, 73-2, etc.)

C. Also included at the upper left-hand corner of an order will be a list of indexing information by which the order is to be listed in the Alphabetical Index.

1. The indexing information will be listed under the words "Index as."

III. Maintaining the Manual

A. The following procedure shall be used when placing a new order in this Manual.

1. Insert the new indexing information shown in the upper left-hand corner in its proper alphabetical sequence in the Alphabetical Index.
2. Insert the subject in its proper numerical sequence in the Control Code Index.

B. When removing a replaced, superseded, or cancelled order from the Manual, cross out neatly all indexing data pertaining to the old order.

C. This Manual is designed for use in a three-ring binder using alphabetical dividers.

1. Binders will be issued to each member of the force and to functional and geographic subdivisions.

D. Each individual member and each unit issued a General Duty Manual shall be responsible for maintaining it in the above manner in the binders provided.

IV. Issuance of New Indices and Periodic Inspections

A. When a sufficient number of new orders has been issued, Research and Development will publish new index data.

1. The index data will consist of an up-to-date Alphabetical Index and Control Code.
2. Each person responsible for the maintenance of a General Duty Manual should check the material contained in the Manual against the new index sheets to ascertain whether the Manual is up-to-date.

B. The Inspection Division will conduct periodic inspections of General Duty Manuals in various offices.

1. The chief and commanders concerned will be notified, through channels, of any discrepancies discovered in such inspections.
2. At the time of the inspection, new indexing sheets will be distributed, when necessary.

V. Effective Date

The effective date of this order is _____, 197__.

(Signed by head of organization)

Distribution:

All personnel
All functional and geographic units

I have read the above order and fully understand it.

Signature

Date

Exhibit III

(Outline only, to show sequence of information)

Special Order 73-3

SUBJECT: BUDGET REQUESTS FOR 1974

The purpose of this order is to present the procedures, and detail the forms to be used in making budget requests for 1974.

I. Forms To Be Used

A. General Instructions

1. Three copies to chief.
2. Prepared in compliance with following instructions and submitted on or before _____ 1973.

B. Form _____: Personnel

1. Submitted by:
2. Instructions.

C. Form _____: Services, materials, supplies, equipment

1. Submitted by:
2. Instructions.

D. Form _____: Building Repair, etc.

1. Submitted by:
2. Instructions.

II. Review of Budget Requests

III. Special Instructions

By Order of:

The effective date of this order is _____, 197__.

Distribution:

Exhibit IV

Personnel Order 73-4

1. Appointments

<u>Name</u>	<u>Position</u>	<u>Eff. Date</u>	<u>Assign</u>
Doe, John W.	Patrolman	10/1/73	Academy
Jones, Martha B.	Clerk	10/1/73	Records

II. Transfers

<u>Rank</u>	<u>Name</u>	<u>From</u>	<u>To</u>	<u>Eff. Date</u>
Captain	Jones, John P.	Patrol	Inspection	12/1/73
Lieutenant	Richards, D.	Staff	Patrol	12/1/73
Sergeant	Roe, Richard	Comm-unications	Inspection	12/1/73

III. Promotions

<u>Name</u>	<u>From</u>	<u>To</u>	<u>Eff. Date</u>
Roe, Richard	Patrolman	Sergeant	12/1/73
Richard, David	Sergeant	Lieutenant	12/1/73

IV. Suspensions, Dismissals, Restorations to Duty

<u>Rank</u>	<u>Name</u>	<u>Action</u>	<u>Eff. Date</u>
Patrol	Spade, Sam	Suspension (30 days)	12/1/73

V. Resignations, Retirements

<u>Rank</u>	<u>Name</u>	<u>Reason</u>	<u>Eff. Date</u>
Sergeant	Rodgers, Thos.	Retirement	12/1/73
Patrol	White, John	Resigned	12/1/73

By Order of:

Date _____, 1973

Distribution:

Exhibit V

Memorandum 73-5

SUBJECT: Membership Opportunity in U. S. Junior Chamber of Commerce (Jaycees)

1. An invitation has been extended to select two Police Officers for membership in the local chapter of the U. S. Junior Chamber of Commerce.
2. Any male Police Officer who has not reached his 33rd birthday is eligible for selection. Interested Police Officers shall submit a brief resume of their background with a request for consideration for selection on or before _____, 1973.
3. Dues and other expenses in connection with membership in this organization will be paid by our organization.
4. Following is a brief outline of the purpose of the U. S. Junior Chamber of Commerce. Further details can be obtained from Sergeant _____, Extension _____.
5. The U. S. Junior Chamber of Commerce is a civic organization for young men between the ages of 21 and 35, inclusive. It is dedicated to two purposes.
 - a. Improvement and development of the community.
 - b. Improvement and development of its individual members to train them for business advancement and civic leadership.

It may be defined as "a supplementary educational organization wherein the young men of the community may join together in a friendly spirit to inculcate civic consciousness in its membership by means of active participation in constructive projects which will improve community, State, and Nation."

In short, a Junior Chamber of Commerce is an organization of young men learning civic consciousness through constructive action.

The Officers selected will have an opportunity to receive leadership and public speaking training in connection with their membership.

5. Final selection will be made by a committee representing officials from the U. S. Junior Chamber of Commerce and this organization.

Date: _____, 1973.

(Signature)

Distribution:

The Information Mission

In order to perform the traffic supervision mission properly, the police must go beyond the routine staff services required in the operation of the department. Foremost among these requirements is the need to keep adequate traffic records.

An adequate information system, including appropriate quality controls, must make provisions for rapid retrieval of the available information in order to respond to the operational demands of the force and those of the neighboring states and communities.

A records system, no matter how well conceived and managed, is valueless if it is incapable of providing answers when queried. A primary task, therefore, is to develop adequate methods for communicating information to the line officers. The entire success of the enforcement program depends upon how well the supervisors and the officers of the operating divisions are informed.

Highway safety programs are based on the concept that many accidents can be prevented if hazardous actions and conditions are corrected. Knowledge of these actions and conditions can be determined by the establishment and use of an effective accident records system at the state and community level.

A prime tool for improving highway safety, the information mission should:

1. Identify the problem driver for corrective action by administrative and enforcement officials
2. Point out high-accident locations for corrective action by the traffic engineer, enforcement agencies, and other governmental units
3. Indicate overall deficiencies in highways and streets for traffic and highway engineers to provide a guide for roadway design and improvement
4. Define the scope of the traffic problem which police administrators must cope with so that intelligent and effective use can be made of manpower and facilities
5. Assist the legislator in drafting laws and help the governmental administrator in formulating policies and regulations
6. Develop public understanding and support for effective official policies and programs and the justification of programs involved

7. Identify areas in which further research is needed—about drivers, vehicles, and roadways
8. Indicate the effectiveness of efforts made by governmental agencies in traffic accident prevention
9. Assist in the training of new drivers in school and public safety education

The responsibility and authority for the collection of accident data, the analysis and use of these data for purposes of police administration, and the dissemination of accident records information should rest with a central records division or similar unit within the police organization.

The traffic data compiled by the police agencies will serve many useful purposes if they are maintained in sufficient quantity, carefully analyzed, and properly used. Primarily, these data will help in providing solutions to traffic problems and serve as guides in the development of police traffic safety programs designed to reduce collisions and relieve congestion. A vital activity in this regard is the analysis of traffic records. The effective use of the traffic records information will depend a great deal on the skill possessed by the analyst.

The usefulness of traffic records also will be dependent upon the kind of information recorded and the accuracy of reporting. The facts needed to develop a sound police traffic supervision program may be quite different from those needed for general police operations. For this reason, the composition and format of the accident report form should provide space for specific information needed. It is probably desirable to develop special procedures to use in gathering data.

Traffic Records¹

The data required for traffic safety programs are as diverse as the causes of traffic accidents. An accident may involve one or more drivers and vehicles, driver failure or inability, driver or pedestrian errors, vehicle failure, poor roadway design, or a combination of any of these and other factors. The purpose of the traffic records system is to make all the data relevant to traffic accidents available for use in traffic safety programs. Because of this, the records system must be supplied data generated and collected by the functions previously discussed as well as the data collected through accident reports. These data are, generally, grouped into four classes: drivers, vehicles, highways, and accidents.

For drivers, the traffic records system must have data available so that each driver licensed in the state can be positively identified and associated with his driving history. For all registered vehicles in the state, the system must have data for identification including size and operating capability and, desirably, operational history data from

¹ Excerpts from Highway Safety Program Management, Automotive Safety Foundation, Washington, D. C., 1968.

The first part of the report is devoted to a description of the experimental apparatus and the methods used for the measurement of the various quantities. The second part contains the results of the measurements and a discussion of the various factors which may influence the results.

The results of the measurements show that the various quantities measured are in good agreement with the theoretical predictions. The error in the measurements is estimated to be about 5%.

The following table gives the values of the various quantities measured for different values of the parameter α .

It is seen from the table that the values of the various quantities increase with increasing α .

The results of the measurements are in good agreement with the theoretical predictions.

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It is seen from the table that the values of the various quantities increase with increasing α .

The results of the measurements are in good agreement with the theoretical predictions.

Although the foregoing discussion centers on a state-level traffic records system, most of the discussion points and stated objectives are amenable to traffic records systems at all levels. It would be difficult to refute the thesis that a municipal traffic records system should look to the criteria of completeness, accuracy, correlation, comprehension and timeliness. The objectives, as presented, are equally applicable, although, in some instances, to a lesser degree.

Some other efforts in the area of traffic records research could properly be catalogued here. Some of them would include:

- Work performed by the American National Standards Institute's (ANSI's) D-20 Committee working toward the development of a state-oriented Model Motorist Data Base
- Design Manual for State Traffic Records System, Volumes I and II, prepared under contract (DOT 131-1-201) for the National Highway Traffic Safety Administration by Computer Sciences Corporation, February, 1972.
- Work performed by the Committee on Traffic Records of the Highway Research Board, National Research Council, Washington, D. C.
- Work performed by the Traffic Accident Data Project Steering Committee of the National Safety Council, Chicago, Illinois, concerned with the Manual on Classification of Motor Vehicle Traffic Accidents, Vehicle Damage Scale for Traffic Accident Investigators, and others.

VI

POLICE TRAFFIC SERVICES EQUIPMENT

General Considerations

Agency administrators will probably never find it possible to acquire equipment that is "perfect" for the job they wish it to perform. The compromise products which will finally be placed into service should be those purchased after due consideration of the following influences:

1. The needs of the service as determined by operational and managerial personnel of the department as the result of an appropriate survey and analysis
2. Budget limitations or cost of equipment including initial purchase (or lease), operation and repair, and resale
3. The degree of support for the department's objectives provided by executive and legislative leaders and the community
4. The technical and productive capabilities of industry

Whenever possible, standardization of equipment used should be followed for efficiency and economy. The larger the size of the agency and the more centralized its operations, the greater becomes the possibility of standardization. On the other hand, the larger the organization's geographical area of responsibility and the more varied its law enforcement duties become, the less able is the department to standardize. Consider, for example, the differences in equipment requirements among municipal or metropolitan departments, state police, and highway patrol agencies.

Surface VehiclesTypes of Surface Vehicles.

1. The patrol car used for Police Traffic Services on high-speed

roadways should have the following characteristics:

- a. Superior acceleration from conservative cruising speed to a top speed of more than 120 mph
 - b. The best possible suspension and roadability with disc brakes for maximum deceleration without brake fade
 - c. High speed tires capable of withstanding stresses placed upon them by the top speed of the vehicle
 - d. Roll bars in addition to the passive and active restraints now required in all passenger-type motor vehicles
2. The patrol car used for Police Traffic Services on surface streets where extremely high speeds are unusual could differ from the high-speed roadway patrol vehicle as follows:
- a. A less powerful engine geared for rapid acceleration to a maximum of approximately 90 mph
 - b. A shorter wheelbase to permit a shorter turning radius on the more congested and narrow streets expected within urban areas
3. Motorcycles
- a. The solo motorcycle is an extremely effective vehicle in heavy, congested traffic conditions because of its maneuverability. However, the motorcycle officer occupies the most dangerous job in police work because of the great potential for accidental injury. When violator speeds approach 90 mph and/or weather conditions deteriorate, motorcycle operation becomes ineffective and prohibitively hazardous. Furthermore, little cargo space is available for safety or service equipment.
 - b. Three-wheel (service vehicle model) motorcycles and scooters should be considered mainly for parking law enforcement and other traffic assignments in downtown business areas.

4. Special Vehicles for Police Traffic Services

- a. Vehicles designed for officers assigned to commercial vehicle enforcement are usually of the station wagon or pickup truck types because of the specialized testing equipment such officers are required to transport. Portable scales, brake testing machines and gauges, and other items require greater cargo capacity for this type of duty.
- b. Vehicles designed for and equipped with instruments and personnel for the purpose of conducting examinations of suspected intoxicated drivers are almost exclusively of the two-axle delivery van type. Such vehicles may reduce time lost in processing drivers arrested for driving while intoxicated offenses.

Van type vehicles have also been utilized with considerable success as primary vehicles for accident investigation units. The size and configuration of the vehicles allow the transportation of large amounts of safety and special investigative equipment as well as a comfortable and protected area for conducting at-the-scene interviews.

- c. In some areas which experience severe weather conditions and/or where off-highway vehicles have been made a police responsibility, snowmobiles¹ and four-wheel drive vehicles are used by police agencies in fulfillment of their duties.

Marking and Equipping Surface Vehicles.

1. Police Traffic Services vehicles are ordinarily painted a distinctive color(s) to provide ready recognition to the public. In some jurisdictions, this is a legal requirement, while in others a proportion of the vehicles are unmarked. Few agencies operate only unmarked cars in Police Traffic Services operations. Distinctively marked vehicles increase the effect of presence on traffic law violators. The argument in favor of unmarked vehicles is that some types of violators ordinarily escape enforcement action when officers are highly visible because of their marked vehicle. In addition to paint color, vehicle marking can be displayed by departmental shield or insignia on the vehicle's sides and/or "Police" or other words on front, sides, or rear.

¹Steve Nelson, "Snowmobiles Find a Place in South Dakota Law Enforcement," Traffic Digest and Review (Traffic Institute, Northwestern University, Evanston, Illinois), Vol. 19, No. 1, p. 105.

2. Emergency Signal Devices Attached to the Vehicle.

- a. Audible warning devices currently in use by law enforcement agencies are either of mechanical or electronic design. The mechanical siren produces its warning sound by the rapid interruption of a current of air by a perforated rotating disk. Energy is ordinarily supplied by an electric motor, but a motorcycle siren's energy may be provided through friction upon a shaft pressed against the cycle's rotating tire.

The electronic siren's warning sound is produced by a loud-speaker activated by an amplifier designed to produce the same sounds as that of the mechanical siren. The unit is ordinarily equipped with a selector which provides tones alternatively high and low in pitch and/or a "yelp" sound. Departmental policies should clearly state, after appropriate legal research, whether or not the high-low and/or yelp selection sounds conform to the jurisdiction's statutes which require other traffic to yield the right of way to the emergency vehicles sounding such warning.

A public address system is often a part of an electronic siren's setup. Appropriate verbal commands by officers through the unit's loudspeaker are additional audible warnings which other traffic units are required to obey under statutes empowering the police to direct traffic.

(NOTE: The use of the ordinary auto horn in conjunction with emergency lights, in appropriate circumstances, is a practice often neglected in some jurisdictions. The horn avoids startling vehicle operators or disturbing others nearby who do not constitute a hazard.)

- b. Warning lights shown to the front of Police Traffic Services vehicles can be red, blue, or both red and blue. Some jurisdictions utilize red or blue in combination with a white light as their warning light colors. Statutory requirements almost exclusively dictate the colors of emergency vehicle warning lights.²

The warning lights showing to the front of emergency vehicles can be steady, flashing, alternatively flashing on each side of the vehicle, or a combination of steady and flashing.

The flashing of lights can be effected by interruption of the electric current (flasher unit), a reflector which circles the light source, several light sources with individual reflectors all of which revolve, or gaseous discharge lamps (strobes).

The warning lights showing to the front can be mounted at heights varying from the vehicle's grill to above the roof line. Ordinarily, the higher the lights, the better their visibility, although officers should remain aware that warning lights mounted especially low or high may not be observed by motorists behind which the police unit is closely following. Also, warning lights mounted below the roof line are more likely to be obscured by intervening traffic units, as may be lights mounted only on centerline of the police vehicle (as opposed to those positioned along the left and right sides of the emergency vehicle).

²Studies and opinions of law enforcement personnel disagree in their preferences for red or blue as warning light colors. (A letter to the IACP from the Connecticut State Police reports a reduction in cruiser accident rates of 20 percent since their use of blue strobe lights. Negative public comments: light too bright and does not offer a good reference point for motorists who are approaching lights.)

A discussion of relative merits of blue warning lights for police vehicles is contained in the appendix.

Warning lights showing to the rear of the Police Traffic Services vehicle can be the same colors or combinations of colors as those shown to the front, but serve to indicate a roadway hazard to motorists approaching the police vehicle when it is halted upon or near the roadway. Additional colors shown under such circumstances in some jurisdictions are yellow or amber. The mounting heights of warning lights shown to the rear are at the level of the vehicle's rear window or higher.

Especially effective for high-speed highways are devices which can be raised well above roof level containing flashing warning lights and/or lights patterned to direct approaching traffic to move left or right away from an obstruction.

3. Other equipment attached to or carried by Police Traffic Services vehicles in some or most jurisdictions:
- a. First aid equipment such as airways, bandages, stretchers, splints, blankets, etc.
 - b. Fusees (flares), traffic cones
 - c. Push bumpers for removing stalled or damaged vehicles from the roadway
 - d. Fire extinguishers and tools for entry into damaged vehicles, axes, shovels, jacks
 - e. Accident investigation kits, including measuring devices (tapes or wheels), chalk or crayons, evidence containers, cameras, ropes or chains
 - f. Cage or partition between front and rear seats
 - g. TV tape camera and playback for recording violations

- h. Spotlights, fixed focus, movable, and/or portable battery-operated units
- i. Area maps
- j. Disaster, roadblock, and other emergency operational plans
- k. A container of gasoline or a fuel exchange device, water, lug wrench, air pump or compressed air bottle for stranded motorists
- l. Tire chains
- m. Shoulder weapon, extra ammunition
- n. Report forms, high intensity light, clip board or other writing surface
- o. Battery jumper cables
- p. Other equipment necessitated by area, climate, or jurisdictional responsibilities

Aircraft

The use of aircraft for law enforcement purposes has grown tremendously over the past decade. They are used by agencies to perform the following missions related to Police Traffic Services:

- General traffic control and observation
- Traffic law enforcement
- Emergency medical evacuation
- Disaster and emergency operations
- Transportation of personnel

- Transportation of medical supplies under emergency conditions

Types of aircraft operated.

1. Fixed-wing aircraft are conventional aircraft, generally powered by single engines and capable of flying speeds between approximately 55 mph and 160 mph.

The advantages of operating conventional fixed-wing aircraft compared with helicopter operation are:

- a. Pilots require less training.
- b. Costs of purchase, maintenance, and operation are considerably less.
- c. They can remain in the air for longer periods.
- d. They have higher top speeds.
- e. They are involved in fewer accidents.

2. Short take off and landing (STOL) aircraft are fixed-wing airplanes of special design which incorporated high power to weight ratios with low wing loadings in order to reduce stalling speed to a minimum. One definition of STOL is that it is a fixed-wing aircraft which can take off or land within 200 meters. One model currently available is capable of landing within 130' and taking off with only 305' of runway. Conventional fixed wing planes require 1,000 feet or more for take off. STOL planes can fly at speeds between approximately 38 mph and 155 mph.

The advantages and disadvantages of STOL aircraft are:

- a. Pilot training is the same as fixed wing.
- b. Purchase price of STOL is more than conventional craft but much less than helicopters.

- c. Fuel costs are more than conventional craft, but STOL planes equipped with turbine engines require less maintenance.
- d. The short take off and landing capabilities of STOL permit more versatility of operation than conventional fixed-wing planes.
- e. They are involved in few accidents.

3. Helicopters, rotary wing aircraft, have greatly increased in use by policing agencies during the past few years. Their ability to hover and land or take off almost anywhere makes them an extremely valuable tool. The more congested the area becomes the more valuable is the helicopter for Police Traffic Services operations. Therefore, most aircraft utilized by departments in metropolitan areas are helicopters.

The disadvantages of the use of helicopters are:

- a. Rotary craft are by far the most expensive to purchase, maintain, and operate. Maintenance is high because approximately 45 percent of a helicopter's weight is that of moving parts which, of course, results in greater wear.
- b. Helicopter pilots require two or three times the training necessary for fixed-wing and STOL operators.
- c. Helicopters are more likely to be involved in accidents because of the greater number of moving parts subject to failure and the steep glide angle of rotary craft which restricts choice of emergency landing spots (glide angle of rotary, 1/1; conventional, 1/8; STOL, 1/15).
- d. The usual top speed is 100 to 110 mph, which is slower than conventional or STOL craft.
- e. They have a smaller payload capacity than fixed-wing and STOL aircraft of comparable power.

greater than that of the suspect. However, if the distance remained the same or increased, the officer then knows that the suspect's speed was as fast or faster than the patrol vehicle's.

Speedometers should be periodically checked for accuracy at either a shop specializing in speedometer work or by the use of an electric fifth wheel speedometer. A chart should be maintained in the police vehicle listing the instrument's deviation from true speeds up to the top speed at which excessive speeds arrests can be expected for the agency. Speedometers more than two or three mph off should be removed and repaired or replaced.

Time/Distance/Speed Computing Devices. These are all based on the formula:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

Once distance has been accurately measured, precise timing of the period necessary for a vehicle to traverse that distance permits computation of the vehicle's speed. Few jurisdictions prohibit evidence of speed gained by such methods.

1. Stopwatches have been used by the police for many years in the enforcement of speed laws. Ordinarily, 1/6 of a mile (880') or other larger fraction of a mile is used, and the timing device should be capable of reading to tenths of a second.

Through the use of a table which relates miles per hour to the elapsed time necessary for a vehicle to have passed through the distance being used, the officer can determine the speed of any vehicle he times. Speed enforcement by this method is used by air and ground unit teams, the officers in the plane ascertaining vehicle speed and relating the information to the ground unit which effects the enforcement contact.

Painted marks on the roadway at precisely measured intervals are used by the officer in the aircraft to mark the beginning of the speed measuring course. Some jurisdictions use an airplane silhouette as their painted mark to increase the sense of presence of enforcement personnel.

It is important the officers be able to testify of their own knowledge to the distance involved in a speeding prosecution. Therefore, unless the officer measures the distance or observes while another makes the measurement, the prosecution must produce as a witness the party who effects the measurement.

