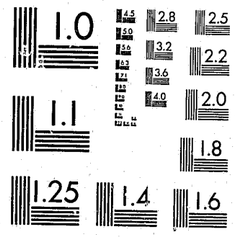

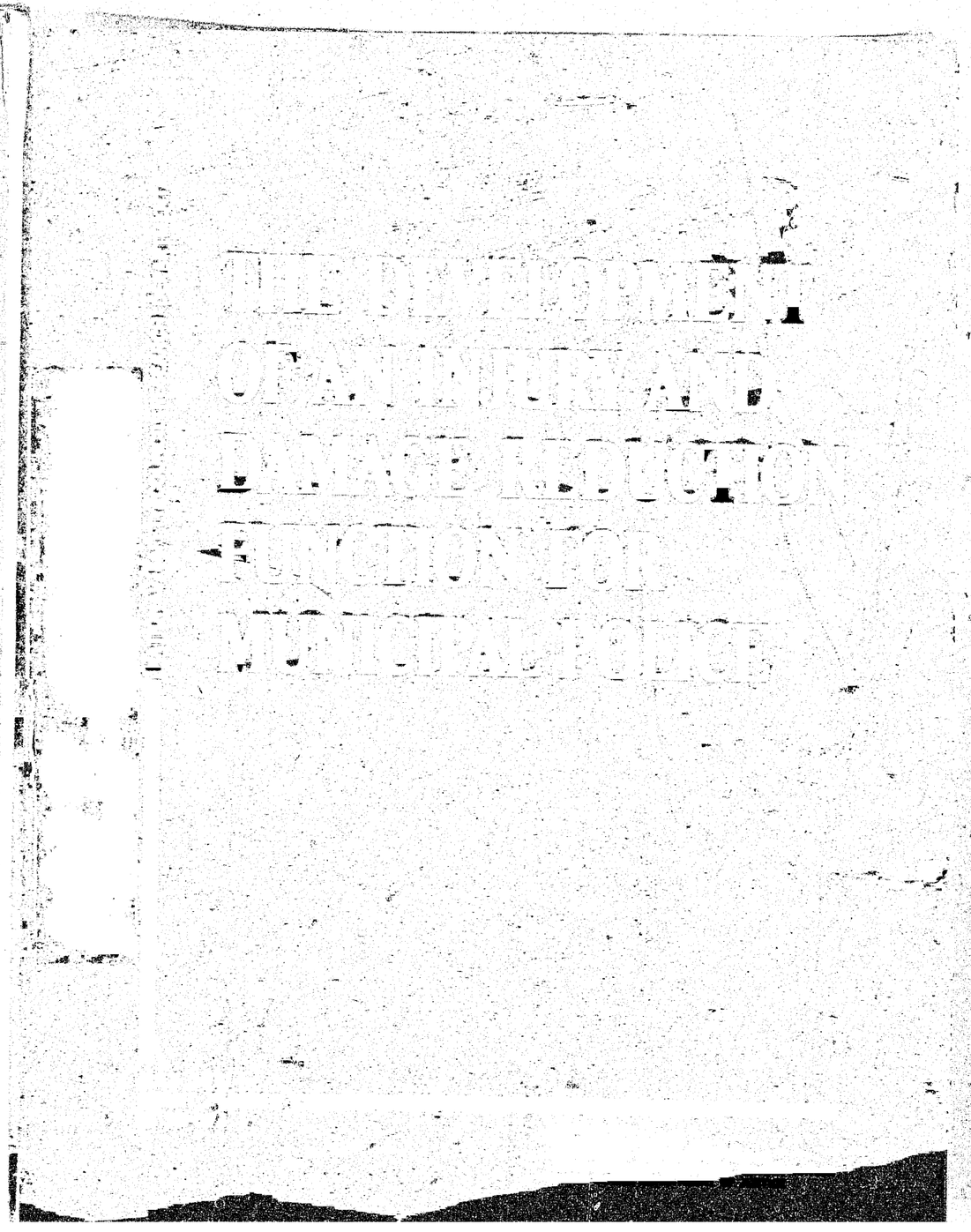

THE DEVELOPMENT OF AN INJURY AND DAMAGE REDUCTION FUNCTION FOR MUNICIPAL POLICE

FINAL REPORT

by

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SUMMARY

The purpose of this project was to define both vehicular and non-vehicular accident, injury and damage problems among municipal police and to recommend programs and methods designed to reduce them. Cooperation of municipal police departments throughout the United States was enlisted, and available accident injury and damage data was collected. Site visits were made to 10 departments and general survey questionnaires were completed by 118 departments to obtain data on injury and damage reduction programming. Supplemental data on injury and damage events were also collected, and literature covering police and industrial safety activity was reviewed.

The primary injury and damage areas found to be most costly to police departments were motor vehicle accidents and police action injuries. Review of police injury and damage reduction programming indicated definite weaknesses in record keeping, training and operational procedures. Vehicle and equipment specifications and inspection systems were also found to be deficient in terms of injury and damage reduction considerations. Current municipal police injury and damage reduction concern has been placed on reducing motor vehicle accidents while formal programming to reduce personnel injuries has not been given the degree of emphasis required, particularly at the supervisory level.

Recommendations for the establishment of an integrated injury and damage reduction function were presented. Selected general and specific countermeasures for various police vehicular and non-vehicular injury and damage problems were given. Injury and damage event record forms were presented and described as were complete programs for training and inspection. The need to adopt a well-planned approach to injury and damage reduction was emphasized as was the necessity to build evaluative procedures into all programs.

Since the data gathered represented a preliminary study of municipal police injury and damage experience, the immediate necessity for the field evaluation of all recommendations was stressed.

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INTRODUCTION

Objectives

The purpose of this project is to define the on-duty injury and property damage control problems among municipal police; to recommend countermeasures to reduce these problems; and to present a management support structure for the operation of an injury and damage reduction function. Specifically work was undertaken to achieve the following objectives:

1. A definition of on-duty police injury and property damage experience on a nationwide basis in two major areas: a) vehicular - during routine and emergency operation and b) non-vehicular - involving the various elements of patrol and investigative operation

2. The production of an organized body of countermeasures in the form of training, equipment and procedural recommendations intended to reduce the frequency and severity of municipal police injury and property damage events

3. A recommended internal organizational and management structure within which an injury and damage control program can be effective

4. A system of reporting, recording, analysis and internal communication that will enable departments to: a) define their injury and property damage problems, b) assess the effectiveness of countermeasure efforts and c) provide for comparability of record keeping among municipal departments throughout the nation.

Approach

Data were gathered from a variety of sources using survey, site visit and literature review methods:

1. To assist in defining police injury and accident experience on a natonwide basis, all municipal departments in cities with a population of 500,000 or more were contacted and requested to submit monthly summaries of motor fleet and personnel injury and property damage experience for the years 1967, 1968 and 1969. A random sampling of municipal departments in cities with less than 500,000, stratified according to geographic region and population size, was also contacted. This information was supplemented by a review of police injury and accident experience as available in the literature.

2. To assist in producing countermeasures, supplemental accident and exposure reports covering 11 areas of police operations were completed by 10 large municipal departments over an eight-week period. Also, motor fleet accidents for the years 1969 and 1970, all personnel injuries during 1970 occurring

in one municipal department and Workmen's Compensation reports covering municipal police injuries for the year 1969 from a large industrial state were analyzed. The data analysis was augmented by a review of police and general industrial safety and training literature.

3. To assist in recommending organizational and management structural elements, two-day site visits were made to 10 cooperating municipal departments to review the organization of personnel safety procedures and accident recording systems. General safety program administration information was requested from all departments in the injury and accident sample group. Literature on police management and industrial safety management was reviewed.

4. To assist in creating an injury and accident records system, report forms and record systems of the participating police departments were reviewed. National standards for recording motor fleet and occupational accidents and injuries were reviewed.

The exact method of data collection will be presented as it pertains to the results in each section.

Scope

The results of this project are limited to the functioning of municipal departments. State, county and sheriff's police are not included. The quantity and quality of the data retrieved are limited by the mode of recording currently in place in the departments contacted. Except for site visits, no observational techniques were employed. The current mode of data collection among municipal departments did not permit the use of such systems analysis tools as fault tree and failure-mode and effect-analysis required to provide more definitive recommendations. Also, when attempts were made to define critical injury and property damage problems in terms of cost the data were found to be quite meager and difficult to obtain. The recommendations contained in this report, however, can be used as an initial step to analyzing police injury and property damage problems on the local level.

This report is concerned with two main countermeasure areas: a) preventing injury and property damage occurrences and b) reducing their severity when they do occur. To this end, wherever possible, available information on the man-machine and environment factors contributing to injury and property damage was collected. The philosophy underlying recommendations is that injury and property damage events result from a series of contributory factors that can be isolated through analysis. Once isolated, these "causal" chains can be interrupted at appropriate points by changes in procedure, training or equipment. No attempt was made to investigate the emergency medical services available to police or to recommend changes in these services that might contribute to lessening severity of injury or increasing the possibility for more rapid and successful rehabilitation.

Finally, the recommendations made in this report constitute the best judgments of the investigators and the police advisors serving on the evaluative committee. It is necessary that they be implemented and evaluated in the field so that modifications can be made, if and where appropriate.

Clarification of Terms

The focus of this investigation is rather broad since it attempts to describe and offer measures to reduce injuries and property damage occurring while police are operating in the line of duty. Injury and property damage can result from accidents that traditionally are thought to involve non-intentional acts on the part of the victim or other individuals who may have contributed to the occurrence. Due to the unique nature of police work, incidents that involve intentional acts on the part of individuals who inflict injury or property damage must also be examined. It should be recognized from the outset that the occupational injury reporting standard (American National Standards Institute, Z-16), though it accounts for fatalities and injuries produced accidentally and intentionally, does not provide a clear distinction between these two circumstances.

So that the distinction between "accidental" and "intentional" injury and damage is clear, the following threefold classification system will be used when discussing recommended injury and damage reduction planning and action:

1. Accident: denotes the unintentional occurrence of injury and damage resulting from a combination of man-machine-environment circumstances, e.g., back injuries, slips, falls, strains and most vehicle accidents. Although such injury or damage at times occurs in the act of confronting or pursuing an offender, there is no intent on the part of that person to injure the police officer or damage department property.

2. Assault: denotes the occurrence of injury and damage resulting from the intentional action of an offender or an accomplice to inflict injury or damage in the course of a direct confrontation with police during summons, field interrogation, arrest, search, transportation or crowd control activities.

3. Ambush: denotes the occurrence of injury and damage resulting from the action on the part of persons intending to inflict injury or damage to personnel or property while police are carrying out non-confrontive routine activities such as patrol and investigation.

Throughout this discussion the words "injury and damage reduction" (IDR) will be used synonymously with the word "safety," which is used more commonly to describe occupational or industrial programs. It is felt that this terminology more aptly describes the intent of programs designed for police since they are often called upon to perform under "unsafe" conditions and in hazardous circumstances over which they have little control. Colonel William Armstrong of the Baltimore Police Department (1) describes the nature of police operation as follows:

"When a police officer receives a call for service his status changes from the ordinary hazard to extraordinary hazard because he may be confronted with a high rate of speed in responding or a confrontation upon arrival or the subduing of a prisoner or he may chase a suspect through hazardous areas such as dilapidated steps, termite ridden porches, etc."

The goal of this study is to provide programs intended to reduce the unwanted results of such encounters as well as to reduce the frequency and severity of injury and damage resulting from accidents.

The term "injury and damage reduction" is also intended to convey a clearer understanding of the purpose of the safety function. Pope and Nicolai (3) observe that management too often misunderstands the meaning of the word "safety;" while the word "accident" seems to be confused with "injury." Lack of clarity about these terms obscures the true objectives of the IDR function, namely the location and definition of operational errors involving "incomplete decision-making, faulty judgments, administrative miscalculations and just plain stupidity."

The injury and damage reduction function is broad in scope, covering a number of program areas. In police departments, it focuses primarily on programs to prevent and mitigate personnel injuries and property damage. As a result, both personnel or occupational and motor fleet IDR programs must be considered. Throughout this report the word "function" will subsume both types of "programs." It is intended that such reference will help to alter the common tendency of management to equate the "safety program" with a single activity be it motor fleet accident prevention or on-the-job injury prevention.

The word "reduction" rather than "control" is used to specify the safety function to emphasize the distinction between "breakthrough" and "control" management described by Juran (2) and exemplified in system safety. As the word implies, "breakthrough" management sets improvement of performance as its goal rather than maintenance or "control" of a certain level of performance. It also involves the use of specific techniques to identify and eliminate chronic obstacles to better performance.

Background

Of utmost importance to the successful completion of this project was the cooperation of the Police Advisory Committee (PAC), which met during the first month of the activity and again during the final phase of the project.

The Police Advisory Committee met on Friday, July 31, 1970. The purpose of this meeting was threefold:

1. To provide an orientation to the entire project, its objectives and the sequencing of activities

2. To obtain general comments and recommendations about the objectives and activities as presented in the original proposal

3. To get specific suggestions about the contents of the general survey questionnaire and the most practical method of contacting police departments to insure the highest rate of return.

Prior to the July 31 meeting, all PAC representatives received a copy of the proposal for review. During the initial session of the meeting, the objectives of the project were described briefly and the project schedule was presented. The representatives were then asked to comment on the general thrust of the project. No significant changes in contemplated activites resulted from this discussion.

In the following sessions the PAC group was divided into three workshop subgroups and the contents of a first draft of the general survey questionnaire were discussed. All sessions were taped and reviewed, but not transcribed. The most significant discussions were those that provided a realistic appraisal of the general nature of accident record keeping and safety programming in municipal departments.

A second PAC meeting was held on June 7-8, 1971, to review the results of the project to date. At that time there was high agreement about the basic IDR management and organizational recommendations. Two workshops were held to discuss recommendations in both the injury and damage record keeping and training portions of the report.

It is felt that obtaining early assistance from departments in planning facilitated the scheduling of site visits and the completion of the supplemental data collection phase of the project. This procedure was highly beneficial and should be used wherever possible.

Members of the Police Advisory Committee included:

Sgt. Kenneth Anker
New York Police Department

Col. William E. Armstrong
Baltimore Police Department

Sgt. Neil Boot
Chicago Police Department

Mr. Eugene Dzikiewicz
The Traffic Institute
Northwestern University

Mr. Edward J. Emond
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Chief Kenneth E. Fox
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International Association of
Chiefs of Police

Mr. Frederick W. Schmidt
Government of District of Columbia

Sgt. Gerald E. Taylor
Seattle Police Department

Our deepest thanks go to all of these fine men and to their departments without whose help this project could not have been completed.

Organization of Report

This report is divided in two major sections. The first section, Chap-1 to 5 inclusive, discusses:

1. The methods of data collection and analysis used in the report (Chapter 1)

2. Current municipal police injury and damage experience based on the data collected from the general survey and other sources (Chapter 2)

3. Current industrial, motor fleet and system safety practice based on a review of the literature (Chapter 3)

4. Current municipal police injury and damage reduction practice as revealed by site visits and general survey information (Chapters 4-5).

The second section, Chapters 6 to 12 inclusive, provides detailed recommendations for the establishment of an injury and damage reduction function within police departments including:

1. Organization and management (Chapter 6)
2. Planning (Chapter 7)
3. Operation (Chapter 8)
4. Training (Chapter 9)
5. Inspection and other support programs (Chapter 10)
6. Record keeping (Chapter 11)
7. Countermeasure recommendations (Chapter 12).

Appendices A through E contain the survey forms, data element descriptions and tables that are referred to throughout the first section. Appendices F through P provide examples of policy, record forms, specifications and checklists that are referred to throughout Chapters 6 through 10. Appendices Q through T contain standards, record forms and coding guides referred to in Chapter 11.

Tables or figures containing a letter prefix are presented in appendices. All other tables and figures contain a numerical prefix designating the chapter in which they appear.

CHAPTER 1

DATA COLLECTION AND ANALYSIS

Police departments throughout the country participated in supplying data for this report. General survey forms were completed by 118 departments; 10 completed supplemental data forms and 10 cooperated in hosting site visits.

To maintain anonymity, departments completing general survey or supplemental reports will be referenced by a population group number and by a number within the population group indicating department size in relation to other departments in the group. Site visit departments will be referenced by a letter code.

General Survey

A general survey was undertaken to define current injury and damage problems and to assess the general level of police safety activity. The general survey questionnaire was constructed using input from the Police Advisory Committee. The contents of the questionnaire were reviewed for clarity by a representative of the safety unit of the Chicago Police Department and changes in wording or content were made as recommended.

The questionnaire (Appendix A) is divided into five sections:

I Police motor fleet or vehicular accident reporting and recording system

II Police occupational (non-vehicular) accident reporting and recording system

III Police personnel strength and administration

IV Safety program administration

V Civil disorders and accident experience.

The emphasis of sections I and II is on the depth, quality and retrievability of current injury and property damage records. These sections also request summaries of accident and injury experience for the years 1967, 1968 and 1969. No attempt is made to ask for accident or injury summaries other than what are available currently. Section III focuses on exposure information in terms of personnel strength for the last three years. Also, a brief coverage of several key safety-related personnel practices is included. Section IV deals solely with safety program management, including such items as designation of safety responsibility within a department, frequency of safety discussions with the Chief, existence of safety budget and training practices. Section V attempts to isolate the unusual occurrences that may have influenced accident experience.

Table 1-1

Return Rates for General Accident Survey by
Geographic Region and Population Group

Geographic Region	Population Groups														Total		Return Rate
	I		II		III		IV		V		VI		VII				
	*S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	
New England	1	1	-	-	4	4	2	2	3	3	1	1	2	1	13	12	92%
Middle Atlantic	4	3	2	1	2	2	2	2	2	1	2	0	2	1	16	10	62%
East North Central	5	3	2	2	2	1	4	3	-	-	2	2	2	2	17	13	76%
West North Central	2	2	3	3	3	3	2	2	2	2	3	3	2	2	17	17	100%
South Atlantic	3	3	3	3	3	3	2	2	2	2	2	1	1	0	16	14	88%
East South Central	1	1	2	2	2	2	1	1	3	1	3	3	1	0	13	10	77%
West South Central	4	4	1	1	2	2	3	3	1	1	2	1	1	1	14	13	93%
Mountain	2	2	2	2	2	2	3	3	2	2	2	2	1	1	14	14	100%
Pacific	4	4	2	2	2	2	2	2	2	2	2	1	2	2	16	15	94%
Total	26	23	17	16	22	21	21	20	17	14	19	14	14	10	136	118	87%
Return Rate		88%		94%		96%		95%		82%		74%		71%		87%	

* S = Sent
R = Received

Roman Numerals = I - 500,000 and over; II - 250,000 to 500,000; III - 100,000 to 250,000; IV - 50,000 to 100,000; V - 25,000 to 50,000; VI - 10,000 to 25,000; VII - Under 10,000

The police sample was selected to give coverage of cities with a population of 500,000 or more. This group included approximately 93,500 police personnel or 44 percent of the total municipal police population. Also, a sample of 108 municipal police departments was drawn so that two cities were included from six population groups under 500,000 in each of the nine standard geographic areas in the U. S.

National Safety Council field service representatives assisted with the general survey and in the larger cities, explained in person the purpose and contents of the questionnaire to the Chief or his assistants. Of the 135 departments contacted, 118 completed the survey. The return rate for various regional and population groups is presented in Table 1-1. A list of cooperating departments is presented in Appendix A.

Supplemental Report Data

Supplemental report forms (Appendix B) were prepared to gather accident, injury and exposure data in areas selected as representative of the important accident and injury producing aspects of police operations. These areas are:

1. Vehicular
   a. Motorcycle driving
   b. Pursuit driving
   c. Emergency driving
   d. Routine driving
   e. Parked and rolling vehicle
2. Arrest Sequence
   a. Field interrogation procedures
   b. Summons, prearrest procedures
   c. Arrest and search procedures
   d. Transportation of prisoner procedures
3. Other
   a. Assistance and rescue operations
   b. Unprovoked assaults and ambushes.

Within the vehicular group, the pursuit, emergency and routine forms concentrate on items about the driver, his vehicle and the circumstances in which the reported activity takes place. Driver related items include age; years on force; assignment; type, amount and recency of training; previous accident experience; use of safety equipment; and rest and fatigue factors such as the amount of uninterrupted driving time and the time between start of shift and time of accident. Vehicle related items include age, type, model, mileage, presence of emergency equipment and presence of defects. Items related to the circumstances surrounding reported events include driving problems encountered; the use of emergency equipment; the use of different types of roads; traffic density patterns; speed patterns; and light, weather and road conditions.

The parked or rolling automobile form deals with accidents involving attended and unattended vehicles. Many of the same items used on other

vehicular forms are included in this form. In addition, the circumstances surrounding curb-parked, double-parked and shoulder- or median-parked vehicles are highlighted.

The motorcycle forms also contain many of the items found on the other vehicular forms, but the focus is on the equipment and driving problems peculair to cycles.

The forms within the arrest sequence group are similar in content. They differ only in a few items related directly to the portion of the sequence covered by the form in question. Items related to the police officer include height, weight, sex, race, age, years on force, assignment, use of equipment, training, physical fitness and fatigue factors. Information on the subject involved in the incident includes age, height, weight, sex, race and understanding of English. Another item deals with whether the subject used profanity, acted belligerently, tried to escape or threatened or assaulted the officer.

Although not considered as part of the arrest sequence group, the form dealing with unprovoked assaults, ambushes and booby traps is patterned after the forms in the arrest sequence group. The assistance and rescue form contains many of the same items used in the arrest sequence forms, but emphasis is placed on the training procedures, equipment and problems encountered in rescue operations.

Sampling Procedure

In order not to burden any single department by requiring the use of all supplemental forms, the different types were allocated among 12 geographically dispersed departments. Size of force determined the quantity of forms received by each department. An effort was made to assign forms of a given type to respective departments on the basis of their indicated activity in the topic under consideration. For example, forms dealing with motorcycles were sent to departments known to have a high volume of motorcycle assignments. In the case of pursuit driving, an attempt was made to distribute forms to departments with varying policies on pursuit regulation.

The 12 departments were telephoned and asked to cooperate in data gathering. Of those contacted, 10 agreed to participate and returned completed forms. Nine of the 10 cooperating departments were in cities of over 500,000 in population. The tenth was in a city of over 250,000.

On February 12, 1971, accident and injury-type forms were mailed to the cooperating departments. The following excerpts from the transmittal letter explain the proposed local data collection procedures.

> "For the next two months please have all officers involved in a motor vehicle accident resulting in injury or property damage fill out the appropriate supplemental form. In addition, have all officers injured during a non-motor vehicle activity complete the appropriate supplemental form. In all cases, please attach copies of the corresponding state, city and departmental accident and/or injury report form(s)."

> "If possible we would like to receive copies of the completed supplements and attached departmental forms every two weeks so that the information can be keypunched immediately."

On March 1, 1971, exposure forms were mailed to cooperating departments. Each department that received an accident or injury form received a supply of the corresponding exposure forms. Again, an excerpt from the transmittal letter will serve to explain proposed local data collection procedures.

> "At some time during the month of March convenient for you, we would like you to distribute each type of form on a random basis, holding as much as is administratively feasible to the following goals.
>
> 1. Wide dispersion throughout the department to those officers likely to encounter the police work topic covered by a particular form.
>
> 2. Allocation of the number of forms per shift on the basis of the per shift allocation of personnel likely to complete the forms.
>
> 3. Selection by lot of the individual officer to complete a single form.
>
> The whole process of distribution, completion and collection, should not take much time, perhaps one or two weeks. When complete, please return the forms all at the same time, but if at all possible before April 1, 1971."

Method of Analysis

Appendix B contains the tabulation of responses to most items on each of the 19 supplemental forms. Basic exposure and accident information that dealt with training, equipment and procedural variables was analyzed for presentation. The statistical treatment of the data was limited in most cases to one level chi square comparisons between accident and non-accident report groups. For this reason all interpretations must be considered as preliminary, subject to further analysis or investigation.

The questionnaire data collected are believed to reflect current police practice. However, factors that affect reliable interpretation of the results of analysis may be present. For example, departments may not have distributed exposure forms on a random basis as requested. Respondents may have failed to answer an item, misunderstood an item or even falsified an item that, if answered truthfully, could involve a violation of department rules and regulations. To counteract such respondent bias on the exposure form the officers were not asked to sign their names. This procedure could not be used in conjunction with the injury report since it was accompanied by the departmental report that already contained the officer's name.

Accident and Injury Data File

To further supplement the general survey data, a large department agreed to provide access to its accident and injury records. The following groups of data were obtained:

1. Medical records for both vehicular and non-vehicular injuries for 1970
2. Traffic accident records for 1969 and 1970
3. Supplemental traffic accident information for 1970.

From these data groups three data files were created, as indicated below:

File Name	Contents	Number of Cases
MEDIC	1970 Medical Records	4693
IPAX	1969 and 1970 Traffic Records	4914
IALL	1970 Traffic Records	2434
	1970 Supplemental Traffic Records	1774 matched
	1970 Vehicular Medical Records	370 matched

Appendix C contains a list of the variables in these files.

The department's medical records are kept in a large log book. Check marks were placed in appropriate columns to record injury information. The actual man days lost were recorded also. Tissue layover sheets were prepared to copy information from the log sheets in appropriate form for direct key-punching. Injuries that resulted in man days lost carrying into 1971 were followed through February, 1971, to update the loss figure. The MEDIC file was established with the 4693 medical records gathered for 1970.

The department keeps a folder on each traffic accident involving a police officer. The folder contains a copy of the traffic accident form used by the police to report accidents involving the general public or the police. Each form has an identification number that was recorded and keypunched in order to access the computer traffic accident data file maintained by the city. Of 5214 records requested, a computer tape of 4914 records with matching identification numbers was produced. These records were used to establish the IPAX file.

The record folders also contain supplemental traffic accident information on the officer's years of service, whether the police vehicle was marked or unmarked, the kind of assignment the officer was on when the accident occurred, the cost of repairs and whether the accident was considered preventable by the officer. This additional information was hand-coded and keypunched. It then was matched with corresponding records from the traffic accident data file as the first step in establishing the IALL file. Since a unique number was not available to match records from the two sets, matching was made on the basis of day, month, hour, and when needed, age and manner of collision. Of 2494

supplemental traffic records available for matching, 1774 were matched. Since the supplemental traffic data and the medical data contained the officer's star number, the IALL file was completed by matching 1970 vehicular medical records to the available supplemental traffic records. Although 921 vehicular medical records were available, only 370 matched.

Method of Analysis

The basic analytical tool used to examine these data files, besides the simple comparison accumulation of frequencies, was a technique developed by the National Safety Council's Statistics Department referred to as "tree search" analysis. This technique probes discrete data for general relationships.

The data in the IPAX file in Appendix C contain a number of variables such as age, driver action and manner of collision. Within each variable are a number of separate categories.

In tree search analysis, a given subset of categories is chosen from any variable in the data file. Variables chosen for analysis need not be limited so that a subset may be defined narrowly or broadly depending on the purpose of analysis.

The choice of a subset limits the total number of accidents considered to those that are identified by the categories selected. Accidents within the subset chosen can be arrayed then on any other variable not used in defining the subset. For example, suppose in a sample of 1,000 accident cases, the investigator wished to examine "rear end collisions," in relation to an age variable comprised of drivers "29 years of age and under" and "30 years of age and older." Suppose the array generated for the "rear end collision" subset shows 75 accident cases for drivers "29 and under" and 25 accident cases for drivers "30 and over," as in column A1 in Table 1-2. In tree search, the subset array in column A1 is then compared with the array of the entire

Table 1-2

Example of Tree Search Analysis on a Subset of "Rear End Collision" Accident Cases as Related to Two Age Groupings

Age	A1	A2	P	E	LB	UB	Sig.
29 and Under	75	600	.6	60	47.3	72.7	Hi
30 and Over	$\frac{25}{100}$	$\frac{400}{1,000}$	.4	$\frac{40}{100}$	29.6	50.4	Lo

sample (A2), including the subset, on the chosen variable, i.e., age. A third array is then formed that allocates the number of accidents in the subset in proportion to the distribution of the total number of accident cases on the chosen variable as shown in column P. The subset accident cases are then allocated in proportion to the total cases as shown in column E, which forms the array of expected values.

Each expected value in array E is assumed to be the mean of a Poisson distribution. Since the standard deviation of any Poisson distribution is defined as $\sigma = \sqrt{\mu}$, a range of standard deviations above and below each expected value can be determined. If the observed number of subset cases for any category in the variable lies outside the expected range for that category (the expected value plus or minus a given number of standard deviations), it is considered to be significant. In Table 1-2, LB represents the lower boundary of the significance range and UB represents the upper boundary. Since the upper boundary of the "29 and under" expected range is 72.7 accident cases and 75 "29 and under" cases were observed, the number of "29 and under" cases is said to be significantly higher than expected. In this example the accident frequency in the "30 and over" category is significantly low.

The Poisson distribution approaches the normal distribution as the number of cases in a sample increases. To probe the data files developed for this report, the .10 level was chosen, corresponding to 1.64 standard deviations in the normal distribution. Since only preliminary directions were sought, the use of a more stringent significance level was avoided.

As the number of subset cases becomes smaller, the Poisson distribution differs more and more from the normal distribution making the use of the assumption of 1.64 standard deviations of the Poisson distribution for significance testing at the .10 level less and less tenable. For this reason, tree search analyses should not be viewed as precise measures, rather they should be seen as a useful measure to detect molar relationships.

Use of Force Data

Examination of the narrative portion of one police department's "use of force" report, revealed a wide range of specific information relating to a variety of arrest situations, about 35 to 40 percent of which resulted in a police injury. Information pertaining to the time of day, condition of offender, activity of the officer, implements used, whether and at what times an offender was violent, etc., was present in some reports and not others.

To obtain more definitive information, the report was redesigned in a multiple choice format. Officials involved consented to use the new form designed to elicit the department's required information for each incident plus data on equipment use and injury occurrence as it relates to various phases of the arrest sequence.

This information was gathered to trace non-vehicular police injuries through a chain of causally related events, in other words, to examine the injury situation not so much as a product but as a process. The redesigned "discharge of firearms and use of force" report (Appendix D) was used for

five months from January through May, 1971. One hundred fifty-eight completed forms were returned. Where the new and previous forms overlapped, the information was substantially the same.

Method of Analysis

Chi square analysis was used to determine: a) the relationship between demographic and "event" variables and injury occurrence, b) the relationship of the use of force in its various aspects to injury occurrence and c) patterns among the variables in the typical injury case as related to the nature, agent and severity of the injury.

Workmen's Compensation Data

The workmen's compensation department of a large middle atlantic state provided data on 2,686 non-vehicular accidents occurring to municipal police in that state in 1969. A tabular presentation of the 13 available variables appears in Appendix C. This particular data format modeled after the American National Standard, Z-16, provides only general descriptive information. Further analysis and countermeasure development is not feasible since the data lack specific reference to police function, type of activity, restraining or protective equipment used, etc. Injury severity measures such as time loss or medical costs are also unavailable.

CHAPTER 2

MUNICIPAL POLICE INJURY AND DAMAGE EXPERIENCE

This chapter considers the vehicular and non-vehicular injury and property damage (ID) experience of municipal police departments. The results for both areas of ID experience are presented in the same manner. First, the current level of accident, injury and damage record keeping in municipal police departments is assessed. Next, the results obtained by gathering available summaries of ID experience from cooperating departments and other sources are presented. Finally, procedural, training and equipment factors found to be significantly related to the injury and damage event are discussed.

When appropriate, ID summaries from reporting departments are presented according to the following population groupings:

I	Over 500,000	IV	50,000 to 100,000
II	250,000 to 500,000	V	25,000 to 50,000
III	100,000 to 250,000	VI	10,000 to 25,000
		VII	Under 10,000

Since the availability and comprehensiveness of information is markedly different among departments in the various population groups, the number of departments providing information in each population group is included in all tabular material. Similar variation in available information was encountered for three reporting years, 1967, 1968 and 1969. Wherever possible, however, only three-year averages are presented in the text. Data based on the general surveys and other explanatory tables are presented in Appendix E.

Motor Fleet Accident Record Keeping

All municipal police departments surveyed keep a record of motor fleet accidents (Table E-1). The records include both injury and property damage events (IDE). Also, most departments use more than one form to report accidents, since frequently it is necessary to provide the city or state government with a report from compensation or other purposes.

As shown in Table E-2, only 51 (43%) of the respondents indicated the use of what might be considered a nationally accepted reporting format following either American National Standards Institute (ANSI) Standard D15 or National Highway Traffic Safety Administration (NHTSA) standards. The frequency of standard report usage declines according to decreasing department size as represented by population group. Even so, a large percentage (35%) of population group I departments are using only workmen's compensation or internally developed forms for IDE reporting.

The lack of a nationally accepted reporting system markedly affects efforts to estimate the seriousness of the police motor fleet accident problem precisely in terms of injuries and cost of damage. Of particular concern is the failure of many departments to be able to report data in even the most fundamental categories, e.g., accidents by type of vehicle. A standardized system of recording injury and damage experience is sorely needed if the true scope of the municipal police motor fleet accident problem is to be presented.

Table 2-1

Vehicular Accident, Injury and Cost Data
General Survey Departments
Three-Year Averages 1967 - 1969
Total All Vehicles

Pop. Group	N	Vehicles Per Dept.	N	Mileage Per Vehicle	N	Accidents Per Vehicle	N	Accidents Per 1,000,000 Mi.	N	Dollar Cost Per Acc.	N	Injury Per Acc.	N	Days Lost Per Inj.
I	19	702	19	19,100	19	.721	20	38.35	10	144.39	8	.361	4	14.24
II	13	164	10	21,612	13	.857	10	40.27	8	141.43	8	.224	6	12.15
III	17	84	16	21,871	16	.780	15	35.65	6	144.48	7	.330	4	3.14
IV	16	31	15	29,092	14	.792	13	26.52	9	236.73	10	.232	9	6.35
V	12	15	12	30,962	11	.886	11	28.63	10	185.85	10	.122	9	7.43
VI	13	7	12	30,867	13	.636	12	19.41	10	274.07	10	.161	4	13.69
VII	9	4	9	32,868	9	.660	9	20.09	8	290.78	8	.015	1	0.00
I	19	702	19	19,100	19	.721	20	38.35	10	144.40	8	.361	4	14.24
II, III	30	120	26	21,717	29	.827	25	38.34	13	142.07	15	.250	10	10.40
IV-VII	50	15	48	30,017	47	.788	45	25.61	35	228.85	37	.171	19	7.12

N - is given for each ratio calculated since only those departments reporting sufficient data to calculate a given ratio were used to arrive at that figure. Departments were included if at least one of the three years was reported.

The retrieval of data is also hampered by the fact that comparatively few departments have records kept in automatic data processing form. The data in Table E-3 reveal that 88 departments maintain motor fleet accident frequency records using manual processing. The frequency of departments reporting manual processing increases for injury and vehicle damage cost records. In private and public property damage cost categories over 23 percent of the departments indicated that the information was not retrievable.

Accidents by Vehicle Type and Mileage Driven

Table 2-1 shows the total vehicular IDE data from responding departments for the three-year period 1967 - 1969. The number of departments reporting each category of information drops off markedly in the areas of damage cost and injury. Also, the damage costs reported include only the direct vehicle repair costs. Cost of injury, cost of damage to private and public property and indirect costs are not included.

Average miles traveled per vehicle increases as the size of the department represented by population group decreases. The rate of accidents per vehicle is lowest in smaller departments; however, the average cost of damage when accidents do occur is twice as great in smaller departments as in larger departments. In contrast, the ratio of injuries per accident is twice as high in larger departments as in smaller departments. This rather puzzling circumstance may be due to the inadequacy of injury record retrieval in the smallest departments. Only one of the 65 accidents reported by population group VII departments resulted in injury to an officer.

The magnitude of the municipal police department motor fleet accident problem probably is expressed best by the number of accidents per vehicle. Approximately three-quarters of police fleet vehicles are involved in accidents each year. In contrast, it is estimated that only one-quarter of the U.S. male driver population in the 20 - 59 age group is involved in vehicular accidents each year (5). To put this difference into perspective it should be noted that during the same time period police vehicles are driven two to three times as many miles as the average non-police vehicle. Even with this variation in exposure the police vehicle accident ratio indicates that accidents are occurring at a higher rate to police drivers than to the average male driver in a similar age group.

Table 2-2 presents the National Safety Council estimate of the urban motor vehicle accident rates for the U.S. driver population for the years 1967 - 1969. These rates are compared with the municipal police rates for the same years derived from the general survey data for all vehicles and for autos alone. From these data also, it is apparent that municipal police are involved in more vehicular accidents than the general driving population.

A further delineation of accident experience by type of vehicle is given in Table 2-3, showing fleet accident, injury and cost experience. In population group I, only limited data on injury and cost by type of vehicle were available. None of these departments was able to provide number of days lost per injury by vehicle type and only three were able to provide some information on the number of injuries per accident by vehicle type.

Table 2-2

Estimated U. S. Urban Vehicle Accident Rates
vs. Municipal Police Vehicle Accident Rates
for the Years 1967, 1968 and 1969

Year	U. S. Driver Urban Accidents per 1,000,000 Vehicle Miles	Municipal Police Accidents per 1,000,000 Vehicle Miles	
		All Vehicles	Autos
1967	20.26	35.68	32.43
1968	20.25	38.95	35.62
1969	20.47	37.58	40.36

Across population groups, autos have the highest accident per vehicle rate in police fleets. The average yearly mileage accumulated by autos, however, is far greater than for other vehicles. When exposure mileage is considered, the two-wheel motorcycle becomes the most potent contributor to the vehicle accident problem in all population group departments except I, where vans and trucks show a rate of 47.65 accidents per 1,000,000 miles driven.

The high hazard of two-wheel motorcycle driving is exemplified more clearly by the severity measures in Table 2-3. Injuries per accident range from four to five times higher for two-wheel cycles than for other vehicles in the police fleet. On the average, days lost and cost of damage are higher in all population groups. These data strongly reinforce opinions expressed by others (4, 8) that departments should reevaluate the use of the two-wheel motorcycle for traffic law enforcement purposes. In sharp contrast, injury and damage rates for three-wheel motorcycles are comparatively low. The use of the three-wheel cycle for limited traffic purposes can be recommended on the basis of these data.

Table 2-4 moves from consideration of various vehicle types to three-year data on auto accidents in reporting departments from the respective population groups. Departments in groups II through V report an annual rate of approximately one accident for every fleet vehicle. In group I departments this rate is somewhat lower involving four out of every five fleet autos in an accident yearly. Departments in groups VI and VII show better experience than the others reporting. Data in Table 2-5 depicting auto accident experience for reporting departments reveal a steady rise in rates over the years 1967, 1968 and 1969. Clearly, the motor fleet accident problem among municipal police is not improving.

Table 2-3

Vehicular Accident, Injury and Cost Data
General Survey Departments
Three-Year Averages 1967 - 1969
Type of Vehicle Comparison

Pop. Group	Vehicle Type	N	Veh. Per Dept.	% of Total Veh.	N	Mileage Per Veh.	N	Acc. Per Veh.	N	Acc. Per 1,000,000 Miles	N	Dollar Cost Per Acc.	N	Inj. Per Acc.	N	Days Lost Per Inj.
I	Autos	19	528	75.2	17	22,129	14	.816	15	37.43	3	145.40	1	.316	0	--
	Vans/Trks.	12	45	6.4	7	12,232	6	.746	4	47.65	2	101.47	0	--	0	--
	2-Whl. MC	18	85	12.1	17	10,072	14	.255	14	25.69	3	154.21	2	1.294	0	--
	3-Whl. MC	16	43	6.1	13	5,369	12	.187	11	34.91	2	150.59	0	--	0	--
	Total Veh.	19	702	--	19	19,100	19	.721	20	38.35	10	144.39	8	.361	4	14.24
II, III	Autos	32	84	70.0	23	26,121	24	1.086	21	39.41	10	127.35	15	.185	9	11.02
	Vans/Trks.	23	7	5.8	11	13,496	15	.317	10	21.67	4	187.90	8	.204	2	8.00
	2-Whl. MC	26	20	16.7	18	11,309	18	.453	14	46.26	5	196.26	10	.654	6	12.77
	3-Whl. MC	25	10	8.3	16	4,704	16	.231	12	27.89	2	52.00	5	.233	1	7.50
	Total Veh.	30	120	--	26	21,717	29	.827	25	38.34	13	142.07	15	.250	10	10.40
IV-VII	Autos	51	12	80.0	45	35,565	43	.996	39	28.46	33	232.82	36	.148	14	4.82
	Vans/Trks.	25	2	13.2	22	13,883	16	.215	14	18.02	3	346.67	3	.111	1	0.00
	2-Whl. MC	24	3	20.0	19	5,544	21	.365	16	59.77	8	385.28	11	.714	7	20.52
	3-Whl. MC	20	2	13.3	15	4,382	16	.202	13	43.57	2	107.80	4	.263	1	7.50
	Total Veh.	50	15	--	48	30,017	47	.788	45	25.61	35	228.85	37	.171	19	7.12

N - is given for each ratio calculated since only those departments reporting sufficient data to calculate a given ratio were used to arrive at that figure. Departments were included if at least one of the three years was reported.

Table 2-4

Vehicular Accident, Injury and Cost Data
General Survey Departments
Three-Year Averages 1967 - 1969
Autos

Pop. Group	N	Vehicles Per Dept.	N	Mileage Per Vehicle	N	Accidents Per Vehicle	N	Accidents Per 1,000,000 Mi.	N	Dollar Cost Per Acc.	N	Injury Per Acc.	N	Days Lost Per Inj.
I	19	528	17	22,129	14	.816	15	37.43	3	145.40	1	.316	0	---
II	14	115	9	25,524	11	1.180	8	44.24	4	106.48	8	.164	5	12.51
III	18	59	14	26,741	13	.937	13	34.68	6	166.78	7	.258	4	7.44
IV	17	23	15	33,818	11	1.044	10	31.67	7	250.48	8	.222	6	5.42
V	12	11	12	39,597	11	1.138	11	28.56	9	182.47	11	.099	7	2.63
VI	13	6	9	35,029	12	.745	9	22.36	9	270.31	10	.125	2	6.88
VII	9	4	9	34,854	9	.708	9	20.32	8	290.76	8	.015	1	0.00
I	19	528	17	22,129	14	.816	15	37.43	3	145.40	1	.316	0	---
II, III	32	84	23	26,121	24	1.086	21	39.41	10	127.35	15	.185	9	11.02
IV-VII	51	12	45	35,565	43	.996	39	28.46	33	232.82	36	.148	14	4.82

N - is given for each ratio calculated since only those departments reporting sufficient data to calculate a given ratio were used to arrive at that figure.

Table 2-5

Three Years of Vehicular Accident Rates
for Autos and Total Vehicles
Population Groups I through VII Combined
1967 - 1969

Type of Vehicle	Year	N	Accidents	Mileage	Accidents Per 1,000,000 Miles
Total Vehicles	1969	90	13,469	357,862,960	37.58
Total Vehicles	1968	82	12,366	316,600,862	38.95
Total Vehicles	1967	75	8,988	251,457,632	35.68
Autos	1969	75	11,210	277,536,571	40.36
Autos	1968	67	6,837	191,876,777	35.62
Autos	1967	59	4,158	128,153,539	32.43

Analysis of the police accident problem is complicated by the fact that police drivers are called upon to do emergency and pursuit as well as routine driving. Table 2-6 presents data showing the percent of accidents for the various types of driving for departments recording this information in 1969. In some cases, departments were able to give only the combined total of pursuit and emergency run accidents.

There is wide variation among the reporters in all categories. The variation stems from a number of factors including local policy, definition of pursuit or emergency driving and comprehensiveness of recording. Also, the total percentage of accidents in the three driving categories is weighed markedly by the contribution of department 3 in population group I. To present a more representative picture of the contribution of each category of accidents to the total, the percents reported by departments 3, 7, 8, 15 and 22 were considered as scores; and means, standard deviations and confidence intervals were produced for each category as follows:

	$\bar{X}$	σ	95% Confidence Interval		
Routine Driving	80.1	8.9	72.2	--	87.9
Emergency Driving	9.8	6.1	4.5	--	15.2
Pursuit Driving	10.1	6.0	4.9	--	15.3

Clearly, routine driving accidents comprise a large part of the police accident problem in terms of frequency. Without exposure data indicating the percent of pursuit, emergency and routine miles driving, however, the seriousness of the routine accident problem as opposed to the problem of emergency or pursuit accidents remains unassessable. Data from the supplemental reports collected from cooperating departments indicate that the relationship between emergency, pursuit and routine driving exposure mileage by percent is as follows:

Routine Mileage	90%
Emergency Mileage	7%
Pursuit Mileage	3%

Though these estimates must be considered preliminary, they strongly suggest that both pursuit and emergency runs contribute disproportionately to the police accident picture when mileage is considered.

Since emergency and pursuit runs are made at higher speeds than routine driving, the likelihood of more severe accidents should be increased. Injury and damage cost data presented in Figure 2-1 for the only department reporting this information, reflects this trend for the three-year period 1967 - 1969. Pursuit and emergency accidents account for almost 30 percent of the department's total

Table 2-6

Vehicular Accidents Occurring During
Emergency Runs, Pursuit Runs and Routine Driving
1969

Population Group	Department[1]	Accidents						Total
		Emergency Runs		Pursuit Runs		Routine Driving		
		f	%	f	%	f	%	
I	1	371[2]	17.9[2]			1,700	82.1	2,071
	3	19	1.4	36	2.6	1,322	96.0	1,377
	7	166	20.0	51	6.1	614	73.9	831
	8	35	9.5	28	7.6	305	82.9	368
	15	25	6.9	59	16.3	278	76.8	362
	22	33	11.4	21	17.9	130	70.7	184
	24	59[2]	15.4[2]			325	84.6	384
II	13	14[2]	12.7[2]			96	87.3	110
Total[3]		278		195		2,649		3,122
Mean[3]		56	8.9	39	6.2	530	84.8	624

[1] Number indicates population size rank within population group from general survey departments list.

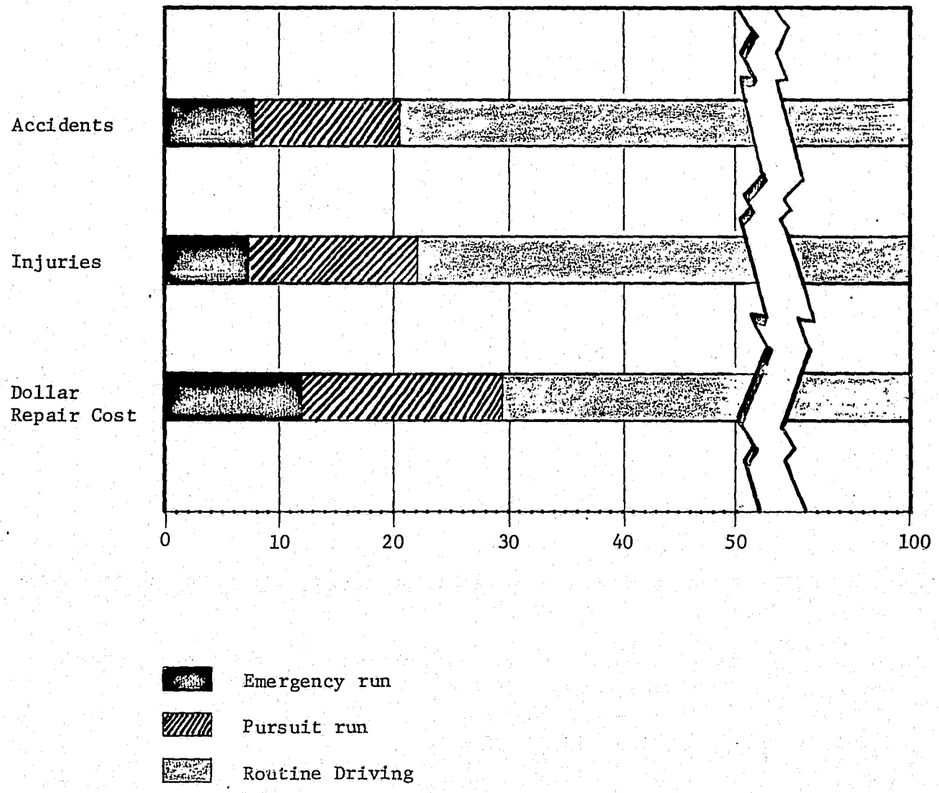
[2] Reported figure includes accidents occurring during emergency run and pursuit run combined, no further breakdown was provided in the department's records.

[3] Includes departments 3, 7, 8, 15 and 22 only.

Fig. 2-1

Proportions Based on Three Years Accident Experience
Of Vehicular Emergency Runs vs. Pursuit Runs vs. Routine Driving
City of Population Size Rank 8 of Population Group I

1967 - 1969



vehicle repair costs or an increase of approximately 38 percent over what would be expected based on proportionate frequency of these accidents.

Assignment, Equipment and Training Factors

Demographic data for officers responding to supplemental report forms are presented in Table 2-7. The similarity of the median age and years of service values across report groups demonstrates the worth of the exposure sampling technique as a practical investigative method.

Table 2-7

Comparison of Median Age, Years on Force
and Years on Assignment Among Respondents
to Vehicular Supplemental Reports

Driving Category	Form Type	Total No. Received	Median Age	Median Years on Force	Median Years on Assignment
Routine	Accident	476	28.7	4.5	2.4
	Exposure	413	29.2	4.4	2.3
Emergency	Accident	64	28.1	4.1	2.1
	Exposure	145	28.6	4.5	2.4
Pursuit	Accident	7	29.2	2.5	2.2
	Exposure	25	28.0	5.5	2.5
Parked	Accident	67	30.9	4.4	2.1

Daily Personnel Assignment

A viewpoint often presented in support of two- versus one-man patrol is that drivers of one-man cars are more likely to be involved in accidents since they have the task of observing criminal activity whil driving (1). The findings in this study do not support this contention.

Data in Table 2-8 indicate that one- or two-man assignment to vehicles as reported is not related significantly to the occurrence of routine accidents while the police vehicle is in motion. Similar analysis of pursuit, emergency and routine moving accidents combined also failed to show significant differences between one- and two-man car assignment. In addition, data in Table 2-9 suggest that switching officer assignment from two- to one-man cars does not increase the likelihood of accident occurrence. In fact, the nearly significant relationship indicates a beneficial effect of rotation, since a disproportionate number of accidents occur to those remaining in two-man cars.

Table 2-8

Routine Moving Accidents and
Type of Assignment

Assignment on Report	Accident Group	Non-Accident Group	Total
1 Man	128.0 (132.4)	186.0 (181.5)	314.0
2 Man	88.0 (83.5)	110.0 (114.4)	198.0
Total	216.0	296.0	512.0

$\chi^2 = 0.67$, df = 1, N.S.

Table 2-9

Routine Moving Accidents and
Assignment Rotation

Assignment Rotation	Accident Group	Non-Accident Group	Total
1 - 1[1]	97.0 (102.0)	155.0 (150.0)	252.0
1 - 2	8.0 (13.7)	26.0 (20.2)	34.0
2 - 1	13.0 (11.3)	15.0 (16.6)	28.0
2 - 2	69.0 (59.9)	79.0 (88.0)	148.0
Total	187.0	275.0	462.0

$\chi^2 = 7.19$, df = 3, N.S.

[1] 1 - 1 is one-man usual assignment, one-man today,
1 - 2 is one-man usual assignment, two-man today,
etc.

Daily Vehicle Assignment

Table 2-10 shows the frequency of routine driving accidents while the police vehicle was in motion by the type of daily vehicle assignment. The distributions of the accident and non-accident groups are significantly different. The direction of the differences suggests an effort should be made to assign the same vehicle to officers whenever possible. No significant relationship was found, however, between usual type of vehicle driven and reporting of type or number of defects.

Table 2-10

Routine Moving Accidents and
Usual Vehicle Driven

Usual Vehicle Driven	Accident Group	Non-Accident Group	Total
Same Vehicle Driven	149.0 (170.6)	261.0 (239.3)	410.0
Same Type of Vehicle Driven	129.0 (107.3)	129.0 (150.6)	258.0
Total	278.0	390.0	668.0

$\chi^2 = 12.15$, df = 1, $p < .001$

Use of Emergency Equipment

Current practice in many cities limits the use of sirens on emergency and pursuit runs. Two reasons presented for this position are that other drivers frequently do not hear the siren and fail to yield right-of-way and that those drivers who do hear it may exhibit panic reactions. Either of these two circumstances are thought to result in more danger for the police officer and the likelihood of increased accidents.

Data in Tables 2-11 and 2-12 show the day and night distributions of emergency, pursuit and routine moving accidents where the main combinations of emergency equipment were reported as used. The non-accident distribution was computed on the basis of the pursuit and emergency non-accident reports only, since the routine exposure form did not provide this information.

Total 2-11

Pursuit, Emergency and Routine Moving Accidents
and Use of Emergency Equipment Under Daylight Condition

Equipment	Accident Group	Non-Accident Group	Total
Siren Only	3.0 (5.4)	15.0 (12.5)	18.0
Turret Only	17.0 (7.9)	9.0 (18.0)	26.0
Siren and Turret	18.0 (24.6)	63.0 (56.3)	81.0
Total	38.0	87.0	125.0

$\chi^2 = 19.20$, df = 2, $p < .001$

Table 2-12

Pursuit, Emergency and Routine Moving Accidents
and Use of Emergency Equipment
Under Night, Dawn or Dusk Conditions

Equipment	Accident Group	Non-Accident Group	Total
Siren Only	10.0 (11.0)	13.0 (11.9)	23.0
Turret Only	33.0 (17.7)	4.0 (19.2)	37.0
Siren and Turret	19.0 (33.1)	50.0 (35.8)	69.0
Total	62.0	67.0	129.0

$\chi^2 = 36.91$, df = 2, $p < .001$

There is a significant difference between the accident and non-accident groups, under both light and dark conditions. The direction of observed differences suggests that use of both siren and turret light is preferable to use of the turret light or siren alone. These differences also persist when emergency and pursuit runs are considered separately and when day/night conditions are combined. These relationships are equally strong when routine moving accidents are parcelled out to make accident and exposure data more comparable.

Vehicle Defects and Maintenance

No significant differences in number or type of vehicle defects were found in comparing accident and non-accident groups across the three main categories of routine, pursuit and emergency driving.

In an attempt to gauge the current level of vehicle maintenance, serious defects in three areas were examined. These were bald or worn tires, binding steering wheel in full turns or noticeable steering wheel play and spongy or fading brakes. All of these defects are related closely to the "vehicle reject" categories in the ANSI D7.1, 1968 standard of motor vehicle inspection. Of the 1,130 officers returning both exposure and accident reports, 16 percent indicated that their vehicle had at least one of these critical defects. These findings suggest that more rigid maintenance practices are necessary in municipal police departments.

Safety Belt Usage

Only 300 (63%) of the police drivers involved in routine accidents indicated that their safety belt was in use at the time of accident. Approximately 50 percent of the non-accident routine group indicated 91+ usage. Of all drivers involved in emergency or pursuit driving, approximately 79 percent indicated that their seat belts were in use. These data coupled with the extremely low reported use of shoulder harnesses suggest that more education of police drivers about the worth of restraint systems is necessary.

Emergency Run Conditions

Approximately 25 percent of the officers reporting on the routine driving exposure form indicated that they made at least one emergency run during the reporting day. Seven percent indicated involvement in at least one pursuit.

Median duration of pursuit and emergency runs in miles and minutes as reported by officers on patrol appear in Table 2-13. Completed emergency runs (non-accident group) tend to be slightly longer than completed pursuit runs on both duration measures though these differences are not statistically significant.[1] As would be expected emergency runs interrupted by an accident are significantly shorter than completed emergency runs. Presumably, the mean duration of pursuit runs that are interrupted by accidents also should tend to be significantly shorter than those that are completed successfully. This is not the case, however. Whether the absence of a difference is due to the non-representation of the small pursuit accident sample, N=7, or some factor associated with pursuit runs must await further study.

[1] Median test and Kolmogorov-Smirnov test.