2. Another type of speed measuring device utilizes pneumatic tubes laid across the roadway a precisely measured distance apart. The wheels of a passing vehicle press upon the tubes which causes impulses to be sent to a timing device which automatically computes the vehicle's speed.
3. Many police agencies are now utilizing speed computing devices which measure distance and elapsed time, as fed into the machine by the officer's operating switches to begin and end information reception. When both sets of information have been entered the instrument reads out speed. In this operation, the officer drives over the same course traversed by the suspect vehicle while the computing device measures the distance through its connection with the patrol vehicle's wheels and drive train. As the suspect vehicle passes through the same distance the officer starts and stops the timing section of the computer. The advantages of this operation are that the two sets of information, time and distance, need not be provided the computer in a set order, and that no particular section of previously measured roadway is necessary. Therefore, the officers who have this equipment available to them can continue to patrol the various parts of the beats providing the traffic services which are their responsibility rather than setting up a speed measuring device at one location and remaining there. Also, it is not necessary to utilize another unit for the operation as is required during an aircraft and ground unit combination.

The points marking the start and finish of the course to be measured can be determined by noting where the suspect vehicle passes through a shadow or over a discernible spot on the roadway, or when the suspect vehicle's lights play upon objects adjacent to the highway, and by many other situations visible to the enforcement officer.

4. The most recent innovation in speed detection equipment is the automatic stationery speed computer and recording instrument. This type of device is emplaced adjacent to the highway and consists of four main parts: (1) sensing devices in the roadway which detect the passage of vehicles between two precisely measured points, (2) a computer which automatically produces a speed figure from the information received from the sensing devices, (3) a light source which provides light sufficient for photographing the suspect vehicle and its operator without interfering with the driver's vision, and (4) a camera which photographs simultaneously on one frame the suspect vehicle and its driver, the speed figure produced by the computer, the time, date, location, and any other information essential for prosecution previously set as a display within the instrument.

This type of speed enforcement device effects considerable saving in enforcement man-hours as it needs no officer in attendance. The

machine is set to record only those violators exceeding the speed limit by a sufficient margin to require enforcement action, either prosecution or warning. Where driving too slowly is a problem, the instrument can be set to record this type of violation also. The manpower required for this type of operation is that of replenishing the supply of film, film development, and the clerical time utilized in making mail notification to owners of the involved vehicles of the enforcement action contemplated. The testimony of the officer attending the device is generally the only police officer manpower necessary in addition to that previously mentioned.

Radar. Radar is another valuable tool available to traffic services agencies for speed enforcement purposes. Evidence of excessive speed by violators as obtained by radar instruments is today universally accepted. Beyond checking the accuracy of the device by holding a vibrating tuning fork adjacent to the instrument's antenna, officers are no longer required by courts to be trained to the extent that they are able to testify to radar's theory and operation.

Radar speed measuring devices operate by measuring the difference between high frequency radio signals sent from the instrument and those signals reflected back to the device by the object vehicle. The instrument automatically reads out the difference in miles per hour.

The advance in technological progress has proceeded to the point at which the newest radar instruments can compute speeds of violators' vehicles even while operated from a moving police vehicle, and some radar units are now made small enough to be held by hand. The effective range of radar speed measuring instruments is as much as 2,500 feet.

Enforcement officers utilize radar by checking their instrument by the tuning fork periodically, aiming the instrument at the vehicles or traffic flow to be measured, and noting the reading in miles per hour as indicated on the instrument's dial or digital readout. Most radar instruments are designed to hold the speed figure on the dial or readout for reference by the officer and/or violator after the enforcement contact has been made.

Instruments and Devices Used by Officers in Driving While Intoxicated Cases

There are two general methods utilized by the police to acquire evidence of intoxication after contacting a suspected driving while intoxicated vehicle operator. The first procedure involves the testing and recording of the observable physical manifestations of intoxication—the suspect's actions and reactions as he moves and speaks. The traditional procedure has been for the officer to make a written report of his observations, and this practice continues. However, the devices and equipment utilized in addition to the report are for the purpose of presenting a recording of the suspect's actions as evidence upon trial of the matter. The following have been and are being used in various jurisdictions for this purpose:

- o Still photography
- o Motion picture photography, both silent and sound
- o TV tape recording
- o Tape recording

While the evidence recorded by these methods has proved extremely effective in proving intoxication of defendants who were obviously drunk, it has often been otherwise in cases where the intoxicated person has been able to keep himself well controlled.

The second procedure for acquiring evidence of intoxication involves obtaining samples of the suspect's breath or urine (blood samples withdrawn only by medically qualified personnel) for analysis. Breath testing can be for the purpose of screening suspects at the roadside or for scientifically accurate determination of the blood alcohol level. Systems are available which do both. That is, the breath both produces screening information for the investigating officer at the scene and provides a sample for a later precise laboratory analysis.

The screening devices involve passing a sample of the suspect's breath through chemicals which change color to various degrees depending upon the amount of alcohol present in the breath. While it is claimed by the manufacturers of these devices that the extent of intoxication can be determined by the officer giving the test, a study made of these screening devices strongly indicated that a large percentage of mistakes are made by officers when they attempt to decide upon the basis of color change whether or not the suspect's blood alcohol level is above the legal limit.³ The value of the screening devices lies in their ability to show the presence of alcohol in the suspect's system rather than its level. The screening devices will distinguish alcoholic intoxication from other problems which exhibit similar symptoms such as illness, fatigue, drugs, etc. Therefore, officers are well advised to base their decisions on whether or not to arrest on the observable actions of suspects and to use the screening devices to ascertain whether or not alcohol is the intoxicant.

Breath testing instruments capable of analyzing samples with scientific accuracy are operated by officers. While some training is necessary before officers are permitted by courts to testify as to the results of breath tests, the training period is ordinarily not lengthy as the newest instruments leave little for the operator to do.

³Richard W. Prouty and Brian O'Neill, An Evaluation of Some Qualitative Breath Screening Tests for Alcohol (Insurance Institute for Highway Safety: Washington, D. C., 1971)

In the past, breath testing instruments were used only at permanent locations or in vehicles of commercial size designed for testing of suspected intoxicated drivers. However, instruments are now available which operate on flashlight size batteries and which can be carried as part of the equipment in every patrol car. One type of device is set to indicate only whether or not the suspect's blood alcohol level is above the legal limit, while the other type reads out the blood alcohol level of the sample the same as a full-sized instrument. For additional information regarding breath alcohol testing devices, see the recent 1972 publication, Breath/Alcohol Tests, prepared by the American Medical Association, Chicago, Illinois.

VII

TRAINING

For many years police instructors have been teaching recruits report-writing by telling them that answers to the following should always be included in good reports: Who, What, Where, When, Why, and How? The police administrator or training officer responsible for producing an appropriate training program for his department must answer those same questions in regard to his training plans.

Who should train and be trained?

What are the training objectives?

Where should the training take place?

When should the training start and end?

Why should some materials and subjects be included and others not?

How should the instruction be given?

Even an inadequate program for training is better than none at all because it at least provides a base upon which to build and a structure which can be evaluated. Learning by experience is time-consuming, and since law enforcement will probably never see the day in which they have sufficient man-hours to take adequate care of all of their responsibilities, time wasted by inadequately trained personnel learning by trial and error methods cannot be spared.

Training should not be thought of as only that which produces specific skills and knowledge. Just as important a product is its effect on attitudes, devotion to work, duty, and the organization are also extremely important. People, not robots, are being influenced, and producing appropriate changes in personnel is an unusually complicated endeavor. In fact, determining precisely what the appropriate changes are to be is primary in planning a training program.

Training is any type of activity which improves personnel and departmental performance toward the achievement of organizational goals and objectives. The effectiveness of training is measured not only by how closely behavioral changes approximate training goals, but also by how efficiently resources expended for training are used to produce the desired result.

Determining Training Needs

The first step in planning a training program is to determine departmental training needs. Specific requirements can be ascertained by considering one or more of the following:

1. Job Analysis. A determination of the duties, skills, knowledge, habits, and attitudes necessary or desirable for effective job performance in each departmental position will lead the training officer to an awareness of the training needs of personnel throughout the organization. As new techniques and materials are developed in the field, they should be constantly added to the training curriculum.
2. Problem Consideration. Management information systems, professional information sharing, and expressions of executive, judicial, legislative, and community concern should be considered to determine problem areas within the department's jurisdiction which are amenable to correction through training.
3. Personnel Development. Although the information needed to plan for training personnel in preparation for accepting increased responsibilities is similar to that of job analysis, emphasis should be placed on increased awareness of the social and political sciences and skills in administrative practices.

Within the aforementioned areas, the techniques for acquiring information concerning the department's training needs include, but are not limited to the following:

1. Inspections and reports by supervisory personnel on either a formal or informal basis and at either specified time intervals or upon individual requests for information
2. Surveys which request training needs opinions from departmental supervisors and personnel, other agencies of the criminal justice system, the community, or experts in law enforcement or related fields
3. Report and record review and analysis
4. Meetings and conferences both intra- and interdepartmental in nature
5. Review of professional literature for comparison of departmental practice with those existing in or attempted by others

One of the best ways to determine training needs is to query the worker, his co-worker, and their supervisor. Each is aware of some problem areas of which the others may not be. When their comments are combined and correlated, training needs become apparent.

Using a form which should be filled out anonymously, officers and supervisors should be requested to report work situations which they are inadequately prepared to solve. Also, they should report either the same or different situations wherein they have noticed that others are experiencing troubles. In addition, they should be asked for their suggested solutions, such as techniques and points of which they are aware, which should overcome the reported problems. Information received through this technique, therefore, can be used not only to determine training needs but training material also. Both support for the policies and procedures and interest in the training developed follow because personnel are aware of their active part in the operation.

Once needs have been determined, training program objectives which fulfill those needs should be developed. Within the confines of these general training objectives, instructional goals should be constructed, and these should state the resultant behavior desired on the part of the successful trainees. For each step of the training program it should be clearly stated what the student will be expected to do. That is, the instructional goals should make explicit the visible and measurable activities expected from the successful students at the end of the instruction and specify a standard by which the students can be evaluated.

Instructional Objectives

Instructional objectives should describe what the learner will be doing when he is tested as to his understanding and appreciation of the material which has been presented. Action verbs should be utilized in the instructional objectives in order to prevent misunderstanding as to what the intended behavior should be. For example, instead of stating that a student should know, understand, appreciate, etc., the objective should require that the student acquire the ability to write, recite, identify, list, construct, etc., as a demonstration of his abilities following the training. In addition, instructional objectives should include the conditions under which the testing will be given and the acceptable standard of performance for those students who will be considered as successfully mastering the subjects presented during the training period.¹ For example, if the trainee had been instructed in determining speed from skidmarks, the instructional objective describing testing and standards should read similar to the following:

Given a set of straight-line, four locked-wheel skidmarks on a hard, dry, clean, surfaced roadway laid down by the instructor without the trainee being present; and given the same test vehicle with calibrated speedometer and the opportunity to use it on the same roadway to make test skids; the student shall, through his use of speed-skid formulas after making his own test skids, ascertain within + 3 MPH the minimum speed at which the instructor was proceeding when the original skidmarks were made. Student calculations shall be made individually and without the availability of reference materials or a speed-skid calculator and shall be completed within 60 minutes of trainee's arrival at the test scene.

¹Robert F. Mager, Preparing Instructional Objectives (Fearon Publishers, Palo Alto, California), 1962.

Note that the instructional objective lists what the trainee will be both given and denied, the degree of accuracy required, and a time limit for successful performance.

In short, the instructional objective should be sufficiently detailed so that both the instructor and any other individual with knowledge in the field of interest will understand precisely the behavior desired (and in some instances negative behavior to be excluded), the testing conditions, and the acceptable level of performance by the trainee being evaluated.

Positioning the Training Function

The police administrator must decide where his personnel are to be trained. Unless his department is unusually large, the more advanced the level of training the more likely it will be that the training will be most effectively performed by institutions not within his own department. When the department is small, even initial, or recruit training is more advantageously done at outside agencies. In fact, the tendency is for this type of training to be the responsibility of area or state training institutions. Even those agencies sufficiently large to have the capacity to support their own training facilities must depend to a certain extent on outside training, at least initially, for their instructors.

However, problems do exist when outside training institutions are utilized. The administrator who sends his personnel to another's training school cannot expect to have but a minimal amount of control over the curriculum. Whether or not he is correct in his evaluation of what his people should learn, when they receive instruction from teachers over whom the administrator has no direct control, his own supervisors must change and retrain the attendees after their return to normal duty within the department. Beside the possibility that corrections cannot be made, there exists the problem of confusion as to what is "right" on the part of the students.

Troublesome situations, and the training aimed at correcting them, which may be peculiar to the administrator's department, cannot be efficiently solved through the teaching at schools which accept trainees from various police agencies. Thus, area, zone, or national training should be limited to that which is common or general throughout the law enforcement field. Therefore, the trainee must be further trained upon his return to his own department. Since it is human to err, this is too often not done, and the result is that frequently the trainee's instruction remains substandard or insufficient. Furthermore, even if the outside training institution were to attempt specialized instruction aimed at the individual local department, the communication lag would always prevent their constant awareness of an up-to-date picture of the training needs of all the local agencies' personnel assigned to be taught by them. Therefore, the great advantage of training at the agency level is that the departmental program can be more easily and accurately designed to fit the needs of their own personnel.

On the other hand, any agency which decides to have its personnel trained at outside institutions will receive some advantages over home-based instruction. Of primary importance is the fact that outside units designed specifically for training can be more

effective and efficient because of their specialization. The instructors at such schools are more likely to be specially trained experts not only in their fields but also in the professional techniques of teaching. Because area and national school staffs occupy a central position in their fields, their professional contacts and sources of information are more likely to provide them with instructional materials of superior quality, especially for the teaching of executive, management, and highly technical subjects.

Some of the necessary instruction given to departmental personnel is best provided under formal classroom conditions by a training unit specifically designed and operated for that purpose. The following are some of the advantages of teaching given by a centralized training staff:

1. Superior control of subject matter and instructors is maintained. The material presented in the various courses is available for inspection and review by commanders responsible for the operation. An essential requirement is written lesson plans. Not only are commanders provided with a check on what is being taught, but the lesson plans permit uniformity of material presented regardless of the instructor who may present it. In addition, because the lesson plans are available for review, coordination of material presented becomes possible in order to prevent repetition of subject matter with consequent loss of efficiency and student interest.

The individual responsible for presenting the material to the students is also under greater control. Commanders will know through information provided in the class schedules exactly when the subject will be covered, and control then becomes possible because the class can be monitored to detect compliance on the part of the instructor to the lesson plan. The presentation of differing interpretations or beliefs in direct opposition to administrative policy is more easily prevented than is possible when training is conducted by on-the-job supervisors and co-workers.

2. Knowledge and skills essential for all personnel, especially at the recruit level, are more efficiently and economically presented in a formal classroom medium.
3. On-the-job supervisors are too often busy with other matters, incapable, or disinterested in teaching their subordinates. When the training unit is responsible for providing information to departmental personnel, the chances that it will be presented are much greater because the information to be disseminated is part of a planned and coordinated unit effort. Furthermore, the training unit's instructors are assigned to teach, so their attention is not diffused among other responsibilities.

4. The selection of the best caliber of instructors is facilitated when a training unit is used to provide instruction. Therefore, instruction is given by specialists with superior knowledge who are also experienced in teaching techniques.

On-the-Job Training. Even where a central training academy is available, the good administrator promotes on-the-job training by supervisors and co-workers as part of his departmental training program. Recognition of those who enthusiastically and systematically upgrade the development of their subordinates and fellow workers and a formalized program of on-the-job training is to be found in all of the better police agencies. Some agencies pick their superior patrolmen to be training officers and provide them with special instruction and evaluation procedures by which the training of their contemporaries is guided. Constant correction and training of subordinates is, of course, one of the responsibilities of all supervisors. Although this responsibility is too often neglected in some agencies, requiring that supervisors periodically rate the performance of their personnel greatly enhances the likelihood that the training duty will be fulfilled. In turn, supervisors should be rated according to the degree to which they fulfill their training responsibility.

Advantages of on-the-job training include the following:

1. On-the-job training is more economical when the skill or knowledge being conveyed is needed by relatively few persons within the department and those who are to teach are not only few but too busy to conduct formalized sessions with numerous students in attendance.
2. On-the-job training is "real." The stress situations and constantly fluctuating factors involved in actual enforcement and decision-making environments cannot be duplicated in the formal classroom.
3. Except in those situations wherein the supervisors have inadequate time, interest, or expertise, learning is faster because the attention of the teacher is as undivided as that of the student. Feedback and full person-to-person communication on the subject between trainee and instructor can be vastly superior to that of the classroom relationship.
4. The evaluation of the student's progress can be greatly increased because of the (usually) one-to-one relationship involved, although administrators must remain aware that some on-the-job trainers are reluctant to submit negative reports. Furthermore, students in a classroom may answer correctly on a paper test but act just the opposite (if they act at all) when performing their duty on the street.

5. Responsibility for inadequate training of the student is more easily placed, and felt, when on-the-job instruction by supervisors and designated co-workers is utilized.
6. The on-the-job trainers feel impelled to improve their own job performance and knowledge in order to stay ahead of their trainees.

Unless special conditions exist which prevent the use of both formal classroom training by a designated unit and on-the-job instruction by supervisors and co-workers, the two types of training should be combined so as to utilize the advantages of each in a planned effort to upgrade the department's personnel.

Principles of Learning

Both the administrator responsible for departmental training and those operational personnel who actually provide training to students should be aware of factors which influence learning.

1. No matter what the subject matter may be, it will be best learned when the trainee is first made aware of how it will be of direct benefit to him. A personal appeal of some sort is essential to effective learning. The basis of the appeal to learn can be to the student's personal safety, economic interest, social status, psychological well being, competitive instinct, security, success, or anything that will satisfy his physical, psychological, or social needs. The more impelling his need to succeed the more quickly he will learn, within the limits of his capacity.
2. Neither the subject matter nor the time limit within which he is required to learn it should exceed the trainee's capacity, providing his abilities meet or exceed departmental standards. Either physical or mental withdrawal follows repeated failures, and instructors who demand the impossible will meet with as much frustration as their students. On the other hand, there should be sufficient challenge to the student to nurture his interest.
3. The trainee should be permitted to perform as soon as possible after he has been instructed. Not only is the doing a reinforcement of the learning, but successful performance is personally rewarding and leads to continued efforts by the student. When the performance is conducted under conditions which are made by the instructor to be as lifelike as possible, the new officer is most comfortable and effective when he takes related actions on the street.

4. Instruction must be planned so as to proceed in a rational, step-by-step process from the known to the unknown or the simple to the complex. Preliminary to the instruction, therefore, is the accurate assessment of the student's capacities and knowledge at the beginning of the presentation. Continuity, coordination, and methods of instruction appropriate to the subject matter or skill involved should be utilized in a planned effort to lead the student's performance to that which is expressed in the instructional objectives.
5. Trainees should be informed clearly as to what is expected of them, what they will be learning, and the standards by which their performance will be evaluated. Such information provides structure for their learning process and a clearly defined goal against which they will be able to measure their progress and success.

Types of Training

Teaching can be divided into that intended for groups and that which involves individual instruction.

Group Instruction. The lecture or modified lecture presentation is the most common method of instruction given to groups. When well constructed, planned, and conducted by an instructor who is not only well versed in his subject but who also follows teaching methods developed by experts in that field, the lecture method is the most efficient medium to convey information to large groups. Some or all of the following factors are involved in well-presented lectures:

1. Students should be prepared to take notes. When the level of scholastic attainment of the group is such that they are not trained and practiced in notetaking, they should be so instructed.
2. Topical outlines listing the "bare bones" progression of the subject matter should be provided each class member to facilitate notetaking.
3. Passout materials providing reading, references, examples, and additional explanations should be provided to each student.
4. Visual aids such as chalkboards, feltboards, slides, movie films, video tapes, recordings, and demonstrations should be used wherever possible. The information to be conveyed should come to the student through as many of his five senses as possible to assure his understanding and retention.

5. Because the greatest difficulty with the lecture method lies in its tendency to reduce person-to-person communication and since there is but one teacher and many students, class participation should be encouraged whenever time permits. This can be promoted by asking questions of the trainees, soliciting queries from them, promoting discussions, and participating in or running through the operations involved in demonstrations.
6. As much as possible, students should be given the information verbally, presented with writings or other visual information, shown by appropriate demonstrations the important steps involved in the subject, and afforded the opportunity to test or demonstrate their newly acquired knowledge or skills.
7. The more closely that which is to be taught approaches that of a purely physical skill or manual dexterity development as opposed to academic or thought-process information, the greater the consideration that should be given to conduct the class as a drill or exercise in which each student practices what has been demonstrated.

Physical drills and exercises are used to teach and develop physical dexterity. The most important point is that each trainee is taught, practices, and demonstrates his proficiency by physical performance of the tasks or skills involved. This type of instruction is most often seen in straight physical training and body development, hand-to-hand combat, firearms, motor vehicle and pursuit driving, swimming, first aid, typing, baton training, and crowd and riot control.

The following are some of the factors to be considered in this type of instruction:

1. In most of these drills and exercises, safety is a primary consideration. Not only should the trainee be in appropriate physical condition prior to participation in the exercises, but procedures, instruction, demonstration, physical plant, safety equipment, and first aid or medical facilities should also be sufficiently provided.
2. Except in activities in which the students' exercises produce a record which can be examined, such as in firearms or typing practice, the number of students per instructor should be smaller than is the case with lecture classes so that each student's performance can be constantly observed and corrected.
3. Those students who have previously learned the skills involved or who have learned with greater speed can be used as coaches to assist the slower trainees.

Role-playing by trainees involves play acting by trainees and/or instructors who take on the various roles of persons with whom they may be expected to interact as police officers in the field. This type of instruction is most effective to teach and provide practice in situations which are fluid and fast changing and in which "thinking on one's feet" is necessary. Playing a role also necessitates an attempt to think how that type of person acts and reacts in real life situations. Thus, after playing the part, the trainee should develop some understanding of that type of person and why his manifest actions are what they are. Role-playing's purpose is not only to show the "right" or appropriate way to perform but also to demonstrate incorrect actions to be avoided. For example, more than one class of trainees have observed one of their classmates commit "perjury" as a witness before a mock court in an attempt to avoid the embarrassment of admitting to a mistake made during a practice crime scene search or accident investigation.

Role-playing is often used in courses which cover such subjects as case investigations and crime scene searches, testifying in mock court, officer-violator contacts, crisis interventions, minority relationships, interviews and interrogations, and stopping, searching, and arresting suspects.

The following are some of the factors to be considered in this type of instruction:

1. Class participation is increased, and a well-planned role-playing session is usually more realistic than other lesson presentations, such as lectures and discussions. However, in almost all cases, lectures or other instruction will precede role-playing, which will then be followed by discussion of the points revealed during the play acting and suggestions for alternative actions.
2. Some police techniques are so important, because the consequences of inadequate action in the field can be disastrous, that trainees must be provided with realistic training to assure that their first performance on the streets will not be their last. For example, making an arrest of an armed and dangerous person or taking appropriate enforcement action in a racially tense situation are situations well suited for teaching by role-playing.
3. At least for the initial role-playing, those trainees most likely to perform well should be chosen because the first presentation usually sets the tone for the remainder.
4. If time is short, the instructor alone may critique the performance, but better learning follows a discussion by the whole class.

On-site observations or field trips involve transporting the class to units or agencies so that trainees can observe the units in operation. Not only will the physical plant be open to inspection, but the personnel actually on the job there can be observed and can present explanations to the trainees.

The following are some of the factors to be considered in this type of instruction:

1. Careful planning and coordination is essential, and consideration must always be given to the fact that an operation most vital to the instruction may not take place for some reason. At the very least, a backup presentation, such as film, should be considered in order to present important points.
2. The trainees should be previously instructed concerning operation they will be visiting so that what they observe will be meaningful to them. The class should be informed not only as to what they will be seeing but also as to the operation's place in the organization of which it is a part.
3. Coordination and preparation should assure that an adequate guest instructor is available at the agency to be visited so that explanations can be made and questions answered.

Conferences, discussions, panels, seminars, forums, case studies, and in-basket problems each involve trainee participation in varying degrees plus problem presentation and solving by several methods.

1. Under the conference method, a group with knowledge of the subject or analytical skills discusses a problem under the leadership of a chairman. Some conferences arrive at a solution, while others identify factors involved and/or recommend more than one course of action.
 - a. Advantages are in the pooling of ideas, stimulation of group effort, analysis of elements involved in problems, and a sense of participation and approval of the decisions resulting.
 - b. Disadvantages are large expenditure of man-hours, useful only for small groups, practical only with groups having knowledge of the subject matter, and tendencies to stray from the issues.
2. In the discussion technique, the instructor leads students as they propose ideas for problem solving. Discussions can also be constructed with a panel of experts who present their views on the subject after which the instructor acts as moderator by summarizing the various points of view.

- a. Advantages are the method's ability to hold student interest and the presentation of a variety of viewpoints on the subject.
 - b. Disadvantages are the propensity of the group to stray from the main subject when there is inadequate planning or leadership by the instructor. Especially with the panel discussion, there is limited student participation should the number of students be large.
3. The seminar is a group discussion of complicated problems by experts who discuss possible solutions in areas which are without previously determined answers.
- a. The seminar's advantage is the bringing together of personnel of high caliber for effective communication of various viewpoints leading to the best possible solutions to abstruse problems.
 - b. The seminar's disadvantages are that the persons involved must be experts, the group's size must be restricted, and detrimental domination by one or a few strong personalities may occur.
4. The forum involves a presentation by a speaker which is followed by questions and comments from the students. The procedure is one of discussion and input by many without attempt to distill the ideas to that of a group solution.
- a. The forum's advantages are in the dissemination of ideas from the many sources available in the class, a thought provoking period in which a relatively large number of participants can engage.
 - b. The forum's disadvantages are the possibility of frustration developing in participants who expect a final solution to develop, a few members may take more than their share of the available time, and distressing arguments may develop between individuals or small groups who advocate a point too vigorously.
5. The case study training method involves group discussion of a case or a combination of cases under the direction of a group leader. In the usual case study operation, all the facts known about the case are presented at the beginning of the discussion. A similar structure is one in which cases are utilized but the group must elicit the facts through appropriate questioning of the instructor.

- a. Advantages are similar to other types of small group training activities with maximum student participation. A note of realism is added when the students are required to develop the facts of the case through questioning just as they would were they tackling a problem on the job.
 - b. Disadvantages are similar to other types of small group training activities, and training is seriously affected when the instructor is inadequate or ill prepared.
6. The in-basket training session is one with great potential for assuring participation. Each student is given the same materials which present various problems common to the type of work the training is designed to improve. The class members independently work through their baskets deciding what action or inaction is appropriate, and are given a relatively short period in which to finish their work. The trainees then gather together to discuss and evaluate the decisions which have been made and the reasons behind the actions taken.
- a. Advantages of this system of training are that each student is forced to participate, superior training is provided in decision-making, and students learn that seldom is but one solution to a problem the only rational possibility.
 - b. The decisions made may not be those which would be chosen were the students involved in a real-world supervisory position because no penalty follows the decisions which are poor, the process takes considerable time, and this type of training must be restricted to small groups.²

Individual Instruction. Training is designed to change attitude, knowledge, and skill. While the relative importance of each of these categories is subject to argument, attitude may well be the most important change to be attempted as it can strongly affect the ability to effect advancement of the other two. Because of the usual one-to-one relationship involved in individual instruction, attitude is probably the one most likely to be affected by such training.

Attitude change is the most difficult of behavior changes because it involves an entire internal system of feelings which control the way that a person acts within his environment. Attitude, therefore, is a training problem. Attitude changes can be measured by the individual's statements of his feelings, the statements of others about his overt actions, and the quantity and quality of his production within the confines of the organization's goals. Attitude change and its measurement require the highest level of competence

² Methods of Presenting Supervisory Training, FBI Law Enforcement Bulletin, (January, 1971), pp. 7-10, 26-27.

in the training function, and the more responsible the trainee's position, the greater the importance of attitude.

Because of the close relationships involved in most individual training and the great potential for change thus created, such training should be a planned, promoted, and ongoing function in all police agencies. Therefore, as the result of planning, the needs of the trainees should be matched to coincide with the abilities of the persons assigned to conduct the training.

The on-the-job trainee could be any of the following:

1. The new officer, a "rookie" or "recruit"
2. A newly transferred officer
3. An officer with a special problem who needs training or retraining in some area of need
4. A regular officer whose skills require some polishing or upgrading
5. An officer marked for promotion or increased responsibility who will be instructed in matters essential to his performance when he attains his new position

The on-the-job trainer could be any of the following:

1. An experienced officer
2. A specially selected and/or instructed training officer
3. An individual who is a specialist in a particular field
4. A supervisor

The departmental training officer, utilizing information gained through job analysis and the recommendations of departmental personnel, should produce a checklist to be used by field training officers as they provide initial training to recruits during the new officers' first days on the job. The actions and knowledge essential for the officer to acquire for good job performance should be on the checklist and as each is explained to, demonstrated for, and performed by the recruit, the instructor should

so note on the checklist.³ By the end of the field training period, the new officer should be proficiently performing all of the tasks involved in the job of traffic officer.

Such a checklist is essential to a good training program for new officers, but may also be developed for use while training newly transferred officers and those in training for increased responsibility.

In a separate periodic report, the field training officer should comment on the trainee's progress. The field instructor should keep the trainee constantly aware of progress which is being made. The trainee should not be kept in the dark, but rather should be informed when he does either well or poorly during the training period. The periodic and final report should be communicated to the unit's commanding officer who should review the reports and conduct an interview with the trainee regarding his progress at the conclusion of the training period.

The final report on the new officer's abilities should be forwarded to the department's training officer so that the academy training program's validity or faults can be continued or corrected to produce the best possible training program.

Departmental administrators should not lose sight of the possibility that defects in the abilities of their personnel may not be caused by inadequate training but rather by a selection program which does not provide the agency with adequate employees. Therefore, either the personnel officer should also receive copies of the trainees' final reports or effective communication should be established between the training officer and the personnel officer to permit selection deficiencies to be reported and, if possible, corrected.

The selection of the trainer is of the utmost importance. Unfortunately, too often the trainer is merely an experienced officer. While some of these will have the ability, knowledge, and attitude necessary to perform the job of traffic officer, unless careful selection is made they may not have the talent or interest in training others. In such cases, of course, the training received by the trainee is bound to be less than adequate and may well be harmful to the development of the new officer.

If at all possible, the field training officer should be one who has been specially selected not only because of his superior performance as an officer but also because he is interested in performing the training task and has a talent for it.

A formal program designed to select and instruct field training officers should be part of the training program of the department. It is only through the use of such officers that trainees will not only receive the best possible instruction in how to perform the tasks of the traffic officer but also will be exposed to personnel who possess the attitudes essential to the professional officer.

³ O. W. Wilson, Police Planning (Charles C. Thomas, Springfield, 1952), pp. 309-321.

Officers selected and trained as field training officers should be afforded recognition of their superior stature by certification, a badge or insignia for display on the uniform, additional credit toward promotion, salary increase, or other reward within the power of the administration.

Training is one of the duties of every supervisor. The superior supervisor will always be in charge of well-trained personnel once he has been given the time with which to effect the training he knows he is responsible for and able to provide. It can be well argued that training is either directly or indirectly involved in all relationships between a supervisor and his people.

Even the average or less-than-average supervisor can be induced to train his people when the department has enacted a formal program by which supervisors are required to evaluate periodically those who are assigned to them. In addition, the evaluation of supervisors by their commanding officers should include comments on the ability, interest, and success supervisors have shown in their training efforts.

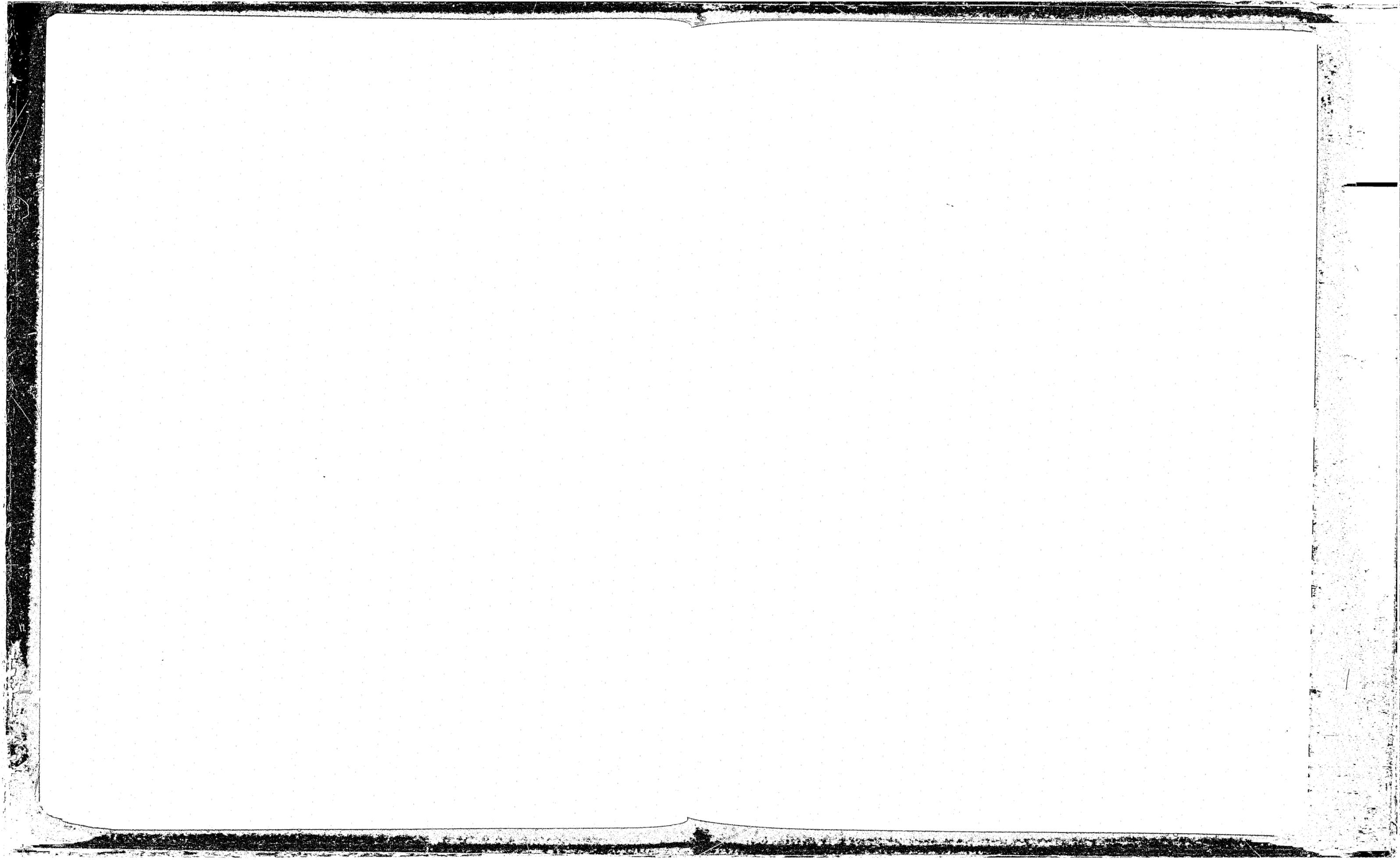
Individual instruction may involve job rotation—the practice of changing assignments for trainees for the purpose of broadening their work experience. Although this system may not be practical for the training of recruits in all departments, the least that can be done is to change beat, shift, and partner assignments within their division. Where the department has the capability of rotating new personnel through the agency, it should be thoughtfully considered. Although some loss of efficiency will be incurred during the training period, the increased experience should provide the department with greater productivity from the trainee as time passes. No training is without cost, but administrators who keep their eyes on the gains to be expected will be rewarded for their investment.

An effective training program will include written materials produced either by the agency or made available through it to departmental personnel. Departmental newsletters, training bulletins, manuals, textbooks, statutes, court decisions, and correspondence courses should all be encouraged or produced as part of the organization's training program. The greatest objection to training by written materials is that the person-to-person contact between trainer and trainee is missing. However, this drawback is not sufficient to prevent this type of instruction from being useful as part of the agency's total training program. To a certain extent, the difficulty in feedback is compensated for when training is accomplished by correspondence courses which include required written assignments and examinations.

Training Curricula

Although there is no single curriculum decided upon as ideal for the training of traffic officers, there are some areas common to the job performance of all specialized officers. Traffic officers enforce vehicle code statutes and other traffic regulations, investigate and reconstruct traffic accidents, facilitate traffic flow, and provide assistance to the motoring public. Therefore, specialized training for traffic officers should cover, but should not be limited to, the following areas of instruction:

1. Traffic Law Enforcement
 - a. Vehicle code and traffic regulations
 - b. Court systems, case preparation, testifying, rules of evidence, collection and preservation of evidence, laws of arrest
 - c. Vehicle inspection requirements including registration, stolen vehicle investigation, and special vehicle regulations (size, weight, loading, equipment)
 - d. Officer violator contacts, including both psychological physical defense techniques
 - e. Selective enforcement theory and practice, including alcohol countermeasures and traffic records and analysis
 - f. Driver licensing requirements
 - g. Pursuit and defensive driving, and use of other equipment to measure speed or record violations
2. Accident Investigation and Reconstruction
 - a. Determining speed from skidmarks
 - b. Hit-and-run investigation techniques
 - c. Photographing, measuring, and diagramming accident scenes
 - d. Report writing
 - e. Protection of the accident scene
 - f. First aid



Each of the training programs listed above consists of three documents designed to fulfill the following objectives:

- Course Guide—developed to aid in the organization and conduct of the training program. Includes course outline and schedule.
- Instructor's Lesson Plans—prepared to provide the instructor with an organized and explicit framework for the delivery of the training content of the course.
- Student Study Guide—designed to serve as the basic reference source for the student/trainees.

Copies of all of these training courses may be purchased from the U. S. Government Printing Office in Washington, D. C.

Technical reports, as distinguished from the instructional publication, are available for each of the above courses. Copies may be purchased from the National Technical Information Services, Springfield, Virginia 22151. For each course, two technical reports cover (1) the developmental process and field testing of the printed material and (2) the planning and operation of instruction institutes which were conducted for the purpose of familiarizing a limited number of selected instructors with the new course and material.

VIII

EVALUATION AND ASSESSMENT

There are three purposes for including a chapter on assessment and evaluation in this manual. First, we wish to convey to the reader the necessity of evaluation as an integral part of a new project. Second, it is important to remove some of the mystique surrounding the evaluative activity. Although this chapter will not transform the reader into an expert on evaluation, it will offer a clearer understanding of the evaluative process and illustrate that evaluation is not accomplished by some enigmatic process known only to the chosen few. Third, it is anticipated that with a clearer understanding of the evaluative process and purpose, the mistrust often harbored by operating agency staff toward the evaluator and the evaluation process will diminish.

Evaluation/Assessment Distinction

It must be recognized at the very onset that evaluation and assessment are not similar. Although used interchangeably, assessment refers to the determination of the nature and extent of a program and its activity.¹ For example, if an agency wishes to know what projects or programs relating to highway safety are operating in a state, it may send questionnaires to all police agencies and departments of traffic engineering. From the responses, he may draw some conclusions as to the extent of enforcement activity, types of manpower allocation and distribution, driver education and training activity, highway safety engineering research, etc. The activity is not an evaluation, but rather a determination of the state of the art. Evaluation, on the other hand, is a more scientific and precise inquiry. Evaluation requires not only general but specific standards and criteria against which the assessment data about the existing program and activity may be compared. While assessment asks what types of programs in highway safety are in operation, evaluation asks whether the program is working, worthwhile, and should be continued.

In this chapter, we discuss the necessary elements of evaluation and assessment. The reader should be advised that we are merely skimming the subject and recommend that further study of the topic be undertaken for a more in-depth and thorough understanding.

¹A Technical Report--The Design and Testing of a Questionnaire Method for Assessment of Local Highway Safety Programs in Cities with 10 to 100 Thousand Population, (Michigan State University, Highway Traffic Safety Center, Continuing Education Service, June 1971).

Definition, Nature, and Purpose of Evaluation

The mere mention of evaluation has a tendency to strike fear into the hearts of project or program directors and staff. Most of us will admit that the fact-finding mechanism is a troublesome activity which often causes great consternation. Probably the most prevalent reason for dislike to even the thought of evaluation is the necessity for methodically snooping out the details of success or failure of a project with the fear that discovery of failure will result. As human beings, we simply hate the idea that our efforts have failed! Evaluation, however, should be looked upon in a positive sense. In reality, the process is designed not to show failure but rather the degree of success. It shows how close we came to the objectives, intent, and purpose of the undertaking. Evaluation will, of course, often show that a project or endeavor falls short of the stated objectives and is thus only partly successful. Evaluation might also show that the endeavor was indeed a failure in that the results did not justify the time, money and effort expended to operate the project. What we often fail to realize, however, is that discovering the project's shortcomings is, in and of itself, a valuable contribution. The knowledge gained from evaluation will enable the project staff to make rational decisions for operational modifications, rather than merely plodding along with an operational procedure that is not giving maximum returns.

As a concept and as an operational process, evaluation is best viewed as a continuum ranging from highly subjective to highly objective. We make evaluations every day. Our decision to purchase a particular product is based on an evaluative process. The housewife who selects one brand of canned peas over another may do so because of experience or because the label is attractive (subjective). Conversely, the housewife may compare the price and amount of peas in the can (evaluative data) then make her decision as to which can of peas she places in the shopping cart. The latter is evaluative process, and a decision is reached based on an objective analysis of the data (price and contents). Her decision, however, may have been more sound had she evaluated additional data including net rather than gross contents, past experience with taste of a particular brand of peas, knowledge about the canning process of the chosen peas as opposed to the rejected product, etc.

The simple selection of a can of peas, of course, has nothing to do with the evaluation of a highway safety project. We merely wish to point out four important factors in the evaluative process:

1. The objective
2. The data
3. Analysis and interpretation of the data
4. The decision

The American Public Health Association gives the following conceptual and operational definition of evaluation:

The process of determining the value or amount of success in achieving a predetermined objective. It includes at least the following steps: Formulation of the objective; identification of the proper criteria to be used in measuring success; determination and explanation of the degree of success; and, recommendations for further program activity.²

Edward A. Suchman, one of several authorities on evaluation, explains this definition as follows:

The key conceptual element in this definition are "the value or amount of success" and "predetermined objective," while the significant operational terms are "objective," "criteria," and "determination and explanation of the degree of success." Thus, inherent in evaluation is the process of assigning value to some objective and then determining the degree of success in attaining this valued objective.³

Throughout the evaluative process we are attempting to discover the degree of success achieved; we must also recognize that a project might produce negative side effects. Another authority on evaluation, Henry W. Riecken, defines evaluation as "the measurement of desirable and undesirable consequences of an action that has been taken in order to forward some goal that we value."⁴ Thus, even though we might at the onset of the project have the best of intentions, we must also be cognizant of the possibility that our activity could produce a degree of harm (to either the clientel or to the operating agency). The famous quotation of Robert Burns, "The best laid plans o' mice an' men gang aft a-gley," is a bit of philosophy applicable not only to the project planner but also to the evaluator who must determine the degree to which the planned project went astray and also why.

The Alcohol Safety Action Program (ASAP), financed by the Department of Transportation, National Highway Traffic Safety Administration, Office of Alcohol Countermeasures, illustrates the above point. One of the projects undertaken in this national program was the assessment of alcohol use by the public. The planned method for collection of this baseline data was to establish a roadside survey, randomly stop passing motorists, and administer a questionnaire. Although the intent of the project was positive in that valuable baseline data would be obtained, many of the participating law enforcement agencies feared the negative consequences of randomly stopping motorists who had not violated the law.⁵

²"Glossary of Administrative Terms in Public Health," American Journal of Public Health, Vol. 50, (February 1960), pp. 225-226.

³Suchman, Edward A., Evaluative Research: Principles and Practice in Public Service and Social Action Programs, (New York: Russell Sage Foundation, 1969), p. 28.

⁴Riecken, Henry W., The Volunteer Work Camp: A Psychological Evaluation, Addison-Wesley Press, Cambridge, Mass.), 1952, p. 4.

⁵It is noteworthy that on the sites which did in fact conduct the roadside survey, there was excellent cooperation from the motoring public, and no significant negative consequences resulted.

This example brings up an important point. At what stage of project development should evaluation be considered? Should evaluation be a process which receives attention after the project has been operational for six months, 12 months, or 18 months?

The Evaluation Component: A Part of the Planning Process

It should be easily recognized that evaluation is not incidental or separate from the project itself, but rather is an integral part of the total endeavor. Thus, from the very beginning of initiating the planning process for project development, evaluation must be considered. If one purpose of evaluation is to determine how a project in operation should be modified so as to result in maximum effectiveness toward the desirable objective, why not include a design for evaluation as part of the total project planning process?

There are some clear and logical reasons for the inclusion of an evaluation component in the total planning process. First, if evaluation is planned for, it automatically forces the planner to specify the project objectives in a concise and narrow manner. It forces the planner to specify his objectives realistically rather than making broad general statements as to what the endeavor will achieve. Second, if evaluation is planned for prior to implementation of the project, the consequences of ex post facto evaluation will be eliminated. In essence, it eliminates the need to "dream up" evaluative criteria at a later time. For these and other reasons to be discussed later, it is advantageous to have the staff responsible for evaluation involved in the project planning process.

Basics of Evaluation

At this juncture, it would be useful to review the basics of evaluation. Federal evaluation policy identifies four functions which an adequate evaluation system must perform, namely:⁶

1. Definition of program objectives and output measures
2. Development of evaluation work plans
3. Design and execution of evaluation studies
4. Dissemination and use of evaluation study findings

A brief expansion on these functions is offered on the following pages.

⁶ Wholey, Joseph S., et al., Federal Evaluation Policy--Analyzing the Effects of Public Programs, (The Urban Institute, Washington, D. C., 1970).

Objective. The identification of the objective is the starting point of any evaluative effort. Stated simply, identification of the objective merely identifies what the project is intended to achieve. This seemingly clearcut statement, however, has more depth than could be imagined, for the statement of objectives is one of the most critical aspects of project development and the follow-up evaluation. We must realize, but guard against, the tendency of project managers and project planners to make full use of the art of grantsmanship and thus go overboard in stating anticipated objectives. Likewise, we must be cautious to avoid underrating the expectations of a project. Some of the typical problems noted in stating and identifying objectives include:⁷

- The total absence of statements of objectives.
- Objectives which are too broadly stated.
- Partial or inaccurate statements of objectives.
- Unrealistic or unachievable objectives.