Pursuit accident runs are significantly longer than emergency accident runs. This seems to point to some special difficulties in the initiation of emergency runs. These may involve distractions resulting from increased radio use or concentration on approach route planning but again, further research is required before firmer conclusions can be drawn.

Table 2-13

Mean Duration in Minutes and Miles for Pursuit and Emergency Runs by Accident and Non-Accident Groups

Duration Measure	Group	Pursuit		Emergency	
		Number	Median	Number	Median
Miles	Accident	7	2.67	53	1.12*
	Non-Accident	25	2.56	131	3.02
Minutes	Accident	7	3.63	51	1.71*
	Non-Accident	25	3.00	134	4.30

*Median length significantly shorter for the accident group compared to the non-accident group.

Table 2-14 presents reported length of uninterrupted driving prior to initiation of pursuit and emergency runs for accident and non-accident groups. The difference between distributions is significant. Higher than expected accident frequencies occur at both ends of the uninterrupted driving continuum. This distribution suggests that a certain amount of time behind-the-wheel may be necessary to bring skills to peak proficiency, while too much time behind-the-wheel leads to driver fatigue.

To explore the problem of accidents during emergency and pursuit driving more carefully, the number of different road types driven and the road type on which top speed was reached, were studied. There is a significant relationship between the total number of different road types driven by an officer and accident occurrence (Table 2-15). Accident occurrence is greater than expected among those drivers who reported driving on two or more different road types. The direction of this relationship suggests that a rapidly changing driving situation in terms of street and possible traffic conditions may produce a more difficult driving situation and therefore more accidents.

There is a significant relationship between the distribution of accident and non-accident cases and the road on which top speed was reached (Table 2-16). More accidents than expected are related to reaching top speed on local residential streets or major arterials while more non-accident

drivers reached top speeds on interstate or other controlled access highways. As a result, the emergency and pursuit "average speeds" medians reported by non-accident drivers (45.6 and 65.8 mph respectively), were much higher than those reported by accident drivers (30.5 and 55.2 mph respectively). These findings suggest that speed of run alone may not be as important as maintaining a speed appropriate to the road type.

Training

Data in Table 2-17 show a definite relationship between training received and routine moving accident occurrence. Officers who report no training have 62 percent more accidents than expected, while those who report practice track or skid pan training have 26 percent less accidents than expected.

The relationship between type of training and reported accident occurrence was found to be significant in pursuit and emergency driving situations. These data suggest that driving training, particularly of the practice track and skid pan variety should be made available to municipal police drivers throughout the country.

Table 2-14

Pursuit and Emergency Accidents and Uninterrupted Driving Time

Time (Minutes)	Accident Group	Non-Accident Group	Total
< 15 min.	24.0 (16.9)	33.0 (40.0)	57.0
16-30	9.0 (15.4)	43.0 (36.5)	52.0
31-45	4.0 (6.2)	17.0 (14.7)	21.0
46-60	1.0 (4.7)	15.0 (11.2)	16.0
61-120	9.0 (11.0)	28.0 (25.9)	37.0
121 +	20.0 (12.5)	22.0 (29.4)	42.0
Total	67.0	158.0	255.0

$\chi^2 = 20.32$, df = 5, $p < .01$

Table 2-15

Pursuit and Emergency Accidents and Variety of Road Types Driven

Number of Different Road Types	Accident Group	Non-Accident Group	Total
1	93.0 (105.1)	54.0 (41.8)	147.0
2	53.0 (43.6)	8.0 (17.3)	61.0
3	15.0 (12.1)	2.0 (4.8)	17.0
Total	161.0	64.0	225.0

$\chi^2 = 14.33$, df = 2, $p < .001$

Table 2-16

Pursuit and Emergency Accidents and Type of Road on Which Maximum Speed is Reached

Road Type	Accident Group	Non-Accident Group	Total
Interstate System and Controlled Access Hwy.	2.0 (12.6)	47.0 (36.3)	49.0
Major Arterial Route	24.0 (19.1)	50.0 (54.8)	74.0
Local or Residential Street	22.0 (17.0)	44.0 (48.9)	66.0
One Lane Alley or Other	3.0 (2.0)	5.0 (5.9)	8.0
Total	51.0	146.0	197.0

$\chi^2 = 16.26$, df = 3, $p < .01$

Table 2-17

Routine Moving Accidents and Training

Training	Accident Group	Non-Accident Group	Total
None	68.0 (42.7)	30.0 (55.2)	98.0
Lecture Only	68.0 (72.9)	99.0 (94.0)	167.0
Lecture and Simulator	15.0 (9.6)	7.0 (12.3)	22.0
Lecture Practice Track, and Skid Pan	91.0 (123.1)	191.0 (158.8)	282.0
Other	44.0 (37.5)	42.0 (48.4)	86.0
Total	286.0	369.0	655.0

$\chi^2 = 49.17$, df = 4, $p < .001$

Parked Vehicle Accidents

No exposure data were collected on parked vehicle accidents; however, one accident report item prompts more detailed investigation. Based on some 40 cases of parallel curb-parked vehicle accidents, the median distance from the curb of front and back wheels was reported as 8.5 feet. Though 15 of the curb-parked vehicle accidents resulted from the parking maneuvers of the vehicles, at least 10 of those reported resulted from sideswipes by other vehicles. These findings suggest that police vehicles should be parked more closely to the curb.

Motorcycle Driving Problems

Table 2-18 presents a ranking of problems found to be troublesome to drivers of two- and three-wheel cycles. There seems to be general agreement between both driver groups in their perception of problems. Approximately one-third of the drivers in each group reported that road hazards were troublesome.

Twice as many three-wheel drivers had trouble with wind-borne objects. This problem may be due to the fact that more three-wheel cyclists fail to wear eye or face protection. Table 2-19 shows a significant relationship between the non-wearing of goggles, face shield or sunglasses and the number of drivers checking wind-borne objects as a troublesome problem. These data suggest that all cyclists should wear some sort of face or eye protection.

The frequency of collision versus non-collision accidents for two- and three-wheel cyclists was analyzed using Fisher's Exact Probability Test (7). The distribution of cell frequencies was found to be significant ($p < .012$). Two-wheel cyclists reported nine collision accidents while three-wheel drivers reported none. As would be expected this suggests that vehicle control problems associated with the speed and stability of the two-wheel cycle are not the same for three-wheel cycle operators.

Driver Age, Accident Type and Frequency

To provide guidelines for emphasis during roll call and in-service training, the IPAX file (Appendix C) was subjected to tree search analysis using age of driver. Since the purpose of this effort was simply to specify directions, items were considered significant at the < .10 level.

Younger police drivers under 25 have significantly more accidents than other age groups while going straight ahead, changing lanes and making right turns. Such problems as speed, disobeying traffic signals and failure to to yield contribute to these types of accidents. It can be hypothesized that these problems contributed to the significantly high number of angle collisions experienced by this group. Of all groups, the younger driver was involved in significantly more accidents judged to be "preventable" and a greater number of high cost collisions.

Drivers in the 25 to 29 age group are also involved in a significantly high number of accidents when going straight and making right turns. The same types of violations contribute to these accidents as were found in the younger age group, particularly failure to yield.

Table 2-18

Problems Reported as Troublesome in the
Routine Driving of Two- and Three-Wheel Motorcycles

Problem	Two-Wheel		Three-Wheel	
	Frequency	Rank	Frequency	Rank
Road Hazards	84	1	42	1
Unusually Heavy Traffic	45	2	26	3
Other Traffic "Not Seeing You"	41	3.5	13	6
Other Traffic--Change Lanes	41	3.5	13	6
Wind-Borne objects	38	5	36	2
Windblasts/Vehicular	25	6	13	6
Impaired Visibility--Weather	20	7	20	4
Vehicular Defect	13	8	7	8.5
Slip/Skid on Wet Road	10	9	7	8.5
Impaired Visibility--Other	6	10	2	10

Table 2-19

Eye Protection Equipment
and Encounter with
Wind-Borne Objects

Wind-Borne Objects	Goggles Face Shield Sunglasses	No Protection	Total
Yes	49.0 (58.7)	34.0 (24.2)	83.0
No	164.0 (154.2)	54.0 (63.7)	218.0
Total	213.0	88.0	301.0

$\chi^2 = 7.61$, df = 1, $p < .01$

Drivers aged 30 to 34 have significantly more accidents while stopped in traffic. These usually involve rear end and/or backing collisions on the part of other motorists. This age group had the least distinct accident profile of all those examined.

Drivers in the 35 to 44 age group had significantly more rear end accidents than other age groups. The rear end accidents occurred while the officer was slowing, stopping or starting in traffic. The violation found significantly high in these accidents was following too closely. Officers in this age group tended to have significantly more accidents on expressways and on expressway entrance and exit ramps. They were also involved in a high number of accidents while making left turns.

Drivers aged 45 to 54 show a high involvement in slowing, stopping and backing accidents. The slowing or stopping accidents tended to occur on expressways and to be of the rear end type. The violation frequently committed in these accidents was following too closely. Accidents where the officer had been backing tended to occur in driveways or off the street. These drivers were involved in a significantly large number of accidents resulting in a fatality.

Older drivers, over 54 years of age, have significantly more accidents making right turns and leaving parking places than other age groups. These drivers tend to have a higher frequency of accidents under snowy weather conditions.

In examining the manner of collision across all age groups on various types of streets, the rear end collision showed a high frequency of occurrence on expressways, boulevards and business streets. In addition, sideswipe collisions with vehicle going in the same direction showed a high frequency on expressways, and turning collisions showed a high frequency on business streets. Accidents on local residential streets tended to be angle, backing and sideswipe with vehicle going in opposite direction collisions.

The tree search relationships involved indicate that a strong driving training program followed up by close supervisory observation should be part of every recruit and field training effort. The younger police driver seems to be overtly violating traffic laws more frequently than other groups. The 30 to 34 age group had comparatively good driving records. As the driver ages, problems that may be related to distraction, i.e., following too closely, seem to increase. The older driver experiences problems that may be related to phyical factors. Both "backing" and "leaving parking place" problems involve turning the head and scanning traffic or fixed objects in the rear. As the driver ages, these actions become more difficult.

Personnel Injury Record Keeping

The majority of municipal police departments keep records of non-vehicular personnel injuries. As shown in Tables E-1 and E-2 the quality of record keeping is much lower for personnel injuries than for motor fleet experience. Only 25 percent of the responding departments use the American National Standard (Z-16) for recording industrial injuries. Personnel injury records are kept by only 52 percent of the respondents. Fourteen departments distributed throughout the various population groups indicated loss time injury data were not even available (Table E-4).

Very few departments keep injury records on automatic data processing (ADP) equipment (Table E-4). No department in population groups below IV uses ADP for personnel injury recording. Summarization of records is far less frequent for personnel injuries than for motor fleet experience.

The inadequacy of injury records is complicated further by use of overlapping, internally developed injury recording categories. This mode of recording frustrates any attempt to produce a profile of police injuries.

Injury Frequency and Severity

The data in Table 2-20 provide insight into police injury problems in terms of frequency and severity. They are based on the total injury experience (Appendix C, MEDIC file) of one large municipal police department for the year 1970. The categories presented are not mutually exclusive since they combine information on type, circumstances and agent of injury under the heading "Cause of Injury." Even so, each injury case is listed only once, so that information presented offers some opportunity for a comparative examination of police experience.

The criticality ranking for each injury category is based on the product of frequency or disabling injuries multiplied by median days lost. Accordingly, the rank combines frequency and severity measures. A ranking based on frequency of severity alone would produce a far different picture of municipal police injuries.

Vehicular injuries constitute the most critical police problem in terms of the ranking formula used. Gunshot wounds, however, which rank second in criticality, produce major disability beyond any other cause. In the reporting city, four officers were killed by gunshots in 1970. Even self-inflicted gunshot wounds, though less severe than those inflicted by others, accounted for a median of 45 days lost.

As is the case with gunshot wounds, the next four highest ranking injury problems are related uniquely to police activity. Accidental injuries resulting from routine slips and falls and lifting appear in the mid-range of the rankings. The rank of these injury types suggests that the police injury problem is not similar to that of other public employee or industrial groups as has been maintained by many administrators. Rather, a large portion of critical injuries result from direct attempts on the part of others to assault or ambush police officers.

The data in Table 2-21 show average injuries by type of injury event for departments in various population groups during the years 1968 and 1969. The major role of injury resulting from public contact is depicted here.

The proportional relationship between public-involved and vehicle-related injuries must be interpreted with caution, however, when vehicular injuries occur, they are more likely to be disabling than injuries incurred during contacts with the public.

Table 2-20

Injury Experience of One Large Municipal Police Department for the Year 1970

Cause of Injury	Total Injuries			Disabling Injuries			Criticality Rank
	f	%	Median Days Lost	f	%	Median Days Lost	
Vehicular	921	20.0	5.3	629	32.8	10.4	1
Gunshot (self/other)*	49	1.1	49.3	39†	2.0	74.0	2
Resisting Arrest	994	21.5	.7	313	16.3	5.6	3
Slip/Fall (police action)	380	8.2	.9	167	8.7	7.5	4
Miscellaneous**	499	10.8	.7	161	8.4	6.0	5
Assault	469	10.2	.8	157	8.2	6.8	6
Slip/Fall (routine)	309	6.7	1.4	158	8.2	7.1	7
Enter/Exit Vehicle	154	3.3	.9	65	3.4	10.5	8
Lifting	75	1.6	2.3	40	2.1	11.0	9
Fight, Riot, Mob Action	187	4.0	.7	52	2.7	6.8	10
Attempting Entrance	106	2.3	.7	28	1.4	12.0	11
Hit by Flying Object	138	3.0	.7	45	2.3	4.7	12
Equipment Failure	81	1.8	.6	17	.9	8.6	13
Cut or Stab	69	1.5	.6	13	.7	9.8	14
Physical Training	91	2.0	.6	21	1.1	3.3	15
Bite	90	2.0	.6	11	.6	4.3	16
Total	4,612	100		1,916	100		

* Gunshot (self) = 8; Gunshot (other) = 41

** Frostbite, animal bite, overcome by fumes or smoke, fire, chemical, electrical contact, equipment repair explosion, exposure to disease poisoning, other.

† Four fatalities

Table 2-21

Injuries by Injury Event Type - General Survey Departments
Two-Year Averages 1968-1969

Population Group	Total Personnel	Type of Injury Event								Total Injuries
		Motor Vehicle		Inj. Resulting from Contact with Public		Slips and Falls		Other Injury Events		
		f	%	f	%	f	%	f	%	
I	8,236	478	17.2	910	32.8	540	19.4	847	30.5	2,775
II	698	35	15.4	86	38.0	24	10.6	82	36.0	226
III, IV	154	7	16.7	19	43.9	6	12.9	12	26.5	44

Table 2-22

Disabling Injuries by Activity at the Time of Injury
Three-Year Averages 1967-1969

Population Groups	Depts.[1]	Sworn Personnel	Type of Activity								Total Injuries
			Arrests, Summons, Detention		Investigation		Use of Vehicle		Other Activities		
			f	%	f	%	f	%	f	%	
I	1	29,762	856	35.7	100	4.2	780	32.5	663	27.6	2,398
	16	2,561	213	24.5	74	8.5	294	33.8	289	33.3	869
Total		32,323	1,069	32.7	174	5.3	1,074	32.9	952	29.1	3,267
Mean		16,162	534	--	87	--	537	--	476	--	1,634

[1] Number indicates population size rank within population group from general survey departments list.

The relationship between vehicle-related and several types of police action in terms of disabling injuries only, is shown in Table 2-22. Though these data are based on the experience of only two departments in population group I, it is apparent that the frequency of disabling injuries due to vehicle use is comparable to those occurring during arrest and investigation activities. The areas of vehicular accidents and assaults during the arrest sequence should be the major targets for injury and damage reduction programs.

Police Fatalities

Police fatalities reflect the disabling injury experiences presented in Table 2-22. FBI data (3) constitute the major source of compilation of police fatality records. Between 1960 and 1959, 561 police officers, including state, county and municipal, were killed by felons. Most of these deaths involved the use of firearms in assault or ambush circumstances. When responding to burglaries or robberies or when in pursuit of burglary or robbery suspects, 164 officers were killed; 157 deaths occurred in the process of making other types of arrests and 53 fatalities resulted from investigation of suspicious persons or circumstances. Responses to disturbance calls produced 107 fatalities during the 10 year period, while ambushes or unprovoked attacks took the lives of 43 officers. The remaining 36 officers were killed handling and transporting prisoners.

During the period 1961 - 1969 some 345 officers in police agencies throughout the U. S. lost their lives in accidents. Data from the FBI on 80 accidental deaths occurring to municipal police during the years 1967, 1968 and 1969 are presented in Table 2-23. Since the reports varied in completeness, each subsection should be related to the total number of cases reported for that category only. Auto accidents accounted for 35 (44%) of the fatalities reported over the three-year period. Of these, 10 were police pedestrian fatalities, all of which occurred at the scene of other accidents, mostly at night. There is a definite indication that motorists may be distracted by the flashing lights of police cars at the scene of accidents and fail to see the attending officer. To counteract this problem reflective vests, jackets, armbands or gloves should be used by officers at the scene of accidents to increase their visibility to oncoming drivers. Also, procedures governing the use of emergency flashers and the positioning of police officers at the accident scene should be reevaluated.

Twenty-six percent of the accidental death toll was due to motorcycle accidents. Of this number, 15 involved collisions with other vehicles while six were attributable to loss of control, Again, the high hazard of motorcycle operation is apparent since it accounts for almost as many deaths as automobile operation.

Accidental gunshot wounds accounted for the next largest proportion of deaths. Of the 10 fatal shootings, five involved one officer shooting another during the apprehension of criminals; three were self-inflicted and in two instances, police officers were shot by others, i.e., non-police.

Non-Fatal Police Action Injuries

To explore non-fatal injuries resulting from police action more fully, data based on number of arrests and assaults were analyzed. Table 2-24 contains summaries from three group I departments on arrest and disabling injury during the years 1967 - 1969. The number of injuries per arrest by department over the three reporting years is somewhat stable. Yet there is much variation among these three departments in the number of injuries per arrest.

In department 1, disabling injuries during arrest occur at a rate more than three times higher than department 5 and almost 15 times higher than department 8.

The annual arrest rate per officer in department 1 over this three year period is 6.5, in department 5 it is 37.8 and in department 8 it is 58.6 (Table E-12). Assuming the reporting to be fairly accurate, these rates suggest that experience in making arrests is related inversely to the incurrence of disabling injuries. Alternative explanations might attribute lower injury rates to more proficient training or higher rates to a policy that restricts the effecting of arrest to the more serious infractions of the law automatically exposing the officers to more hazardous arrests. In any case, further study of the policy, procedures and training of departments with high and low number of injuries per arrest should be undertaken to profile any elements that might account for injury rate variation.

FBI data (3) were used to summarize the frequency of assaults on municipal police offiders for the years 1968 and 1969. These statistics include arrest injuries as well as other types of assault and ambush cases. Table 2-25 shows an increase in the total number of assaults in 1969 as compared with 1968. There is a decrease in the rate of assaults with injury in 1969, however. Here again, variation in the assault and assault with injury rate is marked among population groups.

Table E-13 and E-14 show similar statistics gathered from general survey departments. Unfortunately, no department was able to provide complete assault and injury records. Nevertheless, these data tend to reinforce the fact that variability of experience seems to be the rule rather than the exception in the case of assaults. This finding prompts the same recommendation made for the injury during arrest problem, namely to profile procedural and training elements that differentiate high assault/injury departments from low.

Officer and Offender Factors in the Arrest Sequence

To produce a clearer profile of injury occurrence during police action, supplemental forms covering the various phases of the arrest sequence and other activities were analyzed. As was the case for the supplemental motor vehicle reports, only those data that relate directly to training equipment or procedural recommendations were examined.

Table 2-23

80 Municipal Police Accidental Deaths
1967, 1968, 1969

Variable	%	f
Vehicular		
Auto	35	44
Motorcycle	21	26
Helicopter	3	4
Non-Vehicular		
Gun	10	13
Other	11	14
Type of Driving		
Routine	21	26
Emergency	11	14
Pursuit	11	14
Years on Force		
Less than 1 Year	4	5
1 to 5 Years	18	23
6 to 10 Years	8	10
Over 10 Years	6	8
Type of Patrol		
On Foot	6	8
One-Man Car	15	19
Two-Man Car	7	9
Motorcycle	21	26
Time of Day		
12:01 - 6:00 A.M.	18	23
6:01 - 12:00 Noon	12	15
12:01 - 6:00 P.M.	16	20
6:01 - 12:00 Midnight	20	25
Type of Accident		
Police-Police	7	9
Police-Other	44	55
Police only	23	29
Type of Vehicle Accident		
Collision with Vehicle	27	34
Collision with Object	9	11
Police Pedestrian	10	13
Ran Off Roadway	2	3
Other	2	3
Number of Vehicles Involved		
One	21	26
Two	29	36
Multi	1	1

Table 2-24

Disabling Injuries While Making Arrests
1967 - 1969

Population Group	Depts.[1]	1969		1968		1967	
		Injuries Per Arrest	Arrests Per Injury	Injuries Per Arrest	Arrests Per Injury	Injuries Per Arrest	Arrests Per Injury
I	1	.00384	260	.00396	253	.00253	395
	5[2]	.00111	895	.00113	883	.00093	1,068
	8	.00027	3,619	.00022	4,374	.00024	4,144
	Mean	.00229	436	.00215	465	.00134	742

[1]Number indicates population size rank within population group from general survey departments list.

[2]Does not include arrests of females under 15 years of age.

Table 2-25

Summary of FBI Reports of Assaults on
Municipal Police Officers During 1968 and 1969

1969

Population Group	Total Police Officers	Total Assaults	Rate Per 100 Police Officers	Assaults With Injury	Rate Per 100 Police Officers
	183,661	32,816	17.9	11,278	6.1
Over 250,000	89,581	17,110	19.1	5,723	6.4
100,000 to 250,000	14,089	4,100	29.1	1,512	10.7
50,000 to 100,000	20,952	3,499	16.7	1,370	6.5
25,000 to 50,000	19,921	2,809	14.1	975	4.9
10,000 to 25,000	24,228	3,392	14.0	1,156	4.8
Under 10,000	14,890	1,906	12.8	542	3.6

1968

Population Group	Total Police Officers	Total Assaults	Rate Per 100 Police Officers	Assaults With Injury	Rate Per 100 Police Officers
	184,018	31,286	17.0	13,183	7.2
Over 250,000	89,598	16,038	17.9	7,734	8.6
100,000 to 250,000	15,848	3,756	23.7	1,292	8.2
50,000 to 100,000	21,236	3,419	16.1	1,208	5.7
25,000 to 50,000	19,806	3,169	16.0	1,233	6.2
10,000 to 25,000	23,043	3,180	13.8	1,112	4.8
Under 10,000	14,487	1,724	11.9	604	4.2

*Source: FBI Uniform Crime Report, 1968 and 1969.

Table 2-26 shows personnel data for those respondents who engaged in arrest sequence tasks covered by a supplemental report. In only one category, transportation of prisoners, were no supplemental injury reports received. Officers involved in both injury and non-injury groups are approximately of the same height and weight. The two groups are, as would be expected, similar in rank. There is, however, a noticeable discrepancy between the median age and number of years on the force for injury and non-injury groups. As shown in Table 2-27, injured officers are significantly younger and less experienced than non-injured officers in two of the arrest sequence tasks. A critical period for injury occurrence seems to be the second and third years on the force. The introduction of refresher training in field interrogation and prearrest procedures may be most beneficial at this time.

Table 2-26

Height, Weight and Rank for Injured and
Non-Injured Officers During Arrest Sequence Tasks

Task	Form Type	No. of Reports	Median		Rank	
			Height	Weight	Patrolman	Sgt. & Lt.
Field Interrogation	Injury	26	6'0"	175	25	---
	Non-Inj.	262	5'11"	190	262	---
Summons Prearrest	Injury	60	5'11"	180	54	4
	Non-Inj	98	5'11"	190	97	---
Arrest Search	Injury	31	6'0"	186	28	3
	Non-Inj.	233	5'11"	186	222	2
Transportation of Prisoners	Injury	0	---	---	---	---
	Non-Inj.	164	5'11"	185	159	3

Table 2-27

Median Age and Years on Force for Injured and
Non-Injured Officers During Arrest Sequence Tasks

Task	Median Age		Median Years on Force	
	Injured	Not Injured	Injured	Not Injured
Field Interrogation	25.5	29.9*	1.8	4.7*
Prearrest and Summons	27.5	29.6*	3.1	4.7*
Arrest and Search	27.2	29.3	3.0	5.1
Transportation of Prisoner	----	28.5	----	4.1

* Significant based on median test, $p < .01$

There are two definite patterns across all arrest sequence reports. One involves the pattern of offender action prior to injury, the other involves availability and use of weapons and other equipment.

Offender Hostility

Without exception, the subjects' use of profane language and other expressions of hostility was related significantly to injury occurrence. In Table 2-28, the use of these indicators is shown to be higher than expected for the injury group in all arrest sequence reports. These data suggest that offenders do give cues prior to inflicting injury; however, the precise nature of these and more subtle precursors to injury must be examined carefully using direct observation or some other mode of investigation before practical training and procedural recommendations can be made. Of particular importance is the interaction between the subject and the police officer. Here the effect of age and experience in dealing with suspects may be an important factor in escalating or de-escalating emotional reactions in arrest situations.

Table 2-28

Type of Offender Hostility
and Injury Occurrence

Type of Hostility	Injury		No Injury		Chi Square*
	Yes	No	Yes	No	
Profanity	74.0 (29.2)	20.0 (64.7)	137.0 (181.7)	448.0 (403.2)	115.65
Belligerency	89.0 (38.3)	12.0 (62.6)	170.0 (220.6)	411.0 (360.3)	126.55
Escape	58.0 (16.5)	38.0 (79.4)	58.0 (99.4)	519.0 (477.5)	146.35
Threat	50.0 (14.7)	42.0 (77.2)	57.0 (92.2)	517.0 (481.7)	116.00
Assault	67.0 (14.2)	29.0 (81.7)	31.0 (83.7)	535.0 (482.2)	269.19

* χ^2's significant, df = 1, $p < .001$.

Availability and Use of Arrest Equipment

Table 2-29 shows revolver availability to be related significantly to injury occurrence over all arrest sequence tasks. A greater than expected number of officers who reported that their revolver was not available were injured. Both availability and use of the baton, mace, handcuffs and helmet are related significantly to injury occurrence. The relationship pattern is the same for each piece of equipment. When equipment is reported as "used," the occurrence of observed injury is greater than expected. Situations that necessitate using any of these items are usually indicative of an injury provoking situation for officer and offender, one in which the officer exercises less control than when he uses his revolver. When an equipment item

Table 2-29

Equipment Availability and Use During
Arrest Sequence and Injury Occurrence

Equipment Type	Injury			No Injury			Chi Square
	Used	Available Not Used	Not Available	Used	Available Not Used	Not Available	
Revolver	9.0 (10.3)	81.0 (86.4)	8.0 (1.2)	74.0 (72.6)	614.0 (608.5)	2.0 (8.7)	42.50
Rifle-Shotgun	3.0 (1.9)	30.0 (26.5)	57.0 (61.5)	12.0 (13.0)	178.0 (181.4)	425.0 (420.4)	1.60*
Baton	13.0 (7.8)	49.0 (76.3)	35.0 (12.8)	48.0 (53.1)	546.0 (518.6)	65.0 (87.1)	59.10
Mace	4.0 (1.0)	11.0 (51.6)	77.0 (39.3)	4.0 (6.9)	388.0 (347.3)	227.0 (264.6)	87.90
Handcuffs	45.0 (36.1)	43.0 (58.6)	8.0 (1.1)	258.0 (266.8)	448.0 (432.3)	2.0 (8.8)	51.22
Helmet	4.0 (0.9)	26.0 (56.7)	61.0 (33.3)	3.0 (6.0)	415.0 (384.2)	198.0 (225.6)	57.71
Flashlight	10.0 (23.3)	52.0 (61.3)	31.0 (8.2)	179.0 (165.6)	444.0 (434.0)	36.0 (58.7)	81.40

* Not significant - all others significant, df = 2, $p < .001$

is reported "not available," observed injury frequency is also greater than expected. Only in situations where the equipment item is either in the hand or available are observed injuries less than expected. These data suggest that the well-equipped or prepared officer is less likely to be injured.

Interestingly enough, data on the use and availability of the flashlight support this conclusion. Use of the flashlight, which is not indicative of a more dangerous police/offender encounter, should not involve higher than expected injuries as could be predicted for the other equipment items discussed. This expectation is borne out by the data in Table 2-29. There are, however, more injuries than expected associated with the non-availability of the flashlight.

Search-Handcuff Procedures

Table 2-30 indicates that the search-handcuff sequence is related significantly to injury occurrence. Those officers who handcuffed their prisoners before searching were involved in far more accidents than would be expected. In a corresponding area (Table 2-31), officers conducting prone, kneeling and open field searches had more injuries than expected, while officers conducting spread eagle wall or car searches suffered less injuries than expected.

The number of injury cases collected and the detail of information gathered did not permit associating exact time of injury with the handcuff and search sequence or procedure being used. Only a general statement about the nature of these statistical relationships can be made. The officers who follow recommended procedures are injured significantly less frequently than those who do not. In the discussion of the "use of force" data more will be said about injury in terms of the arrest sequence.

Physical Fitness and Training

In none of the arrest sequence situations was the practice of a daily physical fitness program significantly related to lower injury occurrence. Formal physical fitness programs are required by none of the departments that returned reports. The inadequacy of informal fitness programs seems to be supported by these data indicating the need for a formal departmental program. Neither was recency of supervisor observation nor recency of roll call training related to lower injury occurrence. Since both observation and training should improve the officer's capability in coping with the arrest situation, the interpretation of non-significant relationships is difficult.

In the case of both supervisor observation and roll call training, at least two interpretations are possible. One is that these two mechanisms are ineffective in assisting officers to avoid injury; the other is that supervisors do not observe or instruct subordinates very well in injury reduction procedures. Based on site visit reports discussed in Chapter 4, the latter interpretation seems most tenable. Accordingly, these data appear to reinforce the recommendation that more in-depth coverage of arrest sequence procedures, emphasizing injury avoidance may be necessary.

Table 2-30

Sequencing of Handcuffing and Search Tasks and Injury Occurrence

Task Sequence	Injured	Not Injured	Total
Search & Handcuff	11.0 (16.6)	122.0 (116.3)	133.0
Handcuff & Search	14.0 (5.7)	32.0 (40.2)	46.0
Neither	5.0 (7.6)	56.0 (53.3)	61.0
Total	30.0	210.0	240.0

$\chi^2 = 16.73$, df = 2, $p < .01$

Table 2-31

Type of Search Position and Injury Occurrence

Position	Injured	Not Injured	Total
Prone, Kneeling, Standing in Field	13.0 (10.6)	92.0 (94.3)	105.0
Spread-Eagle, Wall or Car	8.0 (12.4)	114.0 (109.5)	122.0
Other	3.0 (0.9)	6.0 (8.0)	9.0
Total	24.0	212.0	236.0

$\chi^2 = 7.59$, df = 2, $p < .025$

Uniform Versus Plainclothes Attire

All 27 unprovoked assault or ambush cases occurred to men in uniform. Of this total, nine reported injury. The median age of the officers assaulted was 26.8 years and the median years on force was 1.8. Again, there was a strong indication of hostility on the part of the subject before the assault occurred. In more than 50 percent of these cases, profanity or belligerent action preceded the assault.

Though these data are quite similar to the other reported injury groups, they highlight the fact that assaults are being made on men in uniform. The effect of the uniform on the public is difficult to judge. A very strong relationship between wearing of a uniform and injury occurrence in the arrest sequence was present. Table 2-32 indicates that the plainclothes officer is injured far less frequently than would be expected. Of course, this may be due in part to the fact that the detective has had more experience and is better able to handle arrest situations.

Table 2-32

Officer Dress and Injury Occurrence

Dress	Injured	Not Injured	Total
Plain-clothes	7.0 (35.2)	153.0 (124.7)	160.0
Uniform	138.0 (109.7)	360.0 (388.2)	498.0
Total	145.0	513.0	658.0

$\chi^2 = 38.38$, df = 1, $p < .001$

A number of municipal departments, however, recognizing the possibly antagonistic reaction of people toward a police uniform have begun to outfit officers in plainclothes. For example, the Menlo Park California Police have had a blazer uniform experiment underway since December 1969 (2). In 1970 this department experienced a 29.1 percent decrease in assaults on officers and as of March 1971, had not had a lost time assault on an officer in a blazer. "During the six months preceding the experiment," the Menlo Park report states, "Five officers were briefly hospitalized after being assaulted in the old blue uniform." The Menlo Park results and the data in this report support further experimentation of this type.

Use of Force During Arrest

An attempt was made to investigate that portion of arrests involving the use of force. Tables 2-33 and 2-34 present responses to the use of force report for officers who sustained injury and those who did not. Each table contains data summarized from the cooperating department's original use of force report and the new or redesigned form. It can be seen that the new form contains a large amount of detailed information about arrest sequence events that was not contained in the original form. Only those data gathered from the new form are included in this discussion.

In Table 2-33, chi square tests differentiate between injury and non-injury groups in terms of the condition of the offender. This finding highlights the special risk involved in handling not the drunk, but an offender whose condition is classified as "other," a category that is split evenly between those suspected to be under the influence of narcotics, and offenders who are irrational, hysterical or violent. Injuries resulted in 61 percent of these encounters. More data are necessary, however, to specify efficient handling procedures.

As was found in the supplemental data, the frequency with which violence is exhibited by the offender during arrest is higher for the injury group (86%) than the non-injury group (65%) as shown in Table 2-34. In fact, for this sample, anytime violence originates in or continues until the arrest stage, the odds are better than 50-50 that an officer will suffer an injury.

Offenders were violent in 60 cases before arrest. Of this total only three of the 25 officers who used handcuffs immediately after violence occurred, were injured thereafter; while 26 of 35 officers who delayed the using of handcuffs were injured. In other words, given violence, the probability of injury is reduced from .76 to .12 by the prompt use of handcuffs. This finding is striking even in light of the fact that the probability of injury during the use of handcuffs is 14/92 or .15 (Appendix D, Item 8).

In lieu of handcuffs, it appears officers attempt to subdue violent offenders by the use of hands. Using the same reasoning above, and parcelling out those cases in which handcuffs were used, the probability of injury when using hands alone is .73 (11/15), a substantial increase from the overall rate of .48 for injuries occurring when violence appears before arrest. The probability of injury associated with the use of a nightstick against a violent offender in these cases is .50, a negligible difference from this overall rate.

Table 2-34 also indicates significant differences between the injury and non-injury group in the implement used and in the time force was used. Handcuffs are reported used by 70 percent of the injury group and by only 50 percent of the other. Fifty-eight percent of the handcuff injury group, however, reported using handcuffs after the injury (Appendix D, Item 8). In light of this information, a smaller percent of the injury group than the non-injury group uses handcuffs before an injury dictates their use. For these data, the use of handcuffs is usually a consequence not a contributing factor of injury. This lends support to the results previously discussed and suggests a more general use of handcuffs early in the arrest sequence.

Table 2-33

Demographic Variables Comparing
Injury and Non-Injury Groups

Variable	Percent			Frequency		
	Orig. Form[1] (N=70)	New Form Injury (N=64)	New Form No Inj. (N=94)	Orig. Form	New Form Injury	New Form No Inj.
Sex of Offender						
Male	83	92	89	58	59	84
Female	17	8	11	12	5	10
Condition of Offender						
Sober	29	34	44	20	22	41
Drinking	} 53	17	16	} 37	11	15
Drunk		16	24		10	23
Other	17	30*	13*	12	19	12
Medical Treatment for Offender						
Yes	N.A.	50	37	N.A.	32	35
No		47	60		30	56
Time						
Day 6:00 - 11:59 a.m.	3	9	7	2	6	7
Day 12:00 - 5:59 p.m.	18	31	23	13	20	22
Night 6:00 - 11:59 p.m.	48	36	36	33	23	34
Night 12:00 - 5:59 a.m.	31	23	32	22	15	30
Number of Officers						
1	N.A.	23	31	N.A.	15	29
2		44	34		28	32
3 or more		28	29		18	27
Assignment						
Patrol	59	73	52	41	47	49
K-9	3	6	16	2	4	15
Tactical	10	8	9	7	5	8
Other	23	11	18	16	7	17

*Injury group significantly different from non-injury group $p \leq .05$.

[1]70 injury cases reported in the 202 old narrative forms covering the period July through December 1970.

N.A. - Not available

Table 2-34

Event Variables Comparing Injury and Non-Injury Groups

Variable	Percent			Frequency		
	Orig. Form (N=70)	New Form Injury (N=64)	New Form No Inj. (N=94)	Orig. Form	New Form Injury	New Form No Inj.
Offender Violent						
Before Arrest	N.A.	2	5	N.A.	1	5
During		22	22		14	21
After		11	7		7	7
Before/During		17	7		11	7
During/After		20	16		13	15
Before/After		0	1		0	1
Before/During/After		27	19		17	18
None		2	21		1	20
(Total Before)		45	33		29	31
(Total During)		86*	65*		55	61
(Total After)		58	44		37	41
Implement Used						
Cuffs	40	70*	50*	28	45	47
Baton	4	8	10	3	5	9
Mace	6	4	1	4	2	1
Revolver	1	11	19	1	7	18
Hands	44	88*	66*	31	56	62
Other	3	8	18	2	5	17
Time of Force[1]						
Pursuit	N.A.	17	24	N.A.	13	20
Confrontation		25	28		19	23
Arrest		65	54		49	45
Searching		12	11		9	9
Cuffing		43*	27*		32	22
Move to Vehicle		36	25		27	21
Place in Vehicle		32	30		24	25
Transport		4	6		3	5
Remove from Veh.		12*	2*		9	2
Other		7	16		5	13
Time of First Force[1]						
Pursuit	N.A.	17	24	N.A.	13	20
Confrontation		17	23		13	19
Arrest		45	31		34	26
Searching		1	2		1	2
Cuffing		5	4		4	3
Move to Vehicle		7	5		5	4
Place in Vehicle		1	2		1	2
Transport		1	1		1	1
Remove From Veh.		4	0		3	0
Other		0	7		0	6
Time of Injury						
Before Arrest	23	23	---	16	15	---
During Arrest	17	30	---	12	19	---
After Arrest	50	40	---	35	25	---

[1]N=75 and 83 for injury and non-injury

Eighty-eight percent of the injury group report the use of hands. This percentage is significantly higher than that reported for the non-injury group. Unlike the case with handcuffs, however, only 11 percent of those injured said they first used their hands after injury (Appendix D, Item 8, Hands**). The use of hands, therefore, cannot be ruled out as a contributing cause of injury.

The disparity in the percentages of officers using "other implements" is nearly significant and is understood best in conjunction with the differences in K-9 assignment and force during pursuit. This result affirms the efficient use of K-9's in the pursuit phase of the arrest sequence. No officer reported an injury after the use of a K-9.

With regard to time of force, a significant difference identifies "removal from the vehicle" as a phase requiring special attention. Those officers injured during this phase may actually number more than four percent. This is possible since many officers who were asked to indicate the activity at the time of most serious injury (Appendix D, Item 7) checked an item early in the arrest sequence but mentioned later in the narrative portion of the report that injury also took place during removal of the offender from the vehicle.

In summary, injurious incidents are related to the amount of violence displayed by the offender. The use of handcuffs emerges as a consequence of injury, but its early use is shown to be a deterrent to injury, particularly with the violent offender. Use of hands, however, cannot be ruled out as a contributing cause nor identified as a deterrent force. The use of K-9's seems to involve no risk of injury to the officer.

The overall picture of a typical use of force situation shows the offender to be male (87%), and other than sober approximately 70 percent of the time. Over 90 percent of the incidents take place between noon and 6 a.m.; they occur to officers generally on patrol (65%) who find it necessary to use handcuffs about half of the time and their hands about three quarters of the time. Forty percent of the incidents involve at least one police injury. About half of these officers are injured before and during arrest, and the other half after. Injuries to the offender requiring medical treatment are not associated with fewer injuries to the officer, rather as one increases so does the other.

For both injured and non-injured groups the first use of force tended to be simultaneous with the first demonstration of violence by the offender. The diagonal of Table 2-35 shows this occurs in 82 or 52 percent of the cases. Also the officer used force after violence 23 percent of the time, and before any violence, 25 percent of the time.

If an officer is injured, he tends to be injured at the time he first uses force. The diagonal of Table 2-36 shows this to be true for 48 or 64 percent of the 75 officers reporting when they were injured. Thirty-three percent were injured after they had used force while only three percent were injured before they used force for the first time. Since there is no strong difference between when force is first used by the injury and non-injury groups, the type and amount of force and the manner of its application must be important.

Table 2-35

Temporal Relation of First Use of Force and Violence by an Offender

1st Violence by Offender	Force Before Arrest	Force During Arrest	Force After Arrest	Total
Before Arrest	31 (24.6)	26 (26.5)	3 (8.7)	60
During Arrest	15 (25.9)	41 (27.9)	7 (9.1)	63
After Arrest	2 (5.7)	2 (6.2)	10 (2.0)	14
None	17 (8.6)	1 (9.3)	3 (3.0)	21
Total	65	70	23	158

$\chi^2 = 68.55$, df = 6, $p < .01$
$\chi^2 = 50.92$, df = 4, $p < .01$ (With "none" removed)

Table 2-36

Temporal Relation Between Injury and Use of Force

1st Use of Force	Injury Before Arrest	Injury During Arrest	Injury After Arrest	Total
Before Arrest	18 (6.5)	6 (7.9)	2 (11.4)	26
During Arrest	1 (8.6)	16 (10.4)	17 (14.9)	34
After Arrest	0 (3.8)	1 (4.6)	14 (6.6)	15
Total	19	23	33	75

$\chi^2 = 52.87$ df =

Table 2-37

Variables Pertaining to the Injury Itself and the Use of Force

Variable	% (N=78)	f
Activity		
Pursuit	10	8
Confrontation	13	10
Arrest	29	23
Search	0	0
Cuffing	13	10
Move to Vehicle	17	13
Place in Vehicle	5	4
Transport	3	2
Remove from Veh.	4	3
Nature of Injury		
Cut, stab	12	9
Scratch	10	8
Bruise	35	27
Gunshot	1	1
Sprain, strain	35	27
Other	6	5
Source of Injury		
Implement	4	3
Object	6	5
Ground	17	13
Arms, hands	35	27
Teeth	8	6
Feet, legs	29	23
Type of Injury		
Struck by	62	48
Pushed	15	12
Slip	13	10
Other	8	6
Part of Body		
Head	13	10
Back	6	5
Chest	8	6
Abdomen	1	1
Groin	6	5
Arm(s)	18	14
Hand(s)	24	19
Leg(s)	10	8
Feet	0	0

Variable	% (N=78)	f
Medical Treatment		
Yes	33	26
No	60	47
Disabled Days		
Yes	4	3
No	60	47
Unsure	33	26
Implement Used[1]		
Cuffs	70	45
Before injury	12	8
During[2] injury	19	12
After[2] injury	39	25
Baton	5	3
Before	2	1
During	3	2
After	0	0
Mace	3	2
Before	0	0
During	3	2
After	0	0
Revolver	6	4
Before	2	1
During	4	3
After	0	0
Hands	80	51
Before	38	24
During	33	21
After	9	6
Other	5	3
Before	0	0
During	0	0
After	5	3

[1]N=64 incidents
[2]First use, does not include those using implement here and prior

Comparisons of the first use of force with other variables are not significant, but some meaningful trends may be seen. For example, force is used more often after arrest, officers tend to be struck more during or after arrest and medical treatment is needed less frequently when force is used after arrest. As more data are collected these results may be substantiated or clarified.

From the information in Table 2-37, a typical injury can be described. The officer while arresting the offender (29%), sustains a bruise or sprain (70%) as a result of having been struck (62%) by the arms, hands, legs or feet (64%) of the offender. The officer generally does not require medical treatment (60%) nor disability days (60%) while receiving an injury to his arms or hands (42%) that he reports using before injury (38%) and during injury (33%). Handcuffs are used by 47 percent after the injury.

Table 2-38 indicates the strength of relationships between different injury variables. Age appears meaningfully related to type of injury, part of body injured and whether medical treatment was required or not. Officers

Table 2-38

Significance Levels of χ^2 Relating Injury Variables

	Years on Force	Activity	Nature	Source	Type	Part of Body	Medical Trtmt.	"D" Days	Cuffs	Hands	
Age	.01	.30	.30	.30	.05	.07	.06	.30	.20	.30	Age
		-[1]	.21	-	.15	.20	-	-	-	-	Years on Force
			-	-	-	-	-	.30	.30	-	Activity
				-	.20	-	.04	.01	-	.07	Nature
					.01	-	-	-	-	-	Source
						-	.03	-	-	.30	Type
							.05	.15	-	-	Part of Body
								.01	.02	-	Medical Trtmt.
									.05	-	"D" Days
										-	Cuffs
											Hands

[1]"-" no relationship evident

aged 20 to 24 were struck (including bites) significantly less and were pushed or fell more than the 25 to 29 or 30 and over group. Concomitantly, injuries to these latter two groups occur more frequently to the head and torso. Table 2-38 shows that medical treatment is related to type of injury. The 20 to 24 year old group receives medical treatment less frequently. Bruises generally require less medical treatment and fewer disability days. The parts of body associated most frequently with medical treatment are the limbs and head. Injury to limbs is associated with uncertainty about the use of disability days. The use of handcuffs is related significantly to medical treatment and disability days. Only four of 25 officers requiring medical aid reported using disability time before the injury.

Limitations in the depth of analysis performed to date are related to the number of completed forms returned. Yet a number of significant patterns between variables have emerged. Interpretation of the data has suggested improvements of the questionnaire itself; for example, including the age of those injured and specifying the use of hands as striking or restraining. As it becomes demonstrated that certain variables can be specified and measured, hypotheses can be tested concerning them. Withstanding the bias of an interested party's report, questions can be so stated and validity scales so constructed that reasonable objective information results. Such demonstration should be considered the major product of this present effort.

CHAPTER 3

REVIEW OF INDUSTRIAL SAFETY PROGRAMS

Industrial Safety Experience

A review of industrial safety program contents and materials was undertaken to provide a background for the description and evaluation of the police department injury and damage reduction function. The review briefly summarizes literature from industrial, motor fleet and system safety fields.

According to Johnson (10) safety programming can be visualized at four levels:

1. The minimal compliance with enforced regulations
2. The fuller application of manuals and standards
3. The advanced programming stage attained by the Atomic Energy Commission and leading industries
4. System safety.

The data gathered in this study will show that municipal police departments are operating somewhere between levels 1 and 2 in safety programming. To assist in providing a plan for future IDR programs within departments, a review of current programming efforts at both levels 3 and 4 is appropriate.

Industrial Safety Programs

There have been no controlled studies focusing on the effectiveness of specific organizational and management techniques governing safety programs currently operating in industry. Only gross indicators of the general effectiveness of industrial safety programs are available. Table 3-1 shows the injury rates of members of the National Safety Council versus the rates of non-member companies compiled by the U. S. Bureau of Labor Statistics (12). In all industrial classifications NSC injury rates are lower than those of non-members. It is generally assumed that NSC member companies have better safety programs than non-member companies, though this assumption has never been tested.

Bureau of Labor Statistics figures include NSC rates in the comparisons presented in Table 3-1, but in manufacturing and mining NSC member rates can be excluded from BLS rates. When this is done NSC members average more than 70 percent lower for frequency rate and more than 39 percent lower for severity rate in manufacturing; and 40 percent lower for frequency and 44 percent lower for severity in mining operations.

Though these figures seem to present a positive picture in support of safety programming, it must be emphasized that there are numerous factors operating that tend to confound the simple relationships between safety programming and injury experience. Such factors as corporation size, overall

attitude toward employees, employee selection criteria and general managerial ability all play an unknown role in producing rate differences. For example, Grimaldi (6) presents results broadly indicating that: "In an operating component where there is a fairly good control of costs a generally good safety profile will prevail."

The precise interaction between general management practices and good safety management has yet to be described. However, a review of industrial safety policies (13) suggests that safety and efficient operation are one and the same thing. In support of this position, Johnson (10) states, "If we say that safety is just one specialized aspect of reliable control of work,

Table 3-1

Frequency Rates, NSC Members* vs. National Experience, 1968

Industry (NSC Classification)	NSC	BLS
Aerospace	2.4	3.9
Automobile	1.6	5.8
Chemical	3.7	7.4
Fertilizer	6.1	15.7
Food	13.1	24.2
Foundry	9.8	27.8
Glass	6.2	10.2
Iron and Steel Products	11.2	20.7
Lumber	16.3	39.3
Machinery	4.9	13.2
Mining, Coal	32.5†	42.4††
Mining, Metal and Nonmetal	19.6†	28.7††
Non-ferrous Metals and Products	9.2	15.3
Pulp and Paper	7.8	14.2
Quarrying, Stone, Sand and Gravel	15.8†	21.5††
Rubber and Plastics	4.3	15.6
Sheet Metal Products	5.5	21.1
Steel	3.5	6.8
Textile	5.2	8.5
Wood Products	13.7	26.4

Source: NSC - reporters to National Safety Council; BLS - reporters to U.S. Bureau of Labor Statistics. For mining and quarrying sources see footnotes below.

†NSC rates for Mining and Quarrying are from U.S. Bureau of Mines safety competitions.

††BLS rates for Mining and Quarrying are industrywide data from Bureau of Mines.

*In mining, quarrying and steel, a small number of reporters to NSC are not members.

we have taken a giant step toward a useful orientation toward management's objectives."

The General Motors occupational safety program (4), emphasizing that a good safety record is clear evidence of good management, specifies seven principles of safety communication and management.

1. Make all top managers and executives responsible for safety by:
   a. Maintaining a comprehensive safety program at all times
   b. Meeting with key supervisory personnel at least once a month to review safety performance
   c. Taking any action necessary to improve safety conditions.
2. Maintain adequate safety personnel.
3. Develop safety instructions for every job.
4. Instruct each new employee.
5. Operate through supervision.
6. Make every employee safety-minded.
7. Extend efforts beyond the plant.

U. S. Steel's program (22), which has been associated with 81 percent improvement in their disabling injury frequency rate since 1948, echoes the GM attitude and relies heavily on the following safety program tools:

1. Job safety analysis and safe job procedures
2. Basic training, individual contacts and safety observations
3. Employee record cards
4. Accident investigations
5. Awareness charts
6. Physical conditions and safety inspections
7. Activity reports
8. Safety audits.

A review of the contents of other safety programs (5, 9, 20) in companies with outstanding injury reduction records yields a large number of program activities thought to be necessary for efficient safety management. Planek, Driessen and Vilardo (15) attempted to gain a consensus of opinion to determine general and specific factors considered most important to the functioning of a comprehensive industrial safety program. These investigators defined 78 activities covering eight major safety program areas. One hundred safety experts rated the items and program areas in terms of their importance to

total industrial safety programs. The ranking of major safety program areas is presented in Table 3-2. The first five relate closely to line operations while the last three refer mainly to support or administrative functions. Most experts see first line supervision as a key in the success of any program effort.

Table 3-2

Rank Order of Major Safety Program Area*

Element	Rank
Supervisory Participation	1
Top Management Participation	2
Engineering, Inspection, Maintenance	3
Middle Management Participation	4
Screening and Training of Employees	5
Records	6
Coordination by Safety Personnel	7
Motivational and Educational Techniques	8

*Source: Planek, 1967.

Table 3-3 summarizes the three activities of major importance in each program area as found by Planek et al. In the management areas, communication and feedback are emphasized. Across the various management levels, example in terms of exhibiting safe behavior is most important when supported by a frequently repeated safety policy and employee training. Example represents the core of an effective communication system. Evaluation at all levels highlights the feedback portion of the management program. Enforcement is also represented throughout management, however, its importance as a program activity is emphasized most strongly at the supervisory level.

In the engineering area the two highest-rated activities help to "forgive" human error before it produces injury. Establishing a maintenance system and housekeeping practices denotes the necessity for a planned approach to provide a safe environment.

The experts stressed the need to insert safety considerations into three familiar training activities. Those ratings accentuate the intertwining of safety with production as a primary consideration of well-organized and effective safety efforts.

CONTINUED

1 OF 6

Table 3-3

The Three Top-Rated Activities in Each of the Major Program Areas*

Supervisory Participation

Enforcing safe job procedures
Setting an example by safe behavior
Training new or transferred employees in safe job procedures

Middle Management Participation

Setting an example by behavior in accord with safety regulations
Restating management's position on safety
Using safety as a measure of management capability

Top Management Participation

Setting an example by behavior in accord with safety regulations
Assigning someone to coordinate safety on a full or part-time basis
Publishing a policy expressing management's attitude on safety

Engineering, Inspection, Maintenance

Specifying guards on machinery before it is purchased
Setting up a formal lockout procedure
Establishing a system of preventive maintenance for tools, machinery, plant, etc.

Screening and Training of Employees

Making safety a part of every new employee's orientation
Including safety in supervisory training courses
Including safety requirements in job procedures based on job safety analysis

Coordination by Safety Personnel

Advising management in the formulation of safety policy
Analyzing the safety program to determine its effectiveness
Assisting and advising other departments on various safety-related matters

Forming a Record Keeping System

Requiring the department supervisor to conduct investigation of disabling injuries
Using a standardized injury investigation form
Including recommendations in injury statistics reports

Motivational and Educational Techniques

Providing for the employees a list of general safety rules
Establishing a procedure for disciplining violators of safety rules
Holding work place safety meetings

* Source: Planek, 1967.

The highly-rated activities of safety personnel relate to analysis of program effectiveness and advice to various management levels. Again, the structure of communication based on feedback is highlighted. To provide adequate advice, the safety coordinator must be aware of the unfulfilled safety roles of various management levels and departments, as they relate to safety problems evolving from accident records and other measures.

The key to an adequate accident record keeping system is a complete investigation of all injuries using standard terms and procedures. Uniformity and completeness enable the safety coordinator to compare experience among departments and to evaluate plan records periodically so that recommendations can be factually based.

In selecting important activities in the motivation areas, experts rated informational communications most important. Lists of safety rules and penalties seem to be an extension of the important management level activities.

In an attempt to explore safety program contents more definitively Shafai-Sahrai (81) selected 11 matched pairs of industrial firms from 11 different industries located throughout the state of Michigan. Each pair was composed of two similar sized firms in the same industry but with one of the two having higher injury rates than the other. Of the 15 variables studied, a significant difference was found between firms with low and high injury rates on a number of safety-related variables, among which were management interest in safety, quality of the accident records system and supervisor-span of control.

Companies with lower injury rates tended to display more interest in terms of top management involvement in safety meetings, the execution of safety plans and followup of achievement of program objectives. In the area of record keeping, lower accident companies were more likely to show figures on accident costs. Emphasizing the importance of a records system the investigator concludes, "It is no exaggeration to say that one of the cheapest but most effective means of improving the occupational safety picture, especially in small sized firms, is the development of a comprehensive accident record keeping and reporting system."

Of particular interest is the item on supervisor-span of control. In companies with low rates, the median number of men supervised by first-line supervisors fell between 16 and 20; in those companies with higher rates, a median of 21 to 25 subordinates was found. It is clear that the sheer number of employees to be supervised can adversely affect safe practices as well as efficient production.

Corroborating support for the worth of these elements comes from the British Chemical Industry Safety Council (BCISC) whose representatives visited U. S. chemical plants to study "safety practices, procedures and organization." Five U. S. sites were selected because: a) they are leaders in the U. S. chemical industry and b) they have subsidiaries in the United Kingdom. The report (1) points out that subsidiaries in the U. K., using the safety methods of their parent companies in the U. S., have accident rates less than one-third as high as the average of all BCISC member companies.

In addition to management enthusiasm, the report emphasized these factors as indicative of superior U. S. safety practices:

1. General use of company safety policies
2. Assignment of safety responsibility to line management
3. Excellent communication with workers on the shop floor
4. Safety training made a continuing responsibility of line management
5. Willingness of U. S. safety equipment manufacturers to make modifications.