The problems inherent in stating and identifying objectives can be overcome at the very onset of project planning once it is realized that evaluation is a part of the total project development. Much of the blame for confusion over stating objectives falls on the project planner. Responsibility for the confusion, however, should rest equally with the evaluator. It is extremely important that the project planner and the evaluator both be involved in project planning and development. The planner must insist on guidance from the evaluator in stating concise, measurable objectives. Likewise, the evaluator must insist on guidance from the project planner for an overall view of the project's operation and the establishment of evaluation criteria. If the project is to be planned properly and the later evaluative process is to run smoothly, this cooperative effort between the project planner and evaluator is a necessity.

Besides the fact that the team effort between project planner and evaluator will result in more realistic and measurable objectives, there are additional advantages to this cooperation. Evaluators are generally rather precise in their art, and, if given sufficient information, can almost predict the consequences of the endeavor. Also, they have the talent to identify many of the possible negative side effects, thus enabling the project planner to avoid some pitfalls not considered during the planning phase.

Once measurable objectives have been identified, the problem of locating output measures must be addressed. Output measures are simply numerical representations of project activity. Another name for output measures, and one more commonly used, is measures of effectiveness. Here, again, is an area to be planned for during initial project

⁷ Johnson, George H., "The Purpose of Evaluation and the Role of the Evaluator," in Evaluative Research--Strategies and Methods, (American Institute for Research, 1970).

development. A great deal of time, effort, and money could be saved if the needed output measures would be determined prior to project implementation. This necessitates a built-in procedure for the reporting of project data during the planning phase and continual reporting of the predetermined data during operations. Additionally, the operating agency must be informed of, and understand, the required reporting procedures. Quite often an operating agency undertakes a project unaware that an evaluation will be performed. When the operating agency is called upon to produce the necessary data, it is often discovered that no procedure for reporting and collecting data had been established. There are also situations where realistic output measures are available but where the gathering of output data is difficult. For example, an operating agency may have a reporting system but be reluctant to divulge data regarding project achievement. We must again stress the importance of planning for clear statements of objectives and a reporting/feedback system to enable measurement of progress toward meeting the objectives. Unless the project planner and evaluator work together in developing the plan and evaluation criteria, a most difficult state of events will present itself when "judgment day" arrives.

Developing Work Plans. Evaluation is, in and of itself, an expensive endeavor and, as previously mentioned, requires rigorous planning. A hastily promulgated work plan for evaluation will only result in haphazard and unreliable information about the project. Unreliable data will, in turn, produce faulty decisions regarding the continuance, modification, or termination of the endeavor.

The Urban Institute has studied several federal agency level evaluation work plans and found in its studies that the Office of Economic Opportunity (OEO) had the most effective work plan for evaluation.⁸ The general evaluation strategy of OEO was designed to answer four basic questions:

1. Does the program reasonably address the needs of those toward whom it is aimed?
2. To what extent does it reach the intended population?
3. How successful is it in achieving its objectives?
4. How does its costs compare with the value of its benefits?

Evaluation methods can range from straightforward data collection and comparison of pre- and post-project activities to complex studies such as the classic experimental design with control groups, identification and control of variables, and other sophisticated methods. The type of evaluation performed will depend on the nature and scope of the proposed project. Projects which are small in scope, where control groups can be established and intervening variables can be isolated, lend themselves to the experimental design form of evaluation. Many projects, however, cannot be as closely

⁸ Wholey, Joseph S., et al., op cit., p. 36.

controlled; thus, the laboratory approach of experimental design is impractical.⁹

The point here is that the evaluative work plans must specify the type of evaluation to be undertaken. Again, it must be stressed that the cooperative effort between the evaluator and project planner is essential in working out the details.

Design and Execution of Studies. The very basic question of who should do the project evaluation also needs to be answered. Should an outside consulting firm be hired to design and execute the evaluation, or is there sufficient in-house expertise to perform the activity? There are advantages as well as disadvantages to both alternatives.

Since evaluation itself is a troublesome activity, it might seem reasonable to employ an outside consulting firm to perform the endeavor. There are a number of firms qualified to evaluate all types of projects, but serious thought must be given to determine if an outside agency should be employed and which firm is best qualified to evaluate a particular type of project.

The most obvious advantage to employing an outside firm lies in the fact that there is a lack of evaluators within the operating agency. If money, time, and expertise do not permit in-house evaluation, there is no choice but to contract for the evaluation service.

A strong argument often voiced for employing the services of an outside evaluator is that since he is not part of the agency or project he can devote full time to the necessary and complex evaluative responsibilities.

This same argument, however, can be used as a reason for not employing an outside evaluator. If the evaluator is not part of the project and thus is a "Johnny-come-lately" to the project purpose and objectives, how can he be qualified to evaluate? Moreover, if he must learn the complexities of the project, valuable time and money will be wasted while he becomes informed.¹⁰

When the evaluator is part of the agency staff, it is only natural that he has intimate knowledge of the project as well as the organization's policy and objectives. This familiarity, of course, eliminates the task of educating the evaluator as to the project development and operation--the evaluator was part of the planning staff and already

⁹ For an argument against the use of a controlled experiment as a method of evaluation, see: Weiss, Robert S. and Martin Rein, "The Evaluation of Broad-Aim Programs: A Cautionary Case and a Moral," in the Annals of The American Academy of Political and Social Science, Vol. 385, September 1969, pp. 133-142.

¹⁰ See Johnson, George, op cit., pp. 16-17 for a brief discussion on "Who should evaluate?" The reader should also study the arguments offered by Joseph S. Wholey, et al., in Federal Evaluation Policy, op cit., pp. 40-45.

possesses this knowledge. On the other hand, because of his intimacy with the project, his evaluation may be too humanly subjective, thus clouding the results. While the outside consultant/evaluator may have a problem establishing the much needed rapport with the project staff (the "snooping outsider" syndrome), the in-house evaluator will be looked upon as "one of the staff" and need not work at developing new relationships with staff members. Again, however, the obvious advantages and disadvantages are present.

Johnson offers a solution to the dilemma by recommending a combined effort by outside and in-house evaluators:

The resolution of these kinds of issues should not involve an either-or decision. In many instances, it is perfectly feasible to use a combination of outside expertise and internal staff for the planning and conduct of an evaluation, to counterbalance the strengths and weaknesses of the two approaches. In formative evaluation, which is interactive with program design and operation, much more of an internally conducted evaluation would be appropriate; while summative evaluation, being more dependent on objectivity, should strive to maintain an external frame of reference.¹¹

Dissemination and Use of Evaluation Study Findings. There is little logic in evaluating for the sake of evaluation. The purpose of the activity is to enable project managers to make rational decisions regarding the project. Should the operation be modified? Would it be wise to discontinue the project? What is the cost/benefit relationship? These and other questions can only be resolved by honest and reliable evaluative data.

As Wholey states, "Evaluations are not intended to render decision making a mechanical process, even if they were comprehensive or sophisticated enough to be used in that fashion. The need is not for studies that tell what to decide, but rather for studies that provide information useful to policy and program decision makers."¹²

Suchman lists fourteen functions which evaluation findings should perform:

1. Determine the extent to which program activities are achieving the desired objectives. Measure the degree of progress toward ultimate goals and indicate level of attainment.
2. Point out specific strong and weak points of program operation and suggest changes and modifications of procedures and objectives. Increase effectiveness by maximizing strengths and minimizing weaknesses.

¹¹Johnson, George, op cit.

¹²Wholey, Joseph S., et al., op cit., p. 48.

3. Examine efficiency and adequacy of programs compared to other methods and total needs. Improve program procedures and increase scope.
4. Provide quality-controls. Set standards of performance and check on their continuous attainment.
5. Help to clarify program objectives by requiring operational definition in terms of measurable criteria. Challenge the "taken-for-granted" assumptions underlying programs. Point out inconsistencies in objectives or activities.
6. Develop new procedures and suggest new approaches and programs for future programs.
7. Provide checks on possible "boomerang" or negative side effects. Alert staff to possible changes of the program.
8. Establish priorities among programs in terms of best use of limited resources—funds, personnel, and time.
9. Indicate degree of transferability of program to other areas and populations. Suggest necessary modifications to fit changing times and places.
10. Advance scientific knowledge base of professional practice by testing effectiveness of proposed preventive and treatment programs. Suggest hypotheses for future research.
11. Advance administrative science by testing effectiveness of different organizational structures and modes of operation.
12. Provide public accountability. Justify program to public. Increase public support for successful programs and decrease demand for unnecessary or unsuccessful ones.
13. Build morale of staff by involving them in evaluation of their efforts. Provide goals and standards against which to measure progress and achievement.
14. Develop a critical attitude among staff and field personnel. Increase communication and information among program staff resulting in better coordination of services.¹³

The proper way of looking at evaluation is not to examine only past performance but to examine the likely future consequences of the project's efforts. Moreover, a proper

¹³Suchman, Edward A., op cit., p. 141.

evaluation should also enable the decision-maker to make some judgments as to overall effects of alternative measures to the existing program. This can be accomplished only if the evaluative results are made known to the proper authorized officials who are empowered to make the decisions (participating agency, granting institution, etc.)

Assessment: The Overall View of Project Activity

The reader must keep in mind the distinction we made earlier between assessment and evaluation. Assessment, you will recall, is a determination of the nature and extent of a program or activity. In other words, it tells what type of projects are being planned or already operational. It does not tell whether or not a particular project is meeting its objectives or how well the project is operating; this, as we have seen, is the evaluation activity. The Comparative Data Report, an IACP publication, is an example of an assessment instrument. In this report, the IACP attempts by means of a questionnaire to determine such things as type of equipment, number of men, salary ranges, etc., of state police or highway patrols in the country. In other words, it is an assessment of several factors applicable to state law enforcement agencies. The Harris and Gallup Polls are other examples of assessment—individuals' views of a particular issue or candidate.

Factors to Consider in Assessment. The question of methodology for the performance of assessment is the first issue to be addressed. First, a determination must be made of what is to be assessed; second, who can give the needed information must be determined; and third, the means for obtaining the desired information must be established, i. e., we must develop an instrument to elicit the necessary information.

All forms of assessment have one factor in common—they ask a question. In this discussion, we will not dwell on the first two issues of assessment. We assume that the agency wishing to assess knows what is to be assessed. Moreover, we assume that a knowledge of where to obtain the needed information exists. The area which we feel needs attention, therefore, is the development of an assessment instrument. In short, what are some of the do's and don't's of designing a questionnaire?¹⁴

The Questionnaire. G.W. Allport said, "If we want to know how people feel, what they experience and what they remember, what their emotions and motives are like, and the reasons for acting as they do — why not ask them?"

There are three basic considerations to take into account when planning a question and examining the response:

¹⁴The reader should refer to Footnote 1 for information on the use of questionnaires in highway safety programs.

1. Is the question so formulated that one, and only one, meaning is understood?
2. Is the response to the question truthful?
3. Do we understand the response and formulate one, and only one, conclusion—the one intended by the respondent from the response?

The seemingly simple act of asking a question can be a most complicated matter. Unless a question is carefully worded so that only one meaning to the inquiry comes through, the resulting data will be useless. One must remember that a question whose meaning seems obvious to one person may not be clearly understood by another person.¹⁵

Another problem to be considered is the validity of the response. Simply stated, is the response truthful? Truthfulness in many cases should not be equated with honesty: often the respondent is merely not being objective. An agency administrator, for example, may be too subjectively involved to answer certain questions which might bring discredit upon himself or his agency objectively.

The third consideration is similar to the first: is the response formulated in such a way that we understand the respondent's intended answer. Again, unless we properly interpret the answer, the conclusions drawn will be faulty.

From this very brief discussion, the point stressed is a need for accurate communication between the person devising the assessment instrument and the person responding to the questionnaire. Irrespective of the good intentions on the part of both individuals to ask and respond accurately, the answers derived from an inadequately designed questionnaire will render the resulting data useless.

It would serve little useful purpose to review the methods of questionnaire design; such a task would be too extensive for this manual. However, in an effort to acquaint the reader with the types of Police Traffic Services data collection instruments in use there is included in the Appendix an example of a mail out questionnaire and an on-site collection guide.

The Police Traffic Services questionnaire was prepared by the Highway Traffic Safety Center at Michigan State University for the Michigan Office of Highway Safety Planning as part of the project to design and test a questionnaire method of assessing local highway safety programs. The attached on-site collection guide is used by IACP Highway Safety Division staff in conducting Police Traffic Services field surveys.

¹⁵For a discussion on constructing a questionnaire, see Goode, William J. and Hatt, Paul K., Methods of Social Research, (New York: McGraw-Hill, 1952), Chapter 11.

A Guide to the Assessment and Evaluation of Highway Safety Projects

The preceding text has laid a foundation for understanding the assessment and evaluation process. The following is a step-by-step guideline showing the logical sequence of events in the problem-solving (planning) process.¹⁶ The reader should remember (and the point is worth reiteration) that assessment and evaluation are part of the planning process. Unless planned assessment and evaluation are included prior to implementation, the planning process is not complete.

There are two purposes for including this guide for assessment and evaluation of highway safety projects. First, it will serve as a guideline to those who are responsible for ascertaining whether or not project planners utilized a rational, logical and sequential approach for project development. In this respect, the Governor's Representative can determine if initial conditions were identified; if problems were pinpointed, if causes, needs, and goals were determined, etc. In essence, he can perform his assessment function more adequately. Second, by using this guideline, the Governor's Representative can render technical assistance more effectively because he can educate project developers concerning the proper utilization of the rational planning process.

The Planning (Problem-Solving) Process. There are 12 steps in the planning process. Each step follows a logical sequence, and the planning process is not complete unless each and every step is followed.

- Identification of initial conditions
- Problem identification
- Determination of causes
- Identification of needs
- Adoption of goals
- Strategies (projects) to achieve goals
- Evaluation design
- Availability of resources

¹⁶Special acknowledgement is given to Mr. James W. Shumar, Chief Crime and Delinquency Advisor for the U. S. Department of Housing and Urban Development for his permission to use much of the material contained herein. Mr. Shumar has operated in the criminal justice field as police officer, prosecuting attorney, juvenile court referee, and now with HUD. Much of the information offered here is the result of his labors for a forthcoming book on the criminal justice planning process. Additionally, the guideline in a revised form is presently being used by the Research Division of the IACP to evaluate the crime and delinquency component of the HUD-sponsored Model Cities Program.

- Adoption of priorities
- Implementation of strategies
- Monitoring the implementation process
- Evaluation

It should be recognized that the planning process is continuous and circular. As the result of project evaluation, one might learn that there are negative "spin offs" (detrimental unprogrammed consequences) and that it might be necessary to reprogram in an effort to minimize those negative consequences. If there are positive "spin offs" (worthwhile unprogrammed consequences), it might be beneficial to reprogram in an effort to maximize these positive spin offs. One must also realize that a combination of both positive and negative unprogrammed consequences is possible. In these instances, the project planners should reprogram in order to maximize the positive and minimize the negative spin offs.

The following discussion respecting each of the twelve steps of the planning process will assist the Governor's Representative in understanding the underlying rationale for the inclusion of this material in the manual. The reader should keep in mind the fact that one step leads to the next. Although this process may appear to be academic and idealistic as a planning mechanism, the benefits derived from following this extensive procedure far outweigh the time and cost involved in its application.

1. Identification of Initial Conditions. The first step in the planning (problem-solving) process is the identification of initial conditions (existing states of events). Unless this is done in a thorough manner, succeeding steps in the process cannot be adequately taken and the quality of project development cannot be accurately measured. This is essentially a two step process which involves (1) the collection of data and (2) the analysis of data in order to establish what the existing conditions are. It is extremely important that the existing conditions not only determine what the problems are (the second step in the planning process) but also provide the baseline data against which project effectiveness will be measured.
2. Problem Identification. The second logical step in the planning or problem-solving process is the identification of problems. In this context, a problem means an institutional defect or, in other words, a particular state of events which is deemed undesirable. Unless problems are so defined, the planner has nothing which can be isolated and dealt with in a measurable manner. Failure to isolate real problems results in the attempted treatment of symptoms which cannot be measured.

3. Determination of Causes. The third logical step in the planning or problem-solving process is to determine the one or more factors which are the causes of each identified and isolated problem. If real problems have been identified, this is not an impossible task. It simply involves determining why the undesirable state of events exists or what makes it undesirable. It is necessary to determine the causes of problems in order to rationally consider the means of eliminating them.
4. Identification of Needs. The fourth logical step in the planning process is to identify needs relating to the causes of the problems. This is simply the process of identifying existing conditions which need to be changed in order to resolve the identified problems. This could mean changes in practices, in laws, in policies, in attitudes, in the availability of services, etc. The needs identified should relate directly to the causes of the problems. It is necessary to identify such needs in order to enable the planner to rationally adopt goals.
5. Adoption of Goals. The fifth logical step in the planning process is to adopt goals. Adopting goals is simply a process of looking at an undesirable condition or state of events and deciding upon a substitute condition or state of events which is deemed desirable. The goal is the desirable condition or state of events. It may consist of eliminating or changing a condition or state of events or creating a new condition or state of events. The goals adopted should relate directly to identified needs.
6. Strategies to Achieve Goals. The sixth logical step in the planning process is devising strategies to achieve adopted goals. This is the stage in the process where projects are devised. (Unfortunately, many planners begin at this stage.) The question at this point is very simple: "How do we get from our identified undesirable condition or state of events to our adopted desirable condition or state of events?" Where it is determined that the trip between what is undesirable and what is desirable is going to have to occur in dependent stages or steps, the intermediate stops along the way are "objectives." Each objective must be stated clearly and be related to the overall goal. When all objectives are reached, the project's goal has been met. The activities which are devised as the vehicle whereby we move from the undesirable condition or state of events to our objectives and ultimately to our goals are programmatic in nature and are called projects.
7. Evaluation Design. The seventh logical step in the planning process is evaluation design. This involves determination of a means to measure the success or failure of the strategies (projects) devised to achieve goals. Where strategies involve objectives, a means to measure them should also be devised. A sound means of measuring the qualitative and quantitative progress of a strategy (project) is relatively easy to design and implement if the preceding

steps in the planning process have been followed. It is the failure to do so that makes the evaluation process seem consuming and unperformable at this late stage in the process.

It may be argued that evaluation design can be done at any time prior to the actual undertaking of the evaluation process. However, a sound reason for doing it at this time is the fact that most funding agencies require an evaluation design to be part of an application for funds.

8. Availability of Resources. The eighth logical step in the planning process is to ascertain the availability of needed resources. This process should occur at this stage because the availability of resources is an important consideration in adopting priorities.
9. Adoption of Priorities. The ninth logical step in the planning process is the adoption of priorities. This is especially important in comprehensive planning and is necessary because rarely, if ever, will the planners have the resources necessary to implement all of the strategies (projects) adopted in the planning process simultaneously.

It is necessary to adopt priorities with respect to both goals and strategies to achieve the goals. If this is not done, rational program implementation is not feasible.

10. Implementation of Strategies. Viewing planning as a problem-solving process, the next logical step is the implementation of the strategies (i. e., operation of projects).

At this stage of the process, movement from the identified undesirable to the desirable condition or state of events is undertaken and carried on. The actual implementation should not be difficult if all preceding steps of the planning process have been followed. Simply stated, implementation involves carrying into action the plan previously developed. It is the transfer of the paper plan (the blueprint) to an actual activity.

- 11&12. Monitoring and Evaluation. Once a project is implemented, there must be a procedure for providing feedback to both project administrators and funding agency personnel. The feedback of data relevant to project activity is the monitoring procedure and the eleventh step in the planning process. Unless monitoring is planned for and accomplished in a rational manner, the data collected will be unreliable and, therefore, adversely affect the evaluation of project activity.

Monitoring and evaluation are interrelated functions which are planned for during the evaluation design. Evaluation, the method of determining the degree to which a project is achieving its intended goals, consists of data collection and analysis. Monitoring a project activity is, in fact, that part of evaluation which provides

the needed data. During the evaluation phase, the data of project activity is compared to data collected during the identification of initial conditions. Then the changes resulting from the implementation of the project are analyzed.

Important components of project planning and operation, monitoring and evaluation are management tools which, when properly used, will result in sound management decisions respecting continuance, termination, or redesign of project operation. If, for example, evaluation reveals that the project is making a positive impact and resulting in an acceptable degree of attainment toward its objectives, the management decision will probably be to continue the present operation. If, on the other hand, the project is making little impact, cost as opposed to effectiveness is high, or there are negative consequences resulting from the project, the decision may be either to terminate or redesign the project operation. Furthermore, as discussed previously in this text, another possible finding from project evaluation might be that the project is achieving a desirable degree of attainment toward the goals with positive and negative "spin offs" (unprogrammed consequences). In this instance, the decision would be to redesign the project so as to minimize the negative consequences and maximize the positive. The important point to recognize is that monitoring and evaluation are management tools for the purpose of making sound and rational decisions.

IX

PRIORITY AREAS FOR IMPROVEMENT

Throughout this document, an effort has been made to provide the reader with some insights into the organization, administration, and operations of law enforcement agencies and their impact on the delivery of Police Traffic Services. In this concluding chapter, several suggested areas for improving the quality of Police Traffic Services are presented. As is always the case in a document of this type, the recommendations presented will not have universal application and should be viewed in light of actual conditions at the state and local level. The recommendations are listed on a priority basis in a descending order of criticality.

Police Traffic Services Management Practices

- Each agency should develop clear, concise written policies and procedures relating to its police traffic responsibilities. Such written directives should be periodically reviewed and routinely transmitted and acknowledged by all personnel. (See Chapter V - suggested written directive system.)
- Traffic units should be of equal status with other primary operational units.
- First-line supervisors should be capable of insuring compliance with departmental directives as well as adherence to specific program objectives.
- Every effort should be made to insure that traffic functions are performed by trained, motivated individuals. Promotional and advancement potential for traffic personnel should parallel that of other divisions.
- Effective evaluation planning should be built into every traffic-related operational program. A process such as outlined in Chapter VIII should be followed to insure that realistic objectives and output measures are identified, an evaluation work plan is instituted, evaluation studies are consciously conducted,

and results of the evaluation effort are disseminated and used to plan future program planning.

Program and Reporting System

Full reporting systems should be operated to make certain that all traffic law violations, accident investigations, and other Police Traffic Services data are promptly and accurately recorded. Daily Activity Report forms and other data collection devices such as stop sign messages under the management information reporting system section of Chapter 10 should serve as guides to assessing the quality of existing reporting systems.

A review of Police Traffic Services data should be done by different and independent staff personnel who are capable of assessing the data collection system outlined in Chapter 10.

Traffic services data should be included in the planning and evaluation phases of the police management program as well as in the operations phase. To ensure a sustained traffic services program, accurate information must be available to evaluate budgets and make other requests.

Training

Methods of training should be reviewed and revised as needed to reflect the changing needs of police departments. In addition, police departments should provide training opportunities for their officers and staff members.

Traffic law enforcement training should be provided in accordance with the principles of training outlined in Chapter 10. These efforts should be made to select the proper training techniques for the student and a specific matter involved.