In summary, the industrial safety programming literature consistently reflects the need for support from top management culminating in effective, safety oriented first-line supervision. Anecdotal case histories and expert opinion reflect the need for a total safety effort including many facets of management and employee participation.

Motor Fleet Safety Programs

The elements of industrial safety programs have been adapted for use in many fleet operations. Again, consensus of opinion serves largely as the determiner of program contents.

There are a number of anecdotal indicators that seem to support the view that safety programs containing certain elements are effective in improving accident rates. Yount (23) reported a reduction of the Army Transportation Corps' accident frequency rate from 26.0 to 14.0 accidents per 1,000,000 vehicle miles driven during the years 1946 to 1954. He credits this reduction to "specific safety objectives, teamwork, strong command support, able technical advisors and making safety the responsibility of every commander."

In October, 1954, the Baltimore Yellow Cab Company (3) introduced a fleet safety program into its operations. This program included:

1. A preventive maintenance and inspection procedure for fleet vehicles
2. A comprehensive driver selection procedure
3. Supervisory observation of on-street driving.

Supervisors observing violations of safety regulations stopped drivers, explained the seriousness of the violation and scheduled a meeting with the driver to assign disciplinary action or retraining. Over a three year period, 1954-57, the company experienced a reduction in rate from 74.1 accidents to 52.2 per 1,000,000 miles driven.

Robeson (17), in describing Yellow Transit Freight Lines record of 3,024,762 consecutive accident-free miles, makes this statement: "Investigation tells us that such a performance was possible only because safety is considered to be a top management responsibility at Yellow Transit." This program included many of the elements mentioned by Yount, but emphasized control of accident

costs at each terminal as a primary factor in evaluating safety performance.

In hearings before the Subcommittee on Executive Reorganization (7), Postmaster General Gronouski concluded his description of the Post Office Department's safety program as follows: "These, then are a few of the steps that we have undertaken in our overall safety program. As a result, we have been able to reduce our urban motor vehicle accident rate from 130 accidents per million miles driven in 1953 to 30 in 1964."

The program that the Post Office Department undertook included these elements:

1. Supervision of program by a staff of professional safety engineers who plan, develop, evaluate and recommend action
2. A set of safety requirements for vehicle maintenance
3. A stringent driver qualification and licensing program including driver testing, physical examination and examination of past driving records
4. A special orientation and training program for drivers of right-hand-drive trucks
5. Participation in the National Fleet Contest sponsored by the National Safety Council
6. Safety and health committees in larger post offices
7. Participation in off-the-job safety activities
8. Installation of safety belts and other specialized equipment to protect and assist the driver.

More recent figures supplied by Thune (19) of the U. S. Post Office Department are presented in Table 3-4. The data indicate that substantial reduction in both numbers and costs of injury and property damage is continuing.

Weiss (21) conducted one of the few investigations of the relationship of fleet safety programs to accident frequency rates. The data gathered were descriptive and compared the accident records of bakery fleets with standard fleet safety programs to those with substandard programs. The standard program as defined by Weiss included these elements:

1. A standard of driving performance
2. Driver training
3. Record keeping on individual driver's performance
4. Recognition for good driving.

Table 3-4

United States Postal Service Accident Data Comparison 1970 vs. 1969*

	1970	1969	Amt.of Decrease	% of Decrease
1. Total Number of Accidents	79,923	88,366	-8,443	9.5
2. Total Number of Disabling Injuries	15,105	17,869	-2,764	15.5
3. Total Number of Postal Fatalities	17	24	-7	29.2
4. Motor Vehicle Data				
a. Number of MV Accidents	24, 515	28,223	-3,708	13.1
b. Number of MV Fatalities	11	19	-8	42.1
c. Number of Injuries (Disabling & Non-Disabling)	2,504	2,856	-352	12.3
d. Injury Cost (MV)	$1,719,073	$2,668,105	-$949,032	35.6
e. Property Cost (No Fire-MV)	$5,908,226	$7,430,295	-$1,522,069	20.5
f. Property Cost Fire (MV)	$37,002	$81,129	$44,127	54.4

*Source: Thune, 1971.

A program was judged substandard if any one of these four elements was missing. Table 3-5 shows data taken from the Weiss study covering the years 1962, 1963 and 1964. Only those companies that kept accurate accident counts for all three years were included, though in some of these companies it was necessary to use estimates of mileage to compute rates. Those companies with standard programs show one-third fewer accidents than the substandard program companies. However, as was suggested in the discussion of industrial programs, numerous other variables were operative that could affect rates such as company size, selection procedure and overall company management ability.

The Motor Fleet Safety Manual (14), which synthesizes a large number of motor fleet safety programs, specifies these elements as the basis for any program:

1. Management leadership
2. A written safety policy

Table 3-5

Three Year Accident Frequency Rates of
Bakery Fleets With Standard and Substandard Programs**

Bakery Fleet Safety Program	Companies	Total Mileage 1962-1964*	Total Accidents 1962-1964	No. of Accidents per 1,000,000 miles driven
	9	5,831,150	73	12.51
	10	4,702,320	80	17.01
Standard	12	2,919,690	46	15.75
	16	468,000	6	12.82
	Total	13,973,160	205	14.67
	5	6,735,730	123	18.26
	13	631,800	9	14.24
	19	751,000	15	19.97
Substandard	4	577,300	15	25.98
	8	2,453,250	86	35.06
	3	779,600	15	19.24
	Total	11,928,680	263	22.05

* Mileage estimated from odometer readings, trip records and other sources.

*** Source: Weiss, 1966.

3. Safety responsibility assignment

4. An accident records system

5. Driver selection based on physical and past driving experience criteria

6. Driver training

7. Vehicle safety checks and maintenance

8. Safety supervision and employee observation.

In summary, motor fleet safety programs have not progressed as rapidly as industrial programs and, as a result, practice is less standard. Though the suggested program emphasis is the same as found in industry, there is a stronger interest in participation in fleet contests. The worth of such participation has never been evaluated.

System Safety

A system is an orderly arrangement of related components that interact with one another to perform a task or function in a particular environment and within particular periods of time (16).

System safety can be seen as the specific application of supervision, maintenance, personnel requirements, standards and skills throughout all aspects of system operation to assure optimum safety (2). This approach has been used for a number of years by the aerospace industry and is still evolving. The major differences between industrial and system safety lie in the analytic methods used. Industrial safety is closely tied to a general method that functions in a continuous manner and is governed by standards, procedural guidelines and philosophies that are accepted as practical and effective in handling any occupational hazard situation. System safety is more problem oriented, emphasizing hazard classification in terms of both severity (e.g., negligible to catastrophic) and probability of occurrence (e.g., probable to extremely remote).

Of major concern is the analysis of component failure as it affects the total system. Component failure includes consideration of the interaction among man, machine and environment so that specified hazards are maintained within acceptable tolerance limits. Preference is given to creating hardware systems that "forgive" human error or are fail-safe rather than burdening the individual with procedural directives that attempt to fit him to the hardware.

System safety begins at the conceptual phase of operation planning or equipment design. Such methods as technique for human error rate prediction (THERP) (11), failure-mode and effect tables (16) and fault-tree analyses (8) aid in analysing the kinds of failures that occur and their effect on the performance of the total system. Also there is a strong emphasis on the utilization of known precedents and previous research data from other related disciplines, particularly human factors engineering.

Finally, system safety stresses the monitoring and review of hazards throughout the life of the system. Safety considerations begin at the planning phase of any operation and are included throughout all phases until the operation is completed or discontinued. For example, in the manufacture of motor vehicles, safety and human factor considerations should be important checkpoints in developing original specifications and in vehicle performance testing before distribution to the public. Throughout the life of a vehicle, safety inspection and maintenance procedures should insure that it is free from defects.

Johnson (10), in integrating system safety with the best current industrial safety practices, sees the management requirements in terms of personnel function identical for both levels of safety programming:

1. Management is vigorous in pursuit of safety through managerial excellence, because of humane and economic concern and because hazard reduction is congruous with reliable control of work and performance.

2. Line supervision is accountable for performance with safety, is trained and motivated and assisted as necessary.

3. Staff. A specialized safety staff serves as consultant, advisor, expeditor, designer of hazard reduction programs and monitor and evaluator of the effectiveness of the programs.

   Other staff units have assigned safety functions consistent with their objectives.

4. Employees are trained and motivated.

Testimony for the utility of system safety as a device for improving the injury and damage reduction function comes mainly from the military and aerospace sectors of the federal government. Johnson, who presents a detailed examination of these methods, concludes:

> "System safety analysis has not only improved our technological capacities, but also has begun to raise public expectations as to what is possible in product, transportation and occupational safety...there can be no excuse for failure to begin using the concepts (system safety analysis), even though the research necessary for exact numbers and the time available for analysis are both inadequate."

CHAPTER 4

THE ORGANIZATION AND MANAGEMENT OF INJURY AND DAMAGE REDUCTION WITHIN MUNICIPAL POLICE DEPARTMENTS

Data Collection

Information gathered on police IDR programs consisted largely of summarized responses to selected general survey questions supplemented by data gathered on two-day site visits to 10 municipal departments. The purpose of the site visits was to obtain an in-depth view of current injury and damage reduction practices. Larger departments were chosen on the assumption that they would have an organizational structure more suited to supporting a definable IDR function than departments containing fewer personnel.

An extensive questionnaire was devised for the major portion of the site visit interviews to provide a basis for classifying the responses across cities (Appendix A). The underlying rationale directing its planning and final form was that IDR considerations overlay a number of department functions (Table 4-1). As with any other management objective, interest in injury and damage reduction must be exemplified, communicated and subjected to formal followup procedures. The questionnaires attempted to obtain the perceptions of those responsible for IDR as well as those who should be supporting this effort.

A pilot test for the questionnaire and the entire site visit procedure was planned but aborted due to an unforseeable difficulty arising in the pilot test site. However, a two-day meeting of all site visit team members was held to discuss questionnaire contents and interview procedures. Each team was composed of a research and field staff member. Results of the site visit interviews are presented in Appendix F.

An Overview of Police IDR Management

In only five of the 10 site visit cities was there a formal on-going attempt to control injury and property damage within the department. In several of the departments without formal programs, an effort was being made to achieve such control through the city safety administrator's office. In these cases, departmental cooperation was limited largely to compliance with the city's request to provide personnel injury and property damage records for compensation and budgetary purposes.

The city safety administrators expressed the opinion that police and fire departments offered the most difficult challenge in terms of instituting internal programs. Both city safety administrators and police officials admitted that the key to successful implementation of a departmental injury and damage reduction function was the Chief. Without his vigorous support, a city public employee safety program within the police department amounts merely to an accounting of compensable injury and property damage cases or to the convening of an accident review board that functions in a disciplinary and sometimes token capacity. While both record keeping and accident review are desirable features in viable programs, they are not sufficient if the goal is to reduce injuries and property damage.

Table 4-1

Contents of Site Visit Questionnaire

Function	Person(s) to be Interviewed	Contents
SAFETY	Safety officer or equivalent (include both vehicular and non-vehicular responsibilities)	This section focuses on the position of the safety officer or his equivalent in the chain of command. It also includes questions on basic accident reporting and safety inspection procedures.
COMMAND	Commanders in line of command where matters of safety are considered including Chief	This section focuses on the concern of command officers with matters of safety as well as their attitude toward safety and efficient performance.
TRAINING	Director of training	This section focuses on general training practices, safety content of courses and criteria used for performance evaluation.
PERSONNEL	Director of personnel administration	This section focuses on sick leave, compensation, selection and promotion practices.
MOTOR FLEET/ GARAGE	Garage or fleet Commander	This section focuses on specifications for the purchase of new vehicles, vehicle assignment and inspection practices, vehicle defects, motor fleet accident experience and driver selection procedures.
MEDICAL	Police doctor or other knowledgeable personnel	This section focuses on the extent of the current physical fitness program and overall fitness of the department personnel.
BUDGET	Comptroller, city safety coordinator or other knowledgeable personnel	This section focuses on a detailing of safety expenditures and accident costs.

It is the feeling of the investigators that departmental cooperation could be more readily obtained if the contents of an injury and damage reduction function structured to meet police needs were communicated directly to the Chief for implementation. In one department, the Chief indicated that he would forward any effort to establish such a function once it was sufficiently defined.

In the majority of site visit departments safety responsibility was buried in the chain of command to the extent that it afforded little possibility for influencing police decision-making. Coincident with lack of status in the chain of command was the almost total limitation of responsibility to record keeping.

Injury and property damage reports, or summaries thereof, were distributed on a perfunctory basis usually with no recommendations for reducing the occurrence of injuries or property damage. There was no formal mechanism for feedback or followup to ascertain what action was taken as a result of a given report. In one department, the individual responsible for summarizing motor vehicle injury and damage reports had no idea if they were even read. In another department an interviewee was sure that they weren't. In such situations, injury and property damage records become an end in themselves rather than a means for control and reduction. Eastman (2) comments on this misfortune as follows: "A records element with neither administrative nor operational support soon becomes self-serving. It accepts records, files them and forgets them. The office may be neat and tidy, records properly maintained and the total operation quite efficient, yet ineffectual, for it serves no one."

When the city safety administrator is responsible for summarizing and analyzing injury and damage records, the worth of the effort is in part dependent on his ability to communicate with command personnel to obtain action. In no city visited was this liaison found to be satisfactory.

Several departments had fairly aggressive injury and damage control programs as assessed by contents of directives, training materials, analysis of records and support of the Chief. In each of these departments, the individual responsible for injury and damage control was more directly associated with the Chief or operated in close liaison with the department training function.

Police Management of IDR Function

The charactieristics of safety program management are not different from those to be found in the efficient management of any operation. Similarly, they describe a profile that is present in efficient police management systems (3). Eastman (2) enumerates them as planning, organizing, assembling resources, directing and controlling.

The planning function involves problem diagnosis, decision and evaluation (13). It is, according to Eastman, "the only sound basis for any undertaking whether the latter be complex or simple." Although standard safety programs and procedures offer useful input to the Chief and his assistant in formulating their mode of operation, every department's IDR function must be tailored to meet internal needs and solve local problems.

Organizing is the outgrowth of planning and relates directly to establishing the structure for achieving defined objectives. Assembling of resources leads directly to execution of plans and is constrained by the injury and damage problem as well as budgetary, attitudinal and other internal factors.

Directing and controlling constitute the "payoff" activities in program execution. The general order is the usual implementing device through which policy, procedure and responsibility is communicated throughout the department. The control function is undertaken through supervision but as Eastman maintains, "in the final analysis, it must be achieved and assured through a staff inspection process" (2).

The application of these management principles to the IDR function will constitute the basis for the following evaluation of the departments contacted.

Planning

From a review of the general survey data and the site visit interviews, it is clear that most injury and damage reduction programming suffers from a lack of planning. The fragmentation of policies, programs and related activities bespeaks a need for a more organized approach to the injury and damage reduction problem. It was found using data in Table E-10, that only 27 of the 118 departments surveyed have the commonly characterized basic element of an IDR function, i.e., formal, written policy directives in both motor fleet and occupational safety. Even those with directives have not developed their programs sufficiently to reduce injury and damage events.

The insertion of IDR programs into department operations seems to stem largely from ad hoc reactions to injury and damage problems that are out of control or from external demands placed on police officials by city managers, mayors or compensation boards. In these cases, general orders tended simply to fill the current needs rather than to create long range policies to achieve continuous reduction of the injury and damage problem.

A key indicator of the lack of formal planning is the extremely low positive response to the question concerning evaluation of the effectiveness of personnel safety procedures. Only 10 general survey respondents answered that such evaluations were conducted in the motor fleet area and nine departments (Table E-8) answered positively in reference to personnel safety. Only two of these departments were able to describe or attach a report explaining the evaluation and its results.

As is covered more fully in Chapter 2, the quality of the internal recording of injury and damage events, though providing the majority of departments with a molar definition of their problem, does not give sufficient information to allow problem diagnosis and effective decision-making at any command level. Less than 20 percent of the departments surveyed reported record storage in some type of ADP mode. Computerized analysis of these data is a necessity. As Pope (14) observes, "The computer encourages its users to accelerate research, to improve their ability for diagnosing specific problems, to establish a set of priorities and to identify cost/effectiveness situations. It forces safety managers into being more responsive to the needs of good management."

Organizing

In proposing standardized nomenclature for police organization, Gourley (5) maintains that "Non-uniform functional time and place titles for organizational units in police departments result in much confusion. This is particularly true of the major departmental subdivisions which are usually functional units with jurisdiction-wide coverage." Lack of uniformity poses a definite problem when attempting to locate responsibility for injury and damage control within departments on a comparative basis. Further complications arise because there is little agreement in the literature as to where the IDR function should be located organizationally.

To clarify the discussion that follows, the nomenclature proposed by Gourley will be followed:

Bureau	The primary subordinate organizational unit within the police department
Division	A primary subdivision of a bureau having department-wide function either for a general police service or for some specialized activity or an organizational unit responsible directly to the Chief of Police that contains two or more separate sections
Section	An organic subdivision of a division or a geographical subdivision of a district
Unit	A subdivision of a section.

Wilson (17) views safety as an aspect of employee welfare, the responsibility for which is assumed by personnel. He states, 'The personnel officer should develop programs of employee-safety education..."

Eastman (2) also sees department safety functioning in a unit within the personnel section under the staff services division in police departments in a city of 500,000 as in Figure 4-1.

An IACP report from one department locates the safety office within the resource section of the inspections division as shown in Figure 4-2. The report views the safety office as essentially inspectional in function and as being concerned with the prevention of accidents, primarily motor vehicle. Table 4-2 shows the placement of the IDR function within the site visit department's organization structure. In most of the departments the IDR function, where present, is at unit level and, with the exception of department B, not highly staffed. Only in departments B, C and I is the same officer assigned to both motor vehicle and personnel safety. Nineteen percent of the departments responding to the general survey indicated that the same officer was responsible for both programs.

The IDR function was found to be operating most efficiently and with greatest influence in departments B and C. Both of these departments have positioned the IDR responsibility uniquely. In department B, the IDR function

has divisional status and direct communication with the Chief was found to be frequent. Department C's IDR function, situated within the police academy, naturally maintains close communication with the personnel and training function. As a result there is an excellent opportunity to initiate changes in training or to structure training bulletins to reflect needs that appear from analysis of injury and damage records.

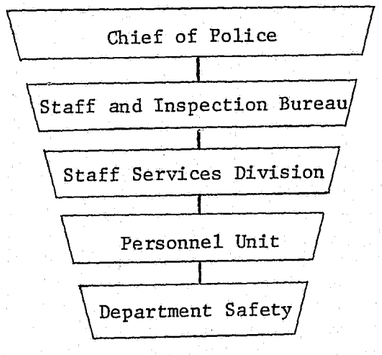


Fig. 4-1 Eastman recommendation for organizational positioning of safety management in a large department.

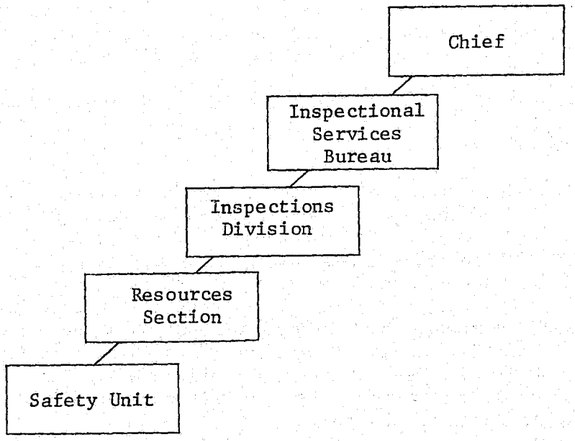


Fig. 4-2 IACP recommendation for positioning of safety unit in a selected department.

Departments D and F have located their IDR function within traffic operations. Such organizational placement is most conducive to maintaining strong supervisory control of the motor fleet IDR program. However, there are no corresponding programs in other operations or field branches such as patrol and investigation. Also, the main thrust of programs in both departments seems to be investigation, record keeping and accident review. Though necessary, these activities constitute only a partial program in the motor fleet area. The nature of the patrol, traffic and investigative activities mitigates against the maintenance of an adequate IDR function in operations. The main reason for this is the pressure on all personnel within operations to fulfill the main functions of the police, namely crime control, protection of the citizens and service to the community. A similar argument is made for the maintenance of the safety department as a staff rather than a line element in industry.

In other departments visited, the IDR function rested either with the city safety administrator or in a unit within a service bureau. The ineffectiveness of having the IDR function operating from the outside, as is the case in departments G and J, has been discussed. It is highly unlikely that any progress can be made unless IDR is seen as a worthwhile goal by the Chief and implemented internally with the city safety administrator operating in a resource capacity.

In departments A, E and I, the IDR function is located at the unit level within a service bureau. In departments A and E, the IDR function is limited mainly to motor fleet activities and seems buried in organizational structure to the point where it is largely a record keeping and review function with characteristics very similar to those found when IDR was located in operations. In department I, a very strong IDR function that was in direct communication with the Chief has recently been resituated as a unit within the inspectional services bureau. Again, though inspection and control is a necessity for the operation of a successful IDR function, it is clear that the usual responsibilities undertaken by the inspections staff are narrower than what can be considered necessary for a total effort.

Directing

Beyond the presence of some mode of record-keeping, there is little uniformity of injury and damage reduction practices within municipal police departments. Only one-third of the general survey departments indicated that a written directive or general order for motor fleet safety was in effect and only 23 percent said there were similar statements on personnel safety (Table E-8).

The presence of a formal safety policy has historically been considered the first step in any viable occupational safety program (9). In the police department, such a statement would take the form of a general order. As Eastman (2) points out, "A general order becomes the guiding document for a long period of time and is a logical step in the establishment of communication within the chain of command." As would be expected, those departments with a general order covering both motor vehicle and personnel safety have a more organized program in terms of assigning responsibility, maintaining safety records of individual officers and instituting safety-related programs.

Table 4-2

Organizational Structure and Responsibilities
of IDR Function in Site Visit Departments, September 1970

Department	Unit	Section	Division	Bureau	IDR Responsibilities	
					Motor Fleet	Personnel
A†	Safety	Administrative	-------	Administrative Services	A B	*
B	----	------	Safety	Administrative Services	A B C I J K L	A B C I J K L
C†	Safety	Administration	Academy	Personnel staff Services	A B C D E I J L	A B C D E I J
D	Accident Investigation	Traffic	Operations	-----	A B H L	*
E	---	------	Personnel & Training	Administrative Services	A B C D L	*
F	-----	Safety	Traffic	Operations	A B C L	*
G	----	City Safety Administrator	-------	-----	A B	*
H					A L	A B
I†	Safety	Resources	Inspection	Inspectional Services	A B L	A B
J	----	City Safety Administrator	-------	-----	A B L	*

IDR Responsibilities:

A--Maintain Injury Records
B--Issue Injury Summaries
C--Coordinate IDR Program
D--Review Department IDR Program
E--Recommend Purchase of Protective Equipment
F--Review Vehicle Specifications
G--Conduct Inspections of Facilities
H--Conduct Employee Observations
I--Issue or Collaborate on IDR Training Bulletins
J--Conduct Training
K--Collaborate on New Training Content
L--Serve on Accident Review Board

†These cities have changed their IDR function substantially since Sept. 1970.

*--Not formally operative

Table 4-3 shows the IDR program elements that were found to be significantly (< .05 level) related to the existence of a general order covering both vehicular and personnel safety across all population groups. The presence of a general directive does not seem to influence such items as record-keeping, frequency of summarizing injury and damage experience, investigating procedures, protective equipment purchase or training. Most of these elements are tied to operational necessities as well as to injury and damage reduction.

Without exception, efforts to influence motor fleet safety directly through organized activities are found to be significantly more frequent than those that increase personnel safety. Seventy-two percent of all departments reporting on the general survey maintain vehicular accidents in personnel files, while only 52 percent keep similar records for non-vehicular injuries (Table E-1). Twice as many departments reported the functioning of a review board for vehicular accidents as compared to non-vehicular accidents (Table E-6). Similar differences in favor of motor fleet safety appear in responses to questions about the existence of a formal safety program, the assignment of responsibility for safety and maintenance of a supervisor's accident file (Table E-8).

The reasons for this discrepancy, in light of the nature and cost of motor fleet accidents, are not difficult to understand. There are, however, strong arguments that would favor a balanced attack including more stress on personnel safety. Numerous injuries occur in the course of non-vehicular operations. But emphasis on only one area of injury and property damage implies that the other is well in hand or, what is even less desirable, that personnel injuries incurred in-the-line-of-duty are acceptable to the department, if the job gets done. This view was expressed a number of times by interviewees who told of cases of officers being reprimanded for having an accident and also receiving a commendation from the commanding officer for effectively accomplishing a mission. Admittedly, there are situations when this outcome may be warranted. On the other hand, lack of formal programs to effect reduction in personnel injuries indicates an unacceptable condition that allows contradictory behavior and leads to an unwarranted undermining of the total IDR effort.

Assembling Resources

Only 42 percent of the departments surveyed have assigned responsibility for motor fleet safety to a specific officer; 25 percent have made similar assignments in personnel safety. In 19 percent of these departments the same officer was responsible for both motor fleet and personnel safety. From these figures alone it is obvious that IDR generally is not considered a crucial management concern.

In terms of budget allocation, only 23 percent of the responding departments were able to give any estimates of expenditures. This failure is not surprising given the general lack of IDR function support. The budget allocated to safety related expenses ranged from .01 to 2 percent of the total annual budget. This level of expenditure, when contrasted with the costs of injury and property damage events incurred by departments, emphasizes the inequity of most department efforts in pursuing injury and damage reduction.

Table 4-3

IDR Program Elements Significantly Related to Presence of Written General Order in Both Motor Fleet and Occupational Safety

IDR Program Element	Chi Square
Maintenance of Individual Vehicle Safety Record	6.1538*
Maintenance of Individual Occupational Safety Record	6.8633
Existance of Occupational Injury Review Board	13.8482
Existance of Vehicle Accident Review Board	9.4624
Formal Motor Fleet Safety Program	13.8586
Officer Assigned to Motor Fleet Safety	14.3170
Formal Occupational Safety Program	35.3597
Officer Assigned to Occupational Safety	20.2154
Same Officer Assigned to Both Motor Fleet and Occupational Safety	10.7604
Planned Safety Inspection - Motor Fleet	11.1263
Planned Safety Inspection - Occupational	12,5000
Safety Inspection Checklist - Occupational	10.6105
Job Safety Analysis Procedures File - Occupational	3.9384*
Employee Safety Observation - Occupational	6.6424
Training in Use of Personal Protective Equipment - Occup.	3.9384*

* $p < .05$, For all other values, $p < .01$.

In the area of record keeping, only 20 percent of the departments indicated that portions of their motor fleet injury and damage records were stored in ADP modes while 12 percent gave similar indications for personnel injury data. Although the general survey did not probe the availablilty of computer installations, a survey by Whisenand and Hodges (16) indicates that a number of departments are using some form of automatic data processing. Of the 25 departments responding to this survey, 44 percent were using ADP in 1968 and some 63 percent stated that they would have some type of installation at their disposal by 1971. In one city, ADP can be used only in instances where 15,000 or more cases are recorded annually. It would seem that the need for a large number of cases to operate ADP economically should be weighed in light of the importance of IDR efforts to provide some sort of reasonable access to this necessary means of analysis.

Controlling

Inspection and supervision

As in industry, basic control to insure compliance to procedures is exercised by first line supervisors in the police department. Newman and Roberts (11) state, "Line or authoritative inspection is and must remain a key management tool. In smaller agencies it will continue to serve as the principle control device." Wilson (17) calls sergeants the "key to good discipline." He assigns them three major responsibilities: a) to discover failures or deficiencies, b) to analyze the deficiencies and the best mode of correcting them and c) to initiate correction.

In larger departments, control at the supervisor's level is supplemented by staff inspections. These are conducted outside the normal lines of authority and responsibility. "In effect, they serve as an extension of the office of the Chief of police--within carefully prescribed limitations and under general circumstances conducive to effective work" (11).

Table 4-4 shows the percent of departments responding positively to survey questions focusing on the supervisory control tools most frequently used in the IDR function. Again the emphasis on vehicular ID control is clear. Supervisor records, used to evaluate experience of subordinates, are maintained by only one-third of the responding departments (Table E-1). While the records of individual members of the department are kept more frequently, the site visit interviews revealed that such records are likely to be filed in the personnel jacket and not subject to rapid retrieval.

Planned safety inspections and employee safety observations are carried out by slightly more than one-third of the departments. No attempt was made to assess the quality of these activities, but from site visit experience and from the lack of documentation provided by departments responding to the general survey, it is felt that the quality of these activities is not high.

None of the site visit cities included safety-related factors in supervisor observation of subordinates. In only one department was safety included in the field evaluation of new recruits. In this case, safe driving ability was evaluated.

Table 4-4

Frequency of Positive Replies to
Survey Items Relating to Supervisory Control of IDR Function

	Motor Vehicle		Personnel	
	Number	Percent	Number	Percent
Supervisor Record	37	31	28	24
Individual Record	85	72	61	52
Planned Safety Inspection	42	36	19	16
Safety Inspection Checklist	49	42	22	19
Employee Observation	42	36	32	27
Job Safety Analysis File	15	13	15	13

The existence of safety checklists is most prevalent in the motor fleet area. Many departments use such lists for vehicle checkout before and after use. This practice was found to be standard in many of the site visit cities and is used frequently to fix responsibility for vehicle damage.

Finally, of particular concern is the lack of documentation on safe job procedures flowing from the job safety analysis process. Most departments make use of IACP materials that contain useful information on many topics such as safe driving practices, arrest, search and transportation of prisoners. However, further analysis of police tasks as they are undertaken at the local level is also required. The supervisor is a main contributor to such analyses.

The site visits confirmed the fact that supervisory IDR participation is minimal. The total department attitude toward "safety" seems to set the norm for supervisor participation. Olsen's study (12) performed in a medium sized midwestern police department provides some insight into the attitudes of sergeants and other levels of supervision toward IDR activity.

The purpose of Olsen's study was to produce a patrolman performance evaluation form. A questionnaire was distributed across all ranks within the department and respondents were asked to rate the appropriateness of each of the 72 traits presented for inclusion on the department evaluation form. One of the traits for which opinions were asked was "safety mindedness" (for example, searching suspects; driving police auto, etc.,). Table 4-5 shows the results across ranks.

Table 4-5

Opinions Concerning the Inclusion of a
"Safety Mindedness" Factor in Patrolman Performance Evaluation Forms*

Rank	Def. Should Be Included	Prob. Should Be Included	No Opinion	Prob. Should Not Be Inc.	Def. Should Not Be Inc.
Capt. & Higher	80	---	20	---	---
Lts. & Staff Sgts.	80	20	---	---	---
Sergeants	59	29	12	---	---
Detectives	100				
Patrolmen	58	28	7	7	---

*Source: Olsen, 1969.

There were two interesting aspects of the response distribution. First, among sergeants and patrolmen "safety-mindedness" was not considered as important a factor in performance evaluation as it is among other ranks. Second, a solid one-fifth of the top command echelon had no opinion as to the inclusion of the "safety-mindedness" trait in performance evaluation. On a department-wide basis the "safety-mindedness" factor ranked 14th out of the 23 "work factor" variables contained in the questionnaire.

It is apparent from this brief example that more needs to be done at the supervisory level to build the participation necessary for implementing IDR programs. Of special concern are supervisor training in IDR activities and the maintenance of a system of supervisor accountability. On the latter point, it must be reemphasized that safe task performance by subordinates is not considered to be a factor in appraising supervisors for promotion in any departments studied. Site visit interviewees indicated that promotion was based primarily on seniority and other factors related to "getting the job done." Efficiency was seen as a major determiner quite apart from factors of safety that were often seen as inhibiting rather than facilitating effective performance.

The problem of supervisor attitude toward safety can be remedied only at the top management level. Unless departmental commitment is clearly demonstrated by the Chief and his immediate commanders, the IDR function will not succeed at the supervisory level and is likely to be considered little more than window dressing by subordinate personnel.

Accident review boards

The accident review board is more commonly operative in motor fleet safety programs. Seventy-five of the responding departments indicated the functioning of such a board to review vehicular accidents and slightly less

than one-half that number reported the presence of boards to review occupational injuries (Table E-6). The frequency of meetings varied, the more common responses being divided between monthly meetings and meetings when necessary. In 27 percent of the cities, employees could be assessed monetary repayment to the city for damage to a police vehicle.

The responsibility of the review board is usually twofold:

1. To judge "the preventability" or "non-preventability" of an accident

2. To recommend any disciplinary action that should be administered.

Johnson (8) makes the point that the functioning of the review board also promotes "uniformity in handling of police accidents."

Study of accident review board procedures in the site visit cities revealed the variety of procedures shown in Table 4-6. In cities with a public employee safety program, the membership of the accident review board ordinarily includes representatives from the various city departments, e.g., police, fire, sanitation and public works. In the absence of a citywide safety program, the membership of the board usually consists solely of police personnel.

Officers can be brought before boards on the basis of fixed criteria or on the recommendation of the investigating or reviewing officers. City safety administrators can also recommend a hearing. Criteria for adjudging driver responsibility for an accident differ in each city. For example, the concept of preventability is defined in department D as failure to obey a traffic sign or control signal; in department E, preventability refers to more general categories including defensive driving principles.

Disciplinary recommendations vary depending on the past record of the offending officers, the disciplinary practices of the department and the influence of the board. In most cases, however, the final decision to act upon recommended disciplinary measures rests with command personnel or city officials.

One measure often used to judge the effectiveness of review boards in evaluating motor fleet accidents is the annual percent of accidents judged to be preventable. The percent of the total number of vehicle accidents judged to be preventable in five site visit departments maintaining such figures for 1969 were 42, 44, 46, 46 and 60 percent respectively. These percents are somewhat lower than the figures reported for 1969 by a sampling of 20 trucking companies contacted by the National Safety Council. Of the 12 companies responding, the median rate of preventable judgments was found to be 67 percent.

A great deal of caution must be used in interpreting this difference as indicating undue leniency on the part of police review boards; the criteria used to assign preventability and particularly the type of exposure experienced by the two motor fleet groups must be examined first. For example,

police fleets are more likely to be the target of assault by certain elements of the general public. In this regard, they may be involved in more "non-preventable" accidents. To check on this assumption several bus companies, who are also subjected more frequently to abuse by the general public, were asked for their preventability figures. The four companies responding submitted rates of 34, 34, 36 and 56 percent respectively.

In summary, it does not seem that annual preventability rates are very useful in making interdepartmental comparisons unless definitions of preventability and exposure are equated. However, the study of these rates may serve internal purposes if they are properly interpreted as indicating trends of public abuse or providing a realistic appraisal of department driving, over time. As to the latter point, a low preventability percent may indicate the effectiveness of motor fleet safety programs. The objective of such programs is to cut preventable accidents to a minimum.

In most of the cities visited, the attitudes underlying accident review board functioning can be described aptly by these quotes from the Motor Fleet Safety Manual (10):

> "Basically, use of the procedure (accident review) assures that a 'lesson' in each accident will be learned by the driver and the organization. Since reward or discipline is decided, it is essential that a standard guide be applied when reviewing an accident."

This position that emphasizes the disciplinary aspect of most review proceedings is at variance with a number of other views of the disciplinary process in police departments. Wilson (17) makes this important observation on the subject:

> "In recommending punishment, superior officers must make important judgments about the motive and intent of the offender. They must determine whether the violation resulted from deliberate defiance of department rules and regulations or inadvertently from ignorance or carelessness. When the offense stems from the latter source all recommended punishment should be aimed at retraining the officer and assisting him to improve his value to the service."

Heisel (7) sees the purpose of disciplinary action as the change of behavior. Training and supervision are the ground work for attaining high levels of compliance and clear cut policies and procedures are part of the training tools.

It seems obvious from the last two opinions expressed that the simple meting out of penalties for preventable vehicular accidents may not achieve the appropriate long term objective of the review process that is to reduce their incidence. This is particularly true if departments have no comprehensive and continuing training and supervisory program to support the push for accident-free driving implied by the existence and rulings of the accident review board.

Table 4-6

Membership Functioning and Responsibilities of
Motor Fleet Accident Review Boards in Site Visit Cities

Department	Member-Ship*	Chairman	Frequency of Meetings	Types of Accidents Reviewed	Criteria For Determining Responsibility	Main Purpose of Hearing	Possible Dispositions: Retraining	Possible Dispositions: Defray Damages	Possible Dispositions: Maximum Penalty	Right of Appeal	Final Review
A	P.D.	Captain, Operations	Monthly	All Accidents	P-Undefined	Discipline	Yes	No	Undefined	Yes	Bureau Commander
B	P.D.	Safety Officer	Weekly	Emergency/Recommended by Investigators or Safety Office	P-Undefined	Educational	Yes	No	Undefined	Yes	Commissioner
C	P.D.	Commander, Police Academy	Bi-Monthly	All Accidents	General Hearing	Educational	Yes	No	Revocation of Department Drivers License	Yes	Chief Inspector
D	C.D.'s	Rotates Among City Departments	Weekly	Recommended by Investigators or City Safety Administrator	P-Negligence/Traffic Control, Sign or Signal	Discipline	No	No	Loss of 24 Hrs. Earned Overtime and Demerits	Yes	Commanding Officer
E	P.D.	Deputy Chief	Monthly	Recommended by Traffic	P-Rules of Road/Negligence/Defensive Driving Principle	Discipline	No	Yes	Compensatory Days Off	Yes	Director of Administrative Services
F	P.D.	Deputy Chief	As Needed	Recommended by Commander or Driver Involved	P-Motor Vehicle Code/ All Aspects of Safety	Discipline	Yes	No	Revocation of Department Drivers License	Yes	Commissioner
G	C.D.'s	City Safety Administrator	Weekly	All Accidents	General Review	Discipline	No	No	Undefined	Yes	Department Administrator
H	D.P.		Bi-Weekly	All Accidents	Driver Negligence	Discipline	No	No	Undefined	Yes	Chief
I	C.D.'s	City Personnel Director	As Needed	Driver's Second Accident in Twelve-Month Period	Driver Responsibility	Discipline	No	Yes	Revocation of Department Drivers License	Yes	City Manager
J	C.D.'s	Rotates	Monthly	All Accidents	Driver at Fault; Define Point System, Determine Extent of Fault	Discipline	No	No	Revocation of Department Drivers License	No	Department Administrator

*P.D. -Police Department
C.D.'s -City Departments

In an attempt to gain an impression of the effect of the accident review board on accident rates, departments with and without a review board were compared. Table 4-7 shows the observed frequency of high rate and low rate departments using the median auto accident rate for all departments reporting 1969 rates as the point of division between high and low. Chi square analysis indicates no significant difference between departments with and without boards.

Twenty-six (32%) of the general survey respondents indicated that employees are assessed monetary repayment for damage to a police vehicle due to negligence. Tables 4-8 and 4-9 show that the presence of a monetary repayment system produced no significant differences in the distribution of high and low auto accident rate departments.

These analyses should be viewed in the proper perspective. Such factors as the number of times repayments are assessed, the fairness of proceedings and the perceptions of department personnel all play a part in preventing any firm interpretation of these results. Nevertheless, the effectiveness of the review board or monetary repayment process as it relates to motor fleet rates has not been demonstrated in this analysis.

A more appropriate role for the review board seems to be defined by Boye (1) who sees hearings as being "primarily educational rather than punitive. The findings are translated into training programs, study of new equipment or issuance of safety directives."

In short, it would seem that the review board's activity should stress more diagnosis of the accident-involved driver's deficiencies and recommend retraining to meet these deficiencies in a positive manner wherever possible. This is, after all, the long term purpose of the review process. Where appropriate, discipline must continue to be applied but the application should be balanced with remedial efforts.

An alternative to the convening of a single accident review board is the establishment of IDR committees throughout the various command echelons, not only to review ID events when necessary but to aid in the formulation and the recommendation of remedial IDR policies and programs.

The police department differs from most public employee and industrial groups in that motor fleet and personnel safety are entwined closely in practice yet separated in departmental control. Motor fleet IDR programs focus on the officer as a driver; personnel IDR programs focus on every one of his responsibilities both inside and outside his vehicle. IDR committees that function efficiently can provide the participation necessary at every department level and thus assume an integrated effort. However, the concept of total involvement requires an IDR committee structure that provides a chain of communication up and down the line of command.

Simonds and Grimaldi (15) give some of the pros and cons of committee activity. A primary weakness is the fact that "As a means of administration, committees are usually too cumbersome and slow moving to be very effective." On the other hand, committees are effective in spreading influence, interest and education in an activity and "may be effective in making broad policy

Table 4-7

*High and Low Auto Accident Rate Departments and Presence of Accident Review Board

	High	Low
Present	21 (24.34)	27 (23.66)
Not Present	15 (11.66)	8 (11.34)

$\chi^2 = 2.86$, df = 1, N.S.

*Median rate for 74 departments reporting 1969 rates = 32.2/1,000,000 miles.

Table 4-8

*High and Low Auto Accident Rate Departments and Repayment of Damages

	High	Low
Repayment	13 (12.61)	13 (13.39)
No Repayment	19 (19.39)	21 (20.61)

$\chi^2 = 0.03$, df = 1, N.S.

*Median rate for 74 departments reporting 1969 rates = 32.2/1,000,000 miles

Table 4-9

*High and Low Auto Accident Rate Departments with Accident Review Boards and Repayment of damages

	High	Low
Repayment	9 (9.38)	12 (11.62)
No Repayment	12 (11.62)	14 (14.38)

$\chi^2 = 0.05$, df = 1, N.S.

*Median rate for 74 departments reporting 1969 rates = 32.2/1,000,000 miles.

decisions." In his analysis of the subject, Forsgren (4) points to the obvious weaknesses that undercut committee effectiveness: a) use of safety as a basis for grievances, b) wasting time through the discussion of extraneous matter and c) the lack of constructive planning on the part of participants. Obviously, such negative aspects must be dealt with by a clear communication of management expectations.

The overriding consideration that prompts the recommendation for IDR committees lies in the obvious negative attitude shown by most departments toward injury and damage reduction. Hayes (6) states, "Because of the universal belief that danger and extreme hazard are inherent to police work, there is a preponderance of evidence which suggests that safety within policing agencies throughout the United States is lacking or totally ignored." The need for reeducation is great across all levels of police personnel. IDR committees functioning efficiently can speed this process.

Safety committee structure is tri-level in industry. A similar arrangement is suggested for police departments. It is proposed, however, that the IDR committee structure in the police department take on a more active role than in most industrial operations, particularly in the area of accident review. Even in cities where interdepartment accident review boards function, it is still possible to implement the IDR committee process with review responsibilities.

CHAPTER 5

IDR PROGRAMS WITHIN MUNICIPAL POLICE DEPARTMENTS

IDR Training

Training is a basic support activity in achieving the goals of the IDR function. The concepts embodied in IDR training programs complement the programs already existing in most departments. On this point, Whisenand (15) comments, "...Special safety training programs are necessary to assist in reducing accidents. However, care must be taken to insure that these programs are designed to support police supervision, rather than supplant it, in the area of safety."

Unfortunately, the problems that beset police training in general magnify the difficulties in specifying IDR training curricula. The "Police Training and Performance Study" prepared for the New York Police Department discusses these problems in detail (9). After general analysis of many municipal police training programs this report comments: "There is no consensus on what percentage of the recruit training program should be devoted to training in each category." In speaking of the curricula developed in the departments surveyed, the report states: "None of these curricula may have been based on anything more than tradition, trial and error or other incidental criteria."

Table 5-1 shows IDR-related training data for site visit departments that were also contacted by the New York Study group. Divergence is particularly great in the areas of physical training and patrol and traffic training.

Table 5-1

Total Training Hours Devoted to
Subjects Incorporating IDR-Related Training*

Site Visit Dept.	Type of Training							
	Firearms Hours	% Total Training Time	Physical Hours	% Total Training Time	First Aid Hours	% Total Training Time	Patrol & Traffic Hours	% Total Training Time
C	56	10	176	32	16	3	88	15
D	68	12	53	9	31	5	169	29
E	56	10	85	16	10	2	151	29
G	50	11	47	10	22	5	62	14
I	64	12	10	2	20	4	144	28
J	55	9	136	22	47	7	108	17

*Source: McManus, 1969.

It is obvious that the content of training programs is the crucial consideration that should dictate both time allocation and training method. None of the site visit departments used formal analysis techniques to create IDR training programs, nor did IDR training exhibit many of the following characteristics described by Robinson (11) as critical for effective training programs:

1. Basing program content on job performance requirements
2. Specifying training objectives in behavioral terms
3. Determining training method in terms of the subject taught
4. Providing students with the earliest opportunity to practice
5. Subjecting the training program to continuous evaluation and revision.

Most departments visited lacked the ID data and communication links necessary to satisfy points 1, 2 and 5. Lack of facilities prevented a number of departments from teaching the vehicle control techniques required for safe and efficient driving, as is suggested in item 3. In contrast, most departments were using demonstrations and practice sessions that allowed students to participate. This type of training was particularly prevalent in the areas of arrest and search procedures.

Driving Training

Table 5-2 presents the number of pursuit and defensive driving training hours provided by respondents to the general survey. Sixty-one (52%) departments indicated that personnel were trained in defensive driving while 52 (44%) indicated some form of pursuit driving training. Of these responding departments, only 51 gave the number and type of hours devoted to defensive driving and 40 departments provided similar pursuit driving training information. Even with the rather incomplete return, it is obvious that current practice varies, and that behind-the-wheel training is lacking in many departments.

Data from Johnson's study of police fleet safety (8) also indicate variation in driving training practices. Of 15 city departments surveyed in 1964, three did not engage in driver training, three offered more than 40 hours of training and the remaining nine offered 16 hours or less. Ten of the 15 departments had both behind-the-wheel and pursuit or defensive driving training. Johnson comments on the latter types of training as follows: "It is the opinion of this writer that most police officials will agree that police driver training is desirable. Disagreement occurs, however, when we begin to ask what kind of driving training."

Disagreement as to what constitutes an effective driver education program is not limited to police. In the last five years, driver education and training has been subjected to the utmost scrutiny. More than one-half million dollars has been expended by the National Highway Traffic Safety Administration (NHTSA) alone, in an effort to evaluate driver education programs and research.

Table 5-2

General Survey Departments Indicating the
Existence of Defensive Driving or Pursuit Driving Training

Response Category	Hour Range	Type of IDR Driving Training			
		Defensive		Pursuit	
		Number	Percent	Number	Percent
Behind Wheel	1 - 5	13	11	17	14
	6 -10	7	6	8	7
	10	5	4	0	0
	Not Specified	36	31	37	23
Classroom	1 - 5	17	14	29	25
	6 -10	31	26	8	7
	10	3	3	3	3
	Not Specified	10	8	11	9

The results of these efforts have not been very satisfying. The one overriding conclusion is, there is no demonstrable evidence that formal driver education produces a better accident record among those who are exposed to it than those who receive their driver education in an informal manner.

While the effectiveness of formal driver education at the high school level continues to be in doubt, advanced driving training has yet to be evaluated with any degree of sophistication. Advanced driving training for police is no exception. The alternative training programs available must be evaluated empirically before a final police driving training curriculum is defined.

Smithson (12) carried out one such study evaluating the effectiveness of the "Advanced" Driver Education Course (ADEC) developed at the General Motors Proving Ground. One group of 30 sheriff's patrol officers was given ADEC, while a matched group of 30 was not trained. Based on a 17-month follow-up, the trained group showed a 50 percent reduction in accidents. The average cost per accident of the trained group was found to be "only 20 percent of that of the untrained group." Though Smithson emphasizes the tentative nature of these results, his recognition of the need for evaluation is indeed welcome.

Given the large number of unknowns in the driving training area, only broad and tentative conclusions can be drawn to set directions for police training. Nevertheless, it was the unanimous opinion of PAC members that emphasis on pursuit driving training should be reduced in municipal police programs. Instead, they felt that principles of defensive driving should be stressed along with exercises teaching maintenance of vehicle control at city driving speeds.

As a rule, motorcycle training was found to be more rigorous throughout departments. The number of hours devoted to training were greater and the "wash out" rate was higher among volunteers for motorcycle duty. The injury and damage statistics presented in Chapter 2, however, cast serious doubts on the efficacy of the two-wheel motorcycle as a safe law enforcement device.

Supporting this position is a conclusion about motorcycle pension, death and injury benefit costs drawn from a 1965 survey of motorcycle use in California (2):

> "Without exception, the police agencies contacted during this survey reported that the cost of pensions to disabled or deceased motorcycle officers and their dependents, the cost of Workmen's Compensation Insurance for policemen assigned to motorcycle duty and the cost of salaries paid to motorcycle officers convalescing from on-duty injuries are greater than similar costs for any other branch of police service."

Data in Table 5-3 from another study that concentrated on the general problems of motorcycle driving in the U.S. (10) show the estimated relationship between passenger car and motorcycle facilities based on the number of vehicles and exposure mileage.

Apart from the problem of IDR training for motorcyclists, these data should prompt reevaluation of two-wheel motorcycle use by municipal police departments. Serious thought should be given to the possibility of substituting the more stable three-wheel cycles for two-wheelers as has been done in many cities.

Table 5-3

Appropriation of Fatality Rates for Motorcycles vs. Passenger Cars in U.S.*

Vehicle	Fatality Rate	
	Per 10,000 Vehicles	Per 100,000,000 Vehicle Miles
Passenger Car	1	1
Motorcycle	2.5	5.5

*Source: Reiss, 1968.

Personnel Training

Table E-11 shows current practice in personnel injury reduction training. The overwhelming majority of departments offer safety training in the use of firearms, techniques of crowd control and techniques of arrest. Usually, materials for these courses are developed internally using such sources as IACP, the FBI and other municipal and state agencies.

IDR training content is definitely reviewed and updated by police departments. Usually, however, there is no formal mechanism for periodic review. An exception to this observation is site visit department C that maintains a close liaison between the safety unit and the police academy.

As with driving training, the emphasis departments place on different types of personnel injury reduction training is quite varied. Of most concern is the lack of validating evidence to support the various procedures that are taught. For example, opinion varies on the use of the "kneeling" search position. Some cities allow this type of search, others do not. IACP training keys present both wall and kneeling search positions.

There are also variations in recommended methods of suspect confrontation. For example, Vallow (13), an authority on arrest and search procedures, states that the confronting officer should "always face the subject squarely." The Daily Training Bulletin of the Los Angeles Police Department (7), discussing the same subject, states, "The officer should take a stance to the right and slightly ahead of the suspect, facing at an angle of approximately 90 degrees from the direction in which the subject is facing."

These differences must be resolved before firm IDR curriculum content recommendations can be presented. Concentration on the IDR elements of task performance can do much to create needed standards in police practice. Many of the differences in practice among departments flow from an attempt to minimize the innate hazards of police work as well as to reduce human error. Before applying analytic methods to police tasks, both hazard and error types must be categorized so that the choice of both training and equipment countermeasures is facilitated.

Haddon (3) presents a description of hazard that is particularly appropriate for police action. He sees injury and damage occurrence as unwanted outcomes of exchange between various energy sources. He also indicates that harmful effects of energy transfer can be handled by one or more of a succession of countermeasures.

Table 5-4 presents a partial list of countermeasures suggested by Haddon along with examples of police action that might be taken to combat an assault. Even though measures to prevent injury can be introduced at every point in the energy exchange sequence, police officers are often limited in the avenue that they have available. This may be due to legal necessity, to social pressure limiting use of force, or to the officer's own failure to prepare for such confrontations by carrying the baton, wearing protective devices or keeping physically fit.

No IDR program in the police department should neglect to provide and demand the use of the total array of countermeasures in confrontations with individuals or crowds. For as Haddon (3) points out, "Measures which seek to prevent injury by interference early in the causal sequences are often incompletely successful and prevention programs usually must include measures designed to ameliorate the injurious energy exchanges themselves." Thus both protective equipment and physical fitness constitute necessary measures to back up techniques taught in the academy.

The concept of error reduction is also particularly useful in analyzing police tasks. Altman (1), in discussing accidents and errors, aptly presents the logic of so doing:

> "A behaviorally defined error classification scheme has particular relevance to learning and accidents since it has been well established that the course of learning complex tasks is definitely dependent upon error-free performance of its less complex behavioral components."

In terms of police function, IDR training focuses on the variety of errors that are likely to occur resulting in injury or damage and reducing efficient performance. Levens (6) presents the following list of human errors that can degrade police performance:

(1) Failure to perform all or part of a task

(2) Incorrect performance of the task or step

(3) Introduction of some task/step that should not be performed

(4) Performance of some task/step out of sequence

(5) Failure to perform the task/step within the allocated period of time.

Table 5-4

Energy Exchange and Examples of Police Action Countermeasures in Assault Situations

Possible Countermeasures to Hazardous Energy Exchange*	Police Action Countermeasures	Countermeasure Objective
Prevent the marshalling of hazardous energy	Put psychologically off-balance Draw gun Use K-9 Display baton	To dissuade intentions to assault
Prevent or modify its release	Put physically off-balance Search Handcuff	To prevent or restrain assault
Separate energy from man in time and place	Keep distance Face at angle Fend off blow Use baton	To ward off assault
Interpose a barrier between energy and man	Use baton Use mace Armored vest Helmet Face shield	To blunt or absorb assault
Raise threshold of injury	Maintain physical fitness	To recover from assault

*Source: Haddon, 1966.

A cursory examination of this classification scheme reveals a number of common errors that are covered implicitly in police training programs. It is the objective of IDR training to make this classification of errors explicit through task hazard analysis. This technique combines observation and report of hazards in such a way that potentially critical errors are not overlooked but are given proper weight in training curricula.

In summary, personnel injury reduction training is seen as being too disorganized to permit any firm conclusions about curriculum content at this time. Recommendations in this area will be concerned, therefore, with a method of task analysis that will provide a more productive basis for future training curricula.

LEAA Funding

Current expenditures for the training of police have been sizeable since the passage of the Law Enforcement Assistance Act of 1965. From the standpoint of current need, two areas of training should receive consideration by LEAA. They are: a) behind-the-wheel test track and skid pan driving training and b) supervisor training.

The statistics presented in Chapter 2 question the efficiency of police vehicle operation. Modern departments use thousands of vehicles daily in the conduct of their law enforcement mission. Advanced driving training can be seen as an essential element in the police training curriculum, certainly on a par with that of firearms training. Most driver educators believe that vehicle control skills can be learned only through behind-the-wheel exercises that supplement classroom and defensive driving instruction. According to Police Advisory Committee members the lack of facilities has been a definite deterrent to providing test track and skid pan training in many cities. It is recommended that LEAA begin to concentrate proportionate funding to assist municipal police departments in making these facilities available so that behind-the-wheel exercises can be included in standard driving training programs.

Another overlooked area of training appears to be programs that assist the supervisor. Much LEAA funding has been devoted to the training of top command and middle levels of police management (5). Little has been set aside for supervisor training, the key to achievement of an effective IDR function in police departments. The lack of supervisor training in IDR practice was evident in all site visit cities. To counteract this deficiency, it is recommended that LEAA assist in establishing supervisor training programs on a local level with an emphasis on injury and damage reduction practice.

Physical Health and Employee Selection Programs

Responses to the general survey shown in Table 5-5 present a rather dismal picture of the medical examination and physical fitness programs carried out by departments throughout the country.

Table 5-5

Departments Indicating Presence of
Physical Examination and Fitness Programs

Type of Program	Departments Answering "Yes"	
	Number	Percent
Entry Physical Exam	48	41
Annual Physical Exam	23	19
Biannual Physical Exam	4	3
Irregularly Scheduled Physical Exam	13	11
Physical Fitness	8	7

Except for the entry physical examination, the site visit cities mirror the responses to the general survey (Table 5-6). Particularly disturbing is the lack of a formal physical fitness program for police officers.

Table 5-6

Physical Examination and Health Programs
Present in Site Visit Departments

Department	Entry	Type of Physical Examination	Type of Health Program	
		Periodic	Fitness	Weight Control
A	Yes	No	No	No
B	Yes	No	No	Reprimand
C	Yes	No	No	No
D	Yes	No	No	No
E	Yes	Biannual and at Prom.	No	Yes
F	Yes	Biannual	No	Yes
G	Yes	Irregular and at Prom.	No	No
H	Yes	Annual	No	No
I	Yes	No	No	No
J	Yes	At 45 Years	No	No

Maintenance of high standards of physical fitness both on entry examinations and throughout an officer's career are seen as beneficial in reducing frequency and severity of injury and in speeding rehabilitation. Unfortunately, the manpower needs of municipal police departments sometimes make it necessary to lower qualification standards.

"The Police Training and Performance Study" (9) cites data from the New York Police Department that indicate the lowering of physical standards due to the need for personnel may be related to an increase in the frequency and severity of injury: "A Department report....indicates an increase of 25% in the frequency rate and 16% in the severity rate of injuries to members of the force in 1968 over 1967, with only a 10% increase in man-hours of exposure." In commenting on an ever increasing number of officers on the sick rolls this report states, "Study of the medical conditions accounting for this loss (economic and manpower) reveals nothing definitive other than the conclusion which is hard to escape, that a significant portion of illness is related to physical fitness or the lack of it."

A definite problem of weight control is present in most departments. A 1965 report from the medical director of one site visit city based on examinations of 518 of 630 men on the force at that time stated that 237 (47.7%) were overweight by 10 pounds or more. Blood pressure examinations revealed 68 men (12%) with high systolic, high diastolic or both. Cardiac irritability was found in 103 (18%) of those examined. Hernias were discovered in 20 examinees. The director indicated that the current situation is not improved.

This rather extreme example is indicative of the need to conduct annual physical examinations as well as the urgency for establishing physical fitness standards to control the physical health of police officers.

On this point, Hart (4) makes an important distinction, "If the program is designed to test strength, it is very likely that age will be given consideration. If the fitness program tests endurance and coordination there is no reason to give special consideration for age." Whatever standards are set, however, they should be tied very closely to personnel injury experience.

Another area of concern implied by the above data is the existence of possibly undetected medical handicaps among police officers. Waller's data (14) shown in Table 5-7 indicate a possible relationship between such diagnostic categories as epilepsy, cardiovascular disease and diabetes to motor vehicle accidents in the general population. Based on these data and other evidence, Waller states, "Routine medical examination of drivers of commercial vehicles is indicated." This recommendation certainly applies to police personnel.

No attempt has been made in this study to discuss the psychological health of police as related to the incidence of injury and damage occurrence. This area merits special examination beyond the scope of the present report.

In summary, there is a definite need to examine more fully the relationship between physical health and municipal police injuries. Fragmentary evidence shows a definite relationship that suggests the upgrading of the health

and fitness standards in most municipal departments would contribute markedly to the success of any IDR effort.

Table 5-7

Observed and Expected Three-Year Accident and Violation Rates by Diagnostic Category for Drivers with Medical Conditions Reviewed by the California Department of Motor Vehicles*

Diagnostic Category	Driving Exposure (millions of miles)	Accidents per million miles		Violations per million miles	
		Expected[1]	Observed	Expected	Observed
Epilepsy	11.1	8.2	16.0	3.4	4.7
Cardiovascular Disease	5.5	9.0	14.6	2.7	3.6
Diabetes	9.0	8.7	15.5	3.3	4.6
Alcoholism	8.2	6.8	11.3	2.5	4.6
Illegal Drug Usage	10.4	8.4	8.6	3.6	6.4
Mental Illness	6.9	7.2	15.3	3.0	5.3
Miscellaneous	2.2	7.4	20.7	2.8	4.9

[1]Rate based on 46 million of miles of driving exposure for a comparison sample of drivers not known to have a medical condition and adjusted so that the rate is that of a comparison group with the same age distribution as the particular medical group

*Source: Waller, 1967.

CHAPTER 6

RECOMMENDED ORGANIZATION AND MANAGEMENT OF IDR FUNCTION IN MUNICIPAL POLICE DEPARTMENTS

Diagnosis of Problem

The major weakness in current IDR practices in municipal police departments is management failure to implement the safety effort in an organized manner. This failure seems to stem from four main causes:

1. An underlying attitude that police operation is hazardous innately and that an emphasis on safe practice will hinder efficiency

2. The lack of concrete information reflecting the total cost of injury and damage to department personnel and vehicles

3. The failure to comprehend the true nature of injury and damage events in terms of contributory circumstances and the means by which they can be counteracted

4. The constant political and social pressure to fight crime and disorder in the community in spite of the costs.

Failure to mount an organized safety effort results in:

1. An inappropriate placement of the IDR function of the organizational structure.

The IDR function, as has been shown, is located organizationally in various branches of the police department. The choice of organizational placement in most departments does not appear to flow from a planned approach to combating the injury and damage problem. Rather, the safety function usually is located in a command unit to satisfy the narrowly defined needs that appear to be most current, generally of the record-keeping variety.

2. The reactive implementation of simple programs to remedy complex problems.

When an IDR program is introduced into a department, it is usually in the area of enforcement or training with the hope that a serious but largely undefined injury and damage problem will be markedly reduced. Unfortunately, such programs rarely show effectiveness because of the intrinsic complexity of the injury and damage problem. As Recht (6) points out, based on an in-depth study of the traffic safety program elements, "There is no one dominant factor in traffic safety programs but rather a large group of factors each contributing a small share to the total."

3. The fragmentation of uncoordinated safety-related activities throughout the department.

Fragmentation of the IDR effort in police departments has been discussed. This fragmentation is detectable most clearly in injury and damage reporting and recording where motor vehicle accident reports are stored in one unit, personnel injury records in another unit and property damage or repair cost records in a third unit. Compensation costs and days lost due to injury may or may not be recorded in one of these three units. The difficulties involved in piecing together the total injury and damage picture in such circumstances is formidable, as witnessed by the inadequate responses to the general survey questions requesting basic injury and vehicle damage cost information.

4. The failure to communicate IDR needs to the appropriate units.

The site visit experience indicated a notable lack of interaction between the safety department and other units in most departments. One of the few exceptions to this observation is communication from review boards (regarding reprimands) to command personnel. Such interaction occurs after the fact of injury and damage and remains of questionable value to morale and efficiency when not supported by positive IDR programs that improve supervision, training and inspection before injury and damage occurs.

5. The inability to produce a reporting system that accurately depicts the injury and damage problem in a manner allowing management action.

Examination of the internal injury and damage summary reports produced by the majority of departments indicates weaknesses in accounting for both days lost and the cost of accidents. Also prevalent is a system of overlapping categories used to describe circumstances or types of accident or injury events. In the same vein, there is a definite question of the usefulness to management of the injury and damage information as presently summarized. This is true particularly when interpretations and recommendations do not accompany summary reports.

The ultimate effect of these weaknesses in the IDR effort is the failure of line supervisors to promote and enforce IDR programs on a continuing basis. The corresponding absence of an organized method of follow-up permits supervisors to overlook these responsibilities.

In contrast to police IDR management practice, it is the conclusion of many large corporations that industrial safety programming is a worthwhile investment. Further, there is strong theoretical support from the administration and management field that such elements as policy, coordination, supervisory support, employee and program evaluation are all part of the efficient operation of any management effort.

Apart from the specific contents of industrial and fleet safety programs and the need for strong management support, one general characteristic stands out as being the most valuable to an effective safety function. Safety programming is most likely to be successful when the effort is total. In a total effort, communication is specific and participation is gained on all

management levels so that staff and line personnel contribute to the goals of the IDR activity according to their function in the organization.

The concept of total participation of management and employees is expanded in system safety to cover the "life" cycle of man-machine-environment subsystems as they interact to achieve the mission of the total system. In system safety, planners, designers, builders, operating and maintenance engineers all contribute to the "fail safe" quality of the system.

The principle of "totality of effort" is complemented by two other IDR management-related practices described by Johnson (4):

1. Staff support for safety should be integrated in one major unit, rather than scattered in several places.

2. The staff safety unit, to be capable of independent review, should report to top management without impeding layers of organization.

In this context, Johnson states that, "As safety programs take on a greater systems and operational flavor, the location of safety units should not characterize safety as an industrial relations, personnel, health, medical or insurance problem."

Importance in Organization

Any serious effort to reduce injury and damage in a department must have sufficient organizational status and manpower to create the necessary changes within the department to reduce injuries to personnel and damage to vehicles. Organizational status involves two main characteristics: a) placement within the department's structure and b) level in the chain of command. The IDR function must also be integrated so that injury and damage data analysis and program activity is directed centrally and operates with the total participation of every unit.

To provide the coordination required to fulfill the IDR objective in the context of maintaining efficient police operation, it is recommended that the IDR function be constituted on an organizational level equal to or above that of personnel, training and community services as described by Wilson (7) and others (1, 2). Where appropriate, other programs could be included under the IDR function. Examples of possible inclusions are fire prevention, health and physical fitness and employee compensation.

An excerpt from the organization chart of site visit department C (Figure 6-1) represents an acceptable positioning within the administrative services bureau in large departments.

In smaller departments it may be necessary to establish the IDR function so that it reports directly to the Chief or his immediate deputy, as in Figure 6-2.

Whatever its position, the IDR function must have a strong connection with line management. As Herbert (3) emphasizes, "The effectiveness of safety is

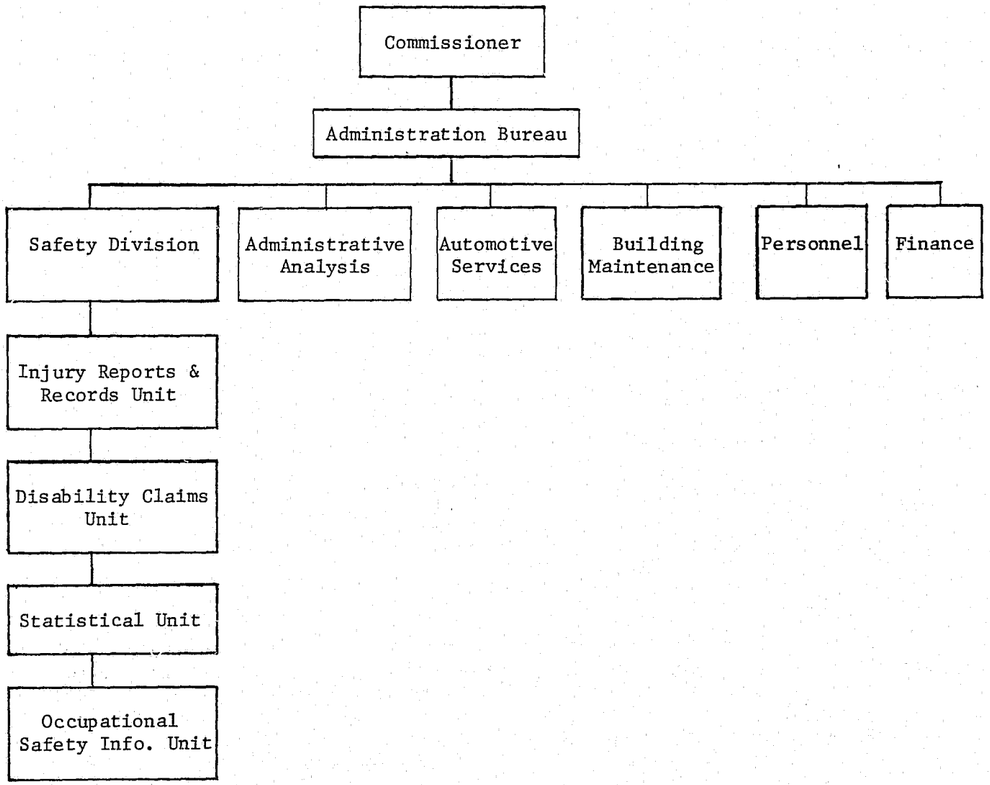


Fig. 6-1 IDR organization in a large department.

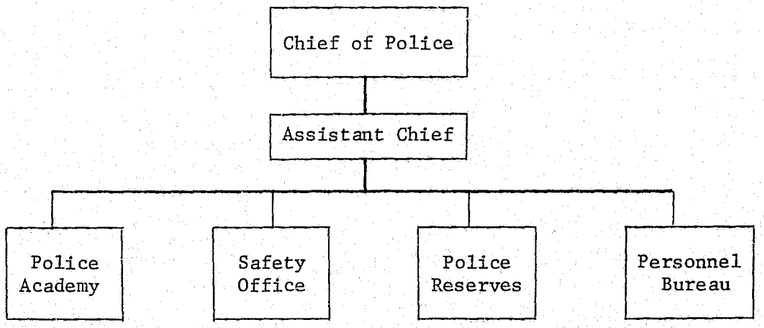


Fig. 6-2 IDR organization in a small department

lessened, if the safety man does not report directly to line management, especially at the top level." He goes on to say, "Safety has little stature when it reports to staff people who have not had field line supervisory experience." This opinion is re-echoed throughout industrial safety literature.

An immediate consequence of this recommendation is the creation of another specialized unit in the police department. Can this be justified? Wilson (7) presents a number of factors that determine specialization decisions:

1. Quality of personnel and need for special skill

The American Society of Safety Engineers has identified the following basic functions as part of the professional safety position:

a. Identification and appraisal of accident loss-producing conditions and practices and evaluation of the severity of the accident problem

b. Development of accident prevention and loss-control methods, procedures and programs

c. Communication of accident and loss-control information to those directly involved

d. Measurement and evaluation of the effectiveness of accident and loss-control systems and the modifications needed to achieve optimum results.

To fill these roles specialization beyond what is normally given in police training programs is needed. Appendix G describes these qualifications more fully.

2. Importance of the job

The demand for injury and damage reduction within police departments on the part of mayors, city councils and police officials is increasing. The waste of both money and manpower lost resulting from accident and non-accident events has been discussed.

3. Need for maintaining skill

The continuing evaluation of the safety field, as witnessed by the National Highway Safety Acts and the recent passage of the Occupational Safety and Health Act, necessitates constant updating of knowledge to assist management decisions. Concurrently, the developments in other scientific areas, such as human factors engineering and industrial hygiene, can add greatly to decisions that improve operational efficiency. The monitoring of these areas must be complemented by an understanding of standards and codes governing the maintenance of police facilities and the purchase of protective and other types of police equipment.

4. Need for planning and control

A total IDR function requires continual monitoring of the injury and damage trend. Analysis of injury and damage data to produce recommendations for training, equipment improvement or procedural adjustments should be continual also, as should consultation with other units to obtain formal and informal feedback about the effectiveness of recommended IDR countermeasures.

The supporting evidence for specialized IDR function ultimately must be given in the form of cost/effectiveness data. It is recommended strongly that such analysis be undertaken using an appropriate technique. One such method is break-even cost benefit analysis as described by Recht (5).

Integration of Function

The IDR function should operate out of a single office to provide the necessary focal point for the following crucial activities:

1. Collection and analysis of accident, injury, cost and manpower loss data.

Figure 6-3 shows the general flow of the primary injury and damage reports into the IDR operation. Compilation of these reports over time is necessary if a complete profile of department ID experience is to be developed. As has been emphasized, the chief weakness of current practice is the inability of most departments to gather pertinent ID data together for proper analysis.

2. Assignment of personnel to plan, recommend and coordinate IDR programs.

Assignment of personnel to expedite countermeasure programs should be dictated by the magnitude or criticality of defined injury and damage problems. Centralization of data allows for the establishment of priorities from which commitments of manpower and time should flow.

3. Controlled evaluation of the effectiveness of IDR programs.

A common problem in complex agencies is the failure to introduce IDR programs in a manner that allows for controlled before/after evaluation of effect. Centralized programming of IDR efforts will facilitate control over the type of IDR program introduced, as well as the mode of introduction, so that department personnel can be exposed to a program in a fashion that permits scientific evaluation. Centralization also lessens the chance that other IDR programs are confounding the effects of the one being studied.

Other gains in administration, such as proficiency and consistency in the recording of information, and the increased opportunity for formal and informal discussion of the mutual problems in generating and promoting IDR programs, are also apparent in an integrated function. Further, there is less opportunity

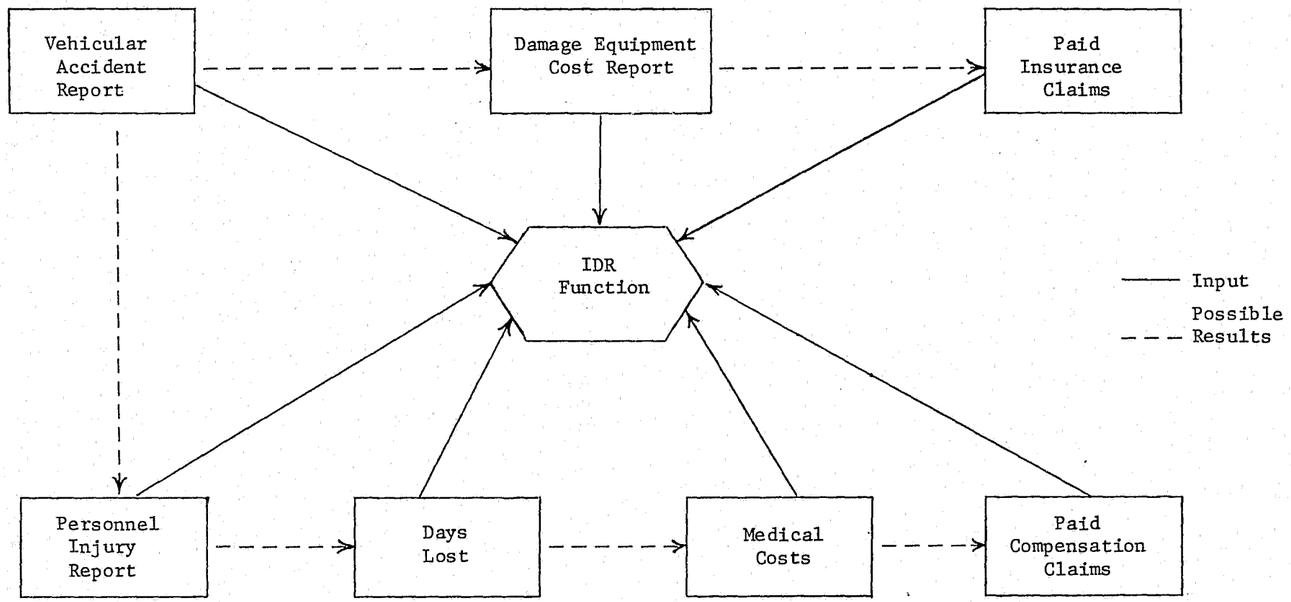


Fig. 6-3 General diagram of injury and damage report to central IDR function.

for other non-safety-related activities to interfere with the fulfillment of the IDR mission.

Total Participation

The IDR function within the police department can be seen as requiring the active participation of all units in four primary areas:

1. Task hazard analysis of field operations that involve hazards judged to be critical
2. IDR training and observation of all personnel according to a predetermined plan and schedule
3. Inspection of facilities and equipment according to a predetermined plan and schedule
4. Investigation and reporting of all injury and damage events.

Coordination of efforts with specific units is also required on the basis of their contribution to the total IDR mission. The recommended participation unit by unit is as follows:

1. Planning and research
   a. To assist in the design and to conduct special investigations of the circumstances of injury and damage particularly as related to changes in procedure; changes in operating method; changes in operating plans
   b. To consult with IDR function in formulating policies, procedures and equipment or vehicle specifications
2. Inspection
   a. To insure that assigned employee observations and facility and equipment inspections are undertaken
   b. To insure that IDR procedures are followed
   c. To consult with the IDR function in reviewing and updating daily activity report, incident, use of force and other forms to provide necessary hazard exposure data
3. Personnel
   a. To include factors associated with personal safety, as defined by the IDR function in the employee selection process
   b. To include the factors of personal safety and, in the case of supervisors, the injury and damage experience of subordinates in employee evaluations for promotion

4. Training
   a. To include explicitly in all appropriate training material the results of operation hazard analyses
   b. To produce training bulletins and other roll call and in-service training materials that contain new or improved countermeasures for neutralizing or eliminating critical hazards
   c. To consult with IDR function when updating, changing or creating new materials for recruit or in-service training
5. Records and communications
   a. To supply needed hazard exposure data for general and in-depth analyses of departmental injury and damage experience
   b. To maintain personnel injury and damage reports for a period of time (usually three years)
6. Data processing
   a. To assist the IDR function in the design of injury and damage report forms for ADP purposes
   b. To assist the IDR function in establishing a computerized record-keeping system that will incorporate the elements essential to the sophisticated analysis of injury and damage experience including type and circumstances of injury and damage, various cost categories and days lost
7. Police garage
   a. To assist the IDR function in obtaining vehicle defect data
   b. To review and update vehicle checklists used by officers and mechanics with the assistance of IDR function to reflect mechanical failures most frequently associated with accidents
   c. To consult with the IDR function in producing specifications for new vehicles
   d. To consult with the IDR function in the development of check-out and check-in procedures that will fix responsibility for parking lot damage
   e. To consult with the IDR function in the planning and layout of parking facilities
8. Building maintenance
   a. To prepare, review and periodically update inspection

procedures and checklists to include environmental hazards reflected in injury and damage reports

b. To make periodic hazard inspection of all facilities with the assistance of IDR personnel

9. Purchasing

To consult with the IDR function before purchasing new or replacement equipment to obtain the most recent safety specifications

10. Medical

a. To supply to IDR function the costs of medical services and compensation claims for departmental injuries

b. To consult with the IDR function in the formulation of physical fitness programs or studies involving back injuries and employee fatigue, as well as the relation of overweight, heart disease, diabetes and other physical problems to injury occurrence.

Since internal organization and function structure varies from department to department, the above categorization of IDR-related activities may not apply to every operation. However, the specifics of total participation revolve around the functions listed.

CHAPTER 7

RECOMMENDED IDR PLANNING IN MUNICIPAL POLICE DEPARTMENTS

The IDR function operates in an administrative capacity equivalent to a staff function in industry. It is concerned with: a) continual control of injury to department personnel and damage to equipment and b) breakthrough in reducing injury and damage by directly attacking specific problems with selected IDR countermeasures or programs.

In control management, the IDR function supplies general guidelines and programs for the selection, training, observation and promotion of personnel as related to injury and damage reduction. It also seeks to control the quality and maintenance of equipment in a continuous manner. The IDR function operates indirectly to maintain a given level of department safety, as shown on the left side of Figure 7-1. The overall effectiveness of such activity is difficult to assess in terms of ID reduction; however, it provides the management structure for more decisive IDR programs. In attacking injury and damage problems within the department directly, the IDR function operates as shown on the right side of Figure 7-1.

The mode of operation for both control and breakthrough problem definitions based on analysis of ID data, involves selection of program recommendations and evaluation of results when the program is executed.

Problem Definition

Two distinct types of information are required if the ID problem is to be defined intelligently. The first type consists of data covering the incidence (frequency, severity and cost) of injury and damage cases according to selected categories (e.g. vehicular damage accidents, vehicular injury and non-vehicular injuries). The second type of information concerns exposure to those events or activities containing the hazards that produce the injury and damage cases as categorized (e.g. number of miles driven and number of hours worked).

The IDR function must receive both incidence and exposure information if it is to achieve its objectives of control and breakthrough. The efficiency of IDR planning will depend largely on the ability of the IDR director to obtain more refined incidence and exposure information. Refinement, in this case, consists of partitioning both types of information to produce a profile of injury and damage experience that: a) is more easily understood by management, b) offers the possibility of selecting well-defined priorities for IDR programming and c) gives specific clues as to the direction and content of program activity.

Process I in Figure 7-2 depicts the most common, and with few exceptions, the most advanced current practice in defining ID problems. Summaries are prepared using personnel injury frequency rates based on number of man hours worked and vehicle accident rates based on number of miles driven. Less frequently summarized are damage costs and days lost due to injury. Other general categorizations, such as injury by part of body, type of driver action and

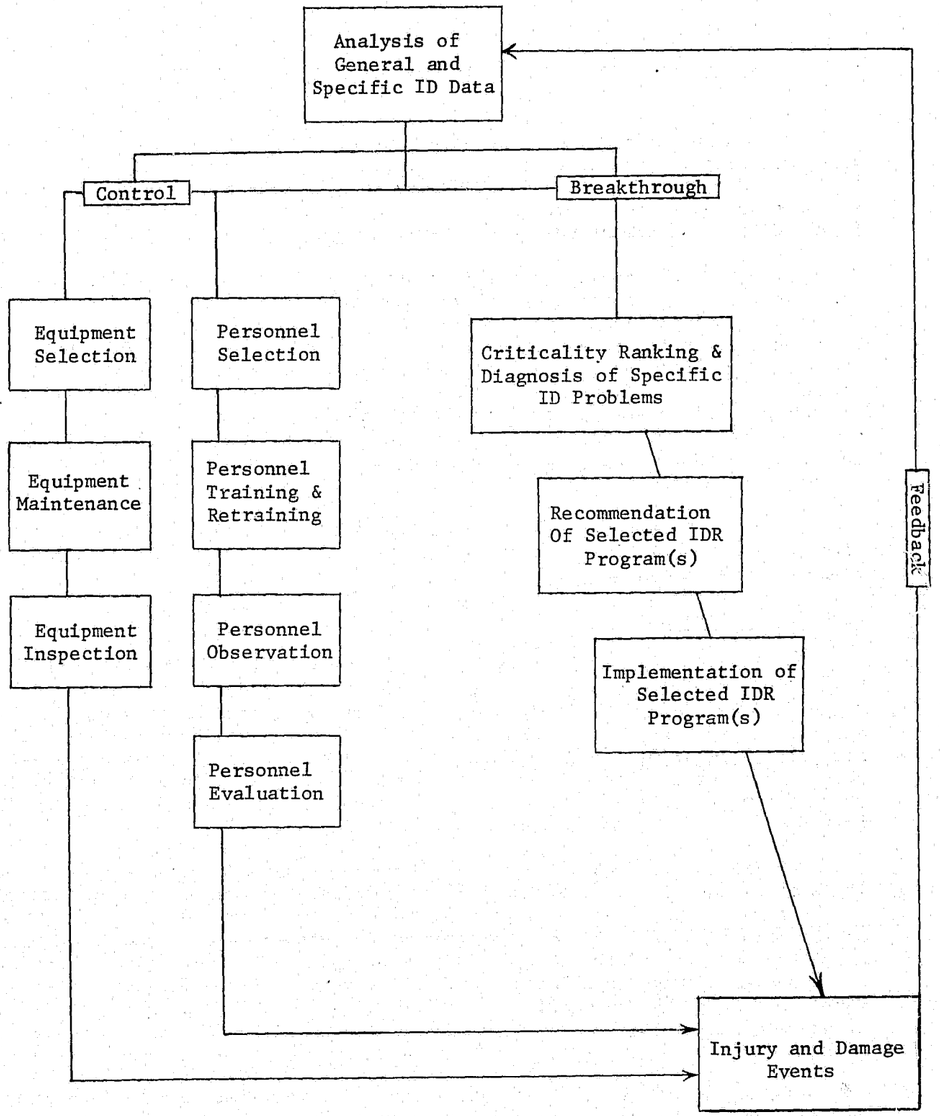


Fig. 7-1 The management of the IDR function operative in the general controlling of injury and damage events and in breakthrough to reduce specific injury and damage events.

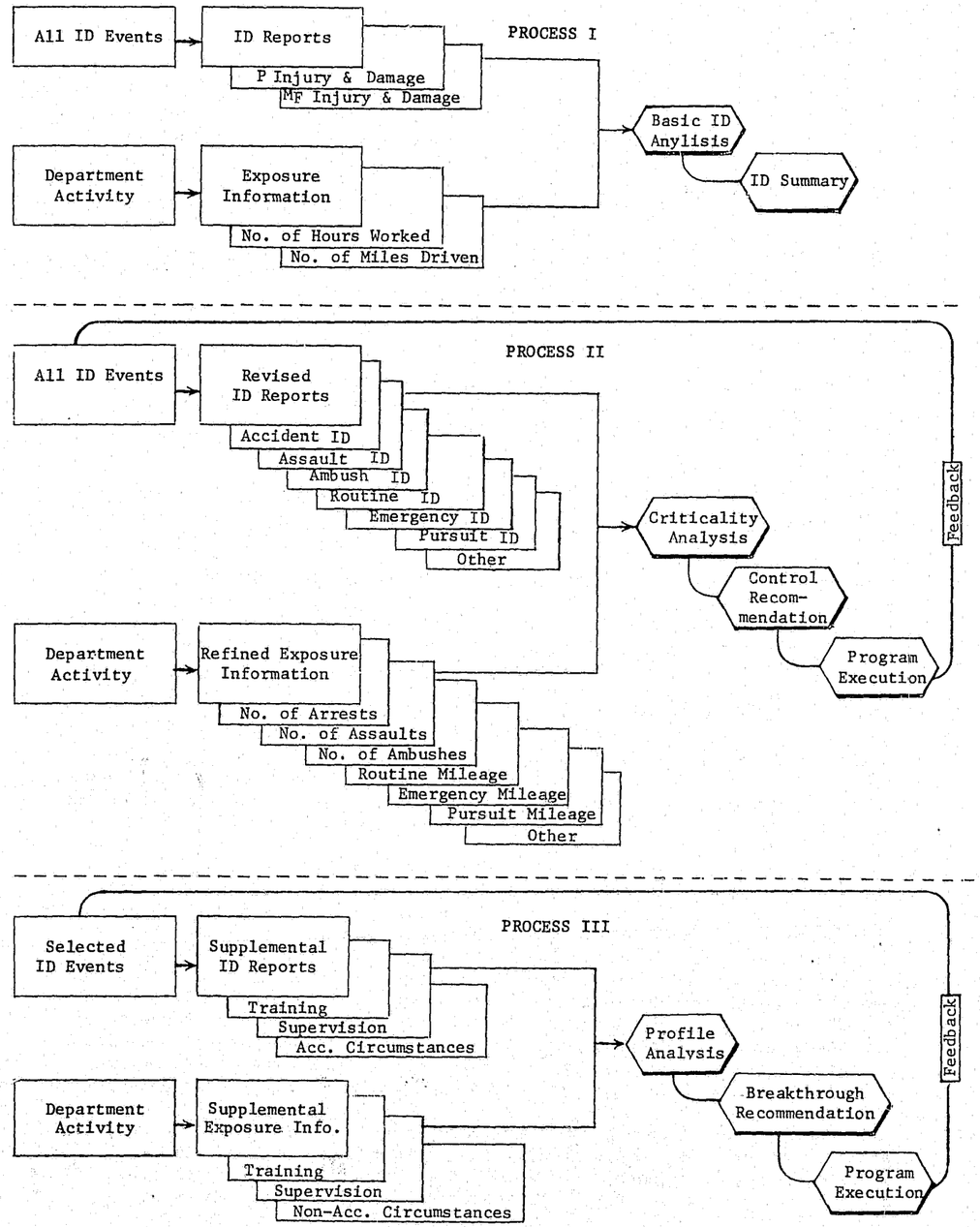


Fig. 7-2 The recording of police injury and damage events on three analytic levels

manner of collision are also prepared in some departments. Although IDR recommendations can be made using such data, it is very difficult to do so. The summarized data do not give a distinct description of the incidence and exposure sub-elements within the total problem. For example, knowing a department's motor fleet auto accident rate is 55 per 1,000,000 miles driven really does not tell the IDR director what to recommend nor does it provide directions for recommendations. The lack of a more refined definition of the ID problem also forestalls the assignment of priority to any recommendations that may be forthcoming. Even so, most departments are planning IDR programs on the basis of this kind of statistical input, or less.

Control Analysis

Proper analysis for control management of the IDR function requires a level of input equal to that presented in Process II. Injury and damage reports should be revised to reflect more accurately the nature of police problems.

Within the three categories of accident, assault and ambush other subcategories can be defined to produce a sharper profile of the police injury and damage problem. The subjects covered by the supplemental injury and accident report forms shown in Appendix B, offer examples of useful subcategories in which to partition department experience. Some of these subcategories will be provided by the recommended injury and damage reports in Chapter 11. The analyses presented in Chapter 2, represent other possibilities available to the IDR director. The number and types of subcategories used in defining areas of concern must be limited so that the frequency of ID events in any single grouping remains sufficiently large to provide an adequate number of cases for study, yet not so large that educated speculation about contributory circumstances is not possible. For example, the incidence of pursuit ID events may be so small that it cannot be studied meaningfully. These cases then should be combined with emergency ID events rather than with routine ID events. Such speculation actually provides the basis for control program recommendations.

To correspond with the more precise categorizing of ID events, more refined estimates of exposure should be obtained. Refined exposure data continue to be the missing ingredients in many injury and damage data collection systems in industry. Police departments, however, because of their comprehensive system of reporting field activities, are accumulating useful exposure data already (i.e. number of arrests, searches, interrogations and emergency runs) or could begin to do so on at least a sampling basis. Refined exposure data for motor fleet accidents might include a breakdown of the number of miles driven under routine, pursuit and emergency conditions respectively. In this case, the relative magnitude of the emergency and pursuit driving accident problem could be put into a more proper perspective.

Consider the percents shown in Table 7-1. Examining only the vehicle accident column, the obvious conclusion is that there are four times as many routine driving accidents as pursuit and emergency accidents combined. Notice how interpretations can vary with refined exposure information.

Table 7-1

Total Vehicle Accidents with Varying Distributions of Total Miles Driven

Type of Driving	Percent of Total Veh. Accidents	Percent of Total Miles Driven		
		Condition A	Condition B	Condition C
Routine	80	80 (1.0)*	90 (.9)	70 (1.1)
Emergency	15	10 (1.5)	8 (1.9)	25 (.6)
Pursuit	5	10 (.5)	2 (2.5)	5 (1.0)

*Ratio of percent of accidents divided by percent of total miles in each driving category.

Under condition "A" emergency driving produces 50 percent more accidents than would be expected based on exposure, whereas pursuit driving situations yield only one-half of the number that should occur based on the exposure rate. Under condition "B" pursuit driving seems to be a definite problem registering two and one-half times as many accidents as would be predicted based on exposure. In condition "C" routine driving accident experience is slightly higher than would be expected based on mileage driven.

Refinement of ID incidence and exposure information also enables the IDR director to produce a criticality ranking of department ID problems. Criticality ranking, described fully in Chapter 11, combines data on the severity and cost of ID cases (e.g. days lost by officers injured searching prisoners) with the estimated frequency of event occurrence (e.g. number of times prisoners are searched daily) and the probability that the event will result in injury or damage (e.g. estimated likelihood that searching prisoners will result in injury to officer). This ranking quantifies hazard in such a way that the most hazardous situations based on local analysis can be pinpointed.

Criticality rankings can be used immediately to produce general recommendations for ID control in the form of training, employee selection, supervisor observation and, if necessary, changes in procedure. The seriousness of the hazard situation dictates the intensity of the ID programs that should be initiated. The following schematic adapted from Johnson (1), represents one possible approach to making control programming decisions.

A wide variety of police activities are carried on daily, seldom resulting in serious accidents. Functions within departments such as routine office duties, foot patrol in certain districts and conversation with citizens quite likely fall into the "Safe" ranking. In most cases, these events do not constitute great hazards and therefore do not require any formal IDR program beyond what is prescribed normally in department regulations.

Task	Criticality Ranking	IDR Program
A - Sitting at desk	Safe	--------
B - Lifting stolen property	Marginal	Roll call training Training bulletins
C - Searching suspect	Hazardous	In-service training Supervisor observation Equipment purchase
D - Arresting dangerous criminal	Critical	Task hazard analysis In-service training Standard operating procedures Equipment purchase

Fig. 7-3 IDR program selection based on task criticality level.

Marginal hazards involved in lifting or carrying individuals and property, handling electrical apparatus or chemical agents would be covered most properly in roll call training or through training bulletins using information from general sources.

Hazardous activities make up a major portion of police operations and are likely to be defined more meaningfully on a local basis. These activities quite likely would include techniques of search, handcuffing, handling dangerous mental patients, parking lot and routine driving ID events. Special efforts should be made to provide and train personnel in the use of the most sophisticated protective equipment feasible. At the same time, special on-the-job retraining should be provided for those officers who show operational deficiencies as adjudged by supervisors.

In the area of critical hazards involved in such activities as pursuit driving, arrest of dangerous prisoners and riot control, standard operating procedures should be specified in detail. Department programs should be instituted to instruct all personnel periodically in procedures and the use of recommended equipment.

IDR programs, operating on a continuing basis with varying degrees of intensity and importance according to the criticality of the hazard, represent the control aspect of the IDR function at its best. Several limitations in the control approach are, however, clearly evident:

1. Criticality rankings largely are artificial because they are dependent upon data presented on the ID reports that frequently must satisfy administrative needs.

2. The descriptions of ID events, as gathered currently, cannot in themselves lead to specific IDR program recommendations for

a department; rather, the IDR director must depend on generally recommended programs to control his department's problem.

3. IDR programs are introduced within a system of police operations already constrained by a number of administrative, attitudinal, legal and political factors that may act against IDR objectives.

4. Breakdowns within police functions at various levels may undercut the effectiveness of IDR efforts. Some examples are failure to follow procedures or to use protective equipment, low quality training, inadequate supervision and improper vehicle inspection and maintenance.

Breakthrough Analysis

Breakthrough in the injury and damage reduction activity depicted as Process III in Figure 7-2, assists in overcoming the limitations in control by diagnosing circumstances contributing to ID problems in greater depth. Using the second level of the bilevel data collection system (Chapter 11), data is collected on aspects of the ID events that are more likely to produce specific adjustments in training, department regulations, inspection procedures or equipment purchase. Examples of such studies include:

1. Study of recency and type of driver training among those involved in vehicular accidents as compared with those not involved to determine the time and content of periodic retraining for police drivers

2. Study of peripheral vision and age among those involved and not involved in sideswipes and intersection accidents to determine a driver selection criteria

3. Study of emergency and pursuit accidents in terms of speed, traffic conditions, weather, length of run in time and miles driven to determine clearer criteria for officers to use in performance of this task

4. Study of arrest incidents in terms of age, sex, race and manner of offender to provide more specific cues to possible violence for use by arresting officer.

Program recommendations based on breakthrough studies have the objective of reducing ID problems that are defined more precisely than in the control phase. The more specifically defined the problem, the more clearly program objectives can be stated and the better the opportunity for the precise evaluation of the recommended countermeasure.

It should be apparent that the collection of breakthrough information is not limited to circumstances immediately related to the ID event in time, as is the case with most of the regularly collected information. Rather, it can focus on procedural or supervisory weaknesses that underlie and more realistically explain human or mechanical failure, such as:

1. Lack of supervisor skill and compliance with training and observation procedures

2. Lack of efficiency of followup procedures

3. Lack of compliance with inspection and maintenance procedures.

Such studies need not be limited to questionnaire information but can involve observational techniques as well.

Program Evaluation

The effectiveness of all IDR programs must be evaluated on a regular basis. The limited funding available for the IDR function must be allocated in such a way that the greatest return for each program effort is realized. Trend evaluation seems most appropriate for monitoring the success of most IDR programs. The difficulty arises in determining what trends to measure.

The total motor vehicle accident rate represented by number of accidents over a segment of mileage driven is suitable for providing the department with some indication of success or failure in combating its motor fleet problem:

$$\text{Frequency Rate} = \frac{\text{Number of Vehicle Accidents} \times 1{,}000{,}000}{\text{Number of Miles Driven}}$$

$$\text{Severity Rate} = \frac{\text{Number of Disability Days Charged} \times 1{,}000{,}000}{\text{Number of Miles Driven}}$$

Total injuries over man hours worked provides a similar indication in non-vehicular problem areas:

$$\text{Frequency Rate} = \frac{\text{Number of Disabling Injuries} \times 1{,}000{,}000}{\text{Number of Man Hours Worked}}$$

$$\text{Severity Rate} = \frac{\text{Number of Disability Days Charged} \times 1{,}000{,}000}{\text{Number of Man Hours Worked}}$$

Because these measures may fluctuate markedly from year to year, it is recommended that a three-year moving average be used to measure progress. The National Safety Council has found the three-year average to be a much more stable indicator of injury and damage experience and therefore a more reliable measure.

Taken alone these measures provide little insight for management in evaluating the effectiveness of the variety of IDR programs in operation. Again, a more refined approach is necessary. The refinement of evaluation is tied closely to the ability of the IDR director to obtain the specific incidence and exposure data already described. It consists of basing evaluation only on those injury and damage incidents that are likely to be affected by a prescribed countermeasure program. For example, the effectiveness of a

pursuit driving training course should be evaluated in terms of pursuit driving ID experience; skid pan training should be evaluated in terms of ID events that involve skidding or loss of control; arrest procedure training should be studied in light of injuries during arrest; a motor vehicle inspection system should be evaluated in terms of ID events involving vehicle defects.

Caution must be used in focusing on injury and damage reduction rates alone. Interim criteria can also be used by supervisors and IDR directors to insure that performance in the field corresponds to the objectives intended by the introduction of an IDR program. Thus, if the garage inspection and maintenance schedules are adequate and being implemented effectively, then the number of defective vehicles reported by users should be reduced. In the same way, performance evaluation of personnel should include the practices taught in IDR training programs and stipulated in IDR procedural regulations.

Failure to find injury and damage reductions of the type implied by the IDR program, when there is assurance that interim criteria in terms of personnel performance are being met, is probably indicative of a poor program. Steps should be taken immediately to re-analyze the problem and prescribe alternative IDR programs either by changing content or method.

In such situations or in cases where the IDR director does not have sufficient information on which to base a single program recommendation, a controlled test of one, two or more programs should be undertaken. This is true particularly in the field of driver training where the effectiveness of a single approach has yet to be demonstrated. If at all possible, different types of training should be prescribed on a random basis to several groups of drivers exposed to similar driving situations. Another group of drivers should be selected and not exposed to any sort of training other than what is currently part of the department program. Departments that have district stations are suited ideally to perform controlled studies. The reduced ID experience, if significant for the trained group, should dictate the IDR recommendation for the total group from which the sample drivers were selected.

This type of study can be tedious; however, an expenditure of time and money on a well controlled pilot investigation of an IDR program will yield more productive results in the long run than prescribing a given program for an entire department without any sort of internal evaluation. The most important factor in these studies is the maintenance of a control group. Obviously, certain basic and in-service training and equipment should be provided to all personnel immediately. On the other hand, in situations where there is some question about the worth of the present content or method of training, the current quality of equipment or the usefulness of established procedures, a well controlled study is recommended where a certain portion of men continue to receive the standard training or equipment.

Cost/Benefit Analysis

Frequently, the IDR director must evaluate a proposed injury and damage countermeasure. At other times he must make use of countermeasure evaluations in choosing one or more proposals from a set of proposals. This choice is

made necessary by the fact that there are usually more proposals competing for funds than there are funds available. Since the ultimate justification for any IDR program must be made by weighing the costs of introducing and implementing it against the benefits it is likely to produce in reducing injury and damage costs, the necessity of making meaningful evaluations and choices is important. Cost/benefit analysis as described by Recht (2) is useful for making these evaluations. His break-even cost approach is recommended to assist the IDR director in making his decisions.

Although there are a number of approaches to the cost/benefit problem, Recht's approach "does not require a high degree of mathematical skill; it avoids the difficulty of comparing benefits on a basis of unequal accuracy of estimates; it uses the available information on benefits; and it gives realistic information that will simplify decision-making." It also assists the department in setting realistic injury and damage reduction goals in proportion with the expenditure for IDR programs.

In break-even analysis, IDR countermeasures (e.g. an in-service training program, purchase of safety glasses, use of K-9 patrol, purchase of safety shoes) are compared based on: a) their cost in terms of injury and damage reduction needed to break even and b) likelihood of equaling or exceeding the break-even point.

The basic procedure for break-even cost/benefit analysis consists of the following steps:

1. Prepare projections of basic department personnel, motor vehicle and injury and damage data for the period of years to be considered in the analysis.

2. Determine the cost for each year of the countermeasure or program being considered.

3. Compute the benefit for each year of the period assuming a one percent reduction in the types of injury and damage events likely to be affected by the countermeasure or program.

4. Convert the benefit into dollars for each year and for the entire period.

5. Divide the cost by the dollars of benefit that were computed for a one percent reduction to determine the break-even percentage reduction.

6. Check the break-even percentage by comparing it against other available information or studies on the possible benefit due to the countermeasure or program under consideration.

7. After each proposal has been analyzed separately, prepare an overall comparison of them for use in decision-making.

The following illustration will aid in understanding the aforementioned procedure. Suppose a department is contemplating a program for the

Year	Installation Cost	Maintenance Cost	Total Cost
1	$1,575	$ 25	$1,600
2	$1,575	$ 50	$1,625
3	$1,575	$ 75	$1,650
	$4,725	$150	$4,875

The probable benefit can be presented as:

Year	Number of Accidents Prevented	Average Cost Per Accident	Total Benefit	1 % Benefit
1	15	$400	$ 6,000	$ 60
2	30	$400	$12,000	$120
3	45	$400	$18,000	$180
	90		$36,000	$360

installation of some safety device in its vehicles over a three-year period. The above cost data is gathered.

The break-even percentage figure is calculated as $4.875/$360 = 13.54 percent. If available, other studies may report break-even percentage estimates for similar projects of approximately 15 percent and an expected or demonstrated effectiveness of 30 percent. Such findings lend support to the estimates prepared by the department and provide the new 30 percent estimate of effectiveness that can be used to calculate the dollar gain in accident reduction for each dollar spent.

	Dollars		Per Dollar Spent
Spent		$ 4,875	$1.00
Return	$360 X 30 =	$10,800	$2.22
Gain		$ 5,925	$1.22

When choices are made from among several alternatives, the dollar gain per dollar spent figure is helpful in selecting the best combination of alternatives within the budget constraints of the department. Recht's paper (2) presents a more complete discussion of how cost estimates are established and comments on the usefulness of refinements dealing with the interest rate of money, the problem of projects of varying length and the problem of optimum selection of competing countermeasures.

CHAPTER 8

RECOMMENDED OPERATION OF IDR FUNCTION IN MUNICIPAL POLICE DEPARTMENTS

The efficiency of the IDR function in municipal police departments is directly dependent on the participation of all echelons in IDR activities. The role of each command level must be defined clearly. Every member of the department must contribute if reductions in injury and damage are to be realized.

The role of subordinate personnel will be defined by the training they undergo and the inspection procedures operative. At the most basic level, however, the attitude of supervisors and command personnel toward department regulations sets the pace for compliance. As was indicated in Chapter 3, management and supervisor example constitutes a major force in the successful IDR effort through which command, supervisory and subordinate personnel can interact in the common interest of injury and damage reduction.

Management Role in IDR Function

As indicated in the review of industrial safety practices, support by top management is essential to the success of any safety program. The breadth of management responsibility is outlined by the president of U.S. Steel (2):

> ". . . We believe it is management's responsibility to see that there is a safe working environment at all times. And when we talk of environment, we are talking about things that require management decisions and actions -- expenditures for better and safer equipment, for correcting a newly discovered hazard, for making available protective apparel where it is required. It is likewise management's responsibility to see that safety rules and procedures are adequate and enforced -- to see that effective training and education programs are developed and used to best advantage."

To fulfill this responsibility management must provide a plan. The content of the plan must be tailored to local conditions, however, it should:

1. Include a policy statement expressing the basic concern of the department about the loss of manpower and equipment due to injuries and damage

2. Establish a set of procedures by which an organized effort to reduce injury and damage is implemented

3. Set a list of actual times for completion of the various procedures so that they are in place on schedule and acted upon promptly

4. Establish an IDR function and supporting IDR committees that will be responsible for the smooth operation of programs in all units

5. Allocate funds to support programs that are evaluated as necessary for the reduction of personnel injury and property damage events

6. Set injury and damage reduction goals for the department as a whole and for its individual units

7. Followup through the IDR function and committee structure to insure compliance of all members of the department.

To fulfill the IDR responsibility in the police department, the Chief must first provide a written policy in the form of a general order or directive that: a) states the department's attitude toward IDR in an unequivocal manner, b) establishes specific IDR responsibilities for all command personnel and c) defines the objectives, duties, responsibilities and authority of the director of the IDR function. Appendix H gives an example of the type of general order that might be written.

The contents and breadth of the general order establishing policy is dependent on local practice. Examples of other topics that might be included in the order concern: a) the establishment of IDR committees, b) the cooperative responsibilities of other units, c) the basic regulations governing accident investigation, d) reporting and record-keeping and e) retraining or disciplinary procedures. If not covered in the general order, these other directives should be produced to establish procedural guidelines. The IDR director should assist the Chief to produce these as rapidly as possible.

The Chief or his assistants should attach deadlines to the enactment of all procedures so that the total IDR function is operative with the full cooperation of other units. Failure to do this may result in costly delays or may be perceived as a faltering of enthusiasm on the part of the Chief.

Sufficient budget must be allocated to support the total IDR effort. Once direct and indirect ID costs are computed, cost-effectiveness analysis can be used to evaluate the worth of various programs. The setting of injury and damage reduction goals is an outgrowth of cost-effectiveness analysis as was described in the preceding chapter.

The role of middle management, consisting of bureau and division commanders, is primarily one of example and review. Attendance at IDR committee meetings should be given high priority. Review of supervisor's IDR performance should be scheduled periodically. Commanders in conjunction with the IDR director and maintenance department should conduct complete inspections of their facilities at least on an annual basis.

Supervisory Role in IDR Function

The supervisor has a key role in the IDR function; a role that must be

carried out efficiently. As has been mentioned, the prevailing attitude toward safety in relation to performance deteriorates somewhat as one moves down the ranks. To improve this attitude and increase safe performance, three activities are recommended:

1. Supervisor training in IDR efforts

To perform adequately, a supervisor must know all aspects of safe performance for the critical tasks performed by subordinates. He must be able to perform task hazard analysis and convey this information clearly using training techniques approved by the department. Supervisory training should also include the essentials of employee observation and contact to correct IDR deficiencies where present. Finally, the supervisor should be trained to inspect the facilities and equipment used by himself and his subordinates.

Supervisor IDR training should be given at promotion and rechecked when transfers are made. When a supervisor is transferred to a new position, an IDR briefing should be given by the outgoing supervisor or his immediate supervisor.

2. Supervisor participation in IDR committees

Participation in personnel IDR committee activity is recommended for as many supervisors as is feasible. Directing participation of selected supervisors on a rotating basis would help to fulfill this recommendation. At no time should more than one-half of any one committee be assigned newly to membership, since the need for continuity of decision and action is essential.

An important aspect of supervisor participation in committee activities is the emphasis on person-to-person communication and group discussion in decision-making. Both of these characteristics are essential to creating change. Supervisors and selected officers should be made the department "innovators" who would begin to diffuse the IDR effort throughout their area of the department.

3. Supervisor accountability

Peterson (1) states quite correctly, "People perform in those areas where they are being measured by their peers. When management wants something accomplished it devises a measurement to determine whether or not it is achieving its defined goals." Among the many possible tools of management appraisal that can be used in the police department the following seem to be most effective:

a. Putting IDR specifications into the supervisor's annual performance appraisal

b. Charging injury and damage events and losses to a supervisor's unit

c. Periodically reviewing the records of all supervisors to recommend retraining in IDR activities

d. Monitoring supervisor records of safety observations, individual IDR contacts and results of inspection.

Accountability, however, cannot substitute for a total supervisory training effort. The objectives and rationale of injury and damage reduction must be communicated to the supervisor along with the techniques necessary to achieve those objectives. Without a strong supervisor indoctrination program, accountability is neither practical nor equitable.

Committee Role in IDR Function

Priority consideration should be given to the establishment of committees at each level of management, as shown in Figure 8-1. Effective IDR committees are intended to fill the education and interest void present in most departments by emphasizing group participation in reviewing and assisting to resolve individual, divisional and departmental injury and damage related problems.

IDR Policy Committee

The IDR policy committee should be chaired by the deputy chief. The purpose of the IDR policy committee is:

(1) To review the progress of the IDR function and its various programs

(2) To check departmental progress in injury and damage reduction

(3) To offer and evaluate recommendations for future programs

(4) To review injury and damage cases when recommended by the supervisory IDR committee

(5) To report agreed-upon recommendations to the Chief.

Most IDR programs depend on the cooperation and agreement of the individuals under whose responsibilities program activities will be undertaken. Therefore, the membership of this committee should include command personnel who are involved particularly in a service or line capacity in carrying out IDR programs. The membership should include commanders or deputy commanders from all bureaus, the medical director and directors of such divisions as training, personnel, patrol, traffic and investigations as required by the current ID problem within the department. When necessary, advisory personnel from other divisions or sections should be available for service on the committee. The effectiveness of this committee depends on the active participation of top command personnel. Committee size and makeup depends on local conditions.

Meetings should be held on a quarterly, bimonthly or monthly basis depending on the size of the department and the seriousness of the ID

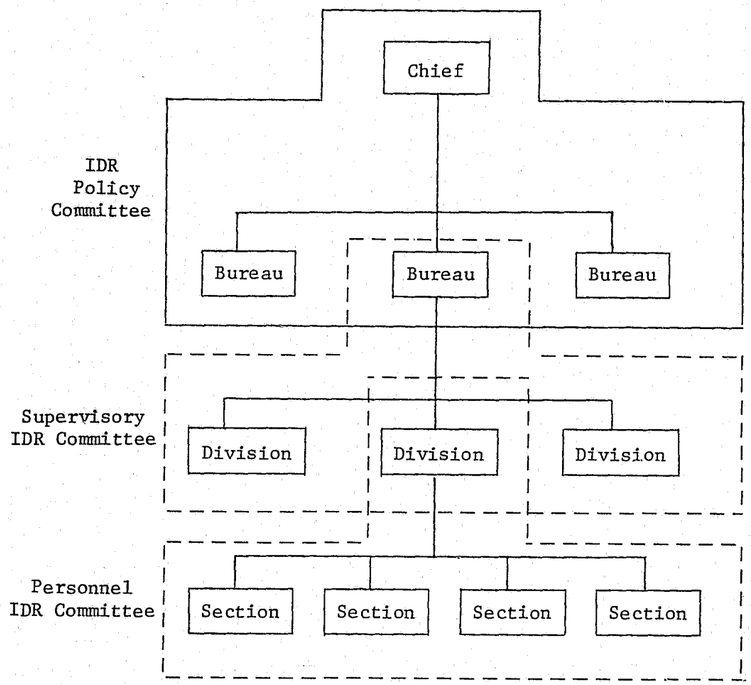


Fig. 8-1 Recommended IDR committee structure for police departments.

problem. Figure 8-2 presents the organization and a possible agenda for the meeting.

Supervisory IDR Committee

A supervisory IDR committee should be established within each bureau. It should meet as often or more frequently than the policy committee depending on the bureau ID record. The committee should be chaired by the bureau commander or his deputy and include all division directors under his supervision. The purpose of this committee is:

(1) To review the progress of IDR programs in reporting divisions

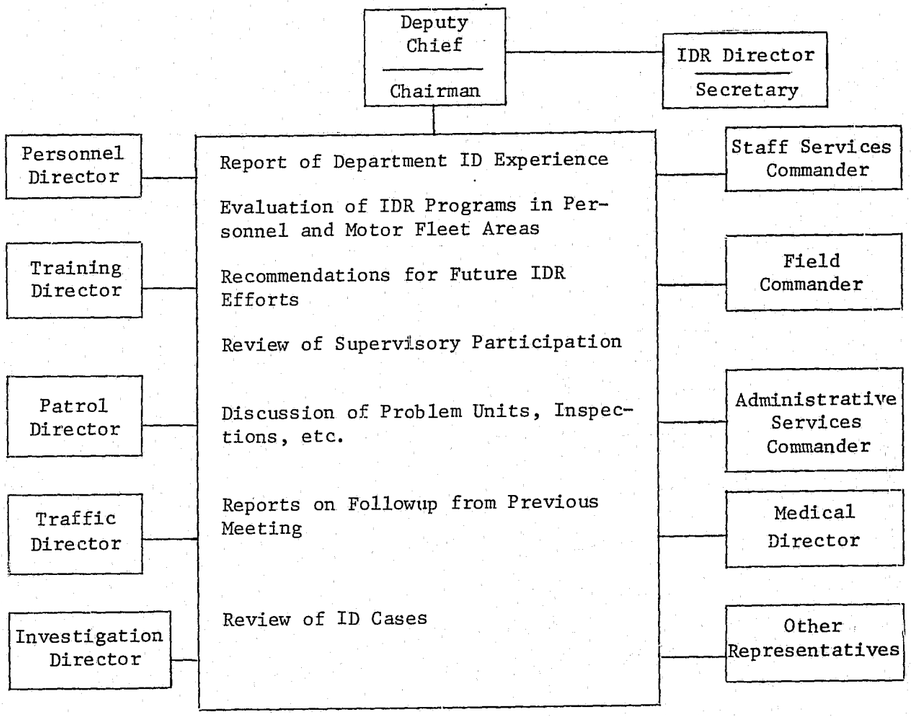


Fig. 8-2 Model IDR policy committee and proposed agenda.