All training, particularly in service police training, should emphasize the positive relationship between officers and citizens with recent experience.

To be effective, the goals and objectives of a department's traffic program must be understood throughout the department. It is essential to effective written policies and procedures. In-service training is essential to accomplish this task.

Police Traffic Services

- o Police Traffic Services should be provided in accordance with the principles of training outlined in Chapter 10.
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APPENDIX II

IACP - Policy: Specialization Versus Generalization

SPECIALIZATION VERSUS GENERALIZATION

1968

WHEREAS, The decision to specialize is extremely critical to the police administrator and has a great effect on the total operation of the police agency; and

WHEREAS, Law enforcement executives are aware that when specialization is carried to excess it seriously affects departmental operations; and

WHEREAS, All departments regardless of size generally offer the same services and perform similar functions, it is imperative to maintain a delicate balance as it relates to specialized and generalized units or divisions within the organizational structure; therefore be it

RESOLVED, That due to the many complex variables which are responsible for jurisdictional problems, the International Association of Chiefs of Police recommends the following guidelines for use in determining the need for specialized traffic units:

1. Every agency regardless of size should have someone either in a staff capacity or in the line function, trained in the areas of highway safety management and in a position to stimulate and evaluate effective action.
2. In the event that a specialized traffic unit is determined to be necessary, careful evaluation should be made in terms of public protection, cost and benefits to determine what duties should be performed by the functional units (Patrol-Traffic-Investigative).
3. Regardless of the degree of specialization within the department, most street-traffic duties should be performed by the motorized patrol division.
4. Specialization should be limited to need. Some specialization is necessary, but police manpower is limited and increased specialization usually results in diminished patrol. Again, public protection and cost benefits should be considered.

APPENDIX IV

Administrative Guide for a Program of Written Warnings
in Traffic Law Enforcement

Accident Investigation Policy

Structured Driver Statement Form

Discussion of Traffic Law Enforcement Standards and Rates

Selective Enforcement Bulletin

ADMINISTRATIVE GUIDE FOR A PROGRAM OF
WRITTEN WARNINGS IN TRAFFIC LAW ENFORCEMENT

PURPOSE:

To indicate problem areas, and to discuss the need for serious consideration of the administrative decisions to be made prior to implementing a program of written warnings in traffic law enforcement.

GENERAL:

The subject of written notices or warnings reveals wide variance of opinion among police administrators. These differences seem to be based upon viewpoint. If the viewpoint is oriented toward traffic law enforcement based on convictions for violations, then the opinions on use of written warnings are largely negative. With viewpoints based upon education of motor vehicle operators, or obtaining voluntary compliance, the opinions are generally favorable to the use of written warnings.

The traffic problem is a constantly increasing one and very complex. There is no single effective solution. Written warning programs are difficult to administer and are subject to possible abuse. This is an adequate reason to move very carefully and precisely in considering the use of written warnings in a traffic law enforcement program.

To avoid legal complications and objections, accumulated written warning data against individual operators could be used for education and special re-examination purposes rather than for punitive purposes.

As police applications of computers to traffic record systems increase there may be more usefulness in the future use of written warnings. A central file will be far more meaningful with immediate electronic retrieval of significant data on individual operators, especially on a state-wide basis.

NEED:

Present use of traffic law enforcement citations has yet to be used or to produce anywhere near optimum results as an effective part of an effective accident prevention program. Something more is needed. A well-planned, well-administered, well-supervised program of written warnings may be an effective addition to, not a substitute for, present traffic law enforcement effort.

PROBLEMS:

1. Existing Legislation at State and Local Levels - Research is necessary to determine whether or not present legislation forbids, or permits, a written warning program. Study may indicate a need for additional legislation prior to such a program to establish legality, or to ensure state-wide coordination. Absence of legislation may permit a limited non-punitive program of written warnings.
2. Definitions - To assure uniformity in understanding and procedure it is necessary to define specifically what is meant and included when particular terms are used. For example: warning, citation, arrest, minor, hazardous, enforcement, etc. Ambiguity ensures confusion.
3. Policy - This is the most difficult area to develop. First, policy must be written. It must be complete, and must be specific so that it is as clear as it should be for maximum understanding. It is important that the written policy be supplemented with criteria for the issuance of written warnings that clearly differentiate from the criteria for issuance of citations and physical arrests so that confusion or substitution does not occur.

It is important that when written warnings are issued for violations other than motor vehicle equipment defects that the officer and the violator clearly understand why a warning was issued rather than a citation. This entire area requires special study and decision.

4. Form Design. Research is necessary to determine the design and composition of the written warning form to be used. First, it must be compatible with the traffic records system already in use with reference to design, size, type, etc. It may be a re-design of the present citation form with additional data, or it may be a completely new and separate form.
5. Distribution and Use of Written Warnings - Decisions must be made as to how many copies shall be prepared of each written warning and what the distribution of the copies shall be. Where shall files be maintained and for what reason? There should be an operator's file where written warnings accumulate against an individual. If deemed sufficiently important, other files could be: by serial number of the form for control purposes, geographic location, type of violation, issuing officer at the local unit, etc.

Follow-up of written warnings is essential to validate the effort and expense. It should take at least two directions. Follow-up on the individual who is accumulating such warnings in order to determine what further action needs to be taken and follow-up on the traffic law enforcement problems that analysis of the files indicate to be in need of increasing attention. Some of these problems could be, for example: needs for specific driver education, safety education, more traffic citations in certain areas or for certain violations, patrol deployment, personnel evaluation, supervisory needs, training needs.

At least once or twice each year, the program of written warnings must be reviewed to determine its efficiency measured against the incidence of traffic deaths and injuries, and its effect on the issuance of traffic citations to determine whether it is actually supplementing the traffic enforcement effort and not substituting for it.

6. Training Programs - It is mandatory that a training program be developed prior to effectuating a written warning program. Special programs must be developed for commanders, supervisors, patrol personnel, and clerks. These training programs must be completed prior to the effective date of the written warning program. The training programs should be coordinated with a publicity program to other interested agencies and to the general public through all news media.
7. Budgeting - Some of the costs will be absorbed by present budgeting of regularly assigned personnel and presently available equipment and supplies. However, there will be some additional costs that may be anticipated. Special equipment may become necessary, additional personnel such as analysts or clerks, special forms or supplies.

RECOMMENDATION:

The use of written warnings should be considered only after careful decision and planning has been completed on at least the seven problem areas indicated. Also that if they are adopted by a police agency, a detailed instruction process—preferably written policy and procedure—be implemented clearly defining the latitude of judgment as to when and when not a written warning shall be issued.

ANYTOWN POLICE DEPARTMENT

POLICY	Effective Date January 1, 1974	Number 74-004
Subject Accident Investigation		
Reference Traffic Procedures 74-0021	Special Instructions Rescinds All Previous Accident Investigation Policies	
Distribution Accident Investigation Unit	Cancellation Date December 31, 1974	No. Pages 1

I. Purpose

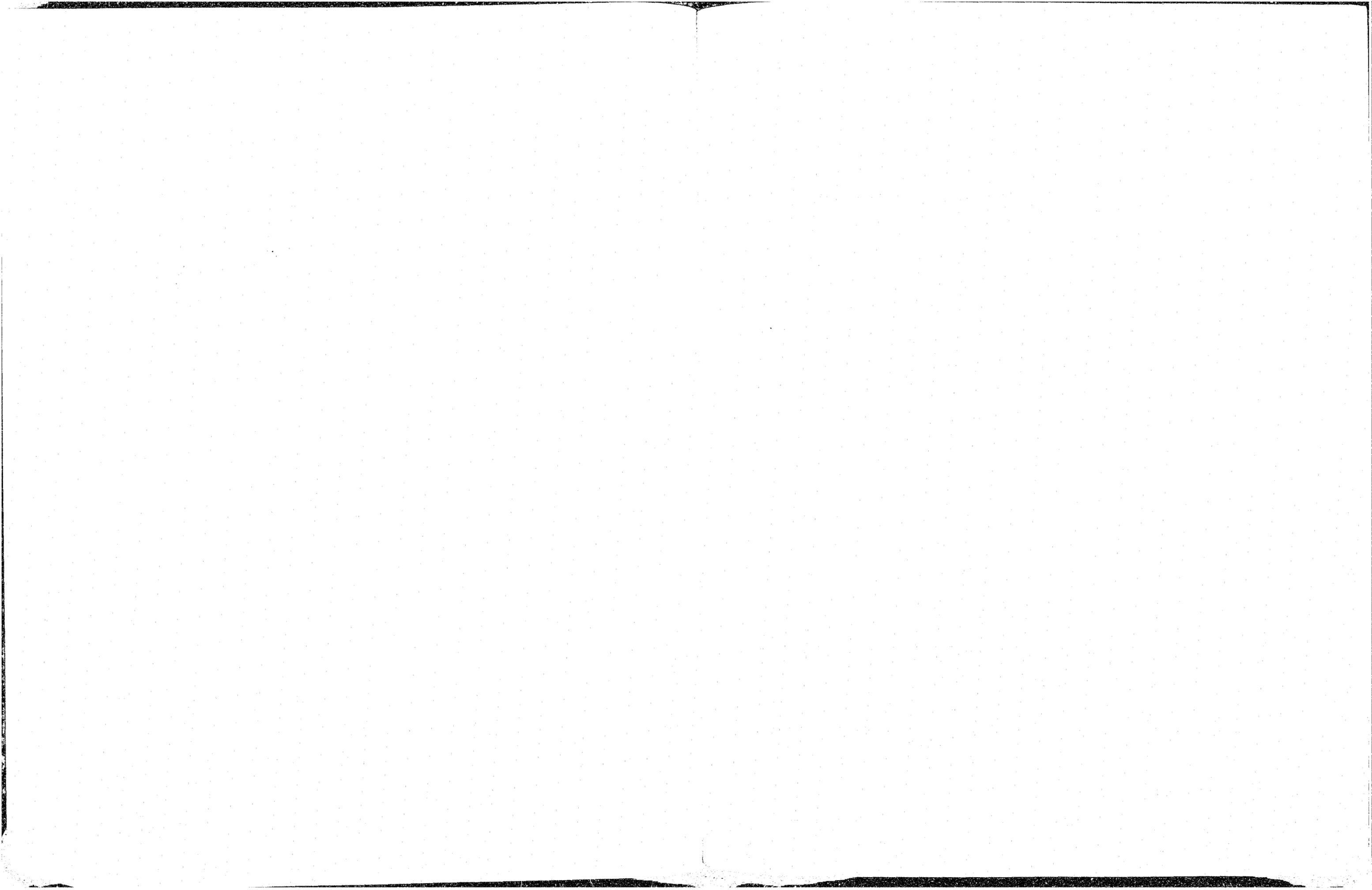
The purposes of accident investigation are many: first, to determine the causes, times and places of accident-causing violations, so that appropriate selective enforcement steps may be implemented, and second; to obtain data for traffic and highway engineering improvements; third, to protect the rights of the individuals involved, and fourth; to obtain data that will improve traffic and driver education.

II. Practice

It will be the policy of this department to investigate each traffic accident that it has knowledge of, to prepare a report of that accident on the appropriate form, to submit a copy of that report to the proper agencies, and to require all parties involved in the traffic accident to fill out all reports required by law.

III. Enforcement Action

In all cases when the investigating officer believes that a violation of law has caused or contributed to the traffic accident, an appropriate summons or citation will be issued.



DISCUSSION OF TRAFFIC LAW ENFORCEMENT STANDARDS AND RATES

For years, professional police administrators have tried to establish a set of standards whereby the effectiveness of their traffic law enforcement programs could be measured. It was anticipated that warrants, similar to those developed by traffic engineers, could trigger or justify enforcement against selected violations. This admirable objective has not yet been attained, and there is reason to believe that easy-to-use rates or formulas for enforcement evaluation purposes will always have limited validity. The measurement of cause and effect in any situation involving human, mechanical, and environmental factors is an enormously complicated task. If selective enforcement studies are to mean anything, they must be managed by trained and experienced statisticians using advanced statistical techniques.

Rates

While it is true that some rates have been articulated by traffic safety professionals, the scale of measurement is merely the product of an official consensus based on empirical observations and subjective experience. Most texts, when quoting the rates, disclaim their validity as standards by stating that they represent generally the best informed opinions.

Enforcement Rate. This rate, more often referred to as the Enforcement Index, is expressed as an equation:

$$EI = \frac{\text{Conviction with Penalty for Hazardous Moving Violations}}{\text{Personal Injury and Fatal Accidents}}$$

Two problems severely limit the usefulness of the Enforcement Index: (1) it cannot be applied by agencies with a small accident data base; and (2) it presumes a cause and effect relationship without due consideration to other factors which influence traffic accident statistics.

Use of the Enforcement Index has been supplemented by more modern statistical methods which are now used to analyze the impact of enforcement on accidents.

Accident Reporting Ratio. The generally accepted proper reporting ratio is 1:55:200 (55 personal injury accidents per fatal accident, and 200 property damage accidents per fatal accident). Law enforcement and traffic engineering professionals recognize the importance of a numerically adequate accident data base and support this formula. Whenever the property damage accident rate drops substantially below

200, it can be concluded that the agency is not providing an adequate level of service to the motoring public and that the accident statistics will not furnish enough information to analyze the traffic problems.

Accident Arrest Rate. The recommended rate of 55 arrests (or citations issued) per 100 accidents investigated is virtually impossible to attain in many urban jurisdictions which must limit the time officers devote to the less serious accidents. However, if relatively minor crashes, which are merely recorded on a collision report, are not defined as "investigated" accidents, even the busy, big city departments should be able to meet or exceed this rate.

A refinement of this rate considers the number of persons arrested or cited per 100 investigated accidents. The recommended level of 60 is attainable by most jurisdictions when only "investigated," and not "reported," collisions are counted.

Hit-and-Run Clearance and Arrest. These rates are 85 and 80, respectively, per 100 cases reported to the police. Both are set very high, particularly since court decisions, beginning with Miranda, have altered the art of police interrogation. A new survey is needed to establish more realistic arrest and clearance rates for hit-and-run cases. A limited number of inquiries¹ designed to sample current rates has suggested that 60 percent would be a more appropriate rate. This percentage figure can be attained by even the urban departments if they develop and take advantage of computerized known vehicle files.²

Conviction Rate for Accident and On-View Arrests and Citations. This rate of 95 percent, although set very high, is usually attainable wherever the court system gives appropriate attention to traffic problems by creating a sufficient number of special courts to handle the volume of traffic cases. If the rate drops below the standard, it usually means that officer training in courtroom presentation and case preparation is needed.

It must be acknowledged that these "rates," discussed above, have only a limited utility, and they cannot be considered validated standards.

¹ Five West Coast cities ranged from a low of 30 percent to a high of 60 percent hit-and-run clearance rate.

² The known vehicle file is a listing of all cited vehicles over a 90 or 120-day period. The data is organized so that it can be accessed by any number of vehicle description factors. The known vehicle file computer, for instance, can provide a listing of all white Fords, a listing of 1962 white Fords, or a further refined listing of 1962 white Fords if any of the license digits are known.

Safety officials who continue to seek "standards" which would provide an easy way to measure their traffic enforcement efforts must reconcile themselves to the fact that such "standards" do not exist. States, cities, police policies, training, resources, weather, roads, traffic densities, and laws are not standard from one jurisdiction to another. Any attempt to establish criteria, rates, etc., which would be valid for comparison purposes is predestined to fail.

Other Statistical Techniques

There are, however, statistical techniques which, when used with carefully designed base line data, will permit the evaluation of the effect of new safety programs or identification of program needs.

The accuracy of conclusions based on traffic accident and enforcement analysis is largely dependent on the existence of a sizeable data base and access to automated or electronic data processing equipment. The measurement and reporting of increases or decreases in the recorded data is a simple task once the relevant data items have been defined. The analytical task becomes much more complicated, however, when it comes time to declare whether or not the increase or decrease is significant and what factors contributed to the change.

Idiosyncratic variations in accident levels at isolated locations can ordinarily be ascribed to environmental changes which are unrelated to traffic law enforcement.

When a traffic accident increase displays an area or line pattern, the probability of increased enforcement activity being needed may be assumed.

If there are no important seasonal environmental or engineering changes affecting the figure, a closer look at the violation patterns and the development of an enforcement strategy is in order.

In order to determine the significance of traffic accident patterns, the base line data should be organized into collision sub-lists. A description of six listings which are basic to traffic analysis follows.

Intersection Accident Frequency (Table 1). Intersections are listed in order of descending frequency. A minimum of three years' experience should be shown for comparison purposes. Intersections with insignificant frequencies (less than four accidents annually) can be dropped from the list.

TABLE 1

SAMPLE CITY - 1973 TRAFFIC ACCIDENTS
RANKINGS OF INTERSECTIONS BY ACCIDENT FREQUENCY

Position	Intersection	Number of Accidents		
		1971	1972	1973
1	Inkster and Ford Road	31	31	22
2	Arcola and Warren Avenue	31	24	19
3	Middlebelt and Ford Road	31	20	33
4	Cherryhill and Venoy Road	30	30	26
5	Pardo Street and Merriman Road	29	18	22
6	Henry Ruff Road and Marquette Street	24	25	16

Intersection Accident Rates (Table 2). All of the intersections appearing on the Intersection Accident Frequency Report will also appear on this listing. They will be arranged, however, in different order according to their relative accident rate. The accident rate is expressed as accidents per million vehicles entering the intersection. Obviously, congestion will influence the number of accidents. This listing, by taking into account the relationship of volume to accidents, helps equate the low volume intersections with more heavily travelled intersections. (The relevance of volume is mostly confined to the busier intersections and for this reason intersections having less than eight accidents per year should not be included on the list.)

TABLE 2

SAMPLE CITY - TRAFFIC ACCIDENTS
RANKINGS OF INTERSECTIONS BY ACCIDENT RATE*

Position	Intersection	Rate			Number of Accidents		
		1973	1972	1970	1973	1972	1971
1	Marquette Blvd. & Venoy	3.86	3.45	1.15	21	14	5
2	Belton St. & Pardo Ave.	3.81	1.11	1.45	10	2	5
3	Merriman Rd. & Warren Ave.	3.60	1.01	.45	9	2	1
4	Gilman St. & Krauter Ave.	3.11	2.85	1.90	9	6	4
5	Ford Rd. & Middlebelt Rd.	3.10	2.40	1.97	28	20	17
6	Deering St. & Inkster Rd.	2.94	2.35	1.82	17	16	9

*Based on accidents per million entering vehicles. (Only intersections with eight or more accidents.)

Alphabetical Intersection Accidents (Table 3). This is simply a printout of all accidents in alphabetical order. In very large cities it is desirable to eliminate from the listing locations with three or less accidents. It is very helpful in dealing with citizen complaints about allegedly dangerous intersections.

TABLE 3

SAMPLE CITY - 1973 TRAFFIC ACCIDENTS
ALPHABETICAL INTERSECTION LISTING

Intersection	Accidents			Frequency Ranking		
	1973	1972	1971	1973	1972	1971
Ford Rd. & Arcola St.	4	5	1	283	287	592
Ford Rd. & Belton St.	2	4	3	528	305	421
Ford Rd. & Caldwell St.	2	1	8	565	561	43
Ford Rd. & Gilman St.	5	7	2	178	95	489
Ford Rd. & Deering St.	5	8	4	170	37	265
Ford Rd. & Helen St.	2	4	7	522	264	87

Classified Street Accident Rates (Table 4). This listing groups accidents by routes which consist of the important through streets. They are classified as prime arterials, major streets, and collector streets. The route limits are distances between interceptions of the classified streets. Supplementary information provided by the listing includes route length, traffic volume, number of accidents, accidents per mile and accidents per million miles for each route section.

TABLE 4

SAMPLE CITY
1973 ACCIDENT RATES ON CLASSIFIED STREETS

	CL	MI	ADT	Accident Rate
Ford Rd. /Middlebelt Rd. - Inkster Rd.	M	.07	2000	19.52
Ford Rd. /Venoy Rd. - Moeller	M	.07	4000	9.76
Ford Rd. /Merriman Rd. - Henry Ruff Rd.	M	.07	4500	8.67
Ford Rd. /Harrison St. - Gilman St.	M	.07	5000	31.23
Ford Rd. /Pardo St. - Florance St.	P	.25	11000	9.94
Ford Rd. /Park St. - 3rd St.	C	.05	7000	.00

Code: MI=Number of Miles, ADT=Average Daily Traffic, CL=Classifications (M - Major, P-Primary, C-Collective)

Accident Rates by Street Classification (Table 5). All classified streets (prime arterial, major, collector) and unclassified streets have their cumulative accident experience reported on this list. The accident figures are jurisdiction-wide averages. By comparing these rates with the specific classified street route rates, significant deviations from normal experience can be spotted. Analysis of the particular violation pattern on the high-accident routes will then shape the selective enforcement effort to be applied.

TABLE 5

SAMPLE CITY
1973 ACCIDENT RATES BY STREET CLASSIFICATION

Class	MI	ADT	Vehicle		Acc. Mi.	Acc. Rate (MVM)
			Mi. Daily	ACC		
Prime Arterial	41.27	18400	760000	918	22.24	3.30
Major	219.02	12600	2754000	7122	32.52	7.06
Collector	250.84	4000	995000	3293	13.13	9.04
Unclassified	1227.00	700	807000	4238	3.45	14.34

Classified Streets/Above-Average Rates (Table 6). Programming a printout of all routes with above-average accident rates greatly simplifies the task of identifying routes with significant deviations from normal.

TABLE 6

SAMPLE CITY
1973 ACCIDENT RATES - CLASSIFIED STREETS
WITH ABOVE-AVERAGE ACCIDENT EXPERIENCE*

Route	Miles	ADT	Veh Mi	ACC	Acc. Rate
Prime Arterials Averaged	53.46	19700	1074000	1341	3.41
Ford Road/Middlebelt- Merriman	.73	66100	48253	69	3.91
Major Streets Averaged	234.98	12600	2956000	7587	7.00
Warren Street/ Venoy- Inkster	2.13	9100	19383	94	13.25

*Only one example shown in each street classification.

The routes with above-average accident rates are the pointers or triggers for selective enforcement. The data processing system will then, when properly programmed, provide the type of violation and time distribution of accidents on each route which is selected as a target for selective enforcement. Armed with this kind of information, the traffic police administrator can systematically and efficiently assign his traffic enforcement units, identify the principal violations requiring enforcement emphasis, and favorably influence accident rates.

The following is an example of a Selective Enforcement Bulletin currently being utilized by several Oakland County, Michigan Police Departments, and furnished by the Traffic Improvement Association of Oakland County through their data bank.

SOUTHFIELD POLICE DEPARTMENT

This selective enforcement bulletin serves two purposes:

1. To help you direct your enforcement efforts to specific locations and to types of violations which contribute most to accidents.
2. As an "educational" device--to show the violator the actual facts (number and places) behind your efforts to reduce traffic accident losses.

Data was provided through the computer file of the Traffic Improvement Association of Oakland County.