(2) To check bureau progress in injury and damage reduction

(3) To report and attempt to resolve IDR problems as required

(4) To consider recommendations for IDR educational or promotional efforts

(5) To review selected ID cases that are reported by the personnel IDR committee

(6) To interview selected officers who have had several accidents in a 12-month period

(7) To direct supervisors whose subordinates are experiencing IDR problems to assess their unit's ID problems and enumerate the steps that will be taken to improve performance

(8) To forward IDR recommendations or serious ID cases to the IDR policy committee.

Personnel IDR Committee

A personnel IDR committee should be established at the division level and chaired by the director or his assistant and should include the sectional directors under his supervision. It should include also, on a rotating basis, at least two sergeants and three officers with the possibility of increasing or decreasing committee size as meets division needs. Again, the time between meetings should be dictated by current ID problems and coordinated with the meetings of the other committees.

The purpose of the personnel IDR committee is:

(1) To review ID events and determine preventability

(2) To determine causes and suggest measures that will prevent or reduce injury and damage

(3) To recommend programs or education and promotion methods that will forward IDR efforts

(4) To conduct periodic inspection of facilities for the elimination of hazards

(5) To discuss and attempt to resolve IDR supervisory problems within the division

(6) To report division recommendations for bureau-wide consideration to the supervisory IDR committee.

The personnel IDR committee of each division holds major responsibility for the review of injury and damage cases. The members' main function in this capacity is to assess the recommendation of the supervisor in regard to the disposition of the case. Injury and damage events that pose special problems for the department, or that contain unusual circumstances that are beyond the committee's purview, should be forwarded to the supervisory IDR committee. For cases of obvious negligence, standard disciplines should be prescribed so that penalties will be assessed equitably across all units in the department. In cases where individual or supervisor performance deficiencies are apparent, retraining for the officer involved or his supervisor should be recommended.

IDR Director's Function

The director of the IDR function should review all cases and report or bring any irregularities in the personnel IDR committee's judgments before the IDR policy committee. He should serve as secretary for the policy committee and receive copies of the minutes from the secretaries of the supervisory and personnel committees. Staff members of the IDR function may be assigned to provide secretariat for the supervisory committee or to attend in

an advisory capacity at either the supervisory or personnel committee meetings.

Motor Fleet IDR Program

The primary purpose of the MFIDR program is to reduce the frequency and severity of injury and damage resulting from motor vehicle accidents involving department personnel by proposing improvements in:

1. Driver selection and evaluation
2. Recruit, field and supervisory driving training
3. Problem driver detection and retraining
4. Specifications of police vehicles
5. Vehicle checkout, operating and parking procedures
6. Vehicle repair and maintenance.

This will enable the members of the department to operate more efficiently in achieving the police mission. To accomplish this purpose the MFIDR unit will:

1. Design, receive, analyze and summarize reports of vehicle accidents resulting in injury or property damage that will clearly define current trends
2. Conduct or plan special studies that focus on the circumstances of vehicular accident occurrence and evaluate the effectiveness of countermeasures intended to reduce the resulting injury and property damage
3. Recommend and update the contents of driver training and retraining to reflect the needs indicated by the analysis of the circumstances of accident occurrence
4. Develop a driver evaluation system for supervisors or specialized personnel to detect poor driving before accidents occur
5. Create a diagnostic system for use in retraining "problem" drivers who have had a number of accidents or have displayed obvious negligence in their driving performance
6. Develop a supervisor evaluation profile that pinpoints the types and circumstances of accidents where subordinates are involved so that supervisory and command personnel will be aware of deficits in supervision
7. Review and update specifications for police vehicles and equipment in consonance with the latest safety improvements available from manufacturers and the needs of the department as judged by accident and injury experience
8. Review and update safety maintenance and checkout system for vehicles to reduce those defects most commonly associated with accident occurrence.

Personnel Injury Reduction Program

The primary purpose of the PIR program is to reduce the frequency of non-vehicular injuries to department personnel by proposing improvements in:

1. Recruit, field and supervisor training
2. Personnel and supervisor evaluation
3. Operating procedures
4. Staff inspection procedures
5. Purchase and use of equipment
6. Equipment and facility maintenance procedures.

This will enable the members of the department to operate more efficiently in achieving the police mission. To accomplish this purpose the PIR unit will:

1. Design, receive, analyze and summarize reports of personnel injury that already define current trends
2. Conduct special studies that focus on the circumstances of injury occurrence and evaluate the effectiveness of countermeasures to reduce the frequency and severity
3. Coordinate and update operation hazard analyses on all tasks determined to involve critical hazards
4. Develop and update the contents and recommend scheduling for recruit training, operation instruction training and supervisor training as determined by an analysis of current injury trends
5. Create a personnel safe performance evaluation system for the use of academy personnel, field trainers and supervisors
6. Develop a supervisory injury and damage reduction rating system for the use of command and staff inspections personnel
7. Review the type and quality of personal protective equipment needed or used by department personnel
8. Review the use of general police equipment relative to the goal of injury reduction

9. Develop a hazard reduction inspection and maintenance system for all police buildings and other facilities

10. Promote voluntary compliance with injury reduction procedures throughout the department.

CHAPTER 9

RECOMMENDED IDR TRAINING PROGRAMS

The purpose of IDR training is to complement and supplement the programs currently existing in municipal departments in three major areas:

1. Motor fleet IDR training

2. Personnel IR training

3. Supervisory IDR training.

Current practice in these areas is extremely divergent both in training content and method. This seems to stem from a basic failure among municipal departments to communicate with one another even though the need is acute. Conversations with PAC members, the FBI and other groups indicate that the need to develop national training standards for municipal police is not limited to the IDR problem.

Most IDR training is developed internally in a way that is not easily susceptible to formal validation. In many departments review and updating of training is haphazard, suffering almost as critically from internal communication gaps as from the inadequacy of useable ID data that constitute the ultimate criteria of effectiveness evaluation.

It would be naive to maintain that internal procedural problems are the only obstacle to creating an effective IDR training effort. The dubious successes of driver education and many industrial safety training programs bear witness to the fact that a great deal of time, money and evaluative effort is certain to precede any significant breakthroughs in municipal police training. However, the point of initiation of adequate IDR training programs must focus on internal procedures that will begin to formalize the creation and revision of training programs.

To do this, it is recommended that IDR training programs be instituted on the basis of current practice where feasible and that a concentrated effort on the validation of these programs be given priority.

Motor Fleet IDR Training

It is recommended that municipal departments adopt a complete MFIDR training program that incorporates the following elements:

1. A core recruit training program stressing principles of defensive driving and vehicle control

2. A mechanism for training evaluation that includes assessment of achievement, on-the-road performance and the reduction of vehicular injury and damage events

3. An in-service training program that includes roll call, department-wide training, individual retraining and problem driver improvement.

To establish a core curriculum for municipal police driving training two areas of concentration should be considered: a) principles of defensive driving and b) the attainment of a high degree of vehicle control. On the latter point there is definite disagreement as to what types of training should be given to municipal police to achieve this skill, particularly in the area of pursuit or high speed driving. A growing body of opinion categorically opposes the use of high speed driving in the city for any reason whatsoever. The feeling is that officers who are taught high speed skills will be more likely to use them in high speed chases with the resultant increase in hazard to themselves and the general public. Unfortunately, there is no clear evidence for or against this view. As a result, the recommendations presented for MFIDR training will include lectures and exercises from a number of different programs including several high speed programs. Selection from these programs will be modified, however, to meet current municipal police needs as interpreted by the investigators and PAC members.

Defensive Driving

The police driver is confronted with more driving problems than the general driving public. The very fact that police must be on the road daily increases their exposure to traffic hazards. The exposure to hazard is heightened by adverse weather and road and traffic conditions. The effects of fatigue, emotional upset and the pressure to perform efficiently have never been examined in relation to police driving, yet it is obvious that they add to the probability of ID occurrence. The requirement to observe while driving on patrol, investigative or traffic duty provides another complication yet to be satisfactorily studied or sufficiently discussed in the literature reviewed. There is a definite need to develop a course on patrol driving techniques that provides an adequate coverage of these and other problems that police drivers face.

Until such a course is developed, defensive driving training must rely heavily on sources of information and techniques presented in programs prepared for the public or motor fleet operator. It is recommended that defensive driving training include concepts taken from: a) the National Safety Council Defensive Driving Course (11), b) the Smith System (15), c) the State of California Highway Patrol Manual, The Driver (2) and d) the Michigan State Police Manual, Precision Driving Techniques (9).

The Defensive Driving Course (11) defines two key concepts that set an attitudinal framework for all police driving tasks: a) defensive driving and b) the meaning of accident preventability. Defensive driving means driving so as to prevent accidents regardless of the actions of other drivers or the presence of adverse driving conditions.

Closely related to defensive driving is the meaning of "preventable accident" or one in which the driver fails to do everything that he reasonable could do to prevent an accident. Police driving can result in a number of injury and damage events that on the surface might be attributable by recruits

and other department personnel to the difficulties of police action. A firm ground in these principles can set the proper tone for the remainder of the training program and also can provide an attitudinal basis for future evaluation of performance and the meting out of discipline when necessary.

The discussion of remedies for the two-car crash situations, built around seeing and recognizing hazards, understanding defensive tactics and acting in time is also recommended. This approach is likely to cover many of the vehicular injury and damage cases that department personnel experience.

The Smith System (15), which emphasizes the use of visual processes and the maintenance of a space cushion around the vehicle, seems well suited for incorporation into a defensive driving training program. One of the rules Smith emphasizes is to keep your eyes moving. Practice of this principle may facilitate safer vehicle operation in one-man patrol car situations. The Smith System of driving generally is behind-the-wheel instruction presented under various traffic conditions by a trained instructor.

The California manual (2) presents various test track exercises related to improving technique and vehicle control. It also provides excellent coverage of such topics as vehicle inspection, reaction to road emergencies, stopping location, backing and arrival at the accident scene.

The Michigan manual (9), also oriented toward test track experience, is recommended particularly for its discussions of fundamental driving requirements including pre-ignition, starting, stopping and driver position. Restraint systems are covered also.

Vehicle Control (City speeds)

Knowing the principles of defensive driving will not be sufficient unless the police driver is proficient in handling and controlling his vehicle in the variety of driving situations likely to occur from day to day in city driving. To provide such experience, test track and skid pan exercises are recommended based on the following sources: a) the "Advanced" Driver Education Course, General Motors (16), b) The Driver, California Highway Patrol (2), c) Skid Control School, Liberty Mutual Insurance (8) and d) A Winter and Emergency Driving Workbook, National Safety Council (13).

The "Advanced" Driver Education Course (16) is almost entirely composed of test track experience and stresses vehicle control including off-the-road recovery, the power skid, evasive maneuvers with and without braking, blowout control and the development of vehicle control on the serpentine track. This course is recommended particularly for the general acquisition of vehicle control skills. The course manual also presents promising evidence of accident reduction effectiveness among sheriff's police.

The exercises in the defensive driving section of the California course (2), including backing in offset lanes and through "S" turns, the bootleg turn and other precision maneuvers, are recommended for use.

The Liberty Mutual Skid Control School (8) concentrates on skid theory and skid pan training. A wide variety of skid conditions are covered including

rear wheel braking, front wheel braking, all wheel braking, power skid, spinout, power spinout and hydroplaning. "Stab" braking, useful in rain or snow conditions, is also taught. It is recommended that as much of this type of training as possible be included in vehicle control training for municipal police.

The driving exercises in A Winter and Emergency Driving Workbook (13) supplement the material presented in the GM program by focusing on stopping techniques, control procedures, skid control and passing maneuvers on icy surfaces. Demonstrations of vehicle stopping and traction ability using various types of tires and tire chains to observe relative effectiveness under similar conditions are also presented. The exercises in this course are recommended only for municipalities with a winter driving problem.

Vehicle Control (Expressway speeds)

The police driver may be called upon at times to engage in driving that involves high speeds. Such driving may occur under all varieties of road, weather and traffic conditions. Training in this area would be useful particularly in those cities where municipal police patrol expressway or freeway traffic. It was the opinion of PAC members that high speed driving training should be reserved only for those officers who operate on expressways.

It is recommended that high speed vehicle control training be built around: a) Police Pursuit Driving, North Carolina State Highway Patrol (14) and b) The Driver, State of California Highway Patrol (2).

The Police Pursuit Driving manual (14) offers a complete coverage of high speed driving including the overtaking and stopping of motorists, pursuit turns, reaction time and stopping distances, interchange of traffic lanes and precision turns. The topics discussing turning in traffic, reaction time and stopping distance, interchange of traffic lanes and precision represent possible inclusions in a course for municipal police drivers.

Appropriate sections in the California course (2) include pursuit and other high speed exercises. Of special interest is a presentation of measures taken to insure the safety of participants during training on the high speed course.

Table 9-1 presents the recommended phasing of instructional material. No evaluation has been made of the content or effectiveness of these training recommendations. However, there is a good deal of consensus among police and driver educators about the efficacy of the lecture and behind-the-wheel material recommended. Based on a department's local access to training facilities, as many as possible of the recruit phase exercises should be covered in vehicle control training.

It is not felt that any of the courses presented, taken alone, fill the needs of municipal police driving training. Even so, some offer convenient packages for in-service training [i.e., NSC Defensive Driving Course (11); GM Advanced Driver Education Course (16); Liberty Mutual Skid Control School (8).] If selected for in-service training on the basis of current ID problems, evaluation of effectiveness of a selected sample of drivers should be a requisite condition.

Table 9-1

Recommended Subjects for Municipal Police IDR Driving Training

Type of Driving	Subject	Source *	Training Method			Recommended Phasing of Training		
			Lec.	Test Track	Skid Pan	Recruit	Roll Call	In-Service
Defensive Driving	Defensive Driving Concepts	NSC	X			L	X	
	Preventability Definition	NSC	X			L	X	
	Two-Car Crash Avoidance	NSC	X			L	X	
	Use of Eyes	SS	X			L	X	
	Vehicle Inspection	CD,MPD	X			L	X	
	Reaction to Driving Emergencies	CD	X			L	X	
	Stopping Location (Violator Stop)	CD,IACP, NUTI	X			L	X	
	Backing (Roadway, Driveway, Garage)	CD	X			L	X	
	Arrival at Accident Scene	CD,IACP	X			L	X	
	Fundamental Driving Requirements	MPD	X			L		
	Restraint System Use	MPD	X			L	X	
Vehicle Control (City Speeds)	Off-Road Recovery	GM	X	X		L		
	Power Skid	GM	X	X		L, TT		
	Evasive Maneuver (Braking)	GM	X	X		L, TT		
	Evasive Maneuver (Without Braking)	GM	X	X		L, TT		
	Blowout Control	GM	X	X		L, TT		
	Vehicle Control (Serpentine)	GM	X	X		L, TT		
	Backing ("S" Turn and Offset Lanes)	CD	X	X		L, TT		
	Bootleg Turn	CD		X				
	Skid Control (All Types)	SCLM	X	X	X	L, TT		
	Hydroplaning	SCLM	X		X	L, TT		
	Stab Braking	SCLM	X		X	L		
	Winter Emergency Driving	NSC	X	X		L	X	
Vehicle Control (Expressway Speeds)	Pursuit Turns	NCPD	X	X				
	Reaction Time/Stopping Distance	NCPD	X	X		L		
	Precision Turns	NCPD	X	X		L		
	Interchange of Traffic Lanes	NCPD	X	X		L		
	High Speed Driving (EVOC)	CD	X	X				
Special Topics	Pursuit Policy	IACP,NUTI	X			L	X	
	Technique for Stopping Motorists	NCPD,CD, IACP,NUTI	X			L	X	
	Emergency Driving	CD	X			L	X	
	Use of Emergency Equipment	MPD	X			L	X	
	Parallel Parking	NCPD	X	X		L		

* See text

Legend: ▨ In service training program packages.

Specialized Police Driving Problems

There are a number of driving problems that present difficulties to police. Two major problems concern the pursuit of violators and felons and responses to emergency calls. Adequate training in defensive driving and vehicle control certainly is required to perform these activities efficiently, but it is also necessary to provide training in technique. Many of the courses already mentioned discuss special police pursuit and stopping techniques as do IACP training keys (5) and bulletins published by municipal departments and organizations such as the Northwestern University Traffic Institute.

Unfortunately, there is divergence of opinion regarding recommended practice particularly in the area of motorist pursuit. The following recommendations can be based only on current practice and will support a major recommendation for standardizing municipal police procedure in these areas.

Techniques for stopping motorists

There is a disagreement about the positioning of the police vehicle relative to the pursued car when the signal to stop is given. The North Carolina Highway Patrol (14) recommends that the pursuing officer "pull alongside until his front bumper is even with the left door of the overtaken car." The California Highway Patrol (2) recommends not going beyond the left rear bumber on the violator's car. IACP (5) recommends remaining behind the pursued vehicle and moving into the parallel position only if necessary.

For municipal police in one-man cars the California practice (2) is highly recommended. The procedures include:

(a) Accelerating 2/3 the separating distance between the vehicles

(b) Removing foot from accelerator and positioning the vehicles

(c) Offset police vehicle slightly to left of violator's vehicle

(d) Turn on turret light, sound horn or flash lights to gain attention

(e) The moment pursued driver identifies you, apply brake.

Pulling abreast of motorist is not recommended for one-man cars. In two-man cars it should be used only as a last resort after attempts have been made to get attention by use of the siren.

Selecting a good spot to stop violators and suspected criminals is most important. With the former, choice should be made with the safety of police officer, his vehicle and the violator's vehicle as a primary consideration. A position completely off the roadway or at the curb in a slightly offset position is recommended. In cases of criminal suspects, choice of a well-

lighted area is mandatory and stop should not be made without assistance. This case is further complicated by the need to make the stop as rapidly as possible once assistance has arrived. In no case, however, is it recommended to attempt to run the suspect's vehicle off the road.

The position of the police vehicle should be behind the motorist's vehicle at a distance of six to 14 feet in an offset position approximately three feet to the left of the violator's or suspect's car. IACP (5) recommends an angular position with front end angled toward center of street when stopping a felony suspect thus giving police officer maximum protection from engine block; some municipalities use a parallel stop position for two-man cars. It is recommended, however, that the vertical offset position be used in both violator and felony suspect situations wherever possible.

Current practice questions the use of lights and emergency flashers on expressways in situations where the police vehicle has stopped a motorist and is entirely off the highway. This has been suggested since other motorists, distracted by the lights, might disrupt traffic or be drawn off the road toward the police vehicle.

Emergency calls

Responses to emergency situations require expert judgment in terms of vehicle speed. In most cases the speed limit should not be exceeded and traffic control signals should be obeyed. Also, strong emphasis is placed on recognizing and reacting defensively to motorist confusion. Obviously, there are a number of other considerations that must be dealt with in driving training for both pursuit and emergency response as well as for circumstances not discussed, such as parallel parking, night driving and dealing with intoxicated drivers. It is recommended that a local department match these and other subjects to local needs as found by in-depth review of ID experience.

Evaluation of Driver Performance

Evaluation of driver achievement should be made at the completion of IDR training. Performance should be evaluated during on-the-job or field training and thereafter periodically by the supervisor or by assigned driver evaluation specialists. The problem of driver performance evaluation is most complex. Achievement should comprise both knowledge tests and skill tests covering all sections of training. Ideally, the score a student obtains on the knowledge tests should indicate his grasp of the lecture material, while his rated competence on the test track and skid pan should reflect his ability in the techniques taught.

Since both knowledge and technique must be translated into improved on-the-road performance, a behind-the-wheel evaluation before and after IDR training should be given as indicated in Table 9-2. The post-training evaluation should be made by a field trainer, driver evaluation specialist or supervisor during the on-the-job evaluation of recruit performance. The evaluation form used should be comprehensive.

Table 9-2

Conceptual Format for Evaluating Driving Training

Type of Evaluation	Purpose	Method	Evaluator
Performance (Pre-training)	1. Assess Driving Performance 2. Input for Driving Trainer	On Road	Training Personnel Driver Evaluation Specialist
Achievement	1. Assess Achievement in: a. Knowledge b. Vehicle Control c. Attitude	Paper-Pencil Test Track Skid Pan	Training Personnel
Performance (Post-training)	1. Assess Driving Performance 2. Input for Department License	On Road	Field Trainer Driver Evaluation Specialist Supervisor

The pre-course evaluation should be made by training personnel or driver evaluation specialists during recruit training before driving training is commenced. Obviously, some performance areas will almost automatically improve after IDR training (e.g., vehicle check out, use of restraint system, entering and starting vehicle) while other aspects of performance will be testable only after training (e.g., pursuit and emergency driving and overtaking violators). However, there are numerous on-the-road performance factors that should be improved by effective training. Post-test scores should reflect this if the student has learned.

A possible form that could be used for pre- and post-training performance is presented in Appendix I. This form is used currently by supervisors of the California Highway Patrol (2) when making driving performance observations. It covers:

Pre-Driving	Emergency Operation
General Driving Habits	Stopping Violators
Freeway Driving	Special Area Conditions
Night Driving	Attitudes

Also recommended as source material is the Ford Motor Company, Road Test Evaluation Program (3) that is built around concepts contained in the Smith System (15). Again, the performance evaluation form should focus particularly on the use of those techniques that are intended to reduce the department's critical ID problems. Failure to meet post-performance standards should result in immediate retraining before a department license is granted. Formulation of these standards for each area of the post-evaluation should be undertaken

initially by weighing the importance of specific sections according to the frequency and severity of the various types of injury and damage events occurring in the department.

The "payoff" of any IDR program or its subelement rests in its ability to reduce the injury and damage problem(s) for which it was intended. For example, defensive driving, use of eyes, reaction time and stopping and stab-braking training is directed toward reducing tailgating and speed-too-fast occurrences and, ultimately, rear end collisions. Failure to achieve a reduction in rear end collisions among those who receive proper training and are scored as having achieved and performed according to the standard established suggests that the method and content of training should be examined carefully. Deficiencies in the evaluation system may also be present. But since the correlation between most of the scores on driver evaluation instruments and accident experience is so low, it is recommended that training material be reevaluated in a systematic manner, using the control group method that has been described.

The importance of periodically evaluating the driving performance of all officers cannot be overstressed. To assist supervisors in this activity, it is recommended that a sufficient number of driver evaluation specialists be trained. Their task would include riding with each officer for at least an hour annually. They would evaluate performance and suggest ways that driving skills might be improved. Such evaluation would also serve as a means of assessing supervisor effectiveness in observing and correcting the driving deficiencies of his subordinates.

In departments where manpower or economic limitations prevent the use of driver evaluation specialists, the supervisor must be responsible for the formal annual evaluation as well as for periodic observation and correction of driver deficiencies.

Other functions of the driver evaluation specialist would include monitoring recruit driver performance and counseling problem drivers.

In-Service Training

The contents and recommendation for in-service IDR driving training should be based on a definition of departmental motor fleet ID problems, evaluation of the driving difficulties of individual non-problem drivers and diagnosis of problem driver deficiencies. It is recommended that the contents and training methods of other programs be adopted to meet these three conditions.

Department-Wide Training

Subjects suitable for roll call training are indicated in Table 9-1. The phasing of such training should coincide with assessment of need as discovered by annual driver evaluation and analysis of the local vehicular injury and damage problem. Scheduling of selected material should be dictated by appropriateness in terms of weather and traffic conditions in the city. For example, in northern cities roll call training and bulletins discussing winter driving hazards, stopping distances and skidding should be scheduled in late fall. Reemphasis of this material should be periodic throughout the winter months.

A similar rationale should dictate the use of general in-service driving training programs. Once a decision to introduce a tested training program is made, if it is not possible to provide training for all units, the program material should be taught on a "worst first" basis. Again, in-service training should always be tied to specified needs and should be evaluated on its capacity to fulfill clearly defined objectives. For example, the initiation of the NSC Defensive Driving Course (11) should produce a reduction of two-car crashes where the police vehicle is in motion.

Driver Retraining

A program should be instituted for retraining individual drivers before accidents occur. The annual evaluation of all department drivers either by supervisors or the driver evaluation specialist should pinpoint those officers whose driving skills are deficient. The evaluation should specify also the areas of driving difficulties. The purpose of retraining would be to improve performance in these areas so that future performance evaluations would show more positive results.

Problem Driver Improvement

The driver who is involved in two or more accidents in a year, requires special treatment. Certainly, physical retesting, driving knowledge retesting and perhaps psychological testing should be undertaken to obtain a complete diagnosis of the driver's problems. A discussion of physical tests to be used is located in Chapter 10 in the section on officer fitness and selection. No specific psychological tests are recommended in this report. However, in consultation with local psychologists a useful battery of tests may be devised.

The primary object of such in-depth testing is to ascertain and remedy the driver's specific problem areas. The driver evaluation specialist or a specially assigned officer should conduct an interview with the problem driver to review the results of the testing.

The program of the New Jersey Improvement Clinic (4) provides an excellent source for the establishment of a problem driver improvement program. This program is designed "to change attitudes and behavior in order to reduce accidents and violations." Modified somewhat for police, it may include the following phases:

1. Diagnosis - determining driving patterns, habits and limitations that might be related to accident and violation behavior

2. Advisement - acquainting the officer with his own strengths and weaknesses

3. Reeducation- providing the officer with knowledge in his areas of weakness and also prescribing appropriate behind-the-wheel retraining

4. Counseling - giving the officer new insights into his own behavior as an individual and as a law enforcement representative

5. Evaluation - collecting information that will lead to further modification of the program.

It is clear that this process is time-consuming and must be weighed in that light. However, current success in driver improvement seems to be built around this or similar techniques that avoid threats of personal injury and death, work on the development of positive attitudes and deal with cases on an individual basis. Even so, results should be evaluated using a technique similar to that described for recruit training evaluation.

Personnel Injury Reduction Training (PIR)

In most police departments personnel are already receiving a certain amount of injury reduction training. Study of such subjects as arrest, search, transportation of prisoners, use of handcuffs and crowd control indicate that a number of precautionary measures are already known and being taught. However, most departments lack a formalized system for revising or updating training based on current ID experience with the result that:

1. The adequacy of PIR training, for recruits and other personnel in critical hazard areas, is unassessable.

2. Supervisor contacts with subordinates remain, for the most part, an individual matter and not susceptible to follow-up.

3. Roll call training and training bulletins do not treat PIR topics in a well-directed manner.

These deficiencies, coupled with the wide disparities in police training practice, prevent the recommendation of PIR training curricula material. A more ordered and precise definition of police task performance with the attendant hazards must be achieved before such material can be presented. For this reason a method that offers promising possibilities for analyzing police task performance is recommended for immediate use by departments.

The major role of the IDR function will be to assist in structuring PIR training programs by guiding the collection of step-by-step analyses of police tasks, their attendant hazards and appropriate countermeasures. The end product of this activity will be a task hazard analysis file for use of training, command, supervisory and subordinate personnel in fulfilling their assigned duties. This file should be updated at regular periods: a) when changes in procedures occur, b) when analysis of ID cases indicates the need for revision or c) when new procedures or types of equipment are introduced.

To establish this program, supervisors must be trained in task hazard analysis (THA) methods. One of the initial activities of IDR supervisory and personnel committees should be to lay the groundwork for such training by fully discussing the need for the activity and its ultimate benefit to all department personnel.

Task Hazard Analysis

Task hazard analysis recommendations come mainly from a manual produced by Bethlehem Steel (1). The technique is referred to as job safety

analysis throughout industry. The steps for conducting task hazard analyses are:

a. Select the task to be analyzed.

b. Break down the task into successive steps.

c. Identify hazards or potential hazards.

d. Develop ways to eliminate them or their injurious effects.

Task Selection

The selection of tasks to be analyzed should flow from injury frequency and severity data as ordered by criticality ranking. The IDR director in conjunction with the IDR policy committee should make the initial determinations of what tasks are to be subjected to THA. Tasks that involve a great potential for severe injury (bomb threats) and those that are newly established (handling of new chemical agents) should also be considered for THA.

Task Breakdown

Before hazard analysis can be undertaken, each step of the task must be described. For example, the technique of passing another vehicle on the highway can be described as follows:

a. Move care into left lane.

b. Accelerate as you move left.

c. Pass vehicle in right lane.

d. Return to right lane.

e. Decelerate to normal speed.

In breaking down a task, the analyst must be careful to become neither too detailed nor too general. The former results in too many specific categories, while the latter may leave out important basic steps that could involve hazard. Each step is given as a generalization, and precautions are not described.

Hazard Identification

Once the task is broken into steps, various hazards or potential hazards should be identified. The identification process includes all types of hazards whether they be environmental or situational. Police tasks almost invariably entail exposure to sudden attack in the form of being "struck by" objects or an offender. At the same time, exposure to unsafe environments causing slips, falls or animal bites is ever present. All of these hazards should be included in the hazard identification phase. It is recommended that the IDR director and the training staff formulate a list

categorizing local police hazards to assist supervisors with this phase of THA. An initial list might include the following three classes of hazard:

Accident	Assault	Ambush
MV - Motor vehicle	HV - Hit by vehicle	HV - Hit by vehicle
St - Struck by/against	HF - Hit by fist, hand arm, foot	HTO - Hit by thrown object
Cw - Contact with	HO - Hit by object	Bb - Bombed
Ca - Caught between, in, on	HTO - Hit by thrown object	Sh - Shot
F - Fall below, same level	Sh - Shot	O - Observed
Sh - Shot	Sb - Stabbed	
	Bi - Bit	
	O - Observed	

Notice that the hazard categories in the accident listing can be expanded so that they conform more fully to industrial standards. With few exceptions the hazards considered in the assault and ambush column are not contained in industrial listings. The item "observed" definitely can be considered a hazard in police operations even though the act of observation is not in itself intended to produce injury or damage. Observation by subjects, felons or snipers can magnify the other hazards that police officers must encounter.

The utility of this classification system depends on its capacity to generate specific hazards. For example, more categories describing critical types of motor vehicle accidents, such as intersection or rear end collisions, may be included based on local ID analysis.

Hazard Elimination

When the hazards and potential hazards of each task step have been identified and their causes understood, methods to prevent their occurrence or minimize their effects should be developed. Such methods may involve: a) change in task procedures, b) change in task equipment or environment, c) development of new ways to perform the task and d) reduction of task frequency.

Appendix J contains a complete description of the task hazard analysis methods. As was mentioned, its main purpose is to systematize IDR training in areas where injury and damage is frequent. Though the THA file can serve as a basis for IDR instruction for recruit and in-service training, it is also most valuable for the supervisor since it guides on-the-job instruction and offers a ready checklist for periodically observing subordinate performance. The existence of an orderly listing of hazards and procedures also provides a focal point for the evaluation of performance after an injury or damage event occurs.

Task hazard analysis is seen as offering a method for defining training needs related to the performance of specific tasks on a local basis. It can be viewed also as a method for producing nationally accepted performance and equipment criteria. It is recommended, therefore, that further research be

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conducted to develop a more refined THA system for police at local and national levels.

Evaluation of Task Performance

The evaluation of PIR recruit training should be built around both achievement and on-the-job performance. The evaluative format is similar to that of driver training; however, no pretest phase is recommended. It is necessary that the field trainer include PIR criteria in the evaluation of performance. Such a section should be devised by the IDR and training staff. A format for evaluation might be built around an assessment of the recruit's reaction to the presence of hazard or danger. For example, the following can provide a general check on recruit behavior:

a. Describes possible hazards associated with various tasks

b. Assesses the criticality of hazards accurately

c. Describes step-by-step preplan for hazardous tasks

d. Demonstrates use of preplan in performing tasks

e. Responds appropriately to hazardous situations

f. Responds appropriately to changes in hazardous situations.

It is recommended that specific field tasks be evaluated using this or a similar list to monitor performance.

Recruit performance evaluation also should include categories that assist in describing the occurrence of human errors. Such evaluation can be a useful guide to the development of new training methods by pinpointing individual and group deficiencies in coping with hazardous situations. Leven's error classification (7) offers a suitable list of categories for the development of such a form in conjunction with the steps defined by THA. For example, the following types of errors are possible in the task of making a search:

a. Error of Omission - - - - Failure to draw gun before search

b. Error of Commission - - - Incorrect positioning of subject during search

c. Error in Method - - - - - Frisk when field search is appropriate

d. Error in Sequence - - - - Handcuffing suspect before search.

Supervisor ID Training

Supervisor training is perhaps the weakest link in current IDR programs. Considering the importance of the supervisor to the achievement of IDR goals,

training in the crucial phase of IDR activity must be provided. This training includes: a) conducting task hazard analyses as has been described, b) imparting task performance instruction to subordinates, c) establishing techniques for making individual personnel contacts, d) planning personnel observations and e) inspecting equipment and facilities.

All of these activities constitute the supervisory role apart from IDR considerations. If a supervisor is operating effectively, he will be performing many of these duties. Thus, training in IDR activities can be seen as improving supervisor efficiency in other areas as well.

Useful sources for obtaining further information about teaching supervisory training topics are the Accident Prevention Manual for Industrial Operations (10), the Supervisors Safety Manual (12), and of particular merit, Bethlehem Steel's Supervisory Safety Manuals (1). Since these sources are oriented toward industry it will be necessary to modify contents for police training. Even so, the general subject matter provides a useful overview of police training guidance.

Supervisors should be trained in those methods that will enable them to observe and instruct their subordinates in sound IDR practice. Accordingly, supervisor training should encompass the following areas:

Task Hazard Analysis

The method for doing THA is presented in detail in Appendix J.

Task Performance Instruction

Basic training in this area should include the proper techniques of teaching. The most commonly accepted format for instructing personnel is the Training Within Industry program of World War II (6). It consists of the following steps:

a. Prepare officer to receive the instruction.

b. Present the operation.

c. Try out performance.

d. Follow-up.

The supervisor should be familiar with this routine and use it in the training of personnel in all areas of performance.

Task Performance Observation

Training in task performance observation should include a review of the reasons for the task performance observation including:

a. A check on training effectiveness

b. The promotion of on-the-spot correction

c. The opportunity to compliment personnel

d. Improved knowledge of men and performance.

Also included in this area of training should be discussion of the extent and frequency of task performance observation with particular emphasis on:

a. Newly graduated recruits

b. Officers who are involved frequently in injury or damage events

c. Officers who frequently take chances.

It is clear that police supervisors should be trained formally in a number of other important areas such as physical inspection of facilities and equipment, human relations and techniques of motivation. The IDR function together with the training function should construct a training curriculum for supervisors at the earliest opportunity. Such training should be given highest priority by the IDR policy committee.

CHAPTER 10

RECOMMENDED IDR SUPPORT PROGRAMS

IDR Inspection Programs

Just as an IDR training program supplements the on-going police training effort, the IDR inspection program supplements the on-going inspection routine. IDR inspection procedures encompass both personnel and equipment.

To be effective, an IDR inspection program must fill these basic needs:

1. Detection - seeking out performance or equipment deficiencies that constitute hazards that could lead to injury or damage

2. Analysis - determining why the deficiencies exist

3. Correction - elimination of the deficiencies.

IDR Personnel Inspection

The overriding purpose of an IDR performance inspection system is to detect human errors before they result in injury and damage and to correct them on the job or through retraining. The system also provides concrete checkpoints for evaluating IDR performance at all levels of supervision. IDR performance inspection results should be included in the annual performance evaluation of all subordinate, supervisory and command personnel and should be given the same weight as other sections dealing with the efficient performance of duty.

"Safety" is not seen by the majority of department personnel as a major requirement for effective police work. IDR performance inspection can be successful only if all personnel are fully aware of the worth of the IDR effort. It is recommended, therefore, that the rationale underlying procedures for evaluating driving and other task performance be discussed during initial IDR committee meetings and periodically thereafter. It is also recommended that personnel be given an opportunity to discuss the final content of performance evaluations.

Personnel Performance Observation

The driving skills of all department personnel should be evaluated annually. Supervisors or driver evaluation specialists should be responsible for this activity. A form similar to that presented for driver evaluation in Appendix I can be adapted for the annual evaluations. Its contents should be updated regularly by IDR staff based on the department's ID experience. The results of the annual driver evaluation should be included in a patrolman's general performance evaluation, as should a record of his involvement in vehicular or non-vehicular ID cases.

Periodic personnel observation is much more complex. Ideally, a record that shows the results of observations covering all critical tasks should be maintained for every officer assigned to a supervisor. This record (Appendix K) can be used to assist in scheduling observations and to trigger followup in cases where attempts have been made to correct deficiencies. It may also contain a record of ID cases focusing on the errors, if any, that led to the injury or damage event.

This detailed recording procedure may not be feasible in departments that assign different officers to a given supervisor on a daily basis. In these cases, the recommended alternative is that supervisors focus their observations on the tasks defined as critical by the IDR supervisory committee of the IDR function.

Critical tasks might include choice of location when stopping violators, handling intoxicated offenders, approaching and turning at intersections or confronting suspected felons. Whatever the problem, supervisors should be aware of the critical task steps to observe. An available THA or a precoded form similar to the one in Appendix J can be used to record observations.

Use of this method does not insure as close a surveillance of performance as the supervisor observation record file, but it does assist in directing the supervisor toward the department's most pressing ID problems.

In either of these methods a record of supervisor observations must be maintained. These records are necessary to assist in gauging the level of supervisor activity and to account for subordinate behavior. It is recommended that personnel observation records be made a part of the supervisor accountability system already existing in the department.

An IDR performance record of supervisors should be maintained by commanders or by the IDR staff. If feasible, the record should consist of ID cases involving subordinates under the control of a specific supervisor. If supervisors are assigned different officers, then supervisor activity in observing critical tasks should be reviewed quarterly by commanding officers. A supervisor whose personnel have a poor ID record or who fails to observe his men should be interviewed by his commander or brought before the IDR supervisory committee. A supervisor's personal ID experience and his performance record should be indicated on his annual review.

IDR Vehicle Inspection

Vehicle inspection is an integral part of the IDR function. Its primary purpose is to detect those defects contributing to accident occurrence. Daily vehicle inspection should be a requirement for every officer who is assigned a motor vehicle. Supervisors should be given responsibility for weekly inspection of every vehicle assigned to their unit.

Strict adherence to inspection schedules is mandatory if the system is to be effective. For this reason, appropriate followup and accountability procedures should be put into effect. A recommended source for such procedures is General Order No. 21, 1970 of the Metropolitan Police Department of

the District of Columbia (16), excerpts of which are provided in Appendix M.

In discussing vehicle maintenance, Vanderbosch (15) points out, "Compliance to a preventive maintenance program may be more easily attained if a police vehicle is specifically assigned to a particular police officer." Both on the score of individual accountability and the officer's dependence on the same vehicle for proper performance, this procedure can be recommended for pilot evaluation, if economically feasible. Data in Chapter 2 also indicate a possible relationship between this practice and accident reduction.

The existence of a vehicle inspection system implies the possibility of correcting defects or replacing equipment within the time constraints put upon the inspecting officer. It is obvious that the tendency not to report defects would be stronger in situations when it is inconvenient or overly time-consuming to obtain the necessary service. To prevent this, staff inspections should be conducted to monitor the availability and speed of their services.

Daily Inspection

It is recommended that all assigned vehicles be inspected by those who are driving them before and after they are taken from the police parking areas. Certain aspects of on-the-road vehicle performance should be recorded for the use of maintenance and supervisory personnel.

A pre-driving inspection checklist covering vehicle performance in a number of crucial areas should be required. These areas include tires, steering, brakes, exhaust system, lighting system and shock absorbers. Other recommended areas of checkout include:

Fluids	-	gas, oil, radiator, battery, windshield washer and automatic transmission
Gauges	-	alternator, temperature, oil pressure and high beams
Other Equipment	-	horn, siren, radio, windshield wiper and washer
General Cleanliness	-	interior floor, front and back seats and back window sill.

Table 10-1 presents recommended procedures for inspecting three major systems in the vehicle taken from the Vehicle Inspection Handbook (2) and the ANSI Standard D7.1, 1968 (1). These sources and the "Study of the Police Patrol Vehicle" (7) should serve as reference points for daily, weekly and more in-depth inspections.

The inspection procedures listed in Table 10-1 can be done without extra equipment in a very short period of time. Conditions in the "take out of service" column correspond to reject levels outlined by the ANSI standard. It is recommended that departments adjust these minimum levels

Table 10-1

Example Inspection Procedures for Three Vehicle Systems
From Vehicle Inspection Handbook, AMA, 1970

System	Procedure	Take out of Service*
Tires	A. Inspect for Wear: Cord exposure, cuts, snags, sidewall cracks, bulges, bumps	A. If tire is worn so that tread wear indicators contact the road in any two adjacent major grooves at three locations spaced approximately equally around outside of tire
		B. If tire has worn spot that exposes cord through the tread or sidewall
		C. If tire has visible bumps, bulges or knots
Steering	A. Binding or Jamming: Turn steering wheel through full right and left turn and feel for binding or jamming conditions	A. If binding or jamming occurs other than at wheel stops
	B. Lash or Free Play: With road wheels in straight-ahead position, turn steering wheel until turning motion can be observed at road wheels	B. If more than two inches of total movement at the steering wheel rim is encountered before the front wheels move
Brakes	A. Hydraulic System Leakage: (if appropriate) driver should be able to apply a moderate foot force (40-60 lbs,) in non-powered systems and 15-20 lbs. in power assisted systems and maintain the same pedal height for one minute	A. If pedal height cannot be maintained for one minute
	B. Pedal Reserve: Depress brake pedal under moderate foot force	B. When less than 1/5 of the total pedal travel
	C. Parking Brake: Set parking brake firmly to determine the reserve travel of the hand lever or foot pedal	C. If there is no reserve travel in lever (or pedal)

*Source: ANSI Standard D7.1, 1968.

upward on all the equipment specified as crucial to safe operation. This procedure will assure maximum roadability and ultimately reduce maintenance costs. Clear criteria for taking a car out of service should be presented on the inspection checklist so that serious discrepancies are not merely noted. Action must be taken immediately to correct defects before the vehicle is driven.

Police vehicles contain a variety of job-oriented and emergency equipment. A checklist used to account for the presence and condition of emergency equipment should include the following:

a. Fire extinguisher - accessible, secured and charged bearing the label of Underwriter's Laboratories, Inc. and showing a classification rating of not less than 4-BC

b. Emergency warning devices - prescribe to SAE standards or DOT Motor Carrier Safety Regulations

c. Safety belts and harnesses - manufacture and installation comply with Federal Motor Vehicle Safety Standards

d. Tire chains - full or strap-on where snowy or icy weather conditions prevail

e. Tools - hammer, jack, wrenches, axe or other equipment required by the department

f. First aid equipment - contained in a dust and weather-proof case reasonably free from leaks and uncontaminated.

Required report forms and other emergency equipment may also be included on the equipment checklist.

Personal protective equipment such as helmets and riot batons should be included in all patrol vehicles. Rifles or shotguns, when assigned, should not be stored vertically. They should be secured horizontally in the console or the trunk of the vehicle.

Vehicle inspection should also include the formal reporting of deficient performance characteristics. A performance checklist might include:

a. Braking characteristics

b. Engine miss on acceleration

c. Faulty defroster, radio, etc.

d. Vehicle stability and maneuverability

e. Shifting and transmission characteristics.

Reporting of this nature not only facilitates prompt service but also gives police drivers an official channel through which they can communicate vehicle problems. Thus, consensus about a poorly performing vehicle make and model can be achieved quickly to provide input for specifications when new or replacement vehicles are purchased. In the case of serious handling problems, evidence can be gathered expeditiously to provoke recall of a specific vehicle type by the manufacturer.

The post-driving checkout should take note of any and all damage that was incurred during the tour and include a check on the condition of all equipment used. Any non-functioning vehicle systems should be reported at this time.

Weekly Inspections

The supervisor should be responsible for the weekly inspection of all vehicles under his command. This inspection should be made to follow up the daily vehicle inspection checkouts. It should be the supervisor's responsibility to: a) review daily inspection reports, b) follow up any indications of poor vehicular performance with the mechanics and c) attempt to discover why deficiencies or defects are occurring. A weekly inspection checkout list, similar to the daily form, should be developed for this purpose.

A well-functioning motor vehicle inspection system should lead to: a) reduction of defects found during weekly supervisory inspections, b) better performance of department vehicles, c) reduced maintenance costs and ultimately, d) fewer accidents where vehicle defects are reported as contributing causes. The IDR staff should maintain a close liaison with the various units using motor vehicles to obtain this information on a periodic basis for report to the IDR policy committee.

IDR Equipment Inspections

The objective of an IDR equipment inspection program is to insure the operational readiness and availability of all personnel equipment. This will require that supervisory staff be responsible not only for thorough inspection, but also for checking routinely on the maintenance and storage of all items. As with vehicle inspection, prompt repair or replacement service for damaged or faulty equipment must be available if an inspection program is to function effectively.

To prepare an adequate inspection program, the IDR staff in conjunction with planning and research should examine the use pattern of the various pieces of equipment together with maintenance and storage specification as indicated by the manufacturer. This information should serve as a basis for determining a reasonable schedule for inspection and routine servicing or maintenance. Equipment may then be grouped by assignment or location to initiate inspection routines for equipment worn or carried by the officer and specialized equipment on call (armored vests, tear gas, etc.). The number and type of items listed within each category will, of course, depend on individual department requirements or policies. Helmets, for example, may be

worn routinely on certain shifts, carried in vehicles or given out only for special assignments or duties.

The watch or shift supervisor should be responsible for checking the presence and condition of items worn or carried by his subordinates. In many departments, roll call inspections are reserved only for personnel who are not living up to the department image in dress or appearance. Whether it is necessary to formalize roll call inspections throughout a division or the department, by instituting an equipment inspection procedure and a checklist to be completed daily by supervisors, depends on the availability of defect information.

Incidence of equipment repair should be monitored regularly. Service and replacement records should contain the name of the officer, his supervisor, the nature of the equipment defect or deficiency and the reason for the condition, i.e., normal wear and tear, abnormal wear and tear, poor maintenance or manufacturer's defect. This information, if tabulated periodically, can be useful in several areas of planning and programming. Determining incidence of equipment failure or frequency of replacement due to wear, for example, will be useful in evaluating equipment performance and calculating cost estimates in terms of purchasing. Problems such as poor maintenance or improper use of equipment may also show up, requiring a more formal inspection system, clarification of equipment use procedures or modifications of maintenance and repair procedures.

Incidence of equipment failure in the field should also be checked periodically. This can be done by focusing on equipment failure in bilevel IDR reporting. An alternate approach would involve the collection of case histories of equipment failure through the Incident Recall method described by O'Shell and Bird (13). This technique, similar to Flanagan's Critical Incident Technique (4), involves brief supervisor interviews with personnel. The purpose of these interviews would be to obtain incidents of equipment failure that have been experienced or recounted by subordinates. These recalls would include a description of the event, an analysis of why it happened and suggestions about how the occurrence could be prevented in the future. This approach will not suffice if the supervisor's purpose is to obtain data on the rate of equipment failure. It would, however, supply details about the nature of such failures. Equipment failure rate data can be gained through a special study or more simply, by adding a question that describes use and efficiency of equipment during onset, to a department's "use of force" form.

Specialized equipment will be the responsibility of the person directly charged with its maintenance such as the armorer or equipment officer. Gas masks, armored vests, tear gas, etc., may be located centrally in an armory, stored in station houses or assigned to specialized on-call vehicles. Since the frequency of use is low but critical, it is essential that this material be checked periodically and tested to maintain it in perfect working order. Thorough inspection after it is used should be standard procedure and officers should be requested to report any difficulties or damages when returning items.

Facilities Inspection

Elimination of environmental hazards from police buildings and other facilities is of primary concern to the IDR function. Supervisory personnel should be responsible for daily inspection of their work areas. There should also be a schedule of planned IDR inspections for the various facilities.

The frequency of inspections depends on the buildup of hazardous conditions in given areas. For example, the jail should be inspected formally more frequently than the office facilities; similarly, the garage probably should be inspected more frequently than the jail. The timing of inspections should be coordinated with the maintenance and staff inspection units. It is the responsibility of the IDR function, however, to see that such inspections are undertaken with a view to the elimination of environmental hazards.

The IDR director should inspect all department facilities initially for the purpose of creating inspection checklists. During this initial inspection the director should be accompanied by a professional safety engineer and an industrial hygienist. It is recommended that these consultants aid in the development of facilities inspection checklists and the scheduling of inspections.

Appendix N contains a general IDR inspection checklist for garage and terminal facilities. It is recommended that the IDR function develop similar lists for all facilities including the jail, firing range and crime laboratory. Unfortunately, specific source material covering these areas is, for the most part, non-existent. Some general sources that will be useful in checklist development are: a) Accident Prevention Manual, NSC (10), b) Fundamentals of Industrial Hygiene, NSC (12), c) Shooting Range Safety, NRA (9), d) Handbook of Laboratory Safety, CRC (14), e) Guide for Safety in the Chemical Laboratory, MCA (8) and f) Manual on Jail Administration, NSA (11).

Once IDR inspection procedures are in effect, followup on the elimination of environmental hazards should be the responsibility of supervisors. If needed safety maintenance is not performed, the supervisor should communicate this failure to the IDR director or the IDR supervisory committee.

Staff Inspection

Staff inspection insures the vigorous participation of all department units in IDR activities. Wilson (17) suggests several modes of staff inspection, one of which is undertaken by operating personnel: "The division that develops an operational plan is responsible for its objective, is interested in its purpose and is qualified to direct it; consequently, it is the logical division to inspect the operation of the plan." It is recommended that the IDR staff undertake this activity at least on an annual basis.

In addition to the annual IDR inspection, it is also necessary to have the department's staff inspections unit periodically examine the IDR function as well as the nature of the departmental participation. This type of inspection is especially warranted when the department's ID experience is not improving.

Appendix O presents IDR audit questions that represent a basic starting point for any staff inspections activity.

Officer Fitness and Selection Program

There is an apparent lack of formal physical health programming in municipal police departments. Usually, physical examinations are given at entry in larger departments, but the occurrence of such examinations during the course of an officer's career is irregular. In some smaller departments even an entry physical is not required.

Fragmentary evidence is available that relates lack of physical fitness, particularly overweight conditions, to increased injury frequency and severity. This evidence also relates the existence of serious medical handicaps to an increased number of motor vehicle accidents.

It is recommended that the IDR function coordinate with the medical unit or city medical director to collect data on the physical fitness of personnel who are involved in three or more ID cases in a single year. The examination should involve a complete physical examination, a vision test and reaction time tests. Results from these tests should be compared with those of a sampling of non-involved personnel to assist in developing directions for fitness standards and entry requirements.

It is recommended that vision testing, including acuity, depth perception, field of vision and color recognition, be given before a recruit is allowed to drive a department vehicle. The same tests should be repeated periodically thereafter. Also, audiometric tests should be given to all personnel periodically, particularly to those who are operating firing range facilities and working in data processing departments.

Local needs must dictate the standards for a municipal department's weight control program. Compliance with standards set by the department physician should be tied to eligibility for promotion at all command echelons. As with other aspects of the IDR effort, weight control on the part of command personnel is the first requirement for program success (5).

Selection of personnel should entail a detailed background check of an individual's past motor vehicle record and his past non-vehicular injury record, if available. Here too, it is recommended that this and other biographic information be collected to examine more intensely those officers who are involved inordinately in ID cases. Again, comparison with a sampling of non-involved officers should be undertaken so that local selection criteria can be developed.

It is recognized that the need for personnel sometimes causes health, fitness and other employment standards to be lowered. Even so, the health and personnel data collected from high ID involvement samples will be useful in pinpointing those who should be supervised more closely, put on restricted duty, given special training or enlisted in a formal physical health program.

Vehicle and Equipment Specifications

The IDR function should participate in the development of specifications for police vehicles. No police vehicle specifications should fail to meet or surpass all of the Federal Motor Vehicle Safety Standards currently promulgated. Also the "Study of the Police Patrol Vehicle," funded by LEAA, contains a complete set of performance criteria that can be incorporated into departmental vehicle specifications.

The process of testing vehicles before purchase used by the Los Angeles Police Department is recommended especially for adoption by all departments, if possible. As shown in Appendix P the specifications include both roadability and brake tests that are conducted before a given type of vehicle is purchased.

The IDR function together with purchasing should gather what available specifications there are for protective and other critical police equipment. Then the IDR function should consult with planning and research to establish performance specifications for all critical equipment.

There is a need to create standards for police vehicles and equipment at a national level. It is recommended that a national standards committee, under the aegis of IACP, NSC or some other national organization, be formed to attack this void at the earliest opportunity.

IDR Program for Office Personnel

A total IDR effort requires that a program be developed for office personnel. The main source of information for initiating such programs is the Accident Prevention Manual for Industrial Operations (10). Hazards that should receive special attention are those that precipitate falls or strains and being struck by or striking against office equipment or materials. Studies conducted by Kiefer (6) and the State of California Department of Industrial Relations (3) indicate that the prime targets for office accidents are new workers, younger employees and female employees.

The IDR staff should be notified of all moves made by department personnel to new facilities. As Kiefer points out, referring to the dramatic increase in office accidents when employees in his operation were moved to new quarters, "Unfamiliar surroundings, equipment located in new positions and the psychological trauma of being wrenched away from old transportation and work routine patterns give rise to a multitude of difficulties for employees during the 'shakedown' period."

The following elements should be incorporated into IDR office planning and inspection procedures:

1. Offices laid out for efficiency, convenience and safety
2. Floor finishes selected for anti-slip qualities particularly on stairways and at elevator entrances
3. Minimum aisle width of four feet

4. Aisles and walkways free from wastebaskets, telephone wires and electrical outlets
5. Glass doors with a design (decal or painted) about four and one-half feet above the floor
6. Noise in offices held to a maximum of 40 decibles at the speech interference level
7. Electrical outlets installed to eliminate extension cords and to accommodate three-wire grounding plug to prevent electric shock
8. All file cabinets bolted to each other or to the floor or wall
9. Proper housekeeping and storage of all office materials
10. All employees, regardless of age, instructed in office safety
11. Periodic inspections of office facilities undertaken in the same manner as other inspections.

The special hazard in a police department seems to be one involving the wearing of firearms in the office or their storage in desk drawers. It is recommended that these practices be reviewed and strict controls be placed on sworn personnel so that weapons are stored properly in lockers.

CHAPTER 11

RECOMMENDED IDR RECORDS SYSTEM

The Records Situation

The professional development of a police officer includes training in investigative skills far superior to most other occupations. The finding and recording of facts associated with a particular event is a routine part of law enforcement activity. The police are in an unusually advantageous position to apply these skills to the study and solution of the injury and damage problems of their own profession.

J. Edgar Hoover (11) observed that adequate and reliable records constitute an indispensable tool of management. They are essential to the intelligent management of any complex operation (12). The records of direct interest to an injury and damage reduction function, however, are scattered widely throughout several systems. Most police agencies require extensive reporting and record systems for complaints, crimes, investigative activity, arrests and other law enforcement events. Most departments also maintain records on a second group of factors that include:

1. Accidents (traffic records, incident reports)
2. Injuries (medical records, compensation claims)
3. Costs (accounting records, insurance files)
4. Damage (vehicle repair records, work orders, purchase orders for equipment to replace property destroyed through accidents).