Traffic Accidents & Violations - 1972

Total Accidents: 3125

Total Violations in Accidents: 3617

The following violations were major contributing causes in traffic accidents in Southfield in 1972:

<u>Leading Violations</u>	<u>Number</u>	<u>% of Total</u>
Following Too Closely		
Fail to Stop Clear Distance	1213	33.5
Failed to Yield Lft Turn	479	13.2
Speeding	406	11.2
Passing Lane Usage, Overtaking, Turning or Signal	383	10.6
Drinking or Drugs	320	8.8
Disregard Traffic Sig	225	6.2
Failed to Yield	187	5.2
Disregard Stop Sign	151	4.2
Defective Equip	78	2.2

(FRONT)

ACCIDENT ACTIVITY PATROL AREA #1

These roadway segments in your patrol area had high accident activity from 1-1-72 to 1-1-73.

<u>Roadway Segment</u>	<u>Total Accidents</u>
1. Telegraph-11 Mile to 12 Mile	154
2. Telegraph-10 Mile to 11 Mile	120
3. Northwestern-S. of 12 Mile to Inkster	65
4. Lahser- 10 to 11 Mile*	60
5. 12 Mile-Inkster to Lahser	60
6. Telegraph-12 Mile to N.Cy lmt	57
7. BS 696-Lahser to Telegraph	53
8. 10 Mile-Berg to Lahser*	43
9. I-696 Northwestern-Telegraph to S. of 12 Mile	39
10. Lahser-11 to 12 Mile*	39

The following intersections in your patrol area had high accident activity from 1-1-72 to 1-1-73.

<u>Intersection</u>	<u>Total Accidents</u>
1. Telegraph & 12 Mile	65
2. Telegraph & 10 Mile*	46
3. Lahser & 11 Mile*	41
4. Telegraph & Swanson	30
5. 12 Mile & Northwestern	25
6. Lahser & 10 Mile*	23
7. Telegraph & Franklin	22
8. Telegraph & Tel-12 S.S.C.	22
9. Lahser & Service Dr. N.B.*	15
10. Lahser & N.W. Sr.Dr. S.B.*	15

* Indicates location borders on another community or patrol area.

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DAILY ACTIVITY REPORT

NAME (Last)		First	Init.	SERIAL No.	ODOMETER READING FINISH
DATE	DAY	VEHICLE No.		START	
SHIFT	BEAT	ASSIGNMENT		TOTAL MILES	

(100) CRIME PREVENTION/SUPPRESSION	INIT. INV.	SUPP. INV.	ASSIST.
(110) PREVENTIVE PATROL			
(120) SECURITY INSPECTIONS			
(130) VAC'TN HOUSE INSPECTIONS			
(140) FIELD CONTACTS			
(150) SECURITY ESCORTS			
(160) CRIME PREVENTION PROGRAMS (SECURITY ORIENTED)			
(170) CRIME PREVENTION PROGRAMS (TREATMENT ORIENTED)			
(180) ALARMS PROGRAM			
SUBTOTAL			

(200) INVESTIGATION/APPREHENSION	INIT. INV.	SUPP. INV.	ASSIST.
(210) CRIMES AGAINST PERSONS			
(220) CRIMES AGAINST PROPERTY			
(230) VICE OFFENSES			
(240) TRAFFIC CRIME INVEST'NS			
(250) CRIMES AGAINST PUBLIC PEACE AND ORDER			
(251) DRUNKENNESS			
(252) DISORDERLY CONDUCT, DISTURBING THE PEACE			
(253) NUISANCE OFFENSES			
(260) MISC. HEALTH, WELFARE AND SAFETY OFFENSES			
SUBTOTAL			

(300) MOVEMENT/CONTROL OF TRAFFIC	INIT. INV.	SUPP. INV.	ASSIST.
(310) TRAFFIC PATROL			
(320) ACCIDENT INVEST. FATAL & INJURY			
(321) ACCIDENT INVEST. MAJOR PROPERTY DAMAGE			
(322) ACCIDENT INVEST. MINOR PROPERTY DAMAGE			
(330) HAZARDOUS MOVING VIOLATIONS			
(331) NON HAZARDOUS VIOLATIONS			
(332) PARKING CONTROL & ENFORCEMENT			
(340) FIRES, FIRE ALARMS			
(350) ESCORTS			
(360) TRAFFIC REGULATION			
(361) TRAFFIC POINT CONTROL			
(362) TRAFFIC SIGNING & SIGNALING			
(363) TRAFFIC ENGINEERING AND FLOW			
(370) SCHOOL CROSSING PROGRAM			
(380) TRAFFIC SAFETY EDUCATION			
SUBTOTAL			

(500) PUBLIC & EMERGENCY SERVICES	INIT. INV.	SUPP. INV.	ASSIST.
(510) EMERGENCY ASSIST & RESCUE			
(511) AMBULANCE SERVICE			
(520) ANIMAL CONTROL			
(530) MISSING PERSONS INVEST'NS			
(540) LOST & FOUND PROPERTY			
(541) ABANDONED AUTO CONTROL			
(550) PERMITS AND LICENSES			
(551) TAXI INSPECTION AND LICENSING			
(560) OTHER NON CRIMINAL INVEST'NS			
(570) OUTSIDE WARRANTS AND SUBPOENAS			
SUBTOTAL			

SPECIAL PROGRAM ANALYSIS	INIT. INV.	SUPP. INV.	ASSIST.
(SHOW TIME EXPENDED IN THE FOLLOWING ACTIVITIES IN ADDITION TO THE TIME INCLUDED ELSEWHERE).			
() JUVENILE INVESTIGATION			
() TRANSPORTATION AND BOOKING OF PRISONERS			
() WARRANT AND SUBPOENA SERVICE FOR LOCAL CASES			
() SPECIAL SERVICE CASES			
NOTE: DO NOT INCLUDE SUBTOTAL FOR THIS BLOCK ON REVERSE SIDE OF FORM.			

(600) ADMINISTRATIVE SERVICES	INIT. INV.	SUPP. INV.	ASSIST.
(610) DIRECTION AND SUPERVISION			
(620) PLANNING & DATA PROCESSING			
(630) INSPECTION			
(640) INTERNAL INVESTIGATION			
(650) COMMUNITY RELATIONS			
(660) PERSONNEL MANAGEMENT			
(670) TRAINING			
(680) FISCAL AFFAIRS			
SUBTOTAL			

(400) MAINTENANCE OF PUBLIC ORDER	INIT. INV.	SUPP. INV.	ASSIST.
(410) PAPADES			
(420) SPECIAL EVENT COVERAGE			
(430) CIVIL DISTURBANCES			
(440) POLICE RESERVE PROGRAM			
(450) CIVIL DEFENSE PROGRAM			
SUBTOTAL			

(700) TECHNICAL SERVICES	INIT. INV.	SUPP. INV.	ASSIST.
(710) CENTRAL RECORDS ACTIVITIES			
(720) COMMUNICATIONS			
(730) PROPERTY CONTROL			
(740) CRIME LABORATORY SERVICES			
(741) PHOTO & I.D. SERVICES			
(750) CUSTODY OF PRISONERS			
SUBTOTAL			

TIME IS TO BE RECORDED IN HOURS TO THE NEAREST 5 MINUTES.

MONTHLY GENERAL ACTIVITY REPORT

	This Month	Same Month Last Year	This Year to Date	Last Year to Date
PART II OFFENSES TOTAL				
Checks				
a. NSF, Account Closed				
b. No Account, Forgery				
Vandalism				
All Other Part II				
TOTAL PART I AND II				
NON-CRIMINAL CASES TOTAL				
Accidents--Total				
Personal Injury				
Fatal				
Property Damage				
Casualties (Non-Vehicle)				
Emerg. Amb. & Aid				
Suicide Cases				
Unattended Death				
Routine Amb. Trans.				
Amb. P. U. (Outside)				
Missing Adults				
Missing Runaway Juveniles				
All Other Numbered Cases				
TOTAL CASES				

ANYTOWN POLICE DEPARTMENT

POLICY	Effective Date January 1, 1974	Number 74-001
Subject Traffic Law Enforcement		
Reference Traffic Procedures 74-0020	Special Instructions Rescinds All Previous Traffic Law Enforcement Policies	
Distribution All Personnel	Cancellation Date December 31, 1974	No. Pages 2

I. Purpose

The purpose of traffic law enforcement is to reduce traffic collisions and injuries and to facilitate the safe and expeditious flow of vehicular and pedestrian traffic through the public's voluntary compliance with traffic regulations. Our goal will be to meet our objective through a combination of education and enforcement.

It will be this department's policy to educate the public regarding traffic regulations through programs aimed at exposing specific problems, by publishing traffic accident and injury statistics, and by giving notice and warnings of changes in regulations prior to taking enforcement action.

It will be this department's policy to take enforcement action upon the detection of an illegal and potentially hazardous act without regard for such factors as attitude, intent, or frivolous excuse. Enforcement action may consist of a warning, citation, or physical arrest.

ii. Police Officer

Police Officer cooperation is one of the main routine tasks performed by officers, and of which they are expected to have considerable experience. This cooperation is the only means of obtaining information with our department. Officers should be aware of the fact that the officer has a responsibility to the public as well as to the department. The officer has a duty to the public to provide information and to the department to provide information.

iii. Department

Since the Uniform Vehicle Code is now being followed by a majority of the states, and since it is being subjected to uniform traffic laws, the uniformity of the code is essential. Therefore, unless the traffic laws are uniform to our state, it is essential that a uniform code be adopted. The uniform code is essential for the uniformity of the code.

iv. Department of Transportation

The Department of Transportation is the agency which is responsible for the uniformity of the code. The Department of Transportation is the agency which is responsible for the uniformity of the code. The Department of Transportation is the agency which is responsible for the uniformity of the code.

Approved by:

Chief of Police

APPENDIX VI

Discussion of Relative Merits of Blue Warning
Lights for Police Vehicles

DISCUSSION OF RELATIVE MERITS OF BLUE WARNING
LIGHTS FOR POLICE VEHICLES

Advantages:

1. In peripheral vision, the eye is more sensitive to blue wavelengths than to red or yellow wavelengths.
2. Many European countries have standardized blue lights in emergency vehicle lights, so adoption of blue lights in the USA would promote international uniformity.
3. There are not many blue lights in the highway environment now, so blue provides a distinctive color for use as a warning light.

Disadvantages:

1. Blue is not widely recognized in this country as conveying a sense of danger or emergency. There is no history of the use of blue as a caution or stop signal in traffic control devices, as there is with red and yellow.
2. Domes of a pure blue color unavoidably transmit a very small fraction of the lumious energy emitted by incandescent lamps. Therefore, for a given level of signal brightness, blue lights using incandescent lamps as sources (as most warning light units do) must be fitted with more powerful lamps and must correspondingly consume more electrical power than lights using other signal colors. Gaseous discharge lamps (strobe) put blue on more even terms with red, but these sources are comparatively expensive.
3. Since blue lights are not yet as common as red and yellow, the total nationwide conversion cost of standardizing on blue would exceed the costs of standardizing on red or yellow or combinations of these with white. The need for heavier electrical systems, or xenon-flashlamp sources, mentioned in #2 above, would further increase the retrofit costs.

The above information was extrapolated from a response from the U. S. Department of Commerce, National Bureau of Standards, Law Enforcement Standards Laboratory, to a question posed by the IACP-Center for Law Enforcement Research Information.

Additional Comments:

Blue or blue and white combination bleach retina to point of causing loss of night visual sensitivity, red not causing such. (American Journal of Optometry, 46, 397-410 (1969) "Positive Afterimage and Measurement of Light and Dark Adaptation," by Glenn A. Fry.)

APPENDIX VII

IACP - Policy: Training, Minimum Recruit for Law
Enforcement Agencies

IACP - Policy: Minimum Training for Accident Investigation

IACP - Policy: Minimum Training for Police Traffic
Instructors

TRAINING

MINIMUM RECRUIT FOR LAW ENFORCEMENT AGENCIES

1967

WHEREAS, There is need to establish minimum standards of traffic police recruit training in order to raise the standards of professional police service; and

WHEREAS, There is now no recommended national standard of training in highway traffic supervision; and

WHEREAS, The IACP should express itself in this important step toward improving the efficiency and effectiveness of traffic police; therefore, be it

RESOLVED, That the International Association of Chiefs of Police in addition to the other recruit training recommend a minimum of 140 hours for recruit traffic training in the city, county, state and other government police training programs in the following subject areas with the following hours allocated:

I. Police Driver Training

The motor vehicle and accessory equipment are introduced as major tools with which the officer works; their care and maintenance stressed. The police officer as a professional driver is emphasized through the use of defensive driving techniques. Students are required to demonstrate their effectiveness in application of theory to practice.

12

II. State Motor Vehicle and Traffic Law

Emphasis will be placed on the purpose of enacting traffic laws and why they are enforced; who is subject to traffic laws; where traffic laws apply; valid and invalid defenses. Each offense has certain basic elements which must be proven in court - stress will be placed on the elements of accident producing offenses.

10

III. Law For Police

An intensive review of the rules of evidence an officer will need to understand confessions, hearsay rule, etc. A study of: what is an arrest, when can an arrest be made, traffic citations, and searches and seizures. Emphasis is placed on the state's Criminal Code, Code of Criminal Procedures, elements of offenses, parties to crime, and pretrial and trial procedure. Preparation of a case for trial is focused on making a good arrest, proper gathering of evidence, legal search, providing elements of an offense and proper presentation in court. How an officer should act and conduct himself in court is reviewed.

26

IV. Court Organization and Operation

Acquaints the student with the structure of the state's Court System. Stress is placed on the jurisdiction of the various courts in the state and the recruit learns where to file his cases. The procedure followed in the trial of a case and the necessity of establishing venue is reviewed. The recruit becomes familiar with how an appeal is taken. The federal court system is reviewed briefly.

4

V. Police Reports

Emphasis is placed on the importance of an effective records-keeping operation. Police programs must be based upon factual information to be successful. An introduction to report writing techniques. A basic understanding of how to collect, summarize, record and use reports. Discuss basic forms and field reports used to record data.

8

VI. Patrol Procedures

An introduction to police patrol procedures. To develop an understanding of the broad concepts and principles involved. Discusses various patrol techniques and their application to obtain maximum effect and efficiency.

20

VII. Preliminary Investigation

The investigative role of the police is introduced with emphasis placed on specific techniques that the officer will be required to use in the field. Stresses the importance of these techniques in facilitating follow-up activity.

8

VIII. Scientific Aids to Investigation

A brief summation of some scientific aids frequently used in police investigations. It is a follow-up to the previous subject of preliminary investigation so that the student understands the need for better police investigation.

5

IX. Police Traffic Operations

Orientation of the recruit policeman to the total traffic problem. Discusses the broad scope of accident investigation, defining the difference between attending and reporting or investigation of the accident. Develops understanding of what traffic accidents are, how they occur, the multiple cause concept, and the relationship between causes. Identifies traffic law enforcement purposes and relationships with courts and other agencies. Underlines the importance of making all enforcement effort return the maximum deterrent effect. Introduces to the recruit officer the important fundamentals of traffic direction.

30

X. Standard First Aid Course

Emphasizes the police officer's responsibility for handling injured persons. Provides instruction and some practice to develop ability to give proper care to accident victims.

10

XI. Review

The first review should be near the middle of the course. The other near the end. Previous instruction should be summarized in the form of an over-view.

2

MINIMUM TRAINING FOR ACCIDENT INVESTIGATION

1969

WHEREAS, There is a need to establish minimum standards for training police traffic accident investigators for the purpose of providing more efficient and effective service to the public; and

WHEREAS, There is a need to gather more meaningful data relating to the causes of motor vehicle traffic accidents; now, therefore be it

RESOLVED, That the International Association of Chiefs of Police recommend a minimum of 52 hours for operational or execution level police personnel engaged in the accident investigation function and that the training should be in the following subject areas with the following number of hours allocated:

I. Philosophy of Accident Investigation 3 Hours

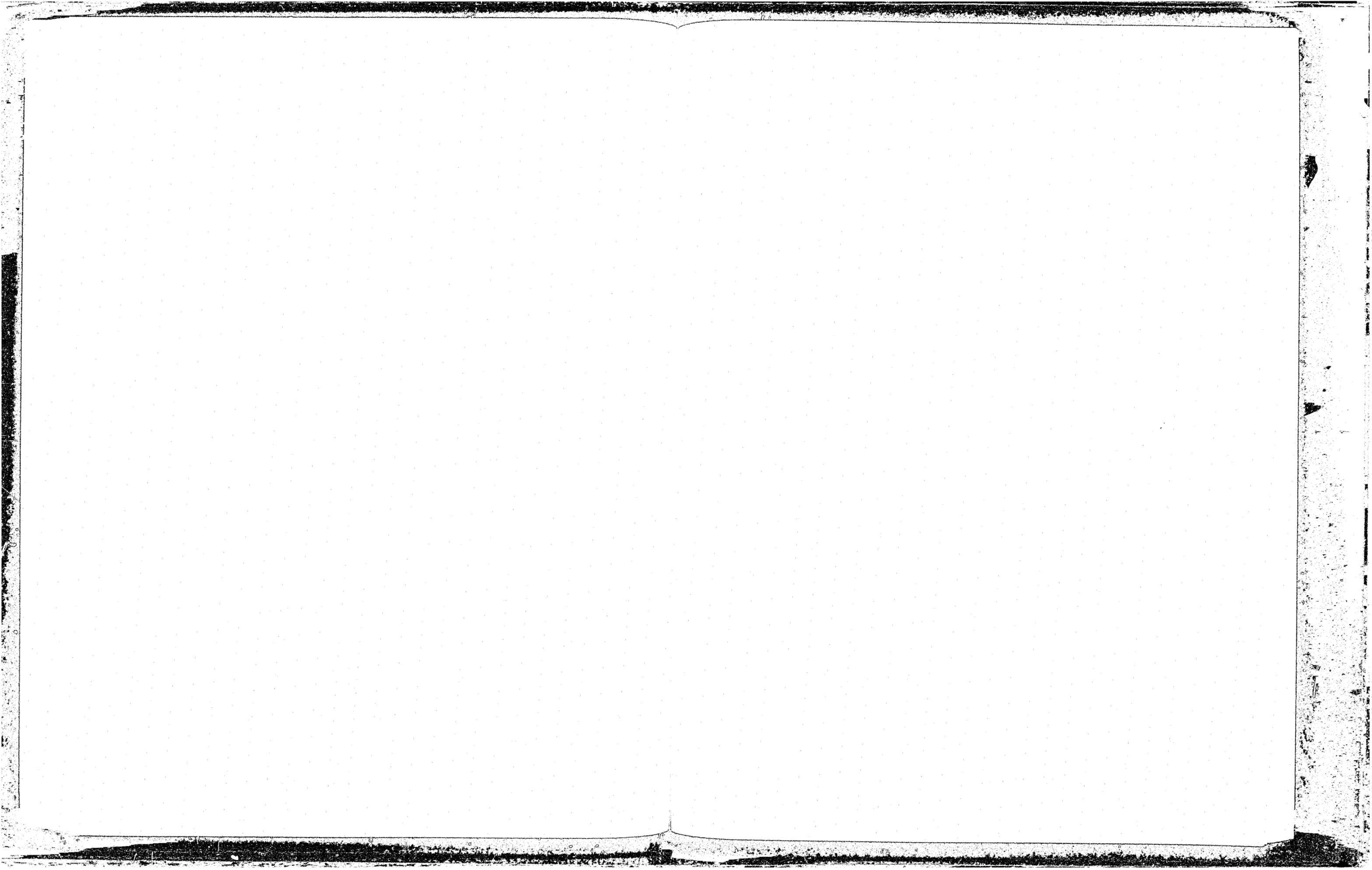
Increase the officer's knowledge and understanding of the principles underlying the investigation of traffic accidents; the value of gathering factual information through investigation as opposed to reporting; the purposes and objectives of traffic accident investigation; the need for, necessity of and importance in taking enforcement action in accident cases; the difference between investigative and on-view enforcement. Improve the officer's ability to recognize and understand the total traffic problem and the police role and responsibility in traffic supervision activities; the necessity for interrelationships between and coordination of the many agencies concerned with improving traffic accident prevention programs.

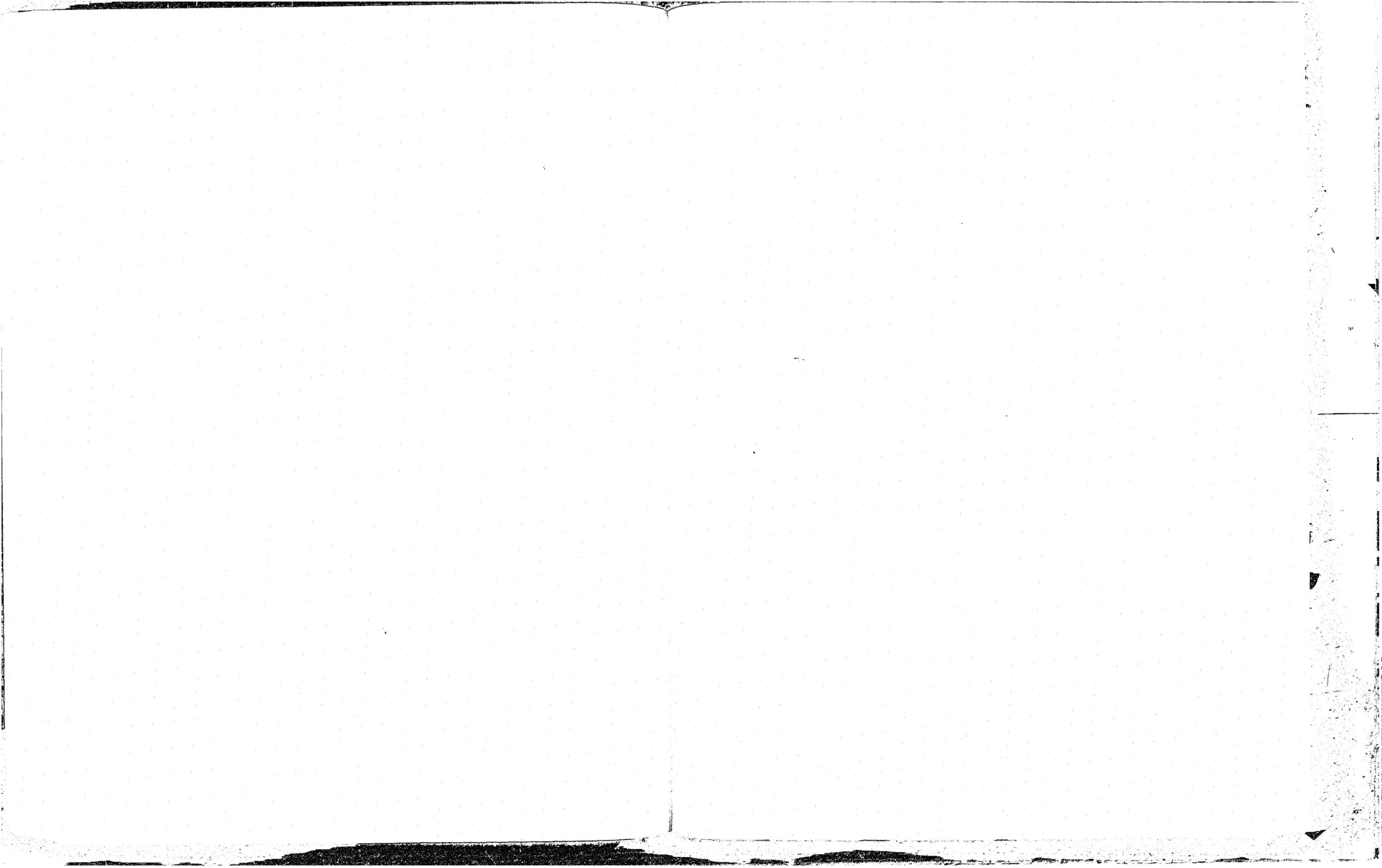
II. Vehicle Traffic Law 6 Hours

Provide a working knowledge of the specific elements, applicable defenses, and the issues involved, in particular traffic law violations.