Only when selected data elements from all of this second group are brought together can there be a meaningful records system oriented to injury and damage reduction. Material gathered during the site visits and through the general survey indicated that the various types of records were available in many departments, but not integrated. It was common that the medical information could be tied to a specific accident only by the laborious manual matching of files. If one deals with 500 or 1,000 cases, the clerical burden rapidly becomes excessive. Not enough thought has been given to the "file linkage" problem as new records about the same event are generated in separate departments. Through the assignment of an "IDE number" to each injury and damage event, all of the records generated by that event will be connected easily. Thus, medical, insurance, personnel, vehicle repair, property replacement, time loss and other records will carry with them the common link of the IDE number. The interrelation and analysis of important data will be facilitated greatly through this action.

In developing an IDR records system, project staff collected several hundred forms from the nationwide sample of police departments and reviewed them to see precisely what information was being collected about police accidents. Appendix Q contains a listing of the forms and manuals collected and reviewed. The diversity of format was exceptionally broad.

Almost all forms record some information about the persons and vehicles involved in a traffic accident, for example, but many do not specify the nature of the injury or damage to persons or vehicles. Many fail to give the significant related costs (estimated or actual). Such items as the total number of persons killed, persons injured or vehicles involved must be laboriously combed out of the various subsections of the forms. Other significant data elements are either absent from many forms or are presented inconsistently: type of driver's license; license restrictions; seat position of persons involved; safety belt use; results of blood alcohol level tests; location of accident; and many other items. Many departments had no separate forms for non-vehicle accidents. If recorded at all, "incident report" forms were used, that were primarily blank sheets of paper with no structuring of report format.

To assist in organizing traffic accident data on a nationwide basis, the National Highway Traffic Safety Administration prepared a standard on traffic records, "Standard 4.4.10" (Appendix R). Several of the items included on the "Standard Form" for all police injury and damage events presented later in this chapter come directly from these federal requirements. Much of the research that went into the preparation of the government standard was accomplished by Blumenthal and Wuerdemann. The first series of studies (2, 3, 4) were based on the fact that the current traffic accident investigation programs yielded "non-uniform data of unknown reliability, accuracy, comprehensiveness, and therefore, limited usefulness." The general objective of the research work was to strengthen the national investigative effort by creating more uniform data collection standards. The specific objectives included the development of procedures, forms and manuals for use by state and local governments. The second series of studies (5, 6, 7) took the materials developed in the first study and subjected them to field testing. The revised "Uniform Police Traffic Crash Report" (6) appears in Appendix R. This is the shorter of two forms developed. The other longer form contained additional space for supplementary information and narrative description but contained exactly the same data elements. While prepared for the purpose of reporting traffic crashes of the general public, it has merit for police traffic record forms and influenced the development of record forms recommended later in this chapter.

Another useful document, generated by the Traffic Accident Data Project of the National Safety Council, is the Manual of Classification of Motor Vehicle Traffic Accidents (17). An article by Beach (1) clarifies the changes in this revision of the older manual published in 1962. This document has been approved as an American National Standard (ANSI D16.1, 1970) by the American National Standards Institute. It provides a common language for reporters, classifiers, analysts and users of traffic accident data. It allows more meaningful comparison of experience from two or more reporting jurisdictions. It was also directly influential in formulating data elements for inclusion on the recommended police injury and damage report forms. Useful adjuncts to this manual include: a) Guide to Classification of Motor Vehicle Trafficway Accidents (16), b) Exercises in Classifying Motor Vehical Trafficway Accidents (15) and c) Vehicle Damage Scale for Traffic Accident Investigators (19).

Other standards of importance for motor vehicle accidents are available from the American National Standards Institute (ANSI). They include:

1. D15.1, 1968 Method of Recording and Measuring Motor Vehicle Fleet Accident Experience

2. D15.2, 1968 Method of Recording and Measuring Motor Vehicle Fleet and Passenger Accident Experience.

In the area of non-vehicle accidents, the following standards are available from ANSI:

1. Z16.1, 1967 USA Standard Method of Recording and Measuring Work Injury Experience

2. Z16.2, 1962 (Reaffirmed, without change, in 1969) American Standard Method of Recording Basic Facts Relating to the Nature and Occurrence of Work Injuries.

Standards serve two very useful functions. First, they enable the reporting of comparable statistics on a nationwide basis. Through such information department ID experience can be related to the experience of other departments. These data provide a baseline for use in evaluating local IDR program efforts. Second, standards set precise guidelines and definitions for the recording of injury and damage events. The ID classification schemes that are an integral part of a well conceived standard would assist in clarifying the police injury and damage picture on the local level.

As was discussed in Chapter 2, many departments do not have a suitable injury and damage classification system. Rather, they use a number of categories that are uninterpretable because they overlap or depend to a great degree on the judgment of the records staff. Data recorded in this fashion are unreliable and cannot provide discernable injury and damage trends on either the local or national level.

Insofar as standards are applicable to police injury and damage record keeping, they should be followed very closely. The vehicular accident recording standards discussed appear to be immediately adaptable for police motor fleet records systems. The industrial injury reporting standard in its present form is not completely applicable to police injury events, however. In the recommended reporting system an attempt was made to incorporate these standards wherever possible.

Simple conformance to reporting standards is not sufficient if a department is to identify its ID problems in depth and generate activities that reduce them at the local level. As Murphy (13) observes, the quality of records maintained has a direct relationship to the quality of police administration. Since the object is to reduce injury and damage events, not merely to record those that occur, the thrust must be in the direction of obtaining information that is immediately useful for corrective action within the jurisdiction under study. Where compliance with reporting standards impedes this effort by consuming too much time and manpower, reexamination of the activity is in order.

The record system in most police departments is already quite complex. Aside from the obvious requirements for internal administration, there are forms from the FBI, forms from city and state government, forms from the U. S.

Department of Labor and others. Many types of records are absolutely essential. The critical question should be, "Is the information gathered and recorded on a particular form, worthwhile?" If so, then the manpower, time and processing equipment must be made available for proper implementation.

With attention to an IDR function, specific reasons for a detailed record system are:

1. To know who was involved in a particular injury and damage event
2. To know where the event occurred
3. To know when it occurred
4. To know what injuries occurred to which persons
5. To know how much damage occurred to property
6. To know what cause or causes produced this event
7. To know other relevant circumstances associated with this event
8. To know who or what was responsible for the event such as persons, machines, procedures or management policy
9. To know possible countermeasures to prevent this type of event from occurring in the future.

The general reasons are:

1. To know what kinds of injury and damage events are occurring
2. To know how many of each kind occur
3. To know how severe they are
4. To know whether accident, injury and severity rates represent a change over previous rates
5. To know how rates compare to: a) the organization's past record, b) other similar organizations and c) national rates
6. To know the cost of events as measured in: a) dollars, b) time loss and c) reduced efficiency
7. To know whether countermeasures are effective
8. To have sufficient information to satisfy legal, insurance and other needs
9. To justify the purchase of better and safer clothing, equipment and vehicles when warranted.

Given these broad purposes, this chapter will provide forms specially developed to answer these requirements.

Reporting Level

It is generally accepted that if there is serious injury or extensive property damage, a report of the event is necessary. The problem of what to report grows, however, as the severity of the event becomes less and less. As the event becomes more minor (approaches zero dollars cost), the requirement for reporting becomes less obvious and less acceptable. At a certain level of very minor ID events, it costs more to report them than to ignore them completely.

The investigators recommend that all significant injury and damage events be reported. A significant event in this context is one that involves $20.00 or more actual damage. This level is in general agreement with Simonds (14), whose system is described later in this chapter. Some reasonable minimum must be established. The basic cost of the employee's time required to fill out the form plus the paperwork initiated for himself, the supervisor, the records section, data processing and others is not likely to be less than $10.00, given today's cost of operation. Thus, a doubling of this figure seems to be a reasonable minimum level. Anything less than $20.00 costs more to report than to disregard.

Minor events frequently clutter a records system and consume valuable time. There are, however, important exceptions. If an event produced injuries or damages totaling less than $20.00, but might have been more severe had circumstances changed very slightly, it may be reported in full at the discretion of the IDR director. The sprain that might readily have been a fracture is a case in point. A whiplash injury that causes pain for three days may seem slight, but this low cost or "no cost" event may act as a signal for highly hazardous conditions that could have resulted in a broken neck.

The actual cost of these events is not as important as the potential cost. The presence of clearly known risk is nearly as important as the injury and damage event itself. If the IDR director feels that the report of a near-miss (where there is no injury, no damage, no reduction of operating capacity) will contribute to the prevention of injury and damage events, such a report should be completed. Near-miss data may point to problems in just as meaningful a way as the actual occurrence of a damaging event. The standard form developed later in this chapter allows the full reporting of near-misses as well as routine injury and damage events.

This general approach seems more reasonable than the requirement to report all injuries, regardless of how minor they are. It is costly to do so. Such a policy can increase the resistance to forms already present in most departments and result in the failure to report events that are marginal but meaningful. Each department must recognize the employee's disinclination to report trivial ID events yet encourage the reporting of significant minor events, when appropriate. The reporting level, then, includes all fatalities, all disabling injuries, all property damage events involving loss of at least $20.00 and all significant minor events as determined by the IDR director.

A Standard IDR Form

The IDR report form recommended for municipal police department evaluation and use is shown as Table 11-1. It contains all data elements necessary for reporting vehicular and non-vehicular accident, assault and ambush injury and damage events. A coding guide (Appendix S) lists each data element, all of the categories within each data element and the coding number to be entered on the form for each category chosen. The guide also contains comments that clarify the meaning of particular elements. While the bulk of the items are oriented to motor vehicle accidents, other events of interest are described adequately if the form is completed properly. Because of possible coding errors, a strict quality control evaluation should be made when the form is first used. Periodic checks should be made later to ensure continued accuracy for reporting.

Note the box at the bottom of the first page of the standard form. It contains the following items:

99 Unknown	97 Other
98 Not Applicable	96 None

These items may be applied to any of the coding slots for any relevant data element. Being common to all, they are termed universal. To avoid confusion, they are listed separately in the coding guide when such listing is seen as helpful. The form is not intended for use by the regular patrolman on the few occasions when he is involved in such an event himself. Rather, it is designed for injury and damage event investigators. While the codes may seem inconvenient at first, after approximately 25 events are reported, a familiarity with the coding scheme develops, making the process of completing the form quite rapid. Not all of the elements are applicable for each injury and damage event covered. Those that are not should be marked with 98, "not applicable." All relevant items should be marked with one of the following:

1. A directly observed number: Number injured, hours worked before event
2. Qualitative information: Name and rank, name of roadway, signatures
3. A code number selected from the coding guide.

The number of each data element in the coding guide is found at the far left of each page. These numbers are the only ones in the coding guide that are followed by a period. These data element numbers match exactly the data element numbers on the form itself. As one completes the sequence of the form, from item one through item 154, the coding guide is used from front to back. Data element four, "Police Property Damage" appears on the first page of the guide. If the on-scene estimate were $355, "08," the code number for that cost category would be entered next to "Police Property Damage" on the form. The other items are completed similarly. The blank space at the bottom of the front page may be used for field notes as required.

Table 11-1

STANDARD FORM: POLICE INJURY AND DAMAGE EVENT

SUMMARY DATA:
1. IDE # _ _ _ _ _ _ 2. # KILLED _ _ 3. # INJURED _ _ 4. POLICE PROPERTY DAMAGE _ _ 5. # OF PAGES _ _
6. GENERAL TYPE OF EVENT _ _ 7. SPECIFIC TYPE OF EVENT _ _ 8. TYPE OF CALL _ _ 9. DUTY STATUS _ _
10. SUPPL. REPORT # _ _ 11. GENERAL LOCATION _ _ 12. # OF EMPLOYEES INVOLVED _ _

GEOGRAPHIC LOCATION:
13. STATE _ _ 14. CITY _____ 15. DISTRICT _____

SPECIFIC LOCATION:
16. ADDRESS OF BUILDING _____ 17. FLOOR _ _ 18. ROOM _____ 19. AREA _____
20. NAME OF ROADWAY _____ 21. AT INTERSECTION WITH _____
22. OR IF NOT AT INTERSECTION _____ FEET 23. N-E-S-W 24. OF _____

TIME OF EVENT:
25. MONTH _ _ 26. DAY _ _ 27. YEAR _ _ 28. DAY OF WEEK _ _ 29. HOUR (2400) _ _ _ _

CONDITIONS:
30. WEATHER _ _ 31. SURFACE _ _ 32. SURFACE CONDITION _ _ 33. LIGHT CONDITIONS _ _

PROPERTY INVOLVED:
34. NAME _____ 35. LOCATION _____ 36. OWNERSHIP _ _

POLICE EMPLOYEE: (DRIVER WHEN APPROPRIATE)
37. NAME _____ 38. EMPLOYEE # _ _ _ _ _ _ 39. SOC. SEC. # _ _ _ _ _ _ _ _ _
40. RANK _____ 41. DIVISION _____ 42. UNIT _____
43. AGE _ _ 44. SEX _ _ 45. ROLE IN ID EVENT _ _ 46. HOURS WORKED BEFORE EVENT _ _ 47. POLICE ACTION _ _
48. LENGTH OF SERVICE _ _ 49. TIME IN THIS POSITION _ _ 50. TYPE OF ASSIGNMENT _ _ 51. SEAT POSITION _ _
52. DR. LIC. # _ _ _ _ _ _ _ _ _ _ _ _ 53. STATE _ _ 54. SAFETY BELT USE _ _ 55. APPARENT VIOLATION _ _
56. NATURE OF INJ. _ _ 57. PART OF BODY _ _ 58. DEGREE OF INJ. _ _ 59. INJ. SOURCE _ _ 60. PED. ACTION _ _

OTHER PERSON #1
61. NAME _____ 62. ADDRESS _____
63. AGE _ _ 64. SEX _ _ 65. ROLE IN ID EVENT _ _ 66. OCCUPANT OF VEHICLE # _ _
67. DR. LIC. # _ _ _ _ _ _ _ _ _ _ _ _ 68. STATE _ _ 69. EXPIRATION DATE _ _ _ _ _ _ 70. SEAT POSITION _ _
71. TYPE OF LICENSE _ _ 72. LICENSE RESTRICTIONS _ _ 73. SAFETY BELT USE _ _ 74. APPARENT VIOLATION _ _
75. NATURE OF INJ. _ _ 76. PART OF BODY _ _ 77. DEGREE OF INJ. _ _ 78. INJ. SOURCE _ _ 79. PED. ACTION _ _

OTHER PERSON #2
80. NAME _____ 81. ADDRESS _____
82. AGE _ _ 83. SEX _ _ 84. ROLE IN ID EVENT _ _ 85. OCCUPANT OF VEHICLE # _ _
86. DR. LIC. # _ _ _ _ _ _ _ _ _ _ _ _ 87. STATE _ _ 88. EXPIRATION DATE _ _ _ _ _ _ 89. SEAT POSITION _ _
90. TYPE OF LICENSE _ _ 91. LICENSE RESTRICTIONS _ _ 92. SAFETY BELT USE _ _ 93. APPARENT VIOLATION _ _
94. NATURE OF INJ. _ _ 95. PART OF BODY _ _ 96. DEGREE OF INJ. _ _ 97. INJ. SOURCE _ _ 98. PED. ACTION _ _

INJURED TAKEN:
99. TO _____ 100. BY _____

FIELD NOTES:

UNIVERSAL CODES:	99 UNKNOWN	97 OTHER
	98 NOT APPLICABLE	96 NONE

VEHICLE #1: (POLICE)

101. YEAR _ _ 102. MAKE _____ 103. MODEL _____ 104. BODY STYLE _____

105. LICENSE PLATE _ _ _ _ _ _ _ 106. STATE _ _ 107. YEAR _ _ 108. VEHICLE # (POLICE) _ _ _ _ _ _

109. VIN (MFRS.) _ _ _ _ _ _ _ _ _ _ _ _ _ _ 110. VEHICLE AREA DAMAGED _ _

111. # OF OCCUPANTS _ _ 112. VEHICLE MOBILITY _ _ 113. VEHICLE REMOVED TO _____

114. VEHICLE ACTION _ _ 115. TYPE OF PATROL CAR _ _ 116. ROLE OF VEHICLE _ _ 117. VEHICLE DEFECTS _ _

VEHICLE #2:

118. YEAR _ _ 119. MAKE _____ 120. MODEL _____ 121. BODY STYLE _____

122. LICENSE PLATE # _ _ _ _ _ _ _ 123. STATE _ _ 124. YEAR _ _

125. VIN (MFRS.) _ _ _ _ _ _ _ _ _ _ _ _ _ 126. VEHICLE AREA DAMAGED _ _

127. # OF OCCUPANTS _ _ 128. VEHICLE MOBILITY _ _ 129. VEHICLE REMOVED TO _____

130. VEHICLE ACTION _ _ 131. ROLE OF VEHICLE _ _ 132. VEHICLE DEFECTS _ _

133. REG. OWNER'S NAME _____ 134. ADDRESS _____

135. REG. GROSS LADEN WEIGHT _ _ _ _ _ 136. TRAILER LICENSE # _ _ _ _ _ _ _ 137. TRAILER LICENSE STATE _ _

OTHER INFORMATION:

138. # OF VEHICLES INVOLVED _ _ 139. VEHICLE ACCIDENT TYPE _ _ 140. RELATION TO INTERSECTION _ _

141. COLLISION TYPE _ _ 142. TRAFFIC CONTROLS _ _ 143. WITNESS STATEMENT ATTACHED _ _

144. ENFORCEMENT ACTION _____

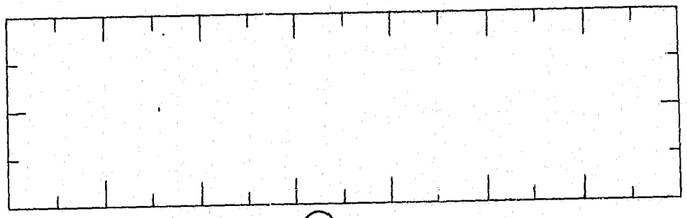
145. NAME OF PERSON COMPLETING THIS REPORT _____ 146. DATE _____

147. CONFIRMATION OF REPORT ACCURACY BY POLICE EMPLOYEE _____ 148. DATE _____

149. CONFIRMATION OF REPORT ACCURACY BY SUPERVISOR _____ 150. DATE _____

NARRATIVE: 151. (GIVE PROBABLE SEQUENCE OF EVENTS. REFER TO PERSONS AND VEHICLES BY NUMBERS.)

EVENT DIAGRAM: 152.



153. PUT ARROW IN CIRCLE INDICATING NORTH

SUPPLE-MENTAL INFORMATION: 154.

It is intended that this form be field tested and revised accordingly. Certainly a more convenient format for the coding guide will be necessary for actual field use.

Police Motor Vehicle Accidents - Additional Information

In situations where the local city or state traffic accident forms continue in use but the police department wants more information about its own injury and damage problems, another form (Table 11-2) is suggested. This form assumes that the routine data elements dealing with driver's name, address, license number, vehicle type, etc., are recorded on the city or state form. The data elements selected for this "additional information" form are concerned primarily with police property, the police employee and the police vehicle. The data elements parallel those used in the standard form. The coding guide numbers and categories also apply exactly. Item 56 on this form, "Nature of Injury" is identical to the standard form.

Supervisor's Report

Another form useful to a complete records system for an IDR function is the "Supervisor's Report: Police Injury and Damage Event" (Table 11-3). This form would duplicate a minimum amount of information on the investigator's report, described earlier, the "Standard Form: Police Injury and Damage Event." The only repeated items would be the IDR number, the name of the employee involved, his social security number and the date of the event being reported. The rest of the form will be completed by either the supervisor or the IDR director, with the supervisor having responsibility for designating the human errors, dangerous conditions, suggested corrective measures, etc. The IDR director would be responsible for following up at a later time to determine actual cost figures, date of return to work, etc. Where detailed cost figures are not obtained, an "average cost" figure connected to classes of accident may be used, as described in the section of this chapter entitled "Setting Priorities for IDR." This form is completed in essentially the same manner as the earlier forms in this section. However, it should be used with the coding guide in Appendix T. Some of the data elements for this form were adopted from a publication by the U. S. Department of Interior (21).

Employee's Record

An "Employee's Record: Injury and Damage Events" (Table 11-4) should be kept in the personnel files for each member of the department. It should be reviewed annually to determine whether any special action, such as training, should be taken. The form should be brief and should include items numbered E1 through E13 in Table 11-4.

Bilevel Reporting

The "supplementary report" in police operations, according to Hanna and Kleberg (10), usually means one of three things:

1. A simple continuation page for any report

2. A report that adds new information to a previously reported incident

Table 11-2

Standard Form:

Additional Information About Police Motor Vehicle Accidents

Summary Data

1. IDE #_ _ _ _ _ _ 4. Police Property Damage _ _

6. General Type of Event _ _ 7. Specific Type of Event _ _ 8. Type of Call _ _

9. Duty Status _ _ 11. General Location _ _ 12. # of Employees Involved _ _

15. District _____ 36. Ownership _ _

Police Employee Information

37. Name _____ 38. Employee # _ _ _ _ _ _

39. Soc. Sec. # _ _ _ _ _ _ _ _ _ 40. Rank _____ 41. Division _____

42. Unit _____ 45. Role in ID Event _ _ 46. Hours Worked Before Event _ _

47. Police Action _ _ 48. Length of Service _ _ 49. Time in this Position _ _

50. Type of Assignment _ _ 51. Seat Position _ _ 54. Safety Belt Use _ _

56. Nature of Inj. _ _ 57. Part of Body _ _ 58. Degree of Inj. _ _

59. Inj. Source _ _ 60. Pedestrian Action _ _

Other Information

65. Other Person's Role in ID Event _ _ 108. Vehicle # (Police) _ _ _ _ _

114. Vehicle Action (Police) _ _ 115. Type of Patrol Car _ _

116. Role of Vehicle _ _ 117. Vehicle Defects _ _

Supplementary Information

Universal Code:	99 Unknown 98 Not Applicable	97 Other 96 None

Table 11-3

Supervisor's Report:
Police Injury and Damage Event

General Information

S1.IDE #_ _ _ _ _ _ S2.Name _____ S3.Soc. Sec. #_ _ _ _ _ _ _ _ _

S4.Date of Event_ _ _ _ _ _ S5.Leave Date_ _ _ _ _ _ S6.Return Date_ _ _ _ _ _

S7.Death Date_ _ _ _ _ _ S8.Est. Total Days Lost_ _ _ _ S9.Actual Total Days Lost_ _ _ _

S10.Degree of Disability_ _ S11.Z.16 Status_ _ S12.Days Charged_ _ _ _

S13.Preventability_ _ S14.Claim Status_ _ S15.Comp. Forms Completed? Y N

S16.Fitness for Duty_ _ S17.Unsafe Act #1_ _ S18.Kind of Unsafe Act_ _

S19.Unsafe Act #2_ _ S20.Kind of Unsafe Act_ _ S21.Dangerous Condition #1_ _

S22.Awareness by Sup._ _ S23.Dangerous Condition #2_ _ S24.Awareness by Sup._ _

S25.Managerial Inadequacy #1_ _ S26.Managerial Inadequacy #2_ _

Task Factors

S27.Task Performed?_____

S28.Type of Procedures? _ _ S29.Procedures Followed? Y N

S30.Frequency of Task Performance_ _ S31.Frequency of Human Error _ _

S32.Frequency of Dangerous Condition _ _

S33.When did you last observe employee perform this task safely?_ _

S34.Should a job safety analysis be performed on this task? Y N

S35.If no change is made, what is the likelihood that another similar event will occur within one month? _ _

Universal Code:	99 Unknown 98 Not Applicable	97 Other 96 None

Table 11-3
(Cont'd.)

S36.Other File # - Case_ _ _ _ _ _ S37.Other File # - Medical_ _ _ _ _ _

S38.Other File # - Comp._ _ _ _ _ _ S39.Other File # - Veh. Repair_ _ _ _ _ _

S40.Other File # - Prop. Repair_ _ _ _ _ _ S41.Other File - Other_ _ _ _ _ _

S42.Other File # - Other_ _ _ _ _ _

Cost Factors (To Nearest Dollar)

S43.Est. Medical _ _ _ _ _ S49.Actual Medical_ _ _ _ _

S44.Est. Vehicle_ _ _ _ _ S50.Actual Vehicle_ _ _ _ _

S45.Est. Property_ _ _ _ _ S51.Actual Property_ _ _ _ _

S46.Est. Comp._ _ _ _ _ S52.Actual Comp._ _ _ _ _

S47.Est. Other_ _ _ _ _ S53.Actual Other_ _ _ _ _

S48.Est. Total_ _ _ _ _ S54.Actual Total_ _ _ _ _

S55.Suggested Corrective Action_____

_____

_____

S56.Action Taken with Employee_ _

S57.Supervisor's Signature_____ S58.Date_____

S59.IDR Director's Signature_____ S60.Date_____

S61.One Month Up Date Completed Y N S62.Initials_____

S63.Six Month Up Date Completed Y N S64.Initials_____

Table 11-4

Employee's Record: Injury and Damage Events

E1. Name _____ E2. Employee # _ _ _ _ _ _

E3. Social Security # _ _ _ _ _ _ _ _ _ E4. Date Employed_____

E5. IDE #	E6. Date of Event	E7. Type of Event - General	E8. Type of Event - Specific	E9. Type of Injury	E10. Degree of Disability	E11. Tot. Days Lost	E12. Police Prop. Damage	E13. Pre. vent-ability

3. A report of progress on an active or pending investigation.

In bilevel reporting, the second level or "supplementary report" is none of the above. It is a totally different concept. Bilevel reporting is a two-level system for collecting data on ID events of interest. The first, or basic level, includes fundamental information that must be collected on all events, all of the time. The information at this level is a necessary minimum set of items. The name of the person involved and the time of the event are two such absolutely necessary items. For motor fleet accidents, an irreducible minimum for basic level reporting would include identification of the drivers and vehicles involved, when and where the accident occurred, the sequence of events and other essential information. This basic level provides the general frequency rates, severity rates and trend patterns.

The second, or supplementary level of a bilevel reporting system is intentionally limited to: a) one type of event, for a short period of time or b) one aspect of all events, for a short period of time. The second level of information contains greater detail about an ID event of interest. It shows enough of the sequence or major contributing factors involved to allow direct

countermeasure development. When the desired information has been gathered, the supplementary level is discontinued, and the basic level form continues.

Bilevel reporting was created as a solution to problems in handling traffic accident data for the general public (20). The central difficulty was knowing how much data should be collected about each traffic accident. Too little information fails to provide a sound basis for accident prevention programs. Too much information, detailing numerous aspects of every accident, puts an unreasonable and unacceptable burden on police investigators. In-depth study of a single type of accident by special teams constitutes one method to obtain detailed information about an ID event. Usually, however, this method suffers because of its high cost and the lack of available personnel to perform the special studies.

Bilevel reporting attempts to operate between the above extremes. The total amount of reporting is reduced, while the value of the information collected is increased. Bilevel reporting operates on the principle that a reporting system should be capable of furnishing basic information on all reportable accidents, yet be flexible enough to produce special studies on any aspect of an event when the need arises. For example, suppose the role of tire failures in accidents on expressways is to be investigated. With much effort, an administrator could have one or two items added to a city or state form. More likely, a special study will be set up in this area requiring special forms, the assignment of special personnel, special instructions, special administrative clearances, etc. However, if a bilevel reporting system is established, this type of problem can be studied expeditiously without the long, involved gearing up process. A short supplementary form can be developed for expressway tire failures and added temporarily to the basic or first level data collection activity.

Ideally, the supplementary forms contain brief, simple, objective questions that are used for a short period, e.g., one to two months. These questions ask for direct observations (facts), not opinions. The questions may be designed by technical specialists, but should be answerable by non-technical reporters. Using the example of tire failures, a short series of questions about the pattern of rupture in the tire might be designed by a tire engineer. Some of the questions included might be:

1. Is the break in the tire an X-pattern on the tread?
2. Is it a Y-pattern on the tread?
3. Is it a burst pattern on the tread?
4. Is it a single slit on the sidewall?
5. Is it a series of parallel cracks on the sidewall?

Such questions, to a knowledgeable specialist might readily identify the cause of a tire failure as defective construction, overloading, excessive wear, improper air pressure or impact.

With a minimal amount of training, perhaps one roll call session, reporting officers can be briefed on the use of supplementary forms. They may be imprinted directly in a space set aside for supplementary information on the standard form or be added to the standard form as a separate sheet. The latter format may be desirable when the information collected is sensitive, confidential or of possible concern in lawsuits against the police department. Both the "Standard Form: Police Injury and Damage Event" and the National Safety Council "Form Traffic 1" (Appendix R) allow space for supplementary information of the type described here.

Another unique feature of bilevel reporting is that one can rather quickly gather exposure information, i.e., information about the total population at risk. The use of force data described in Chapter 2 illustrate this type of information. Both injured and non-injured officers were required to complete the department's use of force report to which were added quesions about equipment use and time of injury as related to the arrest sequence. Thus, equipment use profiles of injured and non-injured officers could be compared.

In addition to the use of force report, each of the 19 supplemental forms used in this study (Appendix B) illustrate the general concept of bilevel reporting. For most special studies these forms should be shortened considerably. It is interesting to note, however, that the response rate to most supplemental report questions was quite high.

Recommended readings that cover the general concepts of bilevel reporting include the Traffic Accident Data Project's Policies and Programs (18) and a study by the California Highway Patrol (8).

Setting IDR Priorities

Criticality ranking, the combination of frequency and severity for certain accident types, is shown in Table 2-20. It contains the basic data for a "worst first" approach to establishing priorities for IDR programming. Similarly, three of the top 10 injury events, as measured by the total number of man days lost, may be selected for study and countermeasure programming. The IDR director can zero in on these for one year in an effort to reduce their dominance.

Though injury and damage frequency and severity rates are the most appropriate measures of criticality, priority ranking in terms of ID cost is more likely to trigger action in support of IDR programming. The obvious basis for establishing priorities based on cost is through the accumulation of the insured costs of certain classes of ID events. The medical costs, wages paid for time not worked and the replacement of damaged equipment all enter into a calculation of these costs to provide an ordered list of priority problems.

Since the insured costs represent only a portion of the economic loss due to injury and damage, a superior method to priority ranking is recommended (14). It involves calculation of uninsured as well as insured costs for a representative sample of events to establish an ID priority ranking. Two forms are used to develop these costs. "Department Supervisor's Accident Cost Report" (Table 11-5) and "Investigator's Cost Data Sheet" (Table 11-6) must be completed for a small series of events. Events of great severity require separate calculation (extensive property damage, fatality, permanent

Table 11-5

DEPARTMENT SUPERVISOR'S ACCIDENT COST REPORT

Injury Accident_____

No-Injury Accident_____

Date _____ Name of injured worker_____

1. How many other workers (not injured) lost time because they were talking, watching, helping at accident? _____

   About how much time did most of them lose? _____ hours _____ minutes

2. How many other workers (not injured) lost time because they lacked equipment damaged in the accident or because they needed the output or aid of the injured worker? _____

   About how much time did most of them lose? _____ hours _____ minutes

3. Describe the damage to material or equipment _____

   _____

   Estimate the cost of repair or replacement of above material or equipment $_____

4. How much time did injured worker lose on day of injury for which he was paid? _____ hours _____ minutes

5. If operations or machines were made idle: Will overtime work probably be necessary to make up lost production? Yes ☐, No ☐. Will it be impossible to make up loss of use of machines or equipment? Yes ☐, No ☐.

   Demurrage or other special non-wage costs due to stopping an operation $_____

6. How much of supervisor's time was used assisting, investigating, reporting, assigning work, training or instructing a substitute, or making other adjustments _____ hours _____ minutes.

Name of supervisor_____

Fill in and send to the safety department not later than day after accident.

Published by National Safety Council
425 North Michigan Avenue
Chicago, Illinois 60611

Form IS7-Rep. 2M17199 Printed in U.S.A. Stock No. 129.27

Table 11-6

INVESTIGATOR'S COST DATA SHEET

Class 1 _____
(Permanent partial or temporary total disability)

Class 2 _____
(Temporary partial disability or medical treatment case requiring outside physician's care)

Class 3 _____
(Medical treatment case requiring local dispensary care)

Class 4 _____
(No injury)

Name _____

Date of injury _____ **Its nature** _____

Department _____ **Operation** _____ **Hourly wage** _____

Hourly wage of supervisor $_____

Average hourly wage of workers in department where injury occurred $_____

1. Wage cost of time lost by workers who were not injured, if paid by employer $_____.

a. Number of workers who lost time because they were talking, watching, helping _____.
Average amount of time lost per worker _____ **hours** _____ **minutes.**

b. Number of workers who lost time because they lacked equipment damaged in accident or because they needed output or aid of injured worker _____. **Average amount of time lost per worker** _____ **hours** _____ **minutes.**

2. Nature of damage to material or equipment _____

_____

Net cost to repair, replace, or put in order the above material or equipment $_____.

3. Wage cost of time lost by injured worker while being paid by employer (other than workmen's compensation payments) $_____.

a. Time lost on day of injury for which worker was paid _____ **hrs.** _____ **mins.**

b. Number of subsequent days' absence for which worker was paid _____ **days (other than workmen's compensation payments)** _____ **hours per day.**

c. Number of additional trips for medical attention on employer's time on succeeding days after worker's return to work _____.
Average time per trip _____ **hrs.** _____ **min. Total trip time** _____ **hrs.** _____ **mins.**

d. Additional lost time by employee, for which he was paid by company _____ **hrs.** _____ **mins.**

(over)

4. If lost production was made up by overtime work, how much more did the work cost than if it had been done in regular hours? (Cost items: wage rate difference, extra supervision, light, heat, cleaning for overtime.) $_____

5. Cost of supervisor's time required in connection with the accident $_____

   a. Supervisor's time shown on Dept. Supervisor's Report _____ hrs. _____ mins.

   b. Additional supervisor's time required later _____ hrs. _____ mins.

6. Wage cost due to decreased output of worker after injury if paid old rate $_____

   a. Total time on light work or at reduced output _____ days _____ hours per day.

   b. Worker's average percentage of normal output during this period _____%.

7. If injured worker was replaced by new worker, wage cost of learning period $_____

   a. Time new worker's output was below normal for his own wage _____ days _____ hours per day. His average percentage of normal output during time _____%. His hourly wage $_____.

   b. Time of supervisor or others for training _____ hrs. Cost per hour $_____.

8. Medical cost to company (not covered by workmen's compensation insurance) $_____

9. Cost of time spent by higher supervision on investigation, including local processing of workmen's compensation application forms. (No safety or prevention activities should be included.) $_____

10. Other costs not covered above (e.g., public liability claims; cost of renting replacement equipment; loss of profit on contracts cancelled or orders lost if accident causes net reduction in total sales; loss of bonuses by company; cost of hiring new employee if the additional hiring expense is significant; cost of *excessive* spoilage by new employee; demurrage). $_____

Explain fully.

Total uninsured cost..... $_____

Name of company_____

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total disabilities). Less severe events may be sampled to determine a practical estimate of their cost. Simonds (14) uses four classes of events in describing this approach.

1. Permanent partial disabilities and temporary total disabilities

2. Medical treatment cases requiring only the attention of a physician outside of the local dispensary

3. Medical treatment cases requiring only first aid or local dispensary treatment resulting in less than $20.00 property damage or loss of less than eight hours working time

4. Events that cause either no injury or minor injury not requiring a physician's attention but resulting in more than $20.00 property damage or loss of eight or more hours working time.

Average cost for each class of ID event should be determined by compiling the total costs for 20 to 40 events in each class. More cases may be needed if the cost figures for one group vary widely. Once average costs are known for each class, it becomes far easier to estimate the savings brought about through IDR activities. When adequate cost information is available, priorities may be set by a more sophisticated method: cost benefit analysis described in Chapter 7.

To be of maximum usefulness, cost figures should represent as accurately as possible the specific experience of the department itself. Cost comparisons across departments in different cities are difficult to justify. Differences in hazards exist from one locality to another. More importantly, differences in the injury and damage reduction programs exist and may influence critically the type of accidents that occur and their related cost factors. A department that does not permit pursuit driving over defined speeds may show a different pattern of serious motor vehicle accidents than one that does not have such a limitation. Obviously, the average cost of pursuit accidents in the one department could not be assigned to the other.

An innovative method for determining priorities has been developed recently by William T. Fine (9). The method is called "risk calculation" or "criticality analysis." When one combines the frequency and severity of an event, the result is the criticality of that event, or its degree of seriousness. Fine's method uses accident data to determine the frequency and severity of an event, when such data are available. He also uses hazard data. By combining both past experience (accident data) with future expectations (hazard data), the IDR director has a way of determining which problems to work on first and to what degree. The method produces a relative ranking of hazards. It is a simple, practical and extremely helpful technique for measuring which hazards are most critical.

A "hazard" may be defined as any unsafe condition or potential source of injury or damage. A "hazard event" is any combination of a hazard with a person or activity that could produce an accident sequence.

Hazards are unavoidable and in fact a frequent occurrence in police operations. Hazardous events, however, are controllable since they involve the activity of the officer whose behavior is influenced by effects of training, use of equipment, etc. Drawing a revolver or firing it, chasing a subject, restraining a violent offender, driving in pursuit or emergency runs may all be considered hazardous events. In applying the Fine system, the investigator chooses one such hazardous event and determines the consequence upon which he will focus his attention. It may be a fatality or a disabling injury. A hazardous event and the particular consequence of that event are related to a probability. This is set by examination of the frequency of the event and its consequences combined. For example, of 30 pursuit runs over five miles in length, three may end in an accident. The probability is the likelihood that the accident sequence will follow from hazardous event to the consequence specified.

To use Fine's system, additional data are necessary to measure exposure or the frequency of occurrence of the hazardous event. But the principal merit of the system is that one does not need exact figures to determine a "risk score." An order of magnitude estimate will suffice.

Table 11-7 designates the measurable degrees of each of the three variables: consequence, exposure and probability. A risk or risk score (R) is defined as: Risk = Consequence X Exposure X Probability (R = C X E X P). Table 11-8 gives C, E, P and R for some typical hazardous events applicable to municipal police.

Given a large police department of about 10,000 men, consider the following sequence:

a) Attempt to apprehend suspect(s) (hazard)

b) Police fires gun(s) (hazardous event)

c) Police bullets strike fellow officer(s)

d) Officer sustains disabling injury (consequence).

General data from several sources indicate the typical consequence of a gunshot is between a disabling injury (C = 5) and an extremely serious injury (C = 15); therefore, C is set at a value of 10. An alternative consequence could have been fatality (C = 25). The hazardous event (shooting) for the particular department involved occurs more than once a day (E = 10). One and a half percent of these shootings resulted in the specified consequence. The data do not indicate the number of fatalities. The probability that the consequence will follow the hazardous event is greater than "remotely possible," and probably somewhat less than "unusual" (P = 2).

$$R = 10 \times 10 \times 2 = 200$$

Similarly risk scores may be calculated for small and medium sized departments and for other hazardous events appearing in Table 11-8. By listing all hazardous events in order from the highest to the lowest risk score, priority action groups can be established. For example, hazard events could be grouped into those requiring: a) action immediately, b) as soon as possible and c) without undue delay.

Table 11-7 Criticality Analysis Rating System

Factor	Classification	Rating
1. Consequences. Most probable result of the potential accident.	a. Catastrophe; numerous fatalities; damage over $1,000,000; major disruption of activities...	100
	b. Multiple fatalities; damage $500,000 to $1,000,000.....	50
	c. Fatality, damage $100,000 to $500,000.....	25
	d. Extremely serious injury (amputation, permanent disability); damage $1000 to $100,000.....	15
	e. Disabling injury; damage up to $1000.....	5
	f. Minor cuts, bruises, bumps; minor damage.....	1
2. Exposure. The frequency of occurrence of the hazard event.	Hazard-event occurs:	
	a. Continuously, (or many times daily).....	10
	b. Frequently (approximately once daily).....	6
	c. Occasionally (from one per week to once per month).....	3
	d. Unusually (from once per month to once per year).....	2
	e. Rarely (it has been known to occur).....	1
	f. Remotely possible (not known to have occurred)	0.5
3. Probability. Likelihood that accident sequence will follow to completion.	Complete accident sequence:	
	a. Is the most likely and expected result if the hazard-event takes place.....	10
	b. Is quite possible, not unusual, has an even 50/50 chance.....	6
	c. Would be an unusual sequence or coincidence..	3
	d. Would be a remotely possible coincidence.....	1
	e. Has never happened after many years of exposure, but is conceivably possible.....	0.5
	f. Practically impossible sequence (has never happened).....	0.1
4. Cost Factor. Estimated dollar cost of proposed corrective action.	a. Over $50,000.....	10
	b. $25,000 to $50,000.....	6
	c. $10,000 to $25,000.....	4
	d. $1,000 to $10,000.....	3
	e. $100 to $1,000.....	2
	f. $25.00 to $100.....	1
	g. Under $25.00.....	0.5
5. Degree of Correction. Degree to which hazard will be reduced.	a. Hazard positively eliminated, 100%.....	1
	b. Hazard reduced at least 75%.....	2
	c. Hazard reduced by 50% to 75%.....	3
	d. Hazard reduced by 25% to 50%.....	4
	e. Slight effect on hazard (less than 25%).....	6

Table 11-8

Risk Scores for Hazardous Events Applied to
Municipal Police Experience by the Fine[1] System

Hazardous Event	Department Size											
	Large				Medium				Small			
	Consequence[2]	Exposure	Probability	Risk	Consequence	Exposure	Probability	Risk	Consequence	Exposure	Probability	Risk
Firing Gun	10	10	2	200	10	2	2	40	10	1.5	2	30
Firing Gun	25[3]	10	1	250	25	2	1	50	25	1.5	1	37.5
Pursuit Run	5	10	3	150	5	10	3	150	5	6	3	90
Emergency Run	5	10	3	150	5	10	3	150	5	10	3	150
Foot Chase	1	10	3	30	1	10	3	30	1	3	3	9
Arresting a Resisting Offender	5	10	3	150	5	10	3	150	5	3	3	45
Directing Traffic	25	10	1	250	5	10	1	50	5	6	1	30

[1] William T. Fine, 1971.

[2] Notice consequences and probability are generally independent of department size. Local differences in experience could vary these estimates.

[3] For the same hazardous event, a more serious consequence, for example fatality, may be examined, C = 25 and P = 1.

Note: The figures presented are reasonable estimates but are not intended to be descriptive of any particular department or group of departments.

Fine's method also gives an indication of the justification of the cost of proposed countermeasures after a hazard has been identified. By relating the elements in the formula given before to the cost of correction and the degree of correction, i.e., how much the hazard will be reduced, he develops a "justification" formula.

$$\text{Justification} = \frac{\text{Consequences X Exposure X Probability}}{\text{Cost Factor X Degree of Correction}} \quad \left(J = \frac{C \times E \times P}{CF \times DC}\right)$$

The top portion of the equation is the same as that for calculating risk scores. The additional items are: the cost factor (CF), the estimated dollar cost of corrective action and the degree of correction (DC), an estimate of the percent of hazard reduction expected after putting the corrective action into effect.

Returning to the hazard event of shooting, bullet-proof vests could be considered as a countermeasure to interrupt the hazard-injury sequence. Given the number of patrolmen used to define exposure (10,000), the cost of equipping them with bullet-proof vests would be in excess of $50,000. Referral to Table 11-7 shows the corresponding cost factor (CF = 10). If data showed that 25-50 percent of bullet wounds occurred to the chest-back area, the degree to which the hazard would be reduced would be 25-50 percent (DC = 4). Then:

$$J = \frac{R}{CF \times DC} = \frac{200}{10 \times 4} = 5.$$

If a training program at the cost of $1,000 - $10,000 (CF = 3) could reduce firings by 25 percent (DC = 4), then:

$$J = \frac{200}{3 \times 4} = 16.7.$$

Another source of data may indicate that pursuit runs over five miles in length resulted in a successful apprehension about 25 percent of the time and a police accident five percent of the time. Without seriously reducing the apprehension rate, a directive might prohibit all but a small percentage of these chases (CF = 0.5, DC = 2). Then:

$$J = \frac{150}{0.5 \times 2} = 150.$$

According to Fine, the critical justification rating is 10. For ratings over 10, the expenditure will be considered justified; for ratings less than 10, unjustified. Fine selected 10 on the basis of his own situation and budget. Local conditions may require adjusting the critical rating up or down using 10 as a reference point.

Justification represents the viewpoint of injury and damage reduction only. Administrators might feel that other considerations may make a countermeasure justifiable, e.g., worker morale, negative public reaction to a tragedy or the wish to expend funds in a certain budget category. Also, other countermeasures may reduce the hazard and prove worthwhile from a cost perspective.

For most departments it is suggested that exposure and cost be based on the experience of the entire sworn force. A problem arises, however, for large departments when frequencies of certain hazardous events grossly exceed the exposure category of "many times daily." Since the consequence and probability are the same for pursuit and emergency runs, their risk scores would be identical even if their frequencies of occurrence were 120 and 400 times a day respectively. One possible solution is to consider frequencies per 10 men. Assume the frequencies 120 and 400 apply to a department with 1,600 sworn personnel on patrol. The 1,600 men, put into groups of 10, produce 160 groups. Using this new exposure base, pursuit runs occur approximately daily (120/160) and emergency runs two and a half times daily (400/160). The base of 10 men is chosen here because it is the largest group that allows differentiating the frequency of occurrence; other bases could be used.

When such modifications are employed two cautions must be observed:

1. The calculated risk scores can only be compared to other risk scores calculated on the same base.

2. Justification (J) remains unaltered if the cost factor is figured on the same base as risk. For example, cost for the above should be based on units of 10 men each.

These modifications do not affect consequences, probability and degree of correction.

Risk scores from Table 11-8 pertaining to large departments can be recalculated using 10 men as the exposure base instead of the entire force. They would be:

H. E.	E	R
Firing Gun	6	120
Firing Gun	6	150
Pursuit Run	6	90
Emergency Run	10	150
Foot Chase	10	30
Arresting a Resisting Offender	6	90
Directing Traffic at Accident	6	150

There are primary advantages in applying this system.

1. It forces attention to specifiable aspects of injury and damage.

2. It uses data for more than descriptive purposes.

3. It constructs a total picture of hazards and possible corrective measures.

4. It produces a list of priorities and shows which hazards are most amenable to correction.

5. It directs or narrows the focus of countermeasures.

6. It allows the evaluation of the effects of countermeasures.

While this method for measuring hazards and fixing priorities for corrective actions grew out of an industrial setting and has yet to be widely used, the investigators feel that it is a significant advance in the field of injury and damage reduction. Fine's weighting system of "ratings" may need modification within the context of municipal police department operation, but it deserves to be tested fully in the near future. Those readers interested in pursuing Fine's techniques are referred to a more complete description of the procedures and recommendations scheduled for publication in the December, 1971 issue of the Journal of Safety Research under the title "Mathematical Evaluation for Controlling Hazards." To foster immediate implementation of this method, a suggested worksheet is presented as Table 11-9.

Table 11-9

Justification Rating Worksheet

PROBLEM:

Sequence of events or factors necessary for accident:

1.

2.

3.

4.

5.

6.

7.

Formula Factors:		Rating
C	Consequence:	
E	Exposure:	
P	Probability:	
CF	Cost Factor:	
DC	Degree of Correction:	

J Justification: $J = \frac{C \times E \times P}{CF \times DC} = \frac{x \quad x}{x} =$

The estimated cost of corrective action is/is not justified.

CHAPTER 12

RECOMMENDATIONS AND COUNTERMEASURES

The scope of this investigation has been extremely broad touching on areas that have not been examined in depth by others. The formulation of recommendations, therefore, is guided primarily by the data obtained in this study. The ultimate objective of these recommendations is the reduction of injury and damage within municipal police departments. The feasibility of all recommendations and countermeasures must be determined primarily at the local level. Such factors as cost of implementation, effect on the community, acceptance by department personnel, and most importantly, effectiveness in reducing police injury and damage events should be included in any final adoption decision.

The recommendations can be grouped into four basic categories:

1. Recommendations for local IDR function
2. Countermeasures for local ID problems
3. Recommendations for nationwide IDR action
4. Recommendations for future research and development.

Recommendations for Local IDR Function

Examination of injury and damage reduction programs in municipal police departments has revealed three major problems:

1. There are strong deficiencies in the current injury and damage reporting and record keeping systems.
2. There is a failure on the part of police administrators to provide the manpower and budget sufficient to support IDR programs.
3. Municipal police officers are being injured and department vehicles are being damaged at an unacceptable rate.

These three problems are interrelated closely. The lack of comprehensive information prevents a clear understanding of the magnitude of the injury and damage problem at the local level. As a result, administrators do not implement planned IDR programs. Rather, countermeasure programs are instituted only as reactions to crisis situations that demand rapid solutions. Unfortunately, injury and damage occurrence usually is not susceptible to this type of ad hoc programming, and injury and damage events continue to increase.

To counteract these conditions, a well planned IDR function is needed in every municipal police department. A blueprint for the organization and planning in this function has been presented. It involves these basic characteristics:

1. Integration of responsibility for the reduction of vehicular and non-vehicular injury and damage events due to accident, assault or ambush within a single IDR function

2. Designation of a high ranking officer to devote full time to the IDR effort in larger departments and proportionately less time in smaller departments

3. Establishment of an adequately staffed IDR function as a separate entity on a level with such functions as personnel, training and research and planning

4. Implementation of a strong first line supervisory IDR program

5. Provision for total IDR participation by all command levels within a department by organizing IDR committees.

Once created the IDR function should, in cooperation with other units, establish the record keeping, training and inspection systems as recommended in this report.

Countermeasures for Local ID Problems

The chief problem areas within municipal police departments are motor vehicle related injury and damage, and non-vehicular injuries incurred during police action. Although firm cost and injury data are not available, it appears that vehicular accidents surpass police action injuries in terms of manpower loss and cost to the department. Assaults and ambushes, however, account for more fatalities than motor vehicle accidents.

This study focused on three types of driving accidents: routine, emergency and pursuit. Routine driving accidents, though much more frequent than emergency and pursuit accidents combined, are not as critical a problem when exposure in terms of miles driven is considered. Also, there is an indication that departments would find that emergency and pursuit accidents account for more disabling injuries and greater costs than their frequency of occurrence would indicate.

The general countermeasures for all types of driving include:

1. Recruit driving training consisting of a combination of defensive driving principles, use of perceptual skills, and practice track and skid pan training

2. Annual observation of all department drivers

3. A specific program to improve problem drivers based on individual diagnosis

4. Supervisor observation of driver behavior on a periodic basis

5. In-service and refresher training oriented toward critical accident types or driving problems

6. A motor vehicle inspection program that provides clear criteria for taking vehicles out of service

7. A program of periodic physical examination for all drivers increasing in frequency for drivers 45 years of age and older

8. The performance testing of vehicles before purchase.

None of these recommendations should be instituted without planned evaluation of effectiveness as described in this report.

Specific countermeasures for routine, emergency and pursuit driving derived from the data in the supplemental reports include:

1. Daily assignment of the same vehicle to an officer

2. Use of both turret light and siren rather than either by itself during emergency and pursuit driving

3. Use of the three-wheel rather than two-wheel motorcycle for traffic purposes

4. Increased in-service driving training for drivers between the ages of 20 and 30, and 45 and over

5. Limitation of the amount of uninterrupted driving on routine patrol to less than two hours

6. Eye protection for both two- and three-wheel motorcycle drivers

7. Criteria for pursuit driving regulations in terms of length of run, number of different road types driven and reduced speed on specific road types regardless of traffic density

8. Periodic one- and two-man vehicle assignment rotation

9. Reduced use of flashers by vehicles parked off the road on expressways

10. Use of reflective apparel by officers directing traffic or investigating accident scenes

11. Parallel parking policy limiting distance of vehicle from curb

12. Radio call response procedures informing other vehicles of approach route of assigned car.

As with the general countermeasures, these recommendations must be given thorough field evaluations before a final decision regarding efficacy can be reached.

Investigation of police injuries resulting from assault or ambush indicates the need for a more basic approach than the listing of general countermeasures to reduce vehicular accidents. This approach entails the collection of more data on police task performance delineating the type of hazard and human error involved. Accordingly, the following general recommendations are appropriate:

1. Critical police hazards in all phases of the arrest sequence from field interrogation to transportation and booking of prisoners should be described explicitly at the local level.

2. Supplemental arrest task data should be collected at the local level for injury and non-injury events focusing on the effectiveness of procedures currently followed by officers.

3. The precise nature of offender hostility and use of force should be investigated in relation to officer injury during various phases of the arrest task sequence.

4. Supervisors should be trained in the observation of subordinates, task hazard analysis and personnel task hazard instruction.

Data from the supplemental reports suggest specific countermeasures that include:

1. Refresher training on field interrogation and prearrest or summons procedures for officers in their second and third years on the force

2. Use of K-9's in arrest situations

3. Early use of handcuffs, particularly where hostility is demonstrated by offender

4. Maintenance of distance from offender whenever possible

5. Avoidance of use of hands alone to restrain an offender whenever possible

6. Increased use of non-uniformed personnel and unmarked cars particularly in high assault and ambush areas

7. Personnel training in double action firing to counteract surprise attacks by gunmen.

Recommendations for Nationwide IDR Action

During the course of this project, contact was made with numerous municipal police departments and a variety of other police and affiliated agencies. It was apparent from these conversations that communication among municipal police in the area of injury and damage reduction was meager. Yet, the Police Advisory Committee deliberations demonstrated that departments definitely can assist one another in IDR efforts. Several departments drafted general orders on safety as a result of PAC discussions. The contents of the new orders were far superior to what had existed previously in these departments.

The usefulness of this effort prompts the recommendation that municipal department IDR representatives convene periodically on a regional or national basis to conduct workshops in IDR programming. The National Safety Council has convened such meetings at its annual Congress for the last several years although attendance has not been large. These meetings or those convened by IACP or other police affiliated organizations should provide the opportunity for necessary and beneficial interchange.

As an adjunct to this activity, there is a need to study the feasibility of creating an IDR information and action center for municipal and other police agencies. The purpose of such a center would be to: a) collect general and detailed data on police injury and property damage problems, b) maintain an up-to-date collection of technical and evaluative information about training, procedures, vehicles and equipment and c) be responsive to the needs of local agencies by providing information and technical assistance in analyzing and solving injury and damage problems.

No organization currently maintains adequate data on police accidents, assaults and ambushes. The FBI receives general information on police fatalities in these areas and also reports non-fatal assault frequency annually. The National Safety Council maintains motor fleet accident data on a small number of departments that are involved in its fleet contest. Records in the form of workmen's compensation summaries were available from several states but these are modeled after the industrial injury standard, judged to be inadequate in its present form, for the recording of police injuries.

The recommended center would collect and analyze police injury and damage data on a nationwide basis. It would also be responsible for intensive study of specific types of police injury and damage events. One possible technique for implementing such studies would be the establishment of a national rapid ID data collection network. For example, with the cooperation of a specially selected sample of police departments across the nations, certain periods could be designated when all incidents of a particular type are reported to the central agency by telephone. This type of response network would also generate comprehensive exposure and supplemental data on a variety of topics such as police ambushes, crowd and riot control and handling narcotics users. The system may prove to be more economical and more productive than a large scale research study in any of these areas.

No organization currently maintains adequate information on police equipment, vehicle specifications or training and procedures evaluation. Most municipal departments contacted used internally developed vehicle and equipment

specifications and conducted only informal evaluations of training and procedures. There is a need to arrive at nationally accepted specifications for police equipment. Similarly, IDR guidelines must be generated for training and procedures. In both of these areas published information is inadequate. Centralized collection and dissemination of internally developed studies and more accessable information could be of immeasurable benefit to small and middle sized departments since frequently they are unable to do adequate testing of equipment and procedures due to budgetary and manpower limitations. Staffing for the center would not be limited to information specialists. Rather, experienced police officers and technical specialists would be employed to work closely with departments in all areas of IDR programming. Once analysis of documentation in IDR areas is comprehensive, the limitations and gaps in practice can be pinpointed more readily.

The need for equipment standards or specifications is acute. Many times manufacturer demonstrations constitute the sole evaluative base for equipment purchase. Unfortunately, the injury prevention or mitigation aspects of specifications often are overlooked.

It is recommended that a standards committee be established under the aegis of the International Association of Chiefs of Police, the American National Standards Institute or some other representative body to review safety specifications for police equipment. As a preliminary step, this committee might conduct or sponsor a study of available police equipment specifications, methods of performance testing and purchasing practices. The results of such a study should also recommend the most expeditious method for creating standards.

The role of the supervisor in injury and damage reduction has been stressed as has the inadequacy of supervisory IDR training. There are also indications that the inadequacy of supervisor training may not be limited solely to IDR areas. It is recommended, therefore, that LEAA provide funds to study supervisor training in municipal police departments with the ultimate objective of creating a first line supervisor training curriculum for use by municipal police departments.

Recommendations for Future IDR Research and Development

Future IDR research activity should follow the trends implied by the preceding recommendations. Police motor fleet injury and damage reduction research should orient toward field evaluation of the driving training package recommended in this report. Training recommendations should be updated based on research currently sponsored by the National Highway Traffic Safety Administration. Research on the safe design of vehicles is also being spearheaded by this agency.

The design of vehicles for police use should receive some priority. No data presented in this report are related to assaults on police while in vehicles but a recent FBI communication indicated the following trend. Of all fatal police assaults the proportion of those occurring to officers inside the vehicle as compared to those outside the vehicle rose from 12.5 percent in 1969 to 18.5 percent in 1970, an increase of nearly one-half. Certainly if this trend continues, the need to study vehicle design changes in terms of offering protection from assault and ambush would be established.

Throughout this study motor fleet injury and damage has been considered to be accidental in nature. The number of police vehicles struck or sideswiped while parked or stopped in traffic suggests that a certain proportion of "assaults" via automobile may be contained in these statistics. It is recommended that departments begin to examine these accidents more closely to define contributory circumstances.

Research into police assault and ambush injuries should be undertaken at a more basic level at this time. The data gathered in this study indicate general relationships among use of force, equipment use and availability, and procedural variables interacting with different phases of the arrest sequence to produce injury. The precise nature of these interactions remains to be defined. One approach that seems to be indicated is a detailed study of training, policy and procedure in departments with high and low assault/injury rates. A preferable alternative is the introduction of procedural changes on a controlled basis within single departments to evaluate their effectiveness.

Several methods of injury and damage data collection and analysis presented in this report deserve further study. The police IDR record system must be evaluated in the field. It is felt that this system, which includes both general and supplemental data collection methods, provides a workable first step for defining and suggesting solutions to police ID problems.

Police task hazard analysis must be accomplished before reasonable, effective IDR training programs for officers can be generated. This area should receive high priority in future IDR research programs.

A major problem facing police departments is the allocation of IDR program efforts to combat the wide variety of injury and damage problems that their personnel face daily. The Fine system for assessing criticality of police ID problems has been presented. This system should be studied in departments of various sizes to assess practicality of method and data accessability. Police records offer a voluminous source of detailed information. Evaluation of the Fine system should include examination of activity, arrest and other non-IDR records that would assist in providing the hazard exposure data so necessary for creating criticality rankings.

The concept of bilevel reporting involves the collection of supplemental data on injury and damage events to produce information on which to base workable countermeasure programs or procedures. Police tasks particularly are susceptible to this type of effort. Supplemental data were collected through three different methods:

1. Completion of supplemental reports following an injury or damage event while performing selected police tasks

2. Completion of supplemental reports on a survey sample basis for selected police tasks

3. Completion of supplemental information by redesigning report forms currently in use for other police purposes.

It is felt that bilevel reporting represents a true breakthrough for those interested in evaluating ID and other problems.

In conclusion, the data that have been gathered indicate the existance of police injury and damage reduction problems far beyond what was expected when this project began. Throughout this report the need for planned action as opposed to crisis reaction at both the local and national levels has been emphasized. It is hoped that LEAA will take the lead in attacking police ID problems by continued funding of applied research in this area and by providing funds for the development of stronger IDR driving and personnel training.

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REFERENCES

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APPENDIX A

COOPERATING POLICE DEPARTMENTS

POPULATION GROUP I

Atlanta, Georgia
Baltimore, Maryland
Boston, Massachusetts
Chicago, Illinois
Cleveland, Ohio
Dallas, Texas
Denver, Colorado
Detroit, Michigan
Houston, Texas
Indianapolis, Indiana
Kansas City, Missouri
Los Angeles, California
Memphis, Tennessee
New Orleans, Louisiana
New York City, New York
Philadelphia, Pennsylvania
San Antonio, Texas
San Diego, California
San Francisco, California
Seattle, Washington
St. Louis, Missouri
Washington, D.C.

POPULATION GROUP II

Akron, Ohio
Albuquerque, New Mexico
Dayton, Ohio
Jacksonville, Florida
Long Beach, California
Louisville, Kentucky
Miami, Florida
Minneapolis, Minnesota
Nashville, Tennessee
Norfolk, Virginia
Oakland, California
Oklahoma City, Oklahoma
Omaha, Nebraska
Rochester, New York
Tucson, Arizona
Wichita, Kansas

POPULATION GROUP III

Albany, New York
Arlington, Virginia
Baton Rouge, Louisiana
Bridgeport, Connecticut
Camden, New Jersey
Columbia, South Carolina
Duluth, Minnesota
Grand Rapids, Michigan
Jackson, Mississippi
Las Vegas, Nevada
Little Rock, Arkansas
Montgomery, Alabama
Providence, Rhode Island
Salt Lake City, Utah
Santa Anna, California
Spokane, Washington
Springfield, Massachusetts
Springfield, Missouri
Topeka, Kansas
Virginia Beach, Virginia
Worcester, Massachusetts

POPULATION GROUP IV

Bethlehem, Pennsylvania
Chesapeake, Virginia
Covington, Kentucky
Everett, Washington
Fargo, North Dakota
Galveston, Texas
Great Falls, Montana
High Point, North Carolina
Lafayette, Louisiana
Manchester, New Hampshire
Mesa, Arizona
Norman, Oklahoma
Oshkosh, Wisconsin
Portland, Maine
Pueblo, Colorado
Rock Island, Illinois
Saginaw, Michigan
Salem, Oregon
Sioux Falls, South Dakota
Troy, New York

POPULATION GROUP V

Bangor, Maine
Baytown, Texas
Bismark, North Dakota
Bowling Green, Kentucky
Burlingame, California
Cheyenne, Wyoming
Concord, New Hampshire
Marietta, Georgia
Middletown T., Rhode Island
Pocatello, Idaho
Rochester, Minnesota
Watertown, New York
Weirton, West Virginia
Yakima, Washington

POPULATION GROUP VI

Bedford, Ohio
Brewer, Maine
Brookhaven, Mississippi
Canton, Mississippi
Carson City, Nevada
Carthage, Missouri
Chickasha, Oklahoma
Dover, Delaware
Grand Junction, Colorado
Henderson, Kentucky
Kent, Washington
Keokuk, Iowa
Olathe, Kansas
St. Charles, Illinois

POPULATION GROUP VII

Alliance, Nebraska
Alva, Oklahoma
Baker, Oregon
Beachwood, Ohio
Blythe, California
Burley, Idaho
Chagrin Falls, Ohio
Ely, Minnesota
Lebanon, New Hampshire
New Cumberland, Pennsylvania

RESEARCH DEPARTMENT
NATIONAL SAFETY COUNCIL

POLICE OCCUPATIONAL
SAFETY PROJECT

SURVEY OF THE ACCIDENT EXPERIENCE AND SAFETY
ADMINISTRATION OF MUNICIPAL POLICE

The National Safety Council has received a grant from the U. S. Department of Justice to develop an occupational safety program for municipal police. The purpose of this set of forms is to gather the information base for identifying accident problems of municipal police personnel and establishing priorities for safety program development. This is an essential feature of safety program development since safety programs are meaningful only if they relate to genuinely important accident problems.

For ease of completion this survey is divided into the following sections:

I Police Motor Fleet or Vehicular Accident Reporting and Recording System

The purpose of this group of questions is to find out the current level of information on vehicular accidents among sworn and civilian personnel in the department.

II Police Occupational Accident Reporting and Recording System

The purpose of this group of questions is to find out the current level of information on occupational accidents among sworn and civilian personnel in the department. For the purposes of this section occupational accidents refers to accidents occurring in line of duty but not involving police vehicles.

III Police Personnel Strength and Administration

The purpose of this group of questions is to find out some general details about the department's personnel strength and administration.

IV Safety Program Administration

The purpose of this group of questions is to find out what kind of safety program is operative in the department.

V Civil Disorders and Accident Experience

Please fill in the blanks below.

City_____ State_____ Date_____

Latest Population Estimate (indicate source and date)_____

Officer completing form_____ Title_____

Address_____ Zip Code_____ Telephone_____

RESEARCH DEPARTMENT
NATIONAL SAFETY COUNCIL

POLICE OCCUPATIONAL
SAFETY PROJECT

City_____

State_____

NOTE: ALL INFORMATION ON THIS FORM WILL BE CONFIDENTIAL

Section I

Police Motor Fleet or Vehicular Accident Reporting and Recording System

The purpose of this group of questions is to find out the current level of information on vehicular accidents among sworn and civilian personnel in the department.

THE FOLLOWING QUESTIONS CONCERN POLICE MOTOR FLEET ACCIDENTS ONLY

1. Does the department keep a record of accidents involving police vehicles?

   Yes ☐ No ☐

2. Is the same recording and reporting procedure used for all police personnel both sworn and civilian?

   Yes ☐ No ☐

   If No, please explain the difference

   _____

   _____

   _____

3. Is a written report made on every police vehicle accident that involves injury, including medical treatment or first aid cases.

   Yes ☐ No ☐

   If No, what is current injury reporting level?

   _____

   _____

   _____

4. a. How are the reports stored?

   ____ Manually filed
   ____ Punched on cards
   ____ Magnetic tape or disc
   ____ Other_____ (specify)

   b. Please attach a copy of the injury report form.

   c. Please attach coding instructions, if applicable.

   d. Has this form been in use since January 1, 1967? Yes ☐ No ☐

   If No, indicate when it was put into use and what recording procedure was followed in past years. In use as of ____ (Month) ____ (year)

   _____

   _____

   _____

5. Is a written report made on every property damage accident in which a police vehicle is involved whether or not an injury occurred?

   Yes ☐ No ☐

   If No, what is current property damage reporting level?

   _____

   _____

   _____

6. a. How are the reports stored?

   ____ Manually filed
   ____ Punched on cards
   ____ Magnetic tape or disc
   ____ Other_____ (specify)

   b. Please attach a copy of the property damage report form, if different from the injury report form.

   c. Please attach coding instructions, if applicable.

   d. Has this form been in use since January 1, 1967? Yes ☐ No ☐

   If No, indicate when it was put into use and what recording procedure was followed in past years. In use as of ____ (Month) ____ (Year)

   _____

   _____

   _____

7. Are vehicular injury and/or property damage reports fed into a central recording or analysis point?

Yes ☐ No ☐

If Yes, what agency, bureau or section receives the information?

_____

If No, which agencies, bureaus or sections keep the information?

_____

8. What standard(s) is(are) used for recording motor vehicle fleet accident experience?

____ American National Standard D15.1-1970
(standard used by National Safety Council)
____ National Highway Safety Bureau Standard 4.4.10, (Traffic Records)
____ City Workmen's Compensation form
____ State Workmen's Compensation form
____ Insurance form
____ Internal form
____ None
____ Other_____
(specify)

9. Does each commanding officer or supervisor keep a record file of vehicle accidents and/or injuries in which his subordinates have been involved?

Yes ☐ No ☐

If Yes, a. When was this procedure put into effect? _____ _____
b. Attach a copy of record form Month Year

10. Is an individual vehicle accident record kept on each employee so that his safety performance can be evaluated?

Yes ☐ No ☐

If Yes, a. When was this procedure put into effect? _____ _____
b. Attach a copy of record form Month Year

11. After each item of accident information on the following list, circle the manner in which the information is currently being stored using the codes in Column I: Circle "M" if manually filed; "P" if on punch cards; "T" If on magnetic tape or disc. Circle "NA" if the information is not available. If none of these codes applies, specify how the information is stored in the blank provided.

If an item of information is available, circle the most frequent number of times that this information is summarized or cumulated in reports to the chief, other command personnel or other agencies, using codes in Column II:

Circle "M" if it is presented monthly or more frequently; "Q" for quarterly; "S-A" for semi-annually; "A" for annually; "R" for when requested. If none of these codes applies, specify how the information is summarized in the blank provided.

Type of Information	I How Information is Stored (Manual, Punch Card, Tape/Disc, Not Available, Specify)	II How Frequently Information is Summarized (Monthly, Quarterly, Semi-Annually, Annually, When requested, Specify)
a. Number of accidents	M P T NA _____	M Q S-A A R _____
b. Number of disabling injuries	M P T NA _____	M Q S-A A R _____
c. Number of days lost	M P T NA _____	M Q S-A A R _____
d. Number of miles driven	M P T NA _____	M Q S-A A R _____
e. Police vehicle damage cost	M P T NA _____	M Q S-A A R _____
f. Private property damage cost	M P T NA _____	M Q S-A A R _____
g. Public or police property cost excluding police vehicles	M P T NA _____	M Q S-A A R _____

12. The three tables below are the same, but refer to the years 1969, 68 and 67. Please fill them in as completely as possible. For each type of fleet vehicle, fill in the number of vehicles in use; total annual mileage of the vehicles; total number of accidents involving the vehicles; total number of police injuries due to accidents involving these vehicles; total man-days lost due to accidents, and total cost of damage to the vehicles. If only general totals are available, please be sure to fill in bottom line of each table.

— 1 9 6 9 —

Type of Fleet Vehicle	Total No. of Veh.	Total* Annual Mileage	Total No. of Acc.	Total No. of Inj.	Total No. Days Lost	Total Cost of Veh. Dam.
Automobiles						
Compacts						
Vans and Trucks						
Buses						
Two Wheel Cycles						
Three Wheel Cycles						
Scooters						
Boats*						
Airplanes &* Helicopters						
Other						
Total						

*For boats, airplanes and helicopters use hours of use rather than mileage.

— 1 9 6 8 —

Type of Fleet Vehicle	Total No. of Veh.	Total* Annual Mileage	Total No. of Acc.	Total No. of Inj.	Total No. Days Lost	Total Cost of Veh. Dam.
Automobiles						
Compacts						
Vans and Trucks						
Buses						
Two Wheel Cycles						
Three Wheel Cycles						
Scooters						
Boats*						
Airplanes &* Helicopters						
Other						
Total						

*For boats, airplanes and helicopters use hours of use rather than mileage.

— 1 9 6 7 —

Type of Fleet Vehicle	Total No. of Veh.	Total* Annual Mileage	Total No. of Acc.	Total No. of Inj.	Total No. Days Lost	Total Cost of Veh. Dam.
Automobiles						
Compacts						
Vans and Trucks						
Buses						
Two Wheel Cycles						
Three Wheel Cycles						
Scooters						
Boats*						
Airplanes & * Helicopters						
Other						
Total						

*For boats, airplanes and helicopters use hours of use rather than mileage.

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POLICE OCCUPATIONAL
SAFETY PROJECT

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State_____

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WILL BE CONFIDENTIAL

Section II

Police Occupational Accident Reporting and Recording System

The purpose of this group of questions is to find out the current level of information on occupational accidents among sworn and civilian personnel in the department. For the purposes of this section occupational accidents refers to accidents occurring in line of duty but not involving police vehicles.

THE FOLLOWING QUESTIONS CONCERN POLICE OCCUPATIONAL ACCIDENTS ONLY

1. Does the department keep a record of occupational accidents involving police personnel?

   Yes ☐ No ☐

2. Is the same recording and reporting procedure used for all police personnel both sworn and civilian?

   Yes ☐ No ☐

   If No, please explain the difference.

   _____

   _____

   _____

3. Is a written report made on every police occupational accident that involves injury including medical treatment or first aid cases (i.e., those not involving loss of time).

   Yes ☐ No ☐

   If No, what is current injury reporting level?

   _____

   _____

   _____

4. a. How are the reports stored?

____ Manually filed
____ Punched on cards
____ Magnetic tape or disc
____ Other_____ (specify)

b. Please attach a copy of the form, if different from vehicle accident report form.

c. Please attach coding instructions, if applicable.

d. Has this form been in use since January 1, 1967? Yes ☐ No ☐

If No, indicate when it was put into use and what recording procedure was followed in past years. In use as of _____ (Month) _____ (Year)

5. Is a written report made on every non-vehicular property damage accident in which police personnel are involved?

Yes ☐ No ☐

If No, what is current property damage reporting level?

6. a. How are the reports stored?

____ Manually filed
____ Punched on cards
____ Magnetic tape or disc
____ Other_____ (specify)

b. Please attach a copy of the form, if different from vehicular or occupational injury report form.

c. Please attach coding instructions, if applicable.

d. Has this form been in use since January 1, 1967? Yes ☐ No ☐

If No, indicate when it was put into use and what recording procedure was followed in past years. In use as of _____ (Month) _____ (Year)

7. What standard(s) is(are) used for recording occupational accident experience?

___ American National Standard Z16.1, Z16.2 (standard used by National Safety Council)
___ City Workmen's Compensation form
___ State Workmen's Compensation form
___ Insurance form
___ Internal form
___ None
___ Other _____ (specify)

8. Does each commanding officer or supervisor keep a record file of occupational accidents and/or injuries in which his subordinates have been involved?

Yes ☐ No ☐

If Yes, a. When was this procedure put into effect?

_____ (Month) _____ (Year)

b. Attach a record form, if different from vehicular record form.

9. Is an individual occupational accident and/or injury record kept on each employee so that his safety performance can be evaluated?

Yes ☐ No ☐

If Yes, a. When was this procedure put into effect?

_____ (Month) _____ (Year)

b. Attach a copy of record form.

10. After each item of accident information on the following list circle the manner in which the information is currently being stored using the codes in Column I. Circle "M" if manually filed; "P" if on punch cards; "T" if on magnetic tape or disc. Circle "NA" if the information is not available. If none of these codes applies, specify how the information is stored in blank provided.

If an item of information is available, circle the most frequent number of times that this information is summarized or cumulated in reports to the chief, other command personnel or other agencies, using codes in Column II; Circle "M" if it is presented monthly or more frequently; "Q" for quarterly; "S-A" for semi-annually; "A" for annually; "R" for when requested. If none of these codes applies, specify how the information is summarized in the blank provided.

Type of Information	I How Information is Stored	II How Frequently Information is Summarized
	Manual / Punch Card / Tape/Disc / Not Available / Specify	Monthly / Quarterly / Semi-Annually / Annually / When requested / Specify
a. Number of loss time (disabling) injuries	M P T NA _____	M Q S-A A R _____
b. Number of medical treatment or first aid (non-disabling) injuries	M P T NA _____	M Q S-A A R _____
c. Number of property damage (non-injury) accidents	M P T NA _____	M Q S-A A R _____
d. Number of man days lost	M P T NA _____	M Q S-A A R _____
e. Number of man hours or man days worked	M P T NA _____	M Q S-A A R _____
f. Average number of employees	M P T NA _____	M Q S-A A R _____
g. Cost of injuries	M P T NA _____	M Q S-A A R _____
h. Property damage cost	M P T NA _____	M Q S-A A R _____

11. a. Please attach the most frequent summaries or cumulations (as checked above) for 1967, 1968 and 1969 to this questionnaire. Include other occupational accident summaries for the years 1967, 68 and 69 that cover other factors such as cause of injury, type of duty (e.g., routine/arrest, emergency), assignment of injured party (e.g., patrol, traffic, investigation, etc.), unsafe acts or equipment etc.

    b. Also, attach in-house studies, summaries or reports about equipment or procedures that increase or reduce the hazard to police operation completed in the last 5 years such as studies on firing range hazards, protective equipment, crowd control and arrest procedures, fatigue and analyses of occupational accident experience in terms of accident cause.

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Section III

Police Personnel Strength and Administration

The purpose of this group of questions is to find out some general details about the department's personnel strength and administration.

1. Please report the department's personnel strength for the years 1969, 68, and 67. Give breakdowns in the following tables. For each assignment category give the average number of sworn and civilian of each sex, employed in a full or part time capacity during each of the three years. If only totals are available, be sure to fill in the bottom line of each table.

1969

ASSIGNMENT OR RESPONSIBILITY	SWORN				CIVILIAN			
	Full Time		Part Time		Full Time		Part Time	
	M	F	M	F	M	F	M	F
a. Patrol								
b. Investigation (Detective)								
c. Traffic								
d. Service								
e. Administrative								
f. Other (specify)								
Total								

1968

ASSIGNMENT OR RESPONSIBILITY	SWORN				CIVILIAN			
	Full Time		Part Time		Full Time		Part Time	
	M	F	M	F	M	F	M	F
a. Patrol								
b. Investigation (Detective)								
c. Traffic								
d. Service								
e. Administrative								
f. Other (specify)								
Total								

1967

ASSIGNMENT OR RESPONSIBILITY	SWORN				CIVILIAN			
	Full Time		Part Time		Full Time		Part Time	
	M	F	M	F	M	F	M	F
a. Patrol								
b. Investigation (Detective)								
c. Traffic								
d. Service								
e. Administrative								
f. Other (specify)								
Total								

2. Please estimate in the table below the average number of police cars of the one-man, two-man, and three or more man types by shift for the years 1969, 68, and 67. If the average number of cars of each type does not remain fairly constant throughout the year because of scheduled changes in vehicle utilization, such as changes from season to season, please explain these differences in the place below marked "comments".

	DAY SHIFT			EVENING SHIFT			NIGHT SHIFT			OTHER SHIFT		
	1 MAN	2 MAN	3+ MAN	1 MAN	2 MAN	3+ MAN	1 MAN	2 MAN	3+ MAN	1 MAN	2 MAN	3+ MAN
1969												
1968												
1967												

Comments:

CONTINUED

3 OF 6

3. a. What is the usual length of the sworn personnel's work week?
_____ hours.

b. What is the usual length of the civilian personnel's work week?
_____ hours

c. What is the average length of a part-time sworn employee's work week?
_____ hours

d. What is the average length of a part-time civilian employee's work week?
_____ hours

e. What type of shift rotation is used? (e.g., weekly, monthly)

f. If the above information is not true for 1969, 68, 67, note differences next to items a. through e.

4. a. Does the department allow sworn personnel to take outside employment or engage in private business activity?

☐ No ☐ Yes, unqualified ☐ Yes, with departmental permission

☐ Other _____

b. If Yes, approximately what percent of the force has outside employment?
_____%

c. Are there any restrictions as to type of jobs and hours of work?

Yes ☐ No ☐

If Yes, explain: _____

_____

_____

5. How frequently are physical examinations of personnel made?

6. a. Do you have a Board of Inquiry or a Board of Review to evaluate occupational injuries?

Yes ☐ No ☐

b. Police vehicle accidents?

Yes ☐ No ☐

7. Members of such Board:

___ a. Commissioner or Director
___ b. Chief or Deputy Chief
___ c. Bureau Chief:
  ___ Patrol
  ___ Motorized Equipment
  ___ Traffic
  ___ Detective Bureau
___ d. Safety Officer
___ e. Personnel Officer
___ f. Representative or Union or F.O.P.
___ g. City Safety Engineer
___ h. Other_____

8. Frequency of Meetings:

___ Weekly
___ Bi-weekly
___ Monthly
___ Other_____

9. Does your Board have authority to invoke and enforce administrative orders and findings?

Yes ☐ No ☐

10. Length of time your Board has functioned: _____

11. Is the right of appeal, by the employee, from decisions or findings of the Board recognized?

Yes ☐ No ☐

12. Is an employee assessed monetary repayment to the City for damage to a police vehicle based on negligence?

Yes ☐ No ☐

13. Describe briefly or attach explanation of police compensation practices in case of injury or property damage accidents.

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Section IV

Safety Program Administration

The purpose of this group of questions is to find out what kind of safety program is operative in the department.

1. Does the department have a formal safety program for police personnel in motor fleet safety?

   Yes ☐ No ☐

2. a. Has a specific officer been assigned the responsibility for motor fleet safety?

   Yes ☐ No ☐

   b. If Yes,

   (1) To whom does he report?

   Name_____ Title_____

   (2) About what proportion of his time is spent on personnel safety? _____%

   (3) Does he have any staff assistance? Yes ☐ No ☐

   If Yes, explain:

   _____

   _____

   _____

   c. If No, how are accident problems in the motor fleet handled?

   _____

   _____

3. How frequently is motor fleet safety discussed with the chief?

   _____

4. Does the department have a formal safety program for police personnel in occupational safety?

   Yes ☐ No ☐

5. a. Has a specific officer been assigned the responsibility for occupational safety?

   Yes ☐ No ☐

   b. If Yes,

   (1) To whom does he report?

   Name_____ Title_____

   (2) About what proportion of his time is spent on personnel safety? _____%

   (3) Does he have any staff assistance? Yes ☐ No ☐

   If Yes, explain:

   _____

   _____

   _____

   c. If No, how are accident problems in occupational safety handled?

   _____

   _____

6. How frequently is occupational safety discussed with the chief?

   _____

7. Is the same officer assigned responsibility for both motor fleet and occupational safety?

   Yes ☐ No ☐

   If No, explain:

   _____

   _____

   _____

   _____

8. About what portion of the department's budget is devoted to safety?

$_____ of a total department budget of $_____. Please itemize the amounts spent on safety as much as possible.

9. Are any of the following equipment items regularly purchased and used by your department? Circle "R" if they are regularly purchased and "M" if they must be used by personnel:

	Regular Purchase	Must Use
Eye and face protection products	R	M
Safety glasses	R	M
Head protection products	R	M
Body and leg protection products	R	M
Arm and hand protection products	R	M
Respiratory protection products	R	M
Hearing protection products	R	M
Foot protection products	R	M
Safety training products	R	M
Safety sign and warning notices	R	M

10. Is there a written directive or general order defining the objectives of a department safety program and describing command and supervisory responsibilities relating to safety?

Motor Fleet: Yes ☐ No ☐

Occupational: Yes ☐ No ☐

If Yes, please attach the copy or copies and indicate the date of issue.

Motor Fleet: Month_____ Year_____

Occupational Month_____ Year_____

11. From the list of items below check the safety procedures now operative in the department. Place an "O" next to items that have been "ongoing" since January 1967 or earlier. If a procedure has been instituted since then, place the month and year it was started next to the item, e.g., 8/68, 7/69.

MOTOR FLEET SAFETY	OCCUPATIONAL SAFETY
_____Formal accident investigating procedure	_____Formal accident investigating procedure
_____Safety Committee	_____Safety Committee
_____Planned safety inspection	_____Planned safety inspection
_____Safety inspection check list	_____Safety inspection check list
_____Job safety analysis procedure and file	_____Job safety analysis procedure and file
_____Employee safety observation	_____Employee safety observation
_____Quality control of purchases	_____Quality control of purchases
_____Personnel safety training in:	_____Personnel safety training in:
_____Pursuit driving { Behind the wheel: ___hrs. / Classroom: ___hrs. }	_____Techniques of safe lifting ___.hrs.
_____Defensive driving { Behind the wheel: ___hrs. / Classroom: ___hrs. }	_____Use of firearms ___ hrs.
_____Motorcycle driving { Behind the wheel: ___hrs. / Classroom: ___hrs. }	_____Office safety ___ hrs.
_____Use of personal protective equipment	_____Techniques of arrest ___ hrs
	_____Techniques of crowd control ___ hrs.
	_____Use of personal protective equipment ___ hrs.

11. (Cont'd)

Others_____ (specify)

Others_____ (specify)

12. Attach copies of materials used in personnel safety procedures described in 11., especially report forms and check lists.

13. Has any evaluation of the effectiveness of the personnel safety procedures been conducted?

Motor Fleet: Yes ☐ No ☐

Occupational: Yes ☐ No ☐

If Yes, to either of the above, please attach copy of report or, if report is unavailable, explain results

14. The space below is for any suggestions the department may have for elements that should be included in standard police personnel safety programs or questions that should be answered in a study of police personnel safety practices.

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Section V

Civil Disorders and Accident Experience

1. During any of the periods covered by periodic accident reports, were there any extraordinary events such as natural disasters or civil disorders, which resulted in abnormally high police personnel injuries or property damage?

Yes ☐ No ☐

If Yes, list the events and if available, attach reports or injury summaries.

City_____

Interview Form
Safety

Name_____Rank_____

Unit, Bureau or Division_____

Responsibility_____

Turnover rate_____

Years with Department_____ Years in this job_____Estimated amount of time devoted to safety_____

Previous Service on Force:

_____

_____

_____

Past experience in safety (either by work experience or training)

_____

_____

Describe current relationship between safety officer and city safety coordinator.

General sources of occupational safety information:

What one source gives newest and most useful safety information

1. Describe your duties as safety officer or provide general order or directive with such a description.

2. What type of authority do you have?

   a. Can you recommend disciplinary action for safety infractions?

      Yes ☐ No ☐

      Comment:_____

      _____

   b. Can you veto purchase of equipment or vehicles ?

      Yes ☐ No ☐

      Comment:_____

      _____

   c. Can you prevent use of defective vehicles or equipment?

      Yes ☐ No ☐

      Comment:_____

      _____

   d. Can you convene advisory or hearing board?

      Yes ☐ No ☐

      Comment:_____

      _____

   e. What are your other areas of authority?

      _____

      _____

      _____

      _____

      _____

      _____

USE TABLE 1 TO RECORD ANSWERS TO THE FOLLOWING QUESTIONS

3. Ask to see an organization chart, if available, and have interviewee trace the chain from himself to the chief.

4. Describe the usual nature of the safety report, if known, at each command level and give usual frequency of such reports.

5. Describe the usual nature of action precipitated by the safety report, at each command level.

USE TABLE 2 TO RECORD ANSWERS TO THE FOLLOWING QUESTIONS

6. With what departments or units do you maintain a liaison?

7. What is the nature and frequency of the liaison on a unit-by-unit basis, (SOP)
e.g., training
personnel
medical
purchasing
planning
building maintenance
vehicle maintenance
motor fleet
foot patrol
office services
data processing

TABLE 1

Chain of Command	Usual Nature of Reports	Usual Frequency of Report	Usual Action Precipitated by Report
SAFETY OFFICER			

TABLE-2

Liaison with Other Departments or Units	Usual Nature of Liaison	Frequency of Liaison
Training		
Personnel		
Medical		
Planning		
Purchasing		
Data Processing		

TABLE 2
(Continued)

Liaison with Other Departments or Units	Usual Nature of Liaison	Frequency of Liaison
Building Maintenance		
Vehicle Maintenance		
Motor Fleet		
Patrol		

8. Let us follow an accident that results in injury and/or property damage through the organization of the department. (In all items be sure to check for and obtain written procedures)

   a. First of all, what general types of accidents are reported:

V/NDI	☐	NV/NDI	☐
V/DI	☐	NV/DI	☐
V/PD	☐	NV/PD	☐
V/PD/DI	☐	NV/PD/DI	☐

KEY
N=Non V=Vehicular
DI=Disabling Injury
PD=Property Damage

   b. Are near misses reported?

   Yes ☐ No ☐

   Comment: _____

   _____

   c. Does the nature of the report vary depending upon severity of injury or amount of property damage or is the same report form completed for every accident?

9. Can we look at several completed accident report forms? --(examine for detail and be sure to get a clean copy)

   a. Who fills out the form?

   The victim ☐ His supervisor ☐ Interviewee ☐

10. a. Must accident reports be filled out immediately or is a certain time gap allowed between occurrence or discovery and completion of report?

    b. Is the extent of injury or property damage verified before the victim takes time off or before equipment is returned to the department?

    c. Who verifies the severity of injury or property damage?

11. a. Under what circumstances is an on-site accident investigation made?

    Who makes it?

    b. Of what does it consist?

12. a. When a report or investigation is completed to whom is it sent for review?

    b. After report is reviewed what are the possible dispositions?

13. Do any units receive copies of the report for administrative purposes?

    Yes ☐ No ☐

    If so, what administrative use is made of them?

14. Why does an advisory or review board become involved?

At whose recommendation?

15. Are disciplinary actions taken based on report review or must the advisory board be convened?

16. Is there a definition of "preventability" in use? Yes ☐ No ☐

If Yes, what is it? How effective as a lever for increased safety?

17. a. Are accident reports summarized? Yes ☐ No ☐

b. In what format?

c. Why is that format used?

18. a. Are summaries fed back to the training unit, medical, personnel, equipment maintenance or other departments?

b. Do summaries lead to any changes in terms of personnel selection, fitness, training, equipment purchase, maintenance, command action, etc.?

19. Is a map and demographic description of the city by precincts or districts available so that injury information can be examined accordingly?

Yes ☐ No ☐

20. Are sick leave absences separated from on-duty injury absences in severity rates?

Yes ☐ No ☐

21. Are colds or flu resulting from exposure to weather allowed as on-duty injuries?

Yes ☐ No ☐

22. Are safety inspections made for headquarters, office, jail, garage? (SOP)

23. Does a safety inspection checklist exist?

Yes ☐ No ☐

24. Who makes inspections?_____

25. What is the method of handling unsafe conditions? Is this successful?

26. Is followup included? Yes ☐ No ☐ If so, who does it?_____

_____

27. Do commanders require a report of inspections?

Yes ☐ No ☐

28. Are job Safety Analyses Used in training?

Yes ☐ No ☐

If Yes, obtain copies of all available

29. Is a schedule for producing or updating JSA's set up?

30. Is there any feedback between accidents and JSA?

31. What method for employee observation is used? (SOP)

32. How frequently is observation and contact made?

33. What is procedure for orienting transferred employees?

34. Who's responsible? _____

35. How often is safety brought up in roll call training?

Who teaches it? _____

Who provides material? _____

Note: Questionnaire forms were also produced for other echelons of command.

APPENDIX B

SUPPLEMENTAL REPORT FORM DATA

Table B-1 is a list of the 19 supplemental report forms used in this study. Ten police departments cooperated in using selected groups of these supplemental report forms between mid-February and mid-April, 1971. Table B-2 presents the number of completed forms of each type received from each department. Note that although five departments agreed to use Transportation of Prisoner Injury report forms, none were returned. Each of these departments was asked whether the lack of return indicated that there were no transportation of prisoner injuries during the time period under consideration. In every case the answer was yes.

For each supplemental report form dealing with injuries or accidents, a cooperating department was asked to attach a copy of its own department injury and/or accident report form. Table B-3 presents the number of each type of department form received with each type of supplemental report form. The department forms were coded as much as possible into a common data code using the data elements presented in Tables B-4 and B-5. Tabulations of selected data elements for vehicular accidents are presented in Table B-6.

Copies of all 19 supplemental report forms are arranged in form number order at the end of this appendix. To facilitate data presentation, the results for each item are presented in the boxes or spaces provided for the item on the supplemental report form. The following will aid in data interpretation:

1. The total number of forms returned is presented in the upper left hand corner of the front page.

2. A number within a box is the number of respondents choosing the item corresponding to the box.

3. Where a blank line was provided for writing a number, the number on the line is the median value of responses given by the number of respondents indicated in the parentheses following the median. In calculating the median, no response and zero cases were excluded except for those questions that required the allocation of 100 percent or all the hours and minutes for a shift among several types of activities. In these cases, zero and no response to individual lines within the question were considered as zero in calculating the median.

4. Where a blank line was provided for writing a word, the following code has been used to present the number of respondents choosing the item indicated by the code.

   a. To code assignment

      P - Patrolmen
      S - Sergeant
      L - Lieutenant or above

b. To code race

W - White
B - Black
S - Spanish-speaking
X - Other

c. To code exercise

C - Calisthenics
S - Sports
R - Running, jogging, swimming, etc.
X - Other

Table B-1

List of Supplemental Report Forms

Form Number	Type
01	Assistance and Rescue
02	Daily Activity Report for Motorcycles and Motorscooters
03	Motorcycle Accident Report
04	Field Interrogation Report
05	Field Interrogation Injury Report
06	Unprovoked Assault, Ambush, Booby Trap
07	Summons, Prearrest Report
08	Summons, Prearrest Injury Report
09	Arrest and Search Report
10	Arrest and Search Injury Report
11	Transportation of Prisoner Report
12	Transportation of Prisoner Injury Report
13	Pursuit Driving Report
14	Pursuit Driving Accident Supplement
15	Emergency Driving Report
16	Emergency Driving Accident Supplement
17	Routine Driving Report
18	Routine Driving Accident Supplement
19	Parked or Rolling Automobile Accident Report

Table B-2

Number of Completed Supplemental Report Forms
Received by Form Type and Department

Pop. Group	Dept.	Supplemental Report Form Number*																		
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
I	1	78	46	2	--	--	2	39	17	74	6	64	0	--	--	--	--	--	--	--
	2	--	45	5	202	--	--	--	--	--	--	--	--	--	--	19	43	39	276	--
	3	--	80	38	--	25	25	--	40	--	--	--	--	--	--	--	--	--	--	45
	4	--	--	--	--	--	--	--	--	56	--	--	0	11	--	--	--	23	--	--
	7	--	2	1	--	1	--	--	3	--	--	--	--	--	--	--	10	2	74	22
	8	--	131	--	--	--	--	--	--	63	14	69	0	--	--	124	3	149	38	--
	21	74	--	--	60	--	--	59	--	--	--	--	--	--	--	--	--	--	--	--
	22	--	--	--	--	--	--	--	--	1	2	5	0	--	--	2	8	15	28	--
	24	--	--	--	--	--	--	--	--	39	9	26	0	10	5	--	--	98	42	--
II	11	13	149	4	--	--	--	--	--	--	--	--	--	4	2	--	--	87	18	--
Total Forms Received		165	453	50	262	26	27	98	60	233	31	164	0	25	7	145	64	413	476	67

*See Table B-1 for form titles

Table B-3

Number and Type of Department Report Forms Received With Each Type of Supplemental Accident or Injury Report Form

Form Number	Type	Motor Vehicle Accident	Injury
01	Assistance & Rescue	---	18
03	Motorcycle	11	30
05	Field Interrogation	---	26
06	Unprovoked Assault	---	9
08	Summons, Prearrest	---	59
10	Arrest and Search	---	28
14	Pursuit Driving	7	0
16	Emergency Driving	58	15
18	Routine Driving	467	51
19	Parked	22	0

14. Light condition

Daylight
Dawn
Dusk
Darkness, street lights
Darkness, no street lights
Darkness, not otherwise classified

15. Locale

Industrial
Shopping
Residential
School/park
Farm
Undeveloped
Unknown
Expressway
Alley

16. Road surface

Asphalt
Concrete
Gravel
Unpaved
Other
Unknown

17. Road condition

Dry
Wet
Icy or snow
Unusual factors (holes, obstacles, work, etc.)

18. Vehicle headlights were

On
Off
Unknown

19. Driving activity immediately before accident

Going straight ahead
Changing lanes
Turning right
Turning left
Slowing; stopping
Starting in traffic
Passing
Leaving parking place
Stopped in traffic
Backing up
Parked
Other movement or maneuver

20. Manner of collision

Head on, police vehicle left of center
Head on, other vehicle left of center
Passing, police vehicle passing
Passing, other vehicle passing
Intersection, police veh. striking
Intersection, police veh. struck
Left turn, police turning left
Left turn, other turning left
Right turn, police turning right
Right turn, other turning right
Merging, police merging from other lane or parked position
Merging, other merging from other lane or parked position
Sideswipe, same direction
Sideswipe, opposite direction
Rear end, police striking
Rear end, police struck
Skidding by police
Skidding by other
Skidding by both
Rollaway, police vehicle
Rollaway, other vehicle
Backing up, police vehicle
Backing up, other vehicle
Backing up, both vehicles
Ran off roadway, intentional
Ran off roadway, unintentional
Overturned in road
Hit while parked
Hit while stopped in roadway
Vehicle hit by flying object
Vehicle caught fire
Other

21. Point of impact

Left front
Left rear
Left side
Left front and side
Left rear and side
Right front
Right rear
Right side
Right front and side
Right rear and side
Rear
Front
Other

22. Vehicle damage estimate

23. Property damage estimate

Under $50.00
$50.00 or more

24. Length of skid marks in feet

25. Evasive action attempted

Emergency braking
Slowing down
Speeding up
Swerving around
Leave roadway
Jump from car
Other
None

26. Contributing circumstances, general

Parking factors
Speed control factors
Lane usage factors
Passing factors
Turning factors
Stopping factors
Perception factors
Personal control factors
Knowledge, awareness factors
Mechanical conditions
Miscellaneous

a) Parking factors

Checking front and rear clear
Checking side clearance
Checking for break in traffic
Parking in unsafe or illegal place
Part of vehicle protruding into traffic
Securing unattended vehicle, rollaway

b) Speed control factors

Relative to volume of traffic
Relative to condition of road
Relative to visibility
Relative to neighborhood or environment
Relative to street, layout, traffic signals

c) Lane usage factors

Centering in lane
Lane change
Left of center

d) Passing factors

Speed and position of vehicle passed
Checking rear before pulling out
Cutting back in
't intersection

e) Turning factors

Lane turned from
Oncoming traffic clear on left turn
Blocking area to right on right turn
Skidding on slippery road

f) Stopping factors

Smooth gradual stop
Slippery road braking

g) Perception factors

Distance from vehicle ahead
Rear clearance when backing
Right side clearance
Left side clearance
Yielding space in traffic encroachment
Observing possibilities of cross traffic
Observing a sufficient distance ahead

h) Personal control factors

Distraction
Caution at traffic signal
Fatigue
Proper use of siren, flashing lights
Caution at an intersection

i) Knowledge, awareness factors

Inspecting equipment
Vehicle familiarity

j) Mechanical factors

Police vehicle
Other vehicle

k) Miscellaneous

Off route
Encountering objects, holes, etc.
Wind
Non-vehicular
Other

Table B-5

Injury Code Data Elements

1. Time loss (indicate if estimate or actual)

   Calendar
   _____days _____estimate _____actual

2. Treatment (check only one)

   First aid only
   Medical attention, not hospitalized
   Hospitalized
   Fatal
   No treatment

3. Part of body (check only that part most severely injured)

Eyes	Back
Face	Abdomen
Brain	Groin
Head, other	Internal organs
Neck	Legs
Arms	Knees
Wrist	Ankles
Hands	Feet
Fingers	Toes
Chest	Other

4. Nature of injury (check only the item related to body part indicated above)

   Cut or laceration (open wound)
   Scratch or abraison (superficial wound)
   Puncture
   Contusion or bruise (skin surface intact)
   Fracture or broken bone
   Dislocation, sprain or strain
   Concussion
   Hemorrhage
   Hernia or rupture
   Internal injuries
   Respiratory impairment
   Complaint of pain
   Other

5. Type of injury (check only the item related to the body part indicated above)

   Motor vehicle incident
   Assault, gunshot
   Assault, stab or slash
   Assault, thrown object
   Assault by person (punch, kick, bite, etc.)
   Fall from elevation
   Fall or slip on same level
   Struck by object
   Struck against object
   Caught in, under or between
   Rubbed or abraded
   Contact with radiation, caustics, toxic or noxious substances
   Strenuous, abrupt, awkward, or unusual body movement
   Exposure, exhaustion, overexertion
   Other

Table B-6

Tabulation of Selected Motor Vehicle Data Elements
for All Forms Received

Data Element	No. of Responses	Data Element	No. of Responses
Original collision with		Manner of collision (check all appropriate)	
Motor vehicle	475	Head on, police vehicle left of center	8
Fixed object	56	Head on, other vehicle left of center	10
Pedestrian	18	Passing, police vehicle passing	21
Bicycle	1	Passing, other vehicle passing	23
Train	1	Intersection, police vehicle striking	49
Animal	0	Intersection, police vehicle struck	70
Other	9	Left turn, police turning left	31
Weather conditions		Left turn, other turning left	35
Clear, sunny	386	Right turn, police turning right	17
Cloudy, overcast	27	Right turn, other turning right	27
Rain	42	Merging, police merging from other lane or parked position	7
Sleet, hail	0	Merging, other merging from other lane or parked position	30
Fog	3	Sideswipe, same direction	16
High wind	0	Sideswipe, opposite direction	4
Snow, slush	61	Rear end, police striking	37
Light conditions		Rear end, police struck	76
Daylight	290	Skidding by police	39
Dawn	8	Skidding by other	26
Dusk	8	Skidding by both	3
Darkness, street lights	210	Rollaway, police vehicle	10
Darkness, no street lights	5	Rollaway, other vehicle	9
Darkness, not otherwise classified	37	Backing up, police vehicle	33
Driving activity immediately before accident		Backing up, other vehicle	47
Going straight ahead	195	Backing up, both vehicles	3
Changing lanes	4	Ran off roadway, intentional	8
Turning right	16	Ran off roadway, unintentional	5
Turning left	41	Overturned in road	0
Slowing, stopping	30	Hit while parked	35
Starting in traffic	8	Hit while stopped in roadway	42
Passing	3	Vehicle hit by flying object	1
Leaving parking place	5	Vehicle caught fire	0
Stopped in traffic	95	Other	58
Backing up	50		
Parked	73		
Other movement or maneuver	25		

APPENDIX C

[ ][ ][ ] (1-3) 165 Forms Returned

ASSISTANCE AND RESCUE

To be completed by officers involved in assistance cases (such as helping a heart attack victim) and rescue operations. This form should be completed in addition to the other forms that may be required by the department.

SECTION I

1. Date and time of incident ___/___/___ (mo. 4-5, day 6-7, yr. 8-9)
   at ___:___ (10-13) a.m./p.m. (14,1 14,2)
2. Name _____
3. Badge No. _____ Rank or Title P-156 (15)
   Years on force 5.0 (162) (16-17) years _____ (18-19) months
4. Age 30.1 (161) (20-21) years Sex [155] (22,1) M [1] (22,2) F
5. Assignment: (Check one)

[8] (24,1)	Traffic	[1] (24,6)	Rescue squad
[0] (24,2)	Training	[38] (24,7)	Ambulance cruiser
[0] (24,3)	Detective	[5] (24,8)	Accident investigation
[101] (24,4)	Motor patrol	[2] (24,9)	Other (specify) _____
[8] (24,5)	Foot patrol		

6. Please indicate the approximate percent of time on the job normally spent in the following activities or locations, (the total must equal 100%).

In police vehicle	70.2 (155) % (25-26)	In directing traffic	1.2 (85) % (31-32)
In investigating or patrolling on foot	18.5 (134) % (27-28)	Other 0.7 (48) (specify)	
In station house	2.5 (103) % (29-30)	_____ % (33-34)	

7. Have you had a physical fitness test in the past year?

[50] (35,1) Yes, passed [1] (35,2) Yes, failed [110] (35,3) No test given

8. When was the last time you received a complete physical examination by a physician?

[28] (36,1)	Less than 6 mos. ago	[25] (36,4)	2 to 5 yrs. ago
[42] (36,2)	6 mos. to 1 yr. ago	[10] (36,5)	More than 5 yrs. ago
[56] (36,3)	1 to 2 yrs. ago		

9. Do you follow a regular exercise program?

[72] (37,1) Yes [87] (37,2) No

a) If yes, with what frequency do you exercise?

[30] (38,1)	Daily	[17] (38,3)	Every 3 days
[18] (38,2)	Every 2 days	[17] (38,4)	Other _____ (specify)

b) If yes, is the program required or administered by the department?

[0] (39,1) Yes [89] (39,2) No

c) Please indicate what you do (e.g., isometrics, calisthenics, weight-lifting, jogging, basketball, etc.) C=53; K=6; S=20; X=2 [ ] (40)

10. Which of the following types of special training in handling assistance or rescue cases have you had?

[107] (41) Techniques for moving the injured
[109] (42) Methods of lifting
[149] (43) First aid
[8] (44) No special training
[0] (45) Other (specify) _____

SECTION II

THE FOLLOWING QUESTIONS REFER TO THE INDIVIDUAL OR "VICTIM" WHO REQUIRED ASSISTANCE AND THE CIRCUMSTANCES ASSOCIATED WITH HIS NEED FOR ASSISTANCE. (If more than one victim, the following questions refer to the victim requiring the most assistance. If you were injured, answer these questions in relation to the victim most closely associated with your injury.)

1. At the time you came to the aid of the victim:

a) What was his condition? (Check one)

[39] (46,1)	Conscious, alert	[27] (46,3)	Unconscious
[82] (46,2)	Conscious, confused		

b) What position was he in? (Check one)

[9] (47,1)	On stomach	[33] (47,6)	Sitting elsewhere
[57] (47,2)	On back	[4] (47,7)	Entangled in wreckage, debris or machinery
[6] (47,3)	On side	[8] (47,8)	Other _____ (specify)
[20] (47,4)	Standing or leaning against object		
[15] (47,5)	Sitting in vehicle		

3. What was the approximate height and weight of the victim?

a) Height 5 (49) ft. 07.9 (148) (49-50) ins.

b) Weight 160.1 (146) (51-53) lbs.

4. What were the circumstances surrounding the victim's need for assistance? (Check one)

[2] (54,1)	Natural disaster	[15] (54,5)	Non-motor vehicle accident
[17] (54,2)	Mental case or attempted suicide	[17] (54,6)	Crime or civil disorder
[57] (54,3)	Physical illness	[7] (54,7)	Other _____ (specify)
[33] (54,4)	Motor vehicle accident	[11] (54,8)	Fire

5. Was the victim under arrest or suspected of a felony or misdemeanor?

[9] (55,1) Yes [145] (55,2) No [3] (55,3) Unknown

6. When you arrived on the scene was the victim's condition of such a nature that he was able to walk without your assistance?

[56] (56,1) Yes [99] (56,2) No

(If yes, please skip to SECTION IV. If no, please answer item 7 below and complete SECTION III.)

7. How many victims did you personally assist in this one incident? 11 (121) (57-58)

SECTION III

THE FOLLOWING QUESTIONS REFER TO THE ACTIONS OF AND EQUIPMENT USED BY THE ASSISTING OFFICER(S).

1. How many police officers, including yourself, rendered assistance?

[26] (59,1) One [47] (59,2) Two [17] (59,3) Three [8] (59,4) More than three

2. Was it necessary for you personally to move any objects, wreckage, or debris in order to reach the victim?

[17] (60,1) Yes [109] (60,2) No

If yes, please specify objects, their shape and weights and any help you had in moving them.

_____ [ ] (61)

3. Did you personally use any tools or equipment to reach the victim or to extricate him from wreckage?

9 (62,1) Yes 120 (62,2) No

If yes, please specify _____ (63-67)

4. Was it necessary for you to pull the victim to safety before giving any other assistance? (Unconscious in burning building or on pavement of busy street.)

15 (68,1) Yes 115 (68,2) No

a) If yes, what method did you use?

4 (69,1) One man drag

0 (69,2) One man drag using blanket

12 (69,3) Other (specify) _____

b) If yes, how far did you move him? 50.2 (15) (70-71) ft.

c) Did this movement involve moving the victim from one level to another (up or down stairs, out of a pit, etc.)?

22 (72,1) Yes 32 (72,2) No

If yes, specify, including height or number of flights of stairs and direction (up or down).

_____ (73)

5. Was a stretcher or litter used? 67 (74,1) Yes 59 (74,2) No

(If no, skip to question 6, this section; if yes, answer items a through g below.)

a) How was the victim transferred to the stretcher or litter? (Check one.)

4 (75,1) One-man or fireman's carry

44 (75,2) Two-man carry

9 (75,3) Three-man carry (suspension lift or hammock carry)

4 (75,4) Four-man carry

0 (75,5) Five-man carry (or blanket lift)

12 (75,6) Other (specify) _____

b) What distance did the transfer to the stretcher or litter cover? 3.0 (66) (76-77) ft. (78-80)

c) Did you transfer or assist in transferring the victim to the stretcher?

32 (4,1) Yes 23 (4,2) No

d) Did the transfer to the stretcher involve moving the victim from one level to another (up or down stairs, etc.)?

17 (5,1) Yes 63 (5,2) No

If yes, specify, including height or number of flights of stairs and direction (up or down).

_____ (6)

e) After the victim was on the stretcher were any level-to-level movements involved other than placing stretcher in ambulance?

29 (7,1) Yes 51 (7,2) No

f) Was it necessary for you to help carry the stretcher or litter?

60 (8,1) Yes 22 (8,2) No

g) How many stretcher bearers were used, including yourself, if you were a bearer? 2.7 (70) (9)

6. Please indicate which of the following items of protective equipment you used, which were available but not used, and which were not available for use.

	Used	Available Not used	Not Available
a) Helmet or hard hat	5 (10,1)	89 (10,2)	17 (10,3)
b) Goggles or face shield	1 (11,1)	39 (11,2)	71 (11,3)
c) Flame retardant clothing	0 (12,1)	10 (12,2)	100 (12,3)
d) Gas mask or dust mask	0 (13,1)	57 (13,2)	53 (13,3)
e) Safety shoes	4 (14,1)	8 (14,2)	99 (14,3)
f) Gloves	19 (15,1)	47 (15,2)	22 (15,3)
g) Other	3 (16,1)	7 (16,2)	7 (16,3)

(Please specify "other" _____) (17)

SECTION IV

THE FOLLOWING QUESTIONS REFER TO ANY INJURIES YOU SUSTAINED WHILE ASSISTING THE VICTIM.

1. Did you receive an injury in this case?

18 (18,1) Yes 137 (18,2) No

(If no, skip to SECTION V; if yes, please answer the following and then go to SECTION V.)

a) did you complete the employee's report of injury or a similar report required by your department?

26 (19,1) Yes 10 (19,2) No

b) Were there sudden or unexpected movements Associated with this injury?

8 (20,1) Yes 27 (20,2) No

If yes, please describe _____ (21)

2. Please attach a copy of the injury report form. Be sure it includes the type and severity of injury, the body part injured and the manner of injury (fall, assault, etc.). (22)

SECTION V

NARRATIVE: Briefly describe this incident, including information not covered above. If an injury to a police officer occurred, include the point in the operation where the injury was sustained, and its type (e.g., in carrying stretcher downstairs I severely sprained my ankle on the steps).

_____ (78-80)

453 Forms Returned

(1-3)

DAILY ACTIVITY REPORT FOR MOTORCYCLES AND MOTORSCOOTERS INCLUDING SOLO (2-WHEEL) AND SERVICAR (3-WHEEL) TYPES.

This form is to be completed by all police personnel who operate motorcycles, motor-scooters or other motor-driven cycles. (If you are assigned to operate a vehicle of this type but are "grounded" because of inclement weather or any other reason, please complete each question in terms of the last day on which you were not grounded.)

Name _____ Age 37.8 (414) (4-5) Badge Number _____

Date (today) ___/___/___ (mo. 6-7, day 8-9, yr. 10-11) Date (last motorcycle assignment) ___/___/___ (mo. 12-13, day 14-15, yr. 16-17)

Time duty began ___:___ a.m./p.m. (18-21, 22,1, 22,2) Odometer Reading _____ (23-27)

Time duty ended ___:___ a.m./p.m. (28-31, 32,1, 32,2) Odometer Reading _____ (33-37)

(Note: Give Odometer Reading to the nearest mile.)

SECTION I

(THE FOLLOWING QUESTIONS REFER TO YOUR ACTIVITIES TODAY OR ON THE LAST DAY ON WHICH YOU OPERATED A CYCLE.)

1. What kind of cycle did you operate today? (Check one)

273 (38,1) Solo motorcycle (2 wheel) 118 (38,4) Servicar motorcycle (3 wheel)

38 (38,2) Motor scooter (2 wheel)

18 (38,3) Motorscooter (3 wheel) 0 (38,5) Other _____ (specify)

2. Experience: (Give estimate if unsure)

a) Driving any kind of motor vehicle? 20.3 (399) yrs. (39-40) mos. (41-42)

b) Driving any kind of cycle? 10.2 (366) yrs. (43-44) mos. (45-46)

c) Length of assignment to your current type of cycle? 4.5 (402) yrs. (47-48) mos. (49-50)

3. What percent of your time on duty today involved the following activities? (The total must equal 100%. Review the whole list first before estimating a particular category.)

a) Operating a motorcycle or motorscooter 80.7 (443) % (51-52)

b) Passenger in other type of motor vehicle 0.5 (19) % (53-54)

c) Directing traffic (on foot) 0.6 (99) % (55-56)

d) Patrol (on foot) 0.6 (57) % (57-58)

e) Investigation (on foot) 0.7 (109) % (59-60)

f) Report writing 1.0 (224) % (61-62)

g) Other _____ (specify) 0.7 (142) / 100 % (63-64)

4. Were there any unusual conditions such as sporting events, concerts, adverse weather, etc., which resulted in a change in your "routine" duties?

60 (65,1) Yes 355 (65,2) No

If yes, please describe briefly both the conditions and the change in your duties.

_____ (66)

5. Of the time spent in operating your cycle or scooter what percent involved each of the following activities? (Total must equal 100%. Review the full list first.)

A) Traffic law enforcement 60.7 (380) % (67-68)

b) Patrol (other than traffic) 0.8 (184) % (69-70)

c) Talking with public 8.1 (192) % (71-72)

d) Emergency run 0.5 (22) % (73-74)

e) Hot pursuit 0.6 (44) % (0 2 1) (75-76, 78 79 80)

f) Parking law enforcement 1.0 (226) % (4-5)

g) Other (specify) _____ 0.6 (100) / 100 % (6-7)

6. As closely as possible, please estimate the percent of on-duty cycle driving time spent today on each of the following kinds of road. (The total must equal 100%.)

a) Divided roadway where maximum speed limit is 50 mph. or more 0.7 (138) % (8-9)

b) Other roadway where maximum speed limit is 50 mph. or more 0.5 (25) % (10-11)

c) Roadway where maximum speed limit is 40 or 45 mph. 0.7 (115) % (12-13)

d) Roadway where maximum speed limit is 30 or 35 mph. 83.1 (387) % (14-15)

e) Roadway where maximum speed limit is less than 30 mph. 0.7 (144) / 100 % (16-17)

7. The following table is designed to determine the predominant kind of road on which you operate your cycle during the different periods of the day while on duty. For example, if you worked between 12-6 a.m., check one box in the "Early Morning" column to indicate which type of road you travel most.

Road Type	Early Morning 12-6am	AM Rush Hour 6-9am	Mid-day 9-3p	PM Rush Hour 3-6p	Evening 6-12p
	TIME				
a) Divided roadway, speed limit 50 mph. or more	10 (18,1)	37 (19,1)	24 (20,1)	29 (21,1)	9 (22,1)
b) Other roadway, speed limit 50 mph or more	0 (18,2)	1 (19,2)	5 (20,2)	0 (21,2)	2 (22,2)
c) Roadway, speed limit 40 or 45 mph.	3 (18,3)	12 (19,3)	21 (20,3)	12 (21,3)	23 (22,3)
d) Roadway, speed limit 30 or 35 mph.	28 (18,4)	134 (19,4)	185 (20,4)	145 (21,4)	82 (22,4)
e) Roadway, speed limit less than 30 m.p.h.	3 (18,5)	16 (19,5)	19 (20,5)	41 (21,5)	22 (22,5)

a=39; b.=7; c=24; d=252; e.=57

8. On which of the road types in question 7 do you usually spend the majority of your routine, on duty time operating a cycle? (Indicate by choosing one letter.) _____ [ ] 23

9. Please estimate the percent of on-duty driving time spent operating your cycle in each of the following types of areas. (The total must equal 100%.)

a. Business, stores offices 80.6(424)% (24-25)
b. Industry, factories 0.7(131)% (26-27)
c. Residential 5.3 (236)% (28-29)
d. Parks, open areas 0.6 (95)% (30-31)
e. Freeway, expressway 0.7 (124)% (32-33)
f. Other _____ (specify) 0.5 (16)% (34-35)
100 %

10. Which, if any of the following conditions or events were present today which you found troublesome? (Check any that apply.)

[43] 36 Windblasts from other vehicles
[167] 37 Road hazards (lumps, holes, grease, debris)
[41] 38 Impaired visibility due to weather (sunglare, fog)
[10] 39 Impaired visibility due to conditions other than weather
[83] 40 Wind-borne objects (insects, leaves, dust)
[77] 41 Unusually heavy traffic
[28] 42 Vehicle defect (specify) _____
[18] 43 Slipping or skidding on wet road surface
[65] 44 Other traffic changing lanes abruptly
[68] 45 Other traffic "not seeing you."
[17] 46 Other (specify) _____

SECTION II

THE FOLLOWING QUESTIONS REFER TO THE MOTORCYCLE (SCOOTER) YOU OPERATE, YOUR TRAINING AND THE PROTECTIVE EQUIPMENT YOU USE. IF YOU DID NOT OPERATE SUCH A VEHICLE TODAY, ANSWER THE QUESTIONS ACCORDING TO THE LAST DAY ON WHICH YOU DID.

1. Please indicate the cylinder displacement and horsepower of the vehicle you operated today. (If unsure, check with garage or someone who knows.)

Displacement 1026.64 (408) cc. (47-50)
Horsepower 57.2 (397) hp. (51-53)

2. Do you usually operate the same vehicle?

[407] 54,1 Yes [13] 54,2 No

3. Do you usually operate the same type of vehicle?

[414] 55,1 Yes [0] 55,2 No

4. Of the following items, check the ones that are on the vehicle you operated today.

[403] 56 2-way radio
[442] 57 Rear view mirrors
[383] 58 Pursuit lights
[320] 59 Siren
[288] 60 Flasher
[388] 61 Windscreen
[12] 62 Fire extinguisher
[174] 63 Turn signals
[446] 64 Horn
[294] 65 Side reflectors or lights
[349] 66 Roll or crash-bars
[12] 67 All of the above
[14] 68 Other _____ (specify)

5. Please indicate which of the following items of personal protective equipment you used today while riding the vehicle.

[444] 69 Helmet
[93] 70 Full face shield
[94] 71 Goggles, eyeshield
[299] 72 Boots above ankle high
[27] 73 Boots ankle high
[27] 74 High-visibility vest or jacket
[29] 75 Raingear
[363] 76 Sunglasses or other anti-glare equipment.
[271] 77 Gloves
[0 2 2] 78 79 80
[257] 4 Long sleeve heavy jacket (leather or other similar material)
[87] 5 Heavy trousers (leather or other similar material)
[10] 6 Kidney belt or similar support
[13] 7 Other _____ (specify)

6. Before being assigned to drive this type of vehicle, did you receive special training from the department in its operation?

[393] 6,1 Yes [23] 6,2 No

a. If yes, please indicate the approximate number of hours in:

1. Classroom instruction 20.8 (204) hours (9-10)
2. Riding instruction 30.3 (405) hours (11-12)
3. Reading materials for private study 6.5 (96) hours (13)

b. If no, describe how you learned to operate the vehicle. _____ [ ] 14

7. Were you required to pass a department examination before being assigned to drive this kind of vehicle?

[324] 15,1 Yes [103] 15,2 No

If yes, please indicate which of the following were a part of the exam. (Check as many as apply.)

[85] 16 Written test
[245] 17 Riding test (in traffic)
[299] 10 Riding test (off street)

8. Since being assigned to drive this vehicle have you had any "refresher" training related to its operation?

[32] 19,1 Yes, less than 6 mos. ago
[22] 19,2 Yes, 6 mos. to 1 yr. ago
[9] 19,3 Yes, 1 to 2 yrs. ago
[14] 19,4 Yes, more than 2 yrs. ago
[332] 19,5 None given

9. If you had a refresher course, what did the training involve?

[47] 20 Classroom instruction
[14] 21 Reading material only
[8] 22 Written test
[43] 23 Riding instruction
[7] 24 Riding test (in traffic)
[47] 25 Riding test (off street)
[0 2 3] 78 79 80

_____

Thank you for your time and cooperation.

MOTORCYCLE ACCIDENT REPORT

[ ] 1-3 50 Forms Returned

FOR MOTORCYCLES AND MOTORSCOOTERS INCLUDING SOLO (2-WHEEL) AND SERVICAR (3-WHEEL) TYPES.

This form is to be completed by all police personnel involved in an accident while operating a motorcycle, motor-scooter or other motor-driven cycle, in addition to other accident report forms required by the department.

Name _____ Age 30.2 (140) (4-5) Badge Number _____

Date (today) ___/___/___ mo. (6-7) day (8-9) yr. Date (last motorcycle assignment) ___/___/___ mo. (10-11) day (12-13) yr.

Date (of accident) ___/___/___ mo. (14-15) day (16-17) yr. Years on Force 6.0(144) years _____ months

Time on duty ___:___ (18-19, 20-21) [ ] 22,1 a.m. [ ] 22,2 p.m. Odometer Reading (nearest mile) _____ (23-27)

Time of accident ___:___ (28-29, 30-31) [ ] 32,1 a.m. [ ] 32,2 p.m. Odometer Reading _____ (33-37)

Time off duty ___:___ (38-39, 40-41) [ ] 42,1 a.m. [ ] 42,2 p.m. Odometer Reading _____ (43-47)

SECTION I

THE FOLLOWING QUESTIONS REFER TO CIRCUMSTANCES ASSOCIATED WITH THE ACCIDENT.

1. What kind of vehicle were you driving at the time of the accident?

[28] 48,1 Solo motorcycle (2-wheel)
[2] 48,2 Motorscooter (2-wheel)
[15] 48,3 Servicar motorcycle (3-wheel)
[3] 48,4 Motorscooter (3-wheel)
[1] 48,5 Other kind of cycle _____ (specify)

2. At the time of the accident, in which of the following activities were you engaged? (Check one.)

[18] 49,1 Traffic law enforcement
[7] 49,2 Patrol (other than traffic)
[0] 49,3 Non-emergency escort (parades, etc.)
[0] 49,4 Emergency run
[4] 49,5 Hot pursuit
[13] 49,6 Parking law enforcement
[1] 49,7 Talking with public
[7] 49,8 Other (specify) _____

3. At the time of the accident were you driving in heavily congested traffic?

[8] 50,1 Yes [38] 50,2 No

4. On what kind of street were you driving at the time of the accident? (Check one.)

[2] 51,1 Divided roadway, speed limit 50 mph. or more
[0] 51,2 Other roadway, speed limit 50 mph. or more
[0] 51,3 Any roadway, speed limit 40 or 45 mph.
[29] 51,4 Any roadway, speed limit 30 or 35 mph.
[17] 51,5 Any roadway, speed limit less than 30 mph.

5. At the time of the accident what was your speed

a. Just before you realized there might be an accident 15.8 (38) mph. (52-53)

b. At the moment of first impact 10.2 (36) mph. (54-55)

6. What was the speed of the other traffic moving in the same direction? 25.3 (28) mph. (56-57)

7. Was your vehicle operative after the accident?

[31] 58,1 Yes [18] 58,2 No

8. What type of accident was it? (First event.)

[2] 59,1 Collision with pedestrian
[23] 59,2 Collision with other moving vehicle
[9] 59,3 Collision with parked or non-moving vehicle
[4] 59,4 Non-collision
[2] 59,5 Non-collision to avoid a collision (e.g. "laying cycle down")
[5] 59,6 Collision with fixed object
[3] 59,7 Other (specify) _____

9. Briefly describe the accident:

_____

_____

_____ [ ] 60

10. Did you fill out an accident report form other than this?

[45] 61,1 Yes [4] 61,2 No

If yes, please attach a copy of it to this form.

SECTION II

THE FOLLOWING QUESTIONS REFER TO THE VEHICLE YOU WERE USING AND THE TRAINING YOU HAVE HAD.

1. Please indicate the cylinder displacement and/or horsepower of the vehicle you were operating. (If unsure, please check with garage or someone who knows.)

Displacement 750.8 (40) cc. (63-66)
Horsepower 55.8 (35) hp. (67-69)

2. Do you usually operate the same kind of cycle or scooter?

[48] 70,1 Yes [1] 70,2 No

a. If yes, do you usually operate the same vehicle?

[43] 71,1 Yes [5] 71,2 No

b. If no, what other kinds of cycles or scooters do you operate on duty and when did you last operate them? _____ [ ] 72

3. Of the following items, check those that were part of the vehicle you were operating at the time of the accident.

[38] 73	2-way radio	[39] 6	Windscreen
[25] 74	Siren	[26] 7	Side reflectors or lights
[40] 75	Flasher	[33] 8	Pursuit lights
[36] 76	Turn signals	[0] 9	Fire extinguisher
[41] 77	Horn [0][3][1] 78 79 80	[1] 10	All of the above
[34] 4	Roll or crash-bars	[1] 11	Other _____ (specify)
[41] 5	Rear-view mirrors		

4. Which of the following devices were actually being operated at the time of the accident?

[16] 12	2-way radio	[3] 16	Siren
[6] 13	Flasher	[2] 17	Horn
[16] 14	Headlights	[4] 18	Pursuit lights
[5] 15	Turn signals	[1] 19	Other _____ (specify)

5. Please indicate which of the following items of protective equipment you were wearing at the time of the accident, those you sometimes use on duty but were not at that moment, and those you never wear while on duty driving the cycle or scooter.

	Wearing	Sometimes Used, Not Worn	Never Wear
Helmet	[37] 20,1	[2] 20,2	[8] 20,3
Full face shield	[6] 21,1	[2] 21,2	[38] 21,3
Goggles, eyeshield	[9] 22,1	[4] 22,2	[27] 22,3
Sunglasses or other antiglare equipment	[30] 23,1	[16] 23,2	[0] 23,3
Gloves	[39] 24,1	[7] 24,2	[0] 24,3
Long sleeve leather jacket (or similar material)	[27] 25,1	[8] 25,2	[5] 25,3
Leather trousers (or similar material)	[6] 26,1	[7] 26,2	[33] 26,3
Boots, above ankle high	[33] 27,1	[3] 27,2	[9] 27,3
Boots, ankle high	[6] 28,1	[2] 28,2	[28] 28,3
Kidney belt	[0] 29,1	[1] 29,2	[37] 29,3
Raingear	[1] 30,1	[32] 30,2	[6] 30,3
Hi-visibility vest	[0] 31,1	[1] 31,2	[38] 31,3
Other _____ (specify)	[2] 32,1	[0] 32,2	[0] 32,3

6. Before being assigned to drive this type of vehicle, did you receive special training from the department in its operation?

[38] 33,1 Yes [1] 33,2 No

a. If yes, please indicate the approximate number of hours

1. Classroom instruction [40.3 (37)] 34-35 hours
2. Riding instruction [80.0 (46)] 36-37 hours
3. Reading materials for private study [8.2 (15)] 38-39 hours

b. If no, describe how you learned to operate the vehicle _____ [ ] 40

7. Were you required to pass a departmental examination before being assigned to drive this kind of vehicle?

[40] 41,1 Yes [9] 41,2 No

If yes, please indicate which of the following were part of the exam. (Check as many as apply.)

[30] 42 Riding test (in traffic) [22] 44 Written test

[36] 43 Riding test (off street)

8. Since being assigned to drive this vehicle have you had any "refresher" training related to its operation?

[5] 45,1 Yes, less than 6 mos. ago [0] 45,4 Yes, more than 2 yrs. ago

[0] 45,2 Yes, 6 mos. to 1 yr. ago

[2] 45,3 Yes, 1 to 2 yrs. ago [40] 45,5 None given

9. If you had a refresher course, what did the training involve?

[4] 46 Classroom instruction [3] 49 Written test

[2] 47 Riding instruction [0] 50 Riding test (in traffic)

[3] 48 Reading material only [3] 51 Riding test (off street)

10. Experience

a. Driving any kind of motor vehicle? [12.8 (44)] 52-53 yrs. 54-55 mos.

b. Driving any kind of cycle? [5.5 (40)] 56-57 yrs. 58-59 mos.

c. Length of assignment to your current type of cycle? [1.8 (44)] 60-61 yrs. 62-63 mos.

SECTION III

THE FOLLOWING QUESTIONS REFER TO ANY INJURIES YOU RECEIVED IN THE ACCIDENT.

1. Did you receive an injury?

[33] 64,1 Yes [177] 64,2 No

(If "no," this form is complete; if "yes." please answer the following.)

2. Did you complete an injury report?

[26] 65,1 Yes [16] 65,2 No

If yes, please attach a copy of it to this form. Be sure it includes the type and severity of injury and the body part injured. Thank you for your time and cooperation.

Any additional comments you wish to add below are welcome. 74 75 76 77 78 79 80 [4][3][2]

[ ] 1-3 262 Forms Returned

FIELD INTERROGATION REPORT

TO BE COMPLETED BY OFFICERS WHO HAVE CONDUCTED FIELD INTERROGATIONS.

Date and time of incident ___ / ___ / ___ at ___ : ___ 7-10 a.m./p.m. 11,1 11,2 Rank or title P-262 [ ] 12

Years on Force [4.7 (262)] 13-14 years ___ 15 months Shift start ___ : ___ 16-19 a.m./p.m. 20,1 20,2

1. Maximum number of each of the following persons at the scene

[10 (259)] 21 Subjects [2.5 (66)] 22 Police officers (include yourself) [3.4 (91)] 23 Bystanders [2.8 (13)] 24 Other (specify) _____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex	Race	
Yourself	[29.9 (220)] 25-26	[5] 27 ft. [11.5 (260)] 28-29 in.	[190.1 (260)] 30-32 lbs.	M 259 (33) F 0	W=209; B=48; S=3	[ ] 34
Other officer	[29.1 (251)] 35-36	[5] 37 ft. [11.1 (251)] 38-39 in.	[187.5 (251)] 40-42 lbs.	M 247 (43) F 1	W=194; B=52; S=5	[ ] 44
Subject 1	[21.6 (254)] 45-46	[5] 47 ft. [09.7 (253)] 48-49 in.	[160.5 (254)] 50-52 lbs.	M 225 (53) F 9	W=111; B=132; S=10; X=1	[ ] 54
Subject 2	___ 55-56	___ 57 ft. ___ 58-59 in.	___ 60-62 lbs.	M 1 (63) F 2		[ ] 64
Subject 3	___ 65-66	___ 67 ft. ___ 68-69 in.	___ 70-72 lbs.	M 1 (73) F 2		[ ] 74

3. Did the subject(s) speak or understand English?

[259] 75,1 Yes [2] 75,2 No [1] 75,3 Uncertain

4. Did you come within arm's length of the subject(s)?

[260] 76,1 Yes [1] 76,2 No

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[108] 77,1 Yes [153] 77,2 No [041] 78-80

6. Did the subject(s)...

	Yes	No	Uncertain
...use profane language or gesture	[41] 1,1	[217] 1,2	[1] 1,3
...act belligerently	[38] 2,1	[223] 2,2	[0] 2,3
...try to escape	[12] 6,1	[249] 6,2	[0] 6,3
...threathen you	[11] 7,1	[245] 7,2	[1] 7,3
...assault you	[7] 8,1	[249] 8,2	[0] 8,3
...Other (specify) _____			[4] 9

7. Where did the incident take place? (Check one.)

[183] 11,1 On a street/sidewalk [4] 11,6 In an apartment

[41] 11,2 In an alley [5] 11,7 In an apt. bldg. but not in apt.

[8] 11,3 In a yard or field [5] 11,8 In another type of building

[4] 11,4 In a tavern/lounge [0] 11,9 In a house

[9] 11,5 In another public place of business [2] 11,10 Other _____ (specify)

8. Was a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[29] 12,1 Yes [229] 12,2 No

9. Indicate your use of equipment (make one check for each item listed).

	Weapon in hand Used	Weapon in hand Not Used	Available Not Used	Not Available
Revolver	[1] 13,1	[20] 13,2	[238] 13,3	[0] 13,4
Rifle/shotgun	[1] 14,1	[0] 14,2	[35] 14,3	[238] 14,4
Night stick/baton	[1] 15,1	[7] 15,2	[237] 15,3	[15] 15,4
Mace or similar spray	[1] 16,1	[0] 16,2	[248] 16,3	[8] 16,4
Handcuffs	[32] 17,1		[225] 17,2	[0] 17,3
Helmet	[1] 18,1		[237] 18,2	[20] 18,3
Flashlight	[78] 19,1		[167] 19,2	[10] 19,3
Other _____	[1] 20,1		[12] 20,2	[10] 20,3

10. Why did you decide to field interrogate the subject(s)? (Check one.)

[165] 21,1 He appeared out of place or acted suspiciously

[55] 21,2 He fit the description of a wanted person or had a known criminal record

[14] 21,3 He appeared intoxicated

[0] 21,4 He appeared ill

[22] 21,5 I was seeking information

[5] 21,6 Other _____ (specify)

11. Did field interrogation lead to arrest of subject?

[3] 22,1 Yes, and I was injured after arrest was effected

[56] 22,2 Yes, and I was not injured after arrest was effected

[200] 22,3 No

12. When you joined the force, did you receive any training in how to conduct field interrogation?

[257] Yes (23,1) [5] No (23,2)

13. Have you received any refresher or roll call training in field interrogation?

[194] Yes, less than 6 mos. ago (24,1) [4] Yes, more than 2 yrs. ago (24,4)
[28] Yes, 6 mos. to 1 yr. ago (24,2) [23] No (24,5)
[13] Yes, 1 to 2 yrs. ago (24,3)

14. When was the last time your immediate supervisor observed you conducting a field interrogation?

[228] In the last month (25,1) [3] 1 to 2 yrs. ago (25,4)
[19] 1 to 6 mos. ago (25,2) [0] More than 2 yrs. ago (25,5)
[4] 6 mos. to 1 yr. ago (25,3) [8] Never observed (25,6)

15. At time of incident I was in . . .

[152] Plainclothes (26,1) [114] Uniform (26,2)

16. At time of incident were you working from a department vehicle?

[108] Yes, marked (27,1) [152] Yes, unmarked (27,2) [2] No (27,3)

17. Was your last working day on a different shift?

[27] Yes (28,1) [235] No (28,2)

If yes,...

...previous shift started ____:____ (29-32) a.m./p.m. (33,1 / 33,2)

...my last working day on previous shift was

[13] Yesterday (34,1) [8] 3 days ago (34,3)
[6] 2 days ago (34,2) [3] More than 3 days ago (34,4)

18. Assignment

[0] Foot patrol (35,1) [0] Traffic (motor) (35,4)
[16] Motor patrol (35,2) [2] Investigative (Det.) (35,5)
[0] Traffic (foot) (35,3) [144] Other All Tactical (specify) (35,6)

19. Years on assignment: [2.2 (262)] (36-37) years and ____ (38) months

20. Last rest stop of 10 or more minutes (e.g. lunch, coffee, etc.) before incident ____:____ (39-42) a.m./p.m. (43,1 / 43,2)

21. Do you follow a regular exercise program?

[164] Yes (44,1) [98] No (44,2)

If yes,...

...is the program required or run by the department?

[0] Yes (45,1) [234] No (45,2)

...how often do you exercise?

[75] Daily (46,1) [43] Every 3 days (46,3)
[57] Every other day (46,2) [48] Other ____ (specify) (46,4)

...indicate what you do (e.g., calisthenics, jogging, sports, etc.)
C=104; R=30; S=35; X=4 (47)

22. Have you taken a physical fitness test in the past year?

[111] Yes, passed (48,1) [0] Yes, failed (48,2) [150] Not given (48,3)

23. When was the last time you received a complete physical examination by a physician?

[87] Less than 6 mos. ago (49,1) [38] 2 to 5 yrs. ago (49,4)
[86] 6 mos. to 1 yr. ago (49,2) [4] More than 5 yrs. ago (49,5)
[45] 1 to 2 yrs. ago (49,3)

24. Do you have another job in your off duty hours?

[39] Yes (50,1) [218] No (50,2)

042 (78-80)

[ ] (1-3) 26 Forms Returned

FIELD INTERROGATION INJURY REPORT

Name ____

TO BE COMPLETED BY ALL OFFICERS INJURED WHILE CONDUCTING A FIELD INTERROGATION BUT BEFORE AN ARREST WAS EFFECTED

Date and time of incident ____/____/____ (mo. 4 / day 5-6 / yr.) at ____:____ (7-10) a.m. / p.m. (11,1 / 11,2) Rank or title P-25 [ ] (12)

Years on force [1.8 (25)] (13-14) years ____ (15) months Shift start ____:____ (16-19) a.m. / p.m. (20,1 / 20,2)

1. Before you were injured, what was the maximum number of each of the following persons at the scene?

[1.0 (20)] (21) Subjects [2.5 (26)] (22) Police officers (include yourself) [6.0 (12)] (23) Bystanders [1.0 (3)] (24) Other (specify) ____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex	Race	
Yourself	25.5 (25) (25-26)	6 (27) ft. 00.5 (25) (28-29) in.	175.1 (25) (30-32) lbs.	M (33) 25 / F 0	W=22; S=3	[ ] (34)
Other officer	24.9 (24) (35-36)	6 (37) ft. 00.2 (25) (38-39) in.	175.4 (25) (40-42) lbs.	M (43) 22 / F 0	W=18; B=2; S=3	[ ] (44)
Subject 1	23.0 (24) (45-46)	5 (47) ft. 09.9 (24) (48-49) in.	165.5 (24) (50-52) lbs.	M (53) 17 / F 2	W=8; B=11; S=4	[ ] (54)
Subject 2	____ (55-56)	____ (57) ft. ____ (58-59) in.	____ (60-62) lbs.	M (63) 1 / F 2	____	[ ] (64)
Subject 3	____ (65-66)	____ (67) ft. ____ (68-69) in.	____ (70-72) lbs.	M (73) 1 / F 2	____	[ ] (74)

3. Did the subject(s) speak or understand English?

[24] Yes (75,1) [2] No (75,2) [0] Uncertain (75,3)

4. Before you were injured, did you come within arm's length of the subject(s)?

[21] Yes (76,1) [5] No (76,2)

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[25] Yes (77,1) [1] No (77,2) 051 (78-80)

6. Before you were injured, did the subject(s) ...

	Yes	No	Uncertain
... use profane language or gesture	19 (4,1)	4 (4,2)	3 (4,3)
... act belligerently	23 (5,1)	2 (5,2)	0 (5,3)
... try to escape	15 (6,1)	8 (6,2)	0 (6,3)
... threaten you	12 (7,1)	11 (7,2)	0 (7,3)
... assault you	19 (8,1)	4 (8,2)	0 (8,3)
... Other (specify) ____			2 (9)

7. Where did the incident take place? (check one)

[19] On a street/sidewalk (11,1) [0] In a house (11,6)
[0] In an alley (11,2) [2] In an apartment (11,7)
[2] In a yard or field (11,3) [1] In an apt. bldg. but not in apt. (11,8)
[1] In a tavern or lounge (11,4) [0] In another type of building (11,9)
[0] In another public place of business (11,5) [1] Other ____ (specify) (10-11,10)

8. Before you were injured, was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[5] Yes (12,1) [21] No (12,2)

9. Indicate your use of equipment before you were injured (make one check for each item listed)

	Used	Weapon in hand not used	Available not used	Not available
Revolver	0 (13,1)	5 (13,2)	17 (13,3)	0 (13,4)
Rifle/shotgun	0 (14,1)	1 (14,2)	8 (14,3)	11 (14,4)
Night stick/baton	3 (15,1)	1 (15,2)	15 (15,3)	4 (15,4)
Mace or similar spray	0 (16,1)	2 (16,2)	0 (16,3)	18 (16,4)
Handcuffs	11 (17,1)		11 (17,2)	0 (17,3)
Helmet	0 (18,1)		8 (18,2)	12 (18,3)
Flashlight	4 (19,1)		12 (19,2)	4 (19,3)
Other ____ (specify)	1 (20,1)		0 (20,2)	0 (20,2)

10. Why did you decide to field interrogate the subject(s)? (check one)

[12] He appeared out of place or acted suspiciously (21,1)
[2] He fit the description of a wanted person or had a known criminal record (21,2)
[2] He appeared intoxicated (21,3)
[0] He appeared ill (21,4)
[3] I was seeking information (21,5)
[7] Other (Specify) ____ (21,6)

11. Did field interrogation lead to arrest of subject(s)?

[11] Yes, and I was injured after arrest was effected. (22,1)
[11] Yes, and I was not injured after arrest was effected (22,2)
[3] No (22,3)

12. When you joined the force, did you receive any training in how to conduct field interrogation?

[26] 23,1 Yes [0] 23,2 No

13. Have you received any refresher or roll call training in field interrogation?

[16] 24,1 Yes, less than 6 mos. [1] 24,4 Yes, more than 2 yrs. ago
[2] 24,2 Yes, 6 mos. to 1 yr. ago [7] 24,5 No
[0] 24,3 Yes, 1 to 2 yrs. ago

14. When was the last time your immediate supervisor observed you conducting a field interrogation?

[21] 25,1 In the last month [0] 25,4 1 to 2 yrs. ago
[3] 25,2 1 to 6 mos. ago [0] 25,5 More than 2 yrs. ago
[1] 25,3 6 mos. to 1 yr. ago [1] 25,6 Never observed

15. At the time of the incident I was in ...

[1] 26,1 Plainclothes [23] 26,2 Uniform

16. Who injured you? (check one)

[21] 27,1 Subject [1] 27,3 Myself
[1] 27,2 Subject's friend [2] 27,4 Other_____ (specify)

17. In your opinion which of the following best describes the actions of the person checked above? (check one)

[9] 28,1 Intended to injure me [1] 28,4 Not intended to injure me, interfere or escape
[5] 28,2 Intended to interfere with performance of my duty [1] 20,5 Unknown
[9] 28,3 Intended as part of escape [0] 28,6 Other_____ (specify)

18. What were you doing when injured? (check one)

[1] 29,1 Approaching subject [9] 29,3 Questioning subject
[6] 29,2 Stopping subject [8] 29,4 Other_____ (specify)

19. What was used to cause your injury? (check one)

[2] 31,1 Revolver /pistol [7] 31,6 Legs/feet
[0] 31,2 Rifle/shotgun [2] 31,7 Teeth
[1] 31,3 Knife/razor [0] 31,8 Other body part (specify)
[0] 31,4 Thrown object _____
[7] 31,5 Hands/arms [5] 31,9 Other_____ (specify)

20. Be sure to attach a copy of the department's injury report form, making certain that it indicates the severity of injury, the part of body injured, the type of injury (i.e., laceration) and the cause of injury (i.e., fall, stab, slip, assault).

21. At time of incident were you working from a department vehicle?

[18] 32,1 Yes, marked [2] 32,2 Yes, unmarked [5] 32,3 No

22. Was your last working day on a different shift?

[1] 33,1 Yes [24] 33,2 No

If Yes, ..
.. previous shift started ____:____ 34-37 a.m. / p.m. 38,1 38,2
.. my last working day on previous shift was:

[9] 39,1 Yesterday [0] 39,3 3 days ago
[0] 39,2 2 days ago [0] 39,4 More than 3 days ago

23. Assignment:

[5] 40,1 Foot patrol [0] 40,4 Traffic (motor)
[17] 40,2 Motor patrol [1] 49,5 Investigative (Det.)
[1] 40,3 Traffic (foot) [1] 40,6 Other_____ (specify)

24. Years on assignment: [15(24)] 41-42 Years and _____ 43 Months

25. Last rest stop of 10 or more minutes (e.g., lunch, coffee, etc.) before incident ____:____ 44-47 a.m./p.m. 48,1 48,2

26. Do you follow a regular exercise program?

[20] 49,1 Yes [4] 49,2 No

If Yes, ..
.. is the program required or run by the department?

[1] 50,1 Yes [20] 50,2 No

.. how often do you exercise?

[6] 51,1 Daily [5] 51,3 Every 3 days
[10] 51,2 Every other day [1] 51,4 Other_____ (specify)

.. indicate what you do (e.g., calisthenics, jogging, sports, etc.)

C=9; R=3; S=2; X=1 [ ] 52

27. Have you taken a physical fitness test in the past year?

[12] 53,1 Yes, passed [0] 53,2 Yes, failed [14] 53,3 Not given

28. When was the last time you received a complete physical examination by a physician?

[18] 54,1 Less than 6 mos. ago [2] 54,3 1 to 2 yrs. ago [0] 54,5 More than 5 yrs. ago
[6] 54,2 6 mos. to 1 yr. ago [0] 54,4 2 to 5 yrs. ago

29. Do you have another job in your off-duty hours?

[0] 55,1 Yes [24] 55,2 No [052] 78-80

BE SURE TO ATTACH DEPARTMENT INJURY REPORT FORM

[ ] 1-3 27 Forms Returned

UNPROVOKED ASSAULT, AMBUSH, BOOBY TRAP

Name_____

TO BE COMPLETED BY ALL OFFICERS WHO WERE VICTIMS OF UNPROVOKED ASSAULTS, AMBUSHES OR BOOBY TRAPS, WHETHER OR NOT AN INJURY RESULTED. DO NOT USE THIS REPORT IF YOU WERE ASSAULTED BY A PERSON (OR PERSONS) YOU WERE INTERROGATING OR ARRESTING.

Date and time of incident ___/___/___ mo. 4 day 5-6 yr. at ___:___ 7-10 a.m./p.m. 11,1 11,2 Rank or title P-23 S-3 [ ] 12

Years on force 2.5(26) 13-14 years _____ 15 months Shift start ___:___ 16-19 a.m./p.m. 20,1 20,2

1. Before you were assaulted (ambushed, booby trapped), what was the maximum number of each of the following persons at the scene

4.5(26) 21 Subjects 4.7(26) 22 Police officers (include yourself) 9.1(14) 23 Bystanders 4.0(8) 24 Other (specify) _____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex	Race	
Yourself	26.8 (27) 25-26	5 27 ft. 11.2 (27) 28-29 in.	180.5 (27) 30-32 lbs.	M 27 (33) F 0	W=23; B=2; S=2	34
Other officer	26.2 (19) 35-36	5 37 ft. 11.4 (20) 38-39 in.	180.2 (20) 40-42 lbs.	M 21 (43) F 0	W=16; B=2; S=1	44
Subject 1	28.5 (19) 45-46	5 47 ft. 11.1 (19) 48-49 in.	180.2 (19) 50-52 lbs.	M 17 (53) F 2	W=6; B=12; S=2	54
Subject 2	55-56	57 ft. 58-59 in.	60-62 lbs.	M 1 (63) F 2		64
Subject 3	65-66	67 ft. 68-69 in.	70-72 lbs.	M 1 (73) F 2		74

3. Of which kind of assault were you the victim?

[23] 75,1 Unprovoked [2] 75,2 Ambush [0] 75,3 Booby trap

4. Did the subject(s) speak or understand English?

[29] 76,1 Yes [0] 76,2 No [3] 76,3 Uncertain

5. Before you were assaulted, did you come within arm's length of the subject(s)?

[12] 77,1 Yes [15] 77,2 No [061] 78-80

6. Before you were assaulted, was it necessary to grasp, hold, support or touch the subject(s)?

[5] 4,1 Yes [22] 4,2 No

7. Before you were assaulted, did the subject(s)...

	Yes	No	Uncertain
...use profane language or gesture	[15] 5,1	[4] 5,2	[1] 5,3
...act belligerently	[19] 6,1	[4] 6,2	[0] 6,3
...try to escape	[8] 7,1	[10] 7,2	[0] 7,3
...threathen you	[14] 8,1	[5] 8,2	[0] 8,3
...Other (specify) _____			[2] 9

8. Where did the incident take place? (Check one.)

[18] 11,1 On a street or sidewalk
[2] 11,2 In an alley
[4] 11,3 In a yard or field
[0] 11,4 In a tavern or lounge
[0] 11,5 In another public place of business
[2] 11,6 In a house
[0] 11,7 In an apartment
[0] 11,8 In an apt. bldg. but not in an apt.
[0] 11,9 In another type of bldg.
[0] 10-11,10 Other _____ (specify)

9. Before you were assaulted, was a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[12] 12,1 Yes [15] 12,2 No

10. Indicate your use of equipment (make one check for each item listed).

	Used	Weapon in hand Not Used	Available Not used	Not Available	
Revolver	[3] 13,1	[5] 13,2	[18] 13,3	[0] 13,4	
Rifle/shotgun	[2] 14,1	[2] 14,2	[16] 14,3	[5] 14,4	
Night stick/baton	[6] 15,1	[1] 15,2	[18] 15,3	[2] 15,4	
Mace or similar spray	[0] 16,1	[0] 16,2	[1] 16,3	[24] 16,4	
Handcuffs	[17] 17,1		[12] 17,2	[0] 17,3	
Helmet	[4] 18,1		[18] 18,2	[3] 18,3	
Flashlight	[2] 19,1		[17] 19,2	[7] 19,3	
Other _____	[2] 20,1		[0] 20,2	[0] 20,3	

11. What were you doing when assaulted?

[1] 21,1 Patrolling on foot
[2] 21,2 Patrolling by car
[5] 21,3 Responding to a call (ambush or booby trap lure)
[1] 21,4 Questionning citizen(s) who did not assault you
[13] 21,5 Other (specify)_____

12. What was used to assault you? (check one)

[2] 23,1 Revolver/pistol
[3] 23,2 Rifle/shotgun
[0] 23,3 Knife/razor
[6] 23,4 Thrown object
[5] 23,5 Hands/arms
[1] 23,6 Legs/feet
[0] 23,7 Teeth
[0] 23,8 Other body part (specify) _____
[0] 23,9 Other_____ (specify)
[0] 22-23,10 Booby trap_____ (specify)

13. When you joined the force, did you receive any training in how to to avoid ambushes and booby traps?

[22] 24,1 Yes [5] 24,2 No

14. Have you received any refresher or roll call training in how to avoid ambushes and booby traps?

[24] Yes, less than 6 mos. (25,1) [0] Yes, more than 2 yrs. ago (25,4)
[3] Yes, 6 mos. to 1 yr. ago (25,2) [0] No (25,5)
[0] Yes, 1 to 2 yrs. ago (25,3)

15. At the time of the incident I was in

[0] Plainclothes (26,1) [27] Uniform (26,2)

16. At time of incident were you working from a department vehicle?

[27] Yes, marked (27,1) [0] Yes, unmarked (27,2) [3] No (27,3)

17. Was your last working day on a different shift?

[2] Yes (28,1) [25] No (28,2)

If yes,...

...previous shift started ___:___ a.m./p.m. (29-32; 33,1; 33,2)

...my last working day on previous shift was:

[8] Yesterday (34,1) [0] 3 days ago (34,3)
[1] 2 days ago (34,2) [1] More than 3 days ago (34,4)

18. Assignment

[3] Foot patrol (35,1) [1] Traffic (motor) (35,4)
[19] Motor patrol (35,2) [0] Investigative (Det.) (35,5)
[1] Traffic (foot) (35,3) [2] Other ___ (specify) (35,6)

19. Years on assignment [27] (33-37) years and ___ (38) months

20. Last rest stop of 10 or more minutes (e.g. lunch, coffee, etc.) before incident ___:___ (39-42) a.m./p.m. (43,1; 43,2)

21. Do you follow a regular exercise program?

[19] Yes (44,1) [8] No (44,2)

If yes,...

...is the program required or run by the department?

[1] Yes (45,1) [20] No (45,2)

...how often do you exercise?

[7] Daily (46,1) [3] Every 3 days (46,3)
[9] Every other day (46,2) [4] Other ___ (specify) (46,4)

...indicate what you do (e.g. calisthenics, jogging, sports, etc.)

C=10; R=2 [ ] (47)

22. Have you taken a physical fitness test in the past year

[7] Yes, passed (48,1) [0] Yes, failed (48,2) [20] Not given (48,3)

23. When was the last time you received a complete physical examination by a physician?

[10] Less than 6 mos. ago (49,1) [0] 2 to 5 yrs. ago (49,4)
[12] 6 mos. to 1 yr. ago (49,2) [0] More than 5 yrs. ago (49,5)
[5] 1 to 2 yrs. ago (49,3)

24. Do you have another job in your off duty hours?

[0] Yes (50,1) [27] No (50,2)

25. Were you injured as a result of the assault, ambush or booby trap?

[9] Yes (51,1) [18] No (51,2)

If yes, be sure to attach a copy of the department's injury report form, making certain that it indicates the severity of injury, the part of body injured, the type of injury (i.e., laceration) and the cause of injury (i.e., fall, stab, slip, assault).

062 (78-80)

[ ] (1-3) 98 Forms Returned

SUMMONS, PREARREST REPORT

TO BE COMPLETED BY OFFICERS FOR THAT TIME PERIOD BEFORE AN ARREST WAS EFFECTED OR A SUMMONS OR WARNING WAS ISSUED.

Date and time of incident ___/___/___ (mo. 4; day 5-6; yr.) at ___:___ (7-10) a.m./p.m. (11,1; 11,2) Rank or title P-97 (12)

Years on force 4.7 (98) (13-14) years ___ (15) months Shift start ___:___ (16-19) a.m./p.m. (20,1; 20,2)

1. What was the maximum number of each of the following persons at the scene

1.0 (94) (21) Subjects 2.5 (98) (22) Police officers (include yourself) 2.9 (40) (23) Bystanders 1.0 (10) (24) Other (specify) ___

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present that the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height, and weight.

	Age	Height	Weight	Sex	Race	
Yourself	28.6 (98) (25-26)	5 (27) ft. 11.4 (98) (28-29) in.	190.0 (98) (30-32) lbs.	M 95 (31) F 0	W=91; B=6	(34)
Other officer	30.3 (87) (35-36)	5 (37) ft. 11.0 (87) (38-39) in.	185.9 (86) (40-42) lbs.	M 86 (43) F 0	W=79; B=8	(44)
Subject 1	26.9 (97) (45-46)	5 (47) ft. 09.3 (96) (48-49) in.	165.6 (96) (50-52) lbs.	M 83 (53) F 8	W=78; B=17; S=1	(54)
Subject 2	___ (55-56)	___ (57) ft. ___ (58-59) in.	___ (60-62) lbs.	M 1 (63) F 2		(64)
Subject 3	___ (65-66)	___ (67) ft. ___ (68-69) in.	___ (70-72) lbs.	M 1 (73) F 2		(74)

3. Did the subject(s) speak or understand English?

[78] Yes (75,1) [0] No (75,2) [0] Uncertain (75,3)

4. Did you come within arm's length of the subject(s)?

[77] Yes (76,1) [2] No (76,2)

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[45] Yes (77,1) [32] No (77,2) 071 (78-80)

6. Did the subject(s)...

	Yes	No	Uncertain
...use profane language or gesture	22 (4,1)	11 (4,2)	2 (4,3)
...act belligerently	25 (5,1)	67 (5,2)	3 (5,3)
...try to escape	9 (6,1)	89 (6,2)	0 (6,3)
...threathen you	14 (7,1)	80 (7,2)	0 (7,3)
...assault you	9 (8,1)	84 (8,2)	0 (8,3)

...Other (specify) ___ [2] (9)

7. Where did the incident take place? (Check one.)

[62] On a street/sidewalk (11,1) [8] In a house (11,6)
[2] In an alley (11,2) [9] In an apartment (11,7)
[2] In a yard or field (11,3) [1] In an apt. bldg. but not in apt. (11,8)
[4] In a tavern/lounge (11,4) [3] In another type of bldg. (11,9)
[5] In another public place of business (11,5) [0] Other ___ (specify) (10-11,10)

8. Was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[22] Yes (12,1) [74] No (12,2)

9. Indicate your use of equipment (make one check for each item listed).

	Used	Weapon in Hand Not Used	Available Not Used	Not Available
Revolver	0 (13,1)	2 (13,2)	83 (13,3)	1 (13,4)
Rifle/shotgun	0 (14,1)	0 (14,2)	10 (14,3)	90 (14,4)
Night stick/baton	1 (15,1)	5 (15,2)	79 (15,3)	6 (15,4)
Mace or similar spray	0 (16,1)	1 (16,2)	52 (16,3)	27 (16,4)
Handcuffs	21 (17,1)		67 (17,2)	1 (17,3)
Helmet	1 (18,1)		65 (18,2)	13 (18,3)
Flashlight	24 (19,1)		57 (19,2)	3 (19,3)
Other ___	3 (20,1)		1 (20,2)	2 (20,3)

10. When this incident began, was your intent to issue a summons or warning for a misdemeanor?

[35] Yes (21,1) [62] No (21,2)

11. When you joined the force, did you receive any training in how to issue a summons and/or warning?

[94] Yes (22,1) [3] No (22,2)

12. Have you received any refresher or roll call training in how to issue summons and/or warnings?

[45] Yes, less than 6 mos. ago (23,1) [4] Yes, more than 2 years ago (23,4)
[20] Yes, 6 mos. to 1 yr. ago (23,2) [21] No (23,5)
[7] Yes, 1 to 2 yrs. ago (23,3)

13. When was the last time your immediate supervisor observed you issuing a summons and/or warning?

[53] In the last month (24,1) [3] 1 to 2 yrs. ago (24,4)
[17] 1 to 6 mos. ago (24,2) [0] More than 2 yrs. ago (24,5)
[5] 6 mos. to 1 yr. ago (24,3) [17] Never observed (24,6)

14. When this incident began, was your intent to make an arrest?

[43] 25,1 Yes [54] 25,2 No

15. When you joined the force, did you receive any training in prearrest procedures?

[94] 26,1 Yes [3] 26,2 No

16. Have you received any refresher or roll call training in prearrest procedures?

[78] 27,1 Yes, less than 6 mos. ago [4] 27,4 Yes, more than 2 yrs. ago
[21] 27,2 Yes, 6 mos. to 1 yr. ago [12] 27,5 No
[11] 27,3 Yes, 1 to 2 yrs. ago

17. When was the last time your immediate supervisor observed you in prearrest situations?

[57] 28,1 In the last month [2] 28,4 1 to 2 yrs. ago
[22] 28,2 1 to 6 mos. ago [3] 28,5 More than 2 yrs. ago
[3] 28,3 6 mos. to 1 yr. ago [11] 28,6 Never observed

18. At the time of the incident I was in:

[1] 29,1 Plainclothes [90] 29,2 Uniform

19. At time of incident were you working from a department vehicle

[88] 30,1 Yes, marked [0] 30,2 Yes, unmarked [9] 30,3 No

20. Were you injured after arrest was effected?

[2] 31,1 Yes, subject caused injury
[0] 31,2 Yes, subject did not cause injury [13] 31,3 No

21. Was your last working day on a different shift?

[7] 32,1 Yes [90] 32,2 No

If yes,...

...previous shift started ____:____ (33-36) a.m./p.m. (37,1 37,2)

...my last working day on previous shift was

[6] 36,1 Yesterday [1] 36,3 3 days ago
[3] 36,2 2 days ago [1] 36,4 More than 3 days ago

22. Assignment

[4] 39,1 Foot patrol [0] 39,4 Traffic (motor)
[95] 39,2 Motor patrol [1] 39,5 Investigative (Det.)
[2] 39,3 Traffic (foot) [0] 39,6 Other ____ (specify)

23. Years on assignment: [2.7(95)] (40-41) years and ____ (42) months

24. Last rest stop of 10 or more minutes (e.g. lunch, coffee, etc.) before incident ____:____ (45-46) a.m./p.m. (47,1 47,2)

25. Do you follow a regular exercise program?

[37] 48,1 Yes [62] 48,2 No

If yes,...

...is the program required or run by the department?

[0] 49,1 Yes [37] 49,2 No

...how often do you exercise?

[16] 50,1 Daily [15] 50,3 Every 3 days
[15] 50,2 Every other day [15] 50,4 Other ____ (specify)

...indicate what you do (e.g., calisthenics, jogging, sports, etc.)

C=20; R=11; S=19; X=5 (51)

26. Have you taken a physical fitness test in the past year?

[25] 52,1 Yes, passed [0] 52,2 Yes, failed [70] 52,3 Not given

27. When was the last time you received a complete physical examination by a physician?

[29] 53,1 Less than 6 mos. ago [9] 53,4 2 to 5 yrs. ago
[20] 53,2 6 mos. to 1 yr. ago [7] 53,5 More than 5 yrs. ago
[37] 53,3 1 to 2 yrs. ago

28. Do you have another job in your off duty hours?

[13] 54,1 Yes [82] 54,2 No [072] (78-80)

BE SURE TO ATTACH DEPARTMENT INJURY REPORT FORM

[60] (1-3) Forms Returned

SUMMONS, PREARREST INJURY REPORT

Name ____

TO BE COMPLETED BY ALL OFFICERS INJURED BEFORE AN ARREST WAS EFFECTED OR A SUMMONS OR WARNING WAS ISSUED.

Date and time of incident ____/____/____ (mo. 4 day 5-6 yr.) at ____:____ (7-10) a.m./p.m. (11,1 11,2) Rank or title P-54; S-3; L-1 (12)

Years on force [3.1 (58)] (13-14) years ____ (15) months Shift start ____:____ (16-19) a.m./p.m. (20,1 20,2)

1. Before you were injured, what was the maximum number of each of the following persons at the scene

[1.0(51)] (21) Subjects [4.5(68)] (22) Police officers (include yourself) [4.8(33)] (23) Bystanders [4.5(3)] (24) Other (specify) ____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height, and weight.

	Age	Height	Weight	Sex	Race	
Yourself	27.5 (60) (25-26)	5 (27) ft. 11.0 (60) (28-29) in.	180.3 (60) (30-32) lbs.	M (33) F 0	W=60	(34)
Other officer	25.0 (44) (35-36)	5 (37) ft. 11.0 (44) (38-39) in.	175.7 (44) (40-42) lbs.	M (43) F 0	W=36; B=5; S=3; X=1	(44)
Subject 1	27.1 (51) (45-46)	5 (47) ft. 10.6 (51) (48-49) in.	160.9 (51) (50-52) lbs.	M (53) F 42	W=21; B=24; S=5	(54)
Subject 2	____ (55-56)	____ (57) ft. ____ (58-59) in.	____ (60-62) lbs.	M (63) F 1 2	____	(64)
Subject 3	____ (65-66)	____ (67) ft. ____ (68-69) in.	____ (70-72) lbs.	M (73) F 1 2	____	(74)

3. Did the subject(s) speak or understand English?

[57] 75,1 Yes [1] 75,2 No [6] 75,3 Uncertain

4. Before you were injured, did you come within arm's length of the subject(s)?

[76] 76,1 Yes [13] 76,2 No

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[47] 77,1 Yes [10] 77,2 No [081] (78-80)

6. Before you were injured, did the subject(s)...

	Yes	No	Uncertain
...use profane language or gesture	[37] 4,1	[10] 4,2	[3] 4,3
...act belligerently	[46] 5,1	[4] 5,2	[2] 5,3
...try to escape	[26] 6,1	[22] 6,2	[1] 6,3
...threathen you	[29] 7,1	[27] 7,2	[3] 7,3
...assault you	[34] 8,1	[16] 8,2	[2] 8,3
...Other (specify) ____			[4] (9)

7. Where did the incident take place? (Check one.)

[31] 11,1 On a street or sidewalk
[1] 11,2 In an alley
[1] 11,3 In a yard or field
[0] 11,4 In a tavern/lounge
[1] 11,5 In another public place of business
[2] 11,6 In a house
[3] 11,7 In an apartment
[1] 11,8 In an apt. bldg. but not in an apt.
[0] 11,9 In another type of bldg.
[15] 10-11,10 Other ____ (specify)

8. Before you were injured, was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[11] 12,1 Yes [49] 12,2 No

9. Indicate your use of equipment before you were injured (make one check for each item listed).

	Used	Weapon in Hand Not Used	Available Not Used	Not Available
Revolver	[1] 13,1	[4] 13,2	[47] 13,3	[8] 13,4
Rifle shotgun	[0] 14,1	[0] 14,2	[15] 14,3	[37] 14,4
Night stick/baton	[6] 15,1	[2] 15,2	[23] 15,3	[27] 15,4
Mace or similar spray	[0] 16,1	[0] 16,2	[4] 16,3	[45] 16,4
Handcuffs	[21] 17,1		[31] 17,2	[8] 17,3
Helmet	[2] 18,1		[17] 18,2	[30] 18,3
Flashlight	[2] 19,1		[23] 19,2	[23] 19,3
Other ____	[4] 20,1		[2] 20,2	[7] 20,3

10. When this incident began, was your intent to issue a summons or warning for a misdemeanor?

[16] 21,1 Yes [44] 21,2 No

11. When you joined the force, did you receive any training in how to issue summons and/or warnings?

[37] 22,1 Yes [2] 22,2 No

12. Have you received any refresher or roll call training in how to issue summons and/or warnings?

[34] 23,1 Yes, less than 6 mos. ago
[12] 23,2 Yes, 6 mos. to 1 yr. ago
[2] 23,3 Yes, 1 to 2 yrs. ago
[1] 23,4 Yes, more than 2 yrs. ago
[10] 23,5 No

13. When was the last time your immediate supervisor observed you issuing a summons and/or warning?

[26] 24,1 In the last month
[13] 24,2 1 to 6 mos. ago
[4] 24,3 6 mos. to 1 yr. ago
[0] 24,4 1 to 2 yrs. ago
[2] 24,5 More than 2 yrs. ago
[15] 24,6 Never observed

14. When this incident began, was your intent to make an arrest?

[27] Yes (25,1) [37] No (25,2)

15. When you joined the force, did you receive any training in prearrest procedures?

[57] Yes (26,1) [1] No (26,2)

16. Have you received any refresher or roll call training in prearrest procedures?

[41] Yes, less than 6 months ago (27,1) [3] No (27,5)
[9] Yes, 6 months to 1 year ago (27,2)
[4] Yes, 1 to 2 years ago (27,3)
[2] Yes, more than 2 years ago (27,4)

17. When was the last time your immediate supervisor observed you in prearrest situations?

[31] In the last month (28,1) [1] 1 to 2 yrs. ago (28,4)
[14] 1 to 6 mos. ago (28,2) [2] More than 2 yrs. ago (28,5)
[3] 6 mos. to 1 yr. ago (28,3) [8] Never observed (28,6)

18. At the time of the incident I was in:

[10] Plainclothes (29,1) [46] Uniform (29,2)

19. Who injured you? (Check one.)

[49] Subject (30,1) [6] Myself (30,3)
[1] Subject's friend (30,2) [1] Other (30,4) _____ (specify)

20. In your opinion which of the following best describes the actions of the person checked above? (Check one.)

[31] Intended to injure me (31,1) [0] Not intended to injure me, interfere or escape (31,4)
[4] Intended to interfere with the performance of my duty (31,2) [2] Unknown (31,5)
[13] Intended as part of escape (31,3) [2] Other _____ (specify) (31,6)

21. What were you doing when injured?

[7] Investigating suspicious circumstances (32,1) [12] Confronting subject (32,3)
[7] Following or pursuing subject (32,2) [11] Questionning subject (32,4)
[16] Other _____ (specify) (32,5)

22. What was used to cause your injury? (Check one.)

[1] Revolver/pistol (34,1) [14] Hands/arms (34,5) [5] Other body part (34,8)
[0] Rifle/shotgun (34,2) [11] Legs/feet (34,6) _____ (specify)
[1] Knife razor (34,3) [3] Teeth (34,7)
[1] Thrown object (34,4) [12] Other _____ (specify) (34,9)

23. Be sure to attach a copy of the department's injury report form, making certain that it indicates the severity of injury, the part of body injured, the type of injury (i.e., laceration) and the cause of injury (i.e., fall, stab, slip, assault).

24. At time of incident were you working from a department vehicle?

[35] Yes marked (35,1) [4] Yes, unmarked (35,2) [22] No (35,3)

25. Were you injured after arrest was effected?

[29] Yes, subject caused injury (36,1)
[1] Yes, subject did not cause injury (36,2) [28] No (36,3)

26. Was your last working day on a different shift?

[1] Yes (37,1) [53] No (37,2)

If yes,...

...previous shift started ___:___ (38-41) a.m./p.m. (42,1 / 42,2)

...my last working day on previous shift was

[9] Yesterday (43,1) [0] 3 days ago (43,3)
[3] 2 days ago (43,2) [1] More than 3 days ago (43,4)

27. Assignment

[4] Foot patrol (44,1) [1] Traffic (motor) (44,4)
[20] Motor patrol (44,2) [2] Investigative (Det.) (44,5)
[2] Traffic (foot) (44,3) [7] Other _____ (specify) (44,6)

28. Years on assignment 1.8(53) (45-46) years and _____ (47) months

29. Last rest stop of 10 or more minutes (e.g. lunch, coffee, etc.) before incident ___:___ (48-51) a.m./p.m. (52,1 / 52,2)

30. Do