CONTINUED

2 OF 3

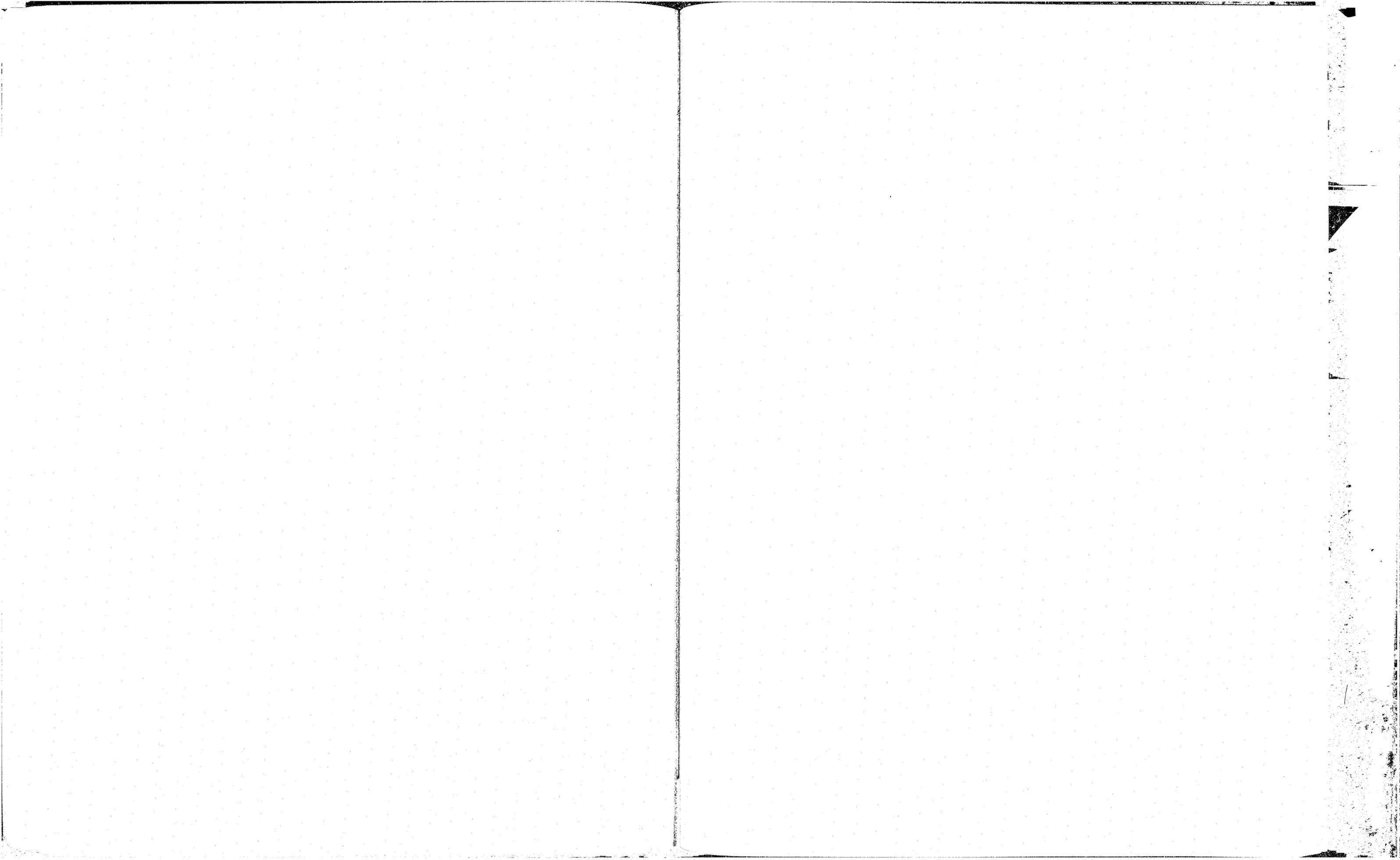




APPENDIX VIII

Management and Police Traffic Services Questionnaire

IACP On-Site Data Collection Guide



II. MANAGEMENT QUESTIONNAIRE

1. Have you filled out this Management Questionnaire before (Questionnaire #II)?

___ 1. Yes ___ 2. No

IF YES, fill in only questions 2 through 8 below and proceed to the functional questionnaire(s) attached.

2. City of: _____

3. Name of Department: _____

4. Name of head of agency: _____

5. Title: _____

6. Address: _____

7. Telephone number: _____

8. This report prepared by: _____

Title: _____

ADMINISTRATION (1.3)

9. Total number of employees in your department:

1. Specify number: _____

10. Number of employees assigned to police traffic safety activities:

1. Specify number: _____

11. Does your department provide pre-service training in police traffic services to new employees with police traffic service responsibilities?

___ 1. Yes ___ 2. No

12. Does your department provide in-service training in police traffic services to employees with police traffic service responsibilities?

___ 1. Yes ___ 2. No

13. Does your department have written policies for conducting police traffic service activities available to its members as guides for carrying out assigned responsibilities?
 1. Yes 2. No
14. Are the policies pertaining to your department's police traffic service responsibilities: (check all items)
- Developed and instituted solely by your department?
 1. Yes 2. No
 - Developed by the city administrator?
 1. Yes 2. No
 - Promulgated by a governing board or commission for your department?
 1. Yes 2. No
 - Developed by the city council?
 1. Yes 2. No
 - Developed by consultants utilizing the advice and assistance of your department?
 1. Yes 2. No
15. Is every police traffic service position in your department described in writing?
 1. Yes 2. No
16. Is each police traffic service task in your department designated in writing as the responsibility of a specific person or persons?
 1. Yes 2. No
17. Have police traffic service program priorities been established by your department?
 1. Yes 2. No
18. What was your department's total budget for fiscal year 1970?
 1. Specify amount: \$ _____
19. What was your department's budget for police traffic services for fiscal year 1970?
 1. Specify amount: \$ _____
20. Does your department have a formal organizational unit responsible for planning police traffic service programs and activities?
 1. Yes 2. No

(Question 20 continued on next page)

- a. IF NO, is there a person or persons responsible for planning police traffic service programs and activities?
 1. Yes 2. No

21. Has your department prepared a written plan for police traffic service programs and activities?
 1. Yes 2. No

IF YES, answer questions 22 through 25.

22. Is your planning based on assessments or studies of police traffic service problems and needs in your city?
 1. Yes 2. No
23. Does your planning provide for training and development of personnel to accomplish the objectives of your police traffic service plan?
 1. Yes 2. No
24. Does your police traffic service plan include written implementation procedures as guides for future action?
 1. Yes 2. No
25. Does your police traffic service plan include written provisions for review and re-evaluation at key steps in the procedures?
 1. Yes 2. No

EVALUATION (1.4)

26. Has any evaluation been made of the effectiveness of any of your department's current police traffic service programs and activities?
 1. Yes 2. No

IF YES, answer questions 27 and 28.

27. Have procedures been issued in writing for review and evaluation of the police traffic service programs and activities of your department?
 1. Yes 2. No
28. Have any of your police traffic service programs been evaluated by an outside agency during the past 5 years?
 1. Yes 2. No



WILLIAM G. MILLIKEN, GOVERNOR

DEPARTMENT OF STATE POLICE
OFFICE OF HIGHWAY SAFETY PLANNING
541 E. GRAND RIVER AVE., EAST LANSING, MICH. 48823

This section completed by: _____

Title: _____

III. FUNCTIONAL QUESTIONNAIRE

Police Traffic Services

Traffic Law Enforcement (3.1)

1. Does your department have written traffic enforcement policies?
___1. Yes ___2. No
2. Does your department have written traffic enforcement procedures?
___1. Yes ___2. No

IF YES, do the written procedures include the following:
(check all items)

- a. Procedure for apprehension of violators?
___1. Yes ___2. No
 - b. Enforcement of parking regulations?
___1. Yes ___2. No
 - c. Methods and practices in patrol tactics?
___1. Yes ___2. No
3. Is your department responsible for the traffic engineering function in your community?
___1. Yes ___2. No
 4. Does your department have one specific supervisor or commander in charge of traffic enforcement activity?
___1. Yes ___2. No
 5. Does your department have part-time officers?
___1. Yes ___2. No

(Question 5 continued on next page)

IF YES:

- a. Total number of part-time officers:
 1. Specify number: _____

6. Do your part-time officers engage in traffic work?
 ___1. Yes ___2. No

7. Enter in table below information on total police personnel. Include personnel assigned to police from other agencies, if any.

Include in first two lines below <u>ALL</u> full-time police officers.	Total Personnel
A. Uniformed officers (1) _____ Command (3) _____ Supervisors (2) _____ Others (4) _____	
B. Plainclothes officers (1) _____ Command (3) _____ Supervisors (2) _____ Others (4) _____	
C. Civilian clerk personnel (a)	
D. Service personnel (b)	
E. Other personnel (c)	
F. Total department personnel (d)	
(a) Civilian clerk personnel - pbx operators, radio dispatchers, stenographers, secretaries, record clerks, etc.	
(b) Service personnel - janitors, custodians, elevator operators, etc.	
(c) Other personnel - civilian school crossing guards, parking control, etc.	
(d) Total departmental personnel - all personnel under police direction, employed by the department or assigned to the department from other agencies.	

- a. How many of the full-time officers shown in the table (lines A and B) perform traffic duties?
 1. Specify number: _____
- b. How many of these officers, if any, are assigned full-time to traffic duty?
 2. Specify number: _____

8. How many patrol vehicles does your department have?
 1. Specify number: _____

9. Does your department utilize a speed computer device (VASCAR; TDS) for traffic speed enforcement?
 ___1. Yes ___2. No

IF YES, answer a. through g.

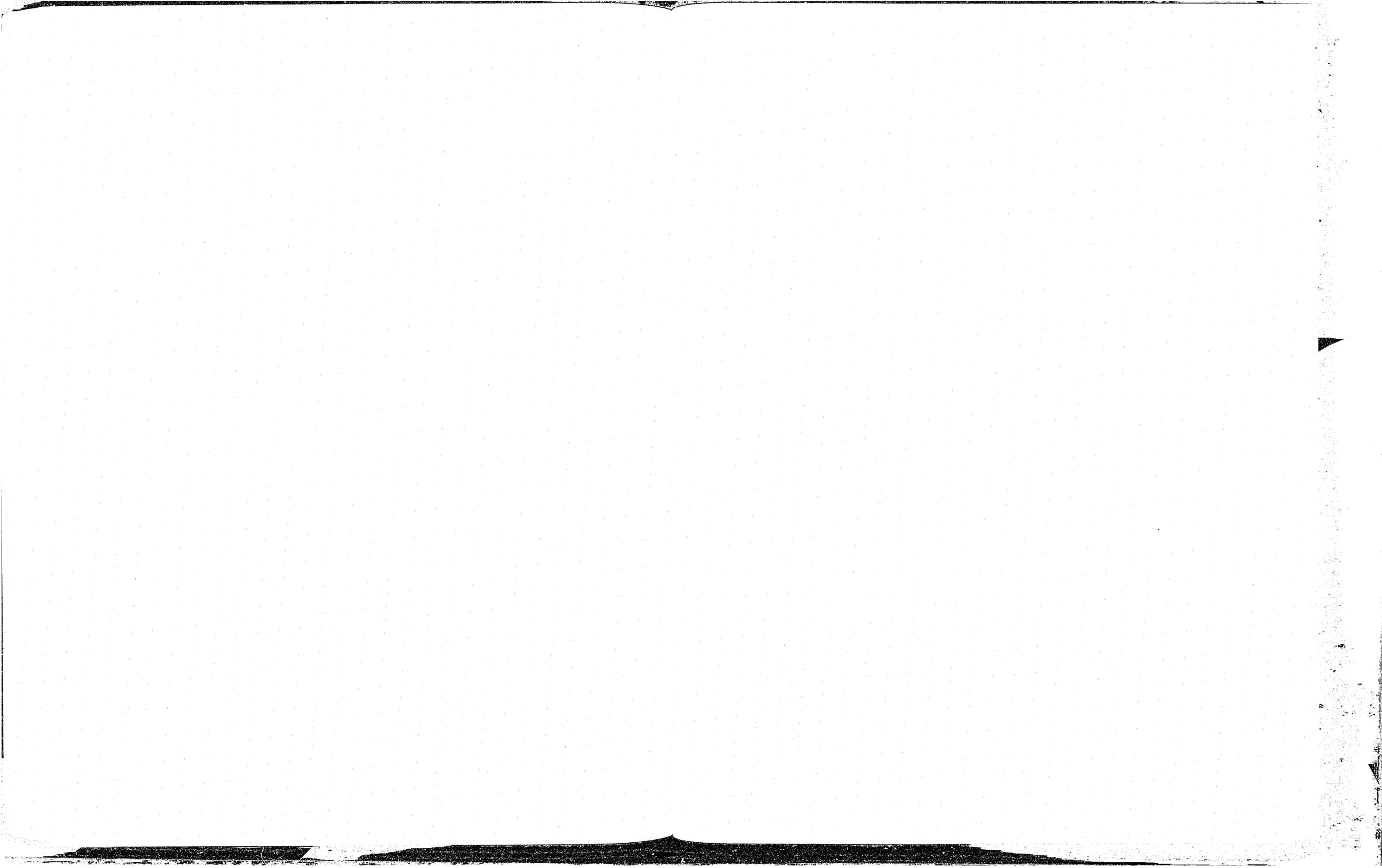
- a. How many units do you have?
 1. Specify number: _____
- b. What is the average number of units in service at any one time?
 2. Specify number: _____
- c. How many trained operators do you have?
 3. Specify number: _____
- d. How many hours of preparatory training do you have?
 4. Specify number: _____
- e. What are the total hours of practice required with the speed computer device before officers are permitted to write tickets?
 5. Specify number: _____
- f. Are your speed computer device officers certified?
 ___1. Yes ___2. No
- g. Do your officers keep a log of enforcement activity utilizing the speed computer device?
 ___1. Yes ___2. No

10. Does your department utilize radar as a means of speed enforcement?
 ___1. Yes ___2. No

IF YES, answer a. through g.

- a. How many radar units does your department have?
 1. Specify number: _____
- b. What is the average number of radar units in service at any one time?
 2. Specify number: _____
- c. How many trained operators do you have?
 3. Specify number: _____
- d. How many hours of preparatory training do you have?
 4. Specify number: _____
- e. What are the total hours of practice required with radar before officers are permitted to write tickets?
 5. Specify number: _____
- f. Are your radar officers certified?
 ___1. Yes ___2. No

(Question 10 continued on next page)



22. Enter in the table below the requested information on traffic case adjudication activity during 1970:

HAZARDOUS TRAFFIC VIOLATIONS (Refer I.A.C.P. classifications - I)	Number of cases based on arrests and citations					
	I Cases Pend- ing 1/1/70	II Cases Init- iated in '70	III Total Cases	IV *Cases Adjud- icated in 1970	V Convic- tions in 1970	VI Cases Pend- ing 12/31/70
1. Hazardous Traffic Law Violations (Motor Vehicle)						
2. Pedestrian Traffic Violations						
3. Total Hazardous Traffic Law Violations (Lines 1 and 2)						
NON-HAZARDOUS VIOLATIONS						
4. Other Traffic Violations (I.A.C.P. Classification - II)						

*Cases adjudicated refers to the number of cases processed through the courts or in the Traffic Court Violations Bureau.

23. Do you use an officer's daily activity report form?
 1. Yes 2. No

IF YES, answer question 24.

24. Does the activity report provide information for analyzing daily activities and time devoted to each?
 1. Yes 2. No

IF YES, answer questions 25 through 27.

25. How many hours/day do patrolmen work (average)?
 1. Specify hours: _____

26. What was the average time spent per day on police traffic services for each uniformed officer?
 1. Specify hours: _____
27. Indicate the average time spent per day by each patrol officer assigned to traffic on:
- Accident investigation:
 1. Specify hours: _____
 - Traffic control:
 2. Specify hours: _____
 - Motorists assist:
 3. Specify hours: _____
 - Traffic safety education:
 4. Specify hours: _____
 - Other traffic related duties:
 5. Specify hours: _____
28. How many total hours in 1970 did your officers spend in traffic court?
 1. Specify number: _____
29. What was your department's enforcement index in 1970?
 1. Specify number: _____
30. Does your department maintain a special parking control unit?
 1. Yes 2. No
31. Is there a special parking control unit operated outside your department?
 1. Yes 2. No
32. When a violator is stopped, is his vehicle also checked for mechanical defects?
 1. Yes 2. No
33. Does your department participate in any type of "spot check" activity in relation to vehicle inspection?
 1. Yes 2. No

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TRAFFIC ACCIDENT REPORTING AND INVESTIGATION (3.3)

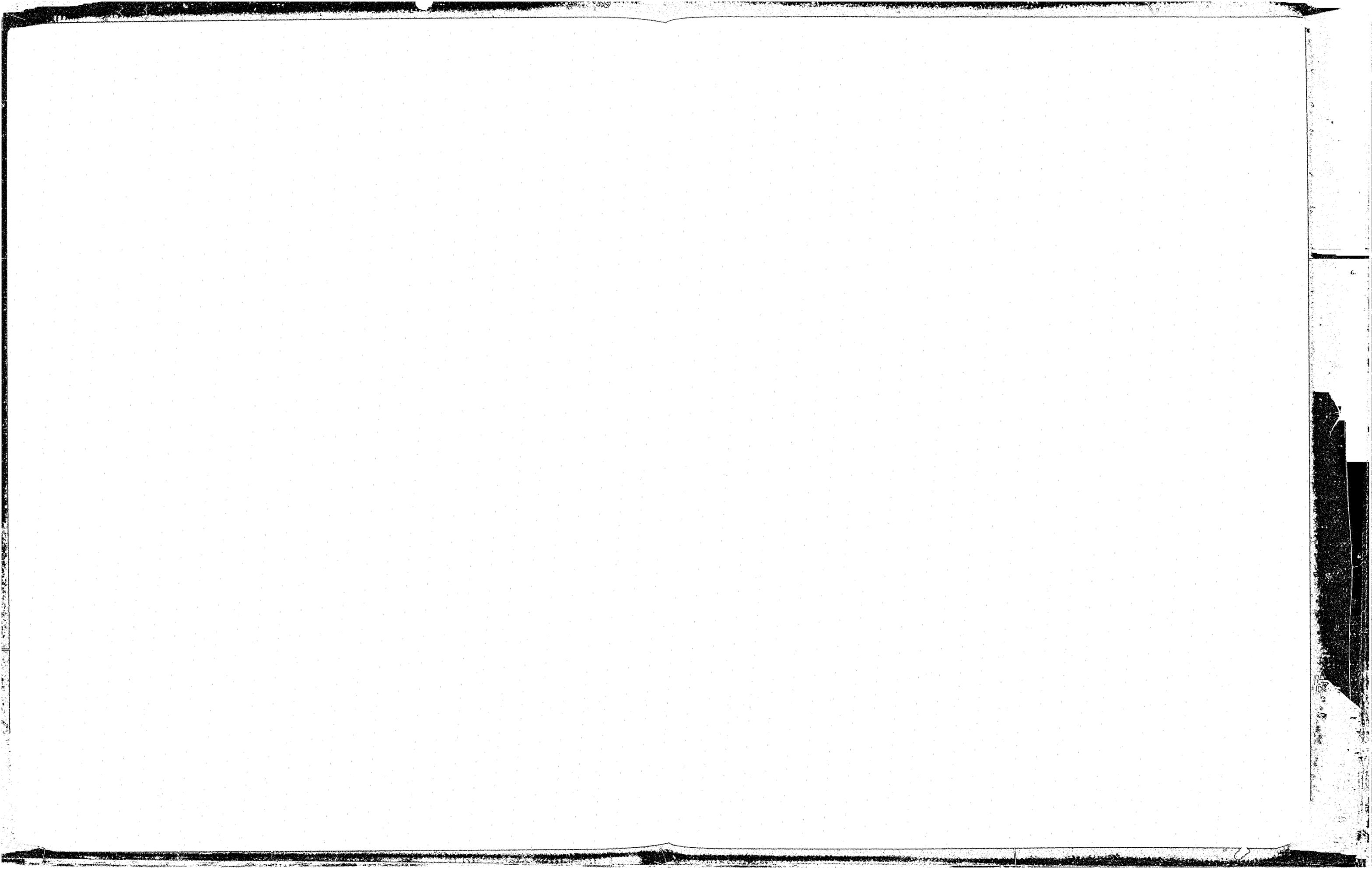
44. Does your department investigate all traffic accidents occurring within your jurisdiction?
 ___1. Yes ___2. No

IF NO, what type of accidents are investigated? (check all items)

- a. Fatal accidents only?
 ___1. Yes ___2. No
- b. All injury accidents?
 ___1. Yes ___2. No
- c. Injury accidents and property damage accidents when vehicle cannot be driven from scene?
 ___1. Yes ___2. No
- d. Other?
 ___1. Yes ___2. No
 Specify: _____
45. Does your department have written procedures defining which traffic accidents are to be investigated and which are to be cleared by driver's report?
 ___1. Yes ___2. No
46. Does your department use bi-lateral reporting for accident cases?
 ___1. Yes ___2. No
47. Does your department have written procedures for handling hit and run cases?
 ___1. Yes ___2. No
48. Does your department have written procedures for the control and investigation of those accidents requiring unique measures as follows: (check all items)
- a. Handling traffic accidents at scene of disasters; e.g. plane crashes, multiple train, explosions?
 ___1. Yes ___2. No
- b. Handling occupants in submerged vehicles?
 ___1. Yes ___2. No
- c. Handling radioactive or inflammable materials?
 ___1. Yes ___2. No
- d. Construction site accidents?
 ___1. Yes ___2. No

49. Do officers in your department identify and take measurements of skid marks in serious accident cases?
 ___1. Yes ___2. No
50. Does the department have written procedures for the following accident investigation activities? (check all items)
- a. Interviewing principals and witnesses?
 ___1. Yes ___2. No
- b. Recording the evidence obtained in an interview?
 ___1. Yes ___2. No
- c. Taking statements and depositions?
 ___1. Yes ___2. No
- d. Writing up citations at an accident scene?
 ___1. Yes ___2. No
- e. Handling the juvenile offender?
 ___1. Yes ___2. No
51. Do officers in your department make follow-up investigations to insure that hazardous conditions have been corrected by the proper agency?
 ___1. Yes ___2. No
52. Are attempts made by investigating officers to determine if individuals involved in traffic accidents were wearing seat belts?
 ___1. Yes ___2. No
53. Do the officers in your department hold a pretrial case review with the prosecutor prior to going to court?
 ___1. Yes ___2. No
54. Does your department provide for evidence in court? (check both items)
- a. Photographs of accident scene?
 ___1. Yes ___2. No
- b. Sketches of accident scene?
 ___1. Yes ___2. No
55. Does your department have written rules and procedures for: (check all items)
- a. The operation of emergency equipment on the police vehicle while proceeding to accident scenes?
 ___1. Yes ___2. No

(Question 55 continued on next page)



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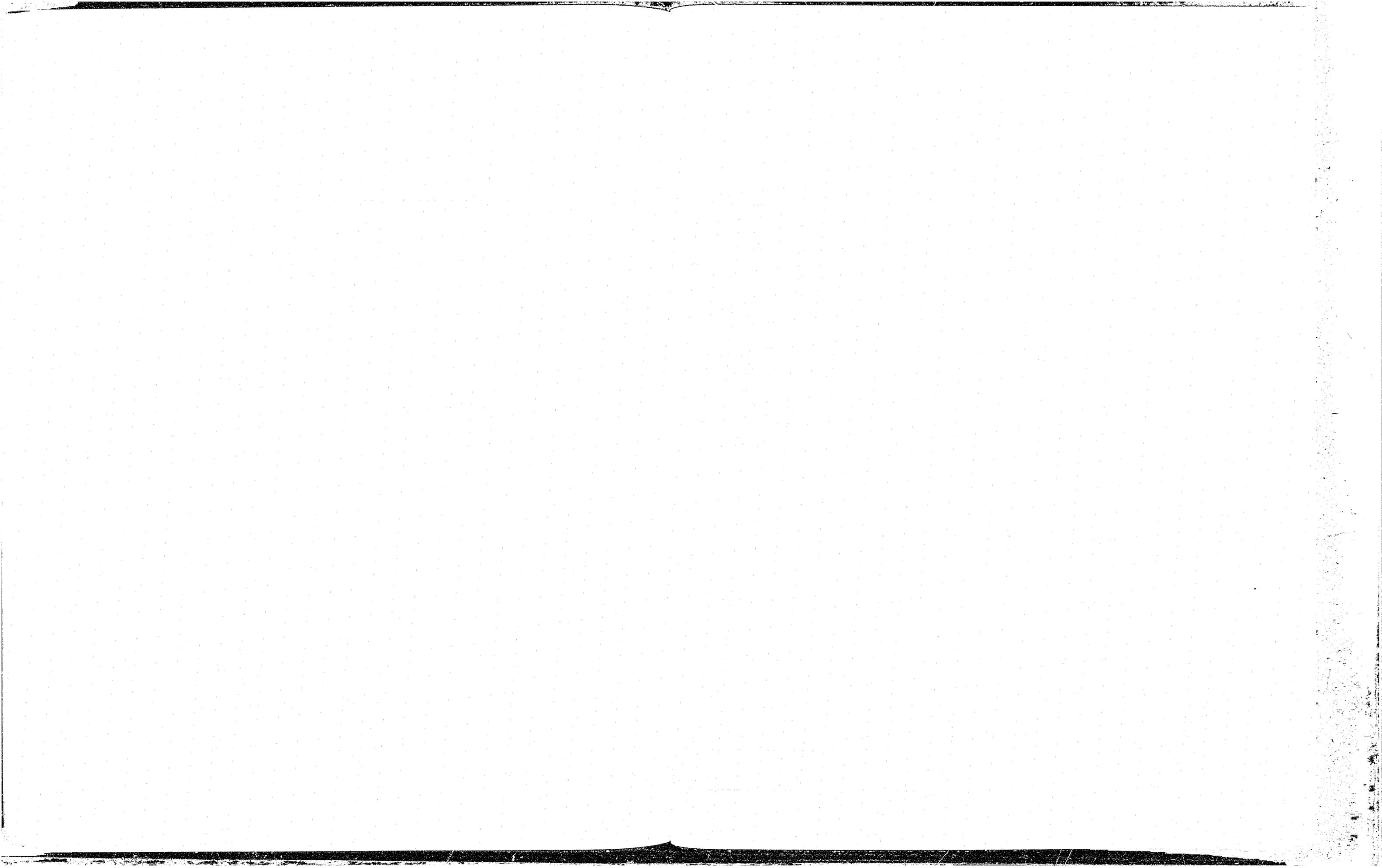
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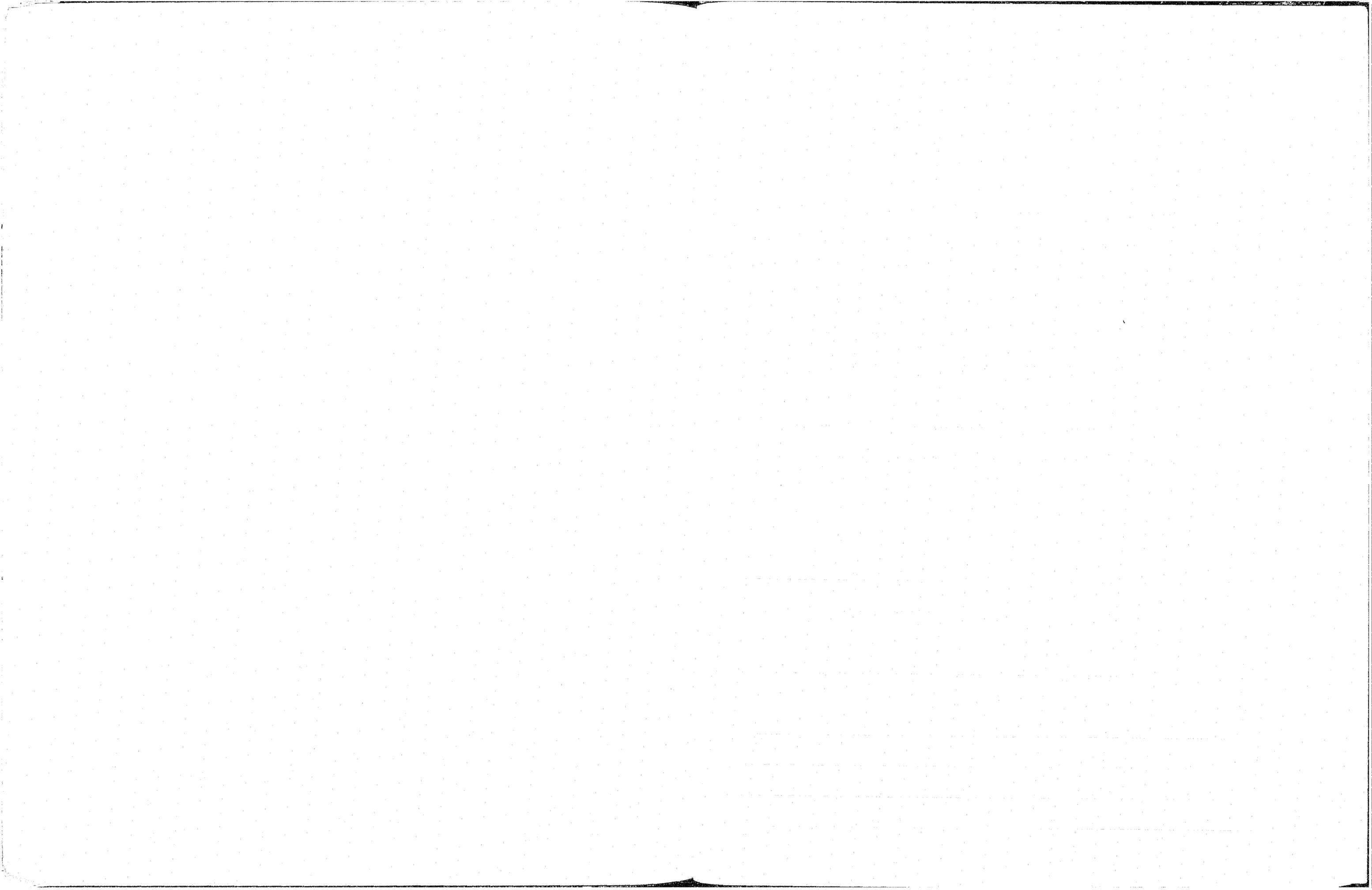
REMARKS

(If additional space is needed, attach extra pages)

HIGHWAY SAFETY DIVISION
INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

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8. Indicate the average annual personnel turnover rate for sworn employees, excluding those released while on probationary status.

_____ %.

9. Indicate the average annual percentage of sworn personnel released while on probationary status.

_____ %.

10. Department organizational chart—including separate breakdown of traffic division if available.

11. City map indicating patrol beats.

MANAGEMENT PRACTICES

1. Does your department have written policies as a guide for conducting police traffic services available to members of your department? If yes, obtain a copy.

2. Is each officer provided a copy of all up-to-date department policies, procedures, rules and regulations?

3. Does your department have written enforcement policies or procedures for:

- _____ a. Apprehension of violators
- _____ b. Patrol methods
- _____ c. Removal of abandoned vehicles
- _____ d. Impounded vehicles
- _____ e. Motorist aid
- _____ f. Injured persons
- _____ g. Warning tickets
- _____ h. Use of radar or other speed detection device.

4. Is every police traffic service position in your department described in writing?

5. How is planning for police traffic service programs and activities accomplished in your department?

6. Is this planning based on assessments or studies of police traffic service problems and needs in your community? Briefly explain base data utilized.

7. Have any of your police traffic services programs been evaluated by an outside agency during the past five years?

8. List and describe federally-funded projects conducted within your department.

9. Does your department record and maintain files on tickets issued and their disposition?

ENFORCEMENT PROCEDURES

1. Does a traffic division, bureau or unit exist within your department? If yes, when was it instituted?

2. If yes, does this "unit" perform in a staff function (records) or as an operational unit, or both? Explain.

3. Do you use an Officer's Daily Activity Report form? Obtain copy.

4. What is the average time spent per day on police traffic services by traffic officers?

5. Total hours spent, in 1971, for all officers in traffic court

_____ on duty court hours per man

_____ off duty court hours per man

6. Department's Enforcement Index in 1969, 1970, 1971, current year to date.

7. Department's conviction rate in 1969, 1970, 1971, current year to date.

8. Is plea bargaining or charge reduction a problem?

9. Do you have a written planned enforcement program?

10. If so, is your planned enforcement program based on:

- a. all reported accidents
- b. police investigated accidents only
- c. other

11. What data source is used? (Specify hand-tally or computer.)

12. Are all officers primarily responsible for traffic enforcement duties provided an analysis of accident data on a regular basis? Who performs this analysis?

13. How often is this data supplied?

14. Is first-line supervision and staff review conducted as a follow-up control on planned police traffic service activity?

ACCIDENT INVESTIGATION

1. Does your agency investigate all motor vehicle accidents within your jurisdiction that you have knowledge of? Describe reporting threshold.

If no, explain.

2. Do you have a written policy concerning the following:

a. What accidents will be fully investigated?

b. What accidents will be reported?

c. Hit-and-run accidents?

3. Who has primary responsibility for investigation of fatal accidents? (Patrol, Detective Bureau, etc.)

4. Under what circumstances is an "in-depth" investigation conducted within your jurisdiction? Whose decision?

5. Who is responsible for conducting the "in-depth" investigation? How does this investigation differ from a regular accident investigation? (Photographs, impoundment, notarized statements.)

6. Do other law enforcement agencies routinely respond to motor vehicle accidents within your jurisdiction? If yes, are these accident statistics included in your records?

7. Does your department have a written policy or a procedure for making arrests at the scene of an accident? (An accident not witnessed by an officer?)

8. Have multi-disciplinary accident investigation teams operated within your jurisdiction?

9. Describe any bi-level accident investigations performed by your agency.

10. List specialized accident investigation equipment utilized (templates, tapes, cameras, etc.)

Accident Statistics

a. Does your agency participate in the National Safety Council's Standard Motor Vehicle Traffic Accident Reporting Program? If yes, obtain summary for last three (3) years.

Accident Statistics (Continued)

b. If National Safety Council summary or other summary format is not available supply the following information:

Total number of accidents investigated by your department for:

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Current Year to Date</u>
Fatals				
Personal Injury				
Property Damage				
Total				

Total number of accidents reported to your department. (Short form - not regular investigation.)

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Current Year to Date</u>
Property Damage				
Personal Injury				

POLICE TRAFFIC SERVICES RESOURCES

Personnel Strength (whole department).

	TOTAL NUMBER			<u>Current Year to Date</u>
	<u>1969</u>	<u>1970</u>	<u>1971</u>	
Uniformed Officers				
Patrolmen				
Corporals				
Sergeants				
Lieutenants				
Captains				
Others				
Plain Clothes (Sworn Personnel)				
Officers				
Supervisors				
Command				
Civilian Personnel (Non-Sworn)				
Clerks, Stenos, Secretaries, Dispatchers, etc.				
Janitors, Mechanics, Custodians				

Personnel Strength (Continued)

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Current Year to Date</u>
Other - Civilian Crossing Guards, Parking Control, etc.				
Total Department Full-Time				
Part-Time Depart- ment personnel (List all)				
Total Department Personnel				

Traffic Unit

a. Indicate number of personnel, by rank, assigned specifically to your traffic unit for the last three (3) years.

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Current Year to Date</u>

* Indicate by asterisk, part-time employees.

Training

1. Do your officers receive formal recruit training prior to field assignments? If no explain.

2. If so, is this training provided by:

_____	Your Agency
_____	State Training Council
_____	State Police
_____	Local College
_____	Other Agency (Specify)

3. What are the total hours of formal recruit training provided?

<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
-------------	-------------	-------------	-------------

4. Of the total recruit training hours, how many of these are traffic or traffic-related subjects?

5. Does your department provide in-service traffic training?

How often? What types of subjects?

6. Does your department conduct regular roll-call traffic training? Describe.

7. Does your department provide advanced traffic training for officers with traffic responsibilities?

How often?

8. If possible, obtain curriculum of recruit, in-service and advanced training programs, particularly traffic subjects.

9. Has an evaluation been made of your department's training and educational objectives?

By whom?

10. List graduates of specialized PTS training courses (long and short course - NUTI, CMSC, MSU, State or FBI short courses). List by name and indicate course title, date of graduation and present assignment of officer (i. e., Patrolman J. Smith, NUTI, long course, 1971, traffic division).

Equipment

1. Indicate police equipment utilized primarily for traffic supervision, both number and type.

1969 1970 1971 1972

Motor Vehicles

Solo Motorcycles

3-Wheel Motorcycles

Motor Scooters

Radar Units

Vascar Units

Other electro-mechanical speed measuring devices

Aircraft

Other

ENFORCEMENT ACTIVITY STATISTICS

1. Secure copies of annual summaries of traffic law enforcement activity for the last three (3) years and to date, including hazardous, pedestrian and parking violations.
2. If prepared summaries are not available collect data to complete forms below.

1. <u>Hazardous Traffic Violations</u>	NUMBER OF CASES BASED ON ARRESTS AND CITATIONS					
	Refer IACP Classifications (I)	A Pending 1/1/69	B Initiated in 1969	C Total	D Adjudicated in 1969*	E Convictions in 1969
1. Hazardous Traffic Law Violations (M. V.)						
2. Pedestrian Traffic Violations						
3. Total Hazardous Violations (Nos. 1 and 2)						
4. <u>Non-Hazardous Violations</u> Other Traffic Violations (IACP) Classifications (II)						

*Cases adjudicated refers to the number of cases processed through the courts or in the Traffic Court Violations Bureau.

ENFORCEMENT ACTIVITY STATISTICS

1. Secure copies of annual summaries of traffic law enforcement activity for the last three (3) years and to date, including hazardous, pedestrian and parking violations.
2. If prepared summaries are not available collect data to complete forms below.

1. <u>Hazardous Traffic Violations</u>	NUMBER OF CASES BASED ON ARRESTS AND CITATIONS					
	Refer IACP Classifications (I)	A Pending 1/1/70	B Initiated in 1970	C Total	D Adjudicated in 1970*	E Convictions in 1970
1. Hazardous Traffic Law Violations (M. V.)						
2. Pedestrian Traffic Violations						
3. Total Hazardous Violations (Nos. 1 and 2)						
4. <u>Non-Hazardous Violations</u> Other Traffic Violations (IACP) Classifications (II)						

*Cases adjudicated refers to the number of cases processed through the courts or in the Traffic Court Violations Bureau.

ENFORCEMENT ACTIVITY STATISTICS

1. Secure copies of annual summaries of traffic law enforcement activity for the last three (3) years and to date, including hazardous, pedestrian and parking violations.
2. If prepared summaries are not available collect data to complete forms below.

1. <u>Hazardous Traffic Violations</u> Refer IACP Classifications (I)	NUMBER OF CASES BASED ON ARRESTS AND CITATIONS					
	A Pending 1/1/71	B Initiated in 1971	C Total	D Adjudicated in 1971*	E Convictions in 1971	F Pending 12/31/71
1. Hazardous Traffic Law Violations (M. V.)						
2. Pedestrian Traffic Violations						
3. Total Hazardous Violations (Nos. 1 and 2)						
4. <u>Non-Hazardous Violations</u> Other Traffic Violations (IACP) Classifications (II)						

*Cases adjudicated refers to the number of cases processed through the courts or in the Traffic Court Violations Bureau.

ENFORCEMENT ACTIVITY STATISTICS

1. Secure copies of annual summaries of traffic law enforcement activity for the last three (3) years and to date, including hazardous, pedestrian and parking violations.
2. If prepared summaries are not available collect data to complete forms below.

1. <u>Hazardous Traffic Violations</u> Refer IACP Classifications (I)	NUMBER OF CASES BASED ON ARRESTS AND CITATIONS					
	A Pending 1/1/72	B Initiated by 9/1/72	C Total	D Adjudicated by 9/1/72*	E Convictions by 9/1/72	F Pending as of 12/31/72
1. Hazardous Traffic Law Violations (M. V.)						
2. Pedestrian Traffic Violations						
3. Total Hazardous Violations (Nos. 1 and 2)						
4. <u>Non-Hazardous Violations</u> Other Traffic Violations (IACP) Classifications (II)						

*Cases adjudicated refers to the number of cases processed through the courts or in the Traffic Court Violations Bureau.

3. List number of traffic cases initiated by your department for:

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Current Year to Date</u>
Manslaughter				
Negligent Homicide				
Felonious Assault				
Reckless Driving				
First Offense DUIL				
Second Offense DUIL				
Third Offense DUIL				
Driving While Visibly Impaired				
Driving While Suspended or Revoked				

4. What percentage of speeding citations issued are the result of utilizing electromechanical devices?

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Current Year to Date</u>

MISCELLANEOUS

1. Does your department engage directly in the traffic engineering function? Describe.

2. Briefly describe traffic-related educational programs instituted at any level (grade school, high school, driver education, adult education, driver improvement school, etc.).

3. Has your department instituted any special programs designed to apprehend the driver when license has been suspended or revoked? (Road blocks, stake outs, individual home and job surveillance.)

4. Describe any specific countermeasures you have implemented to detect and apprehend the drinking driver.

5. Are you now using video tape, motion pictures on CCTV? In what capacity (training, processing drunk drivers, etc).

6. Does your department conduct random vehicle inspection lane checks?

7. Do the state police or any other law enforcement agency operate in your jurisdiction? If so, is your department providing men and assistance?

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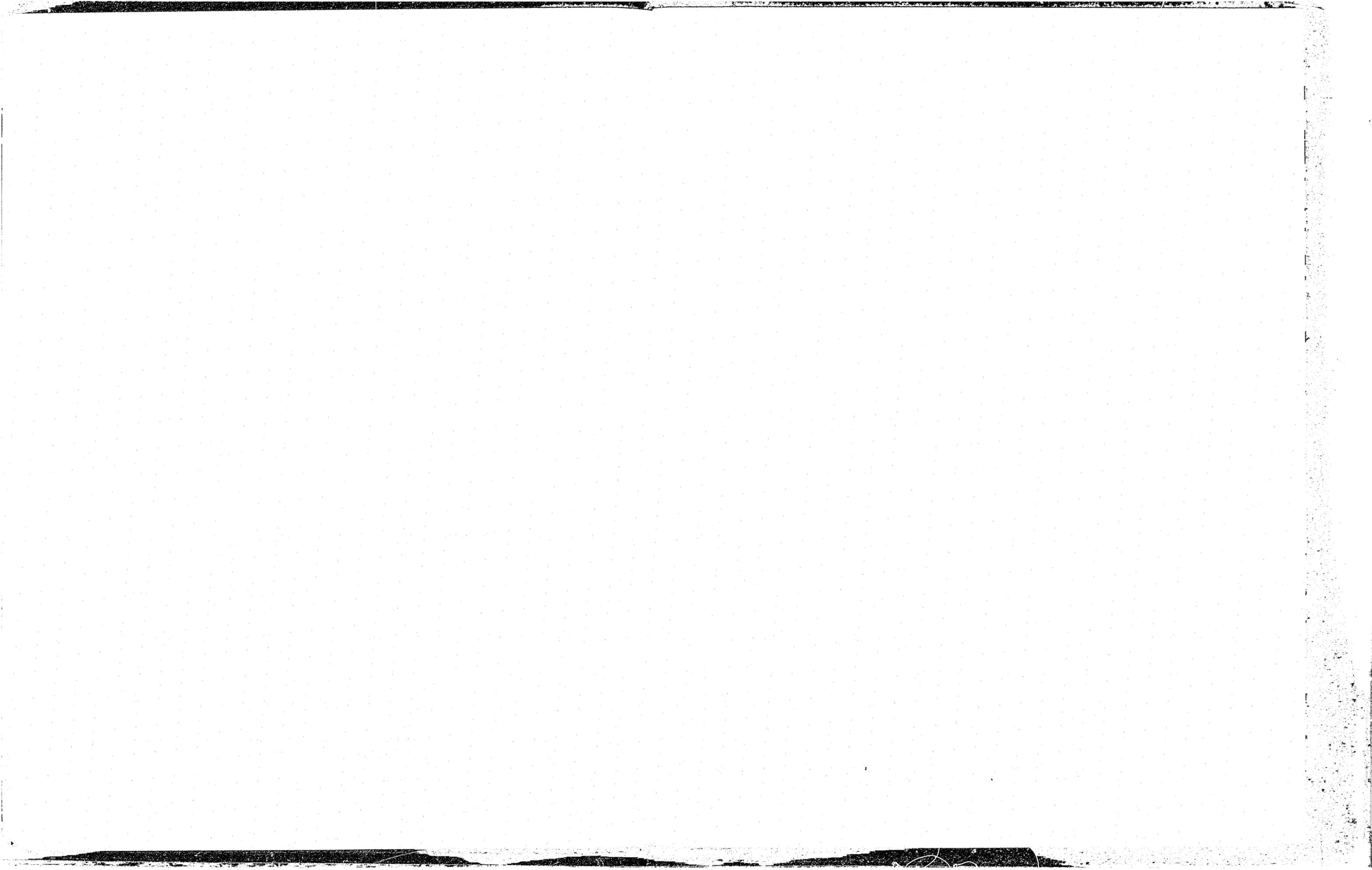
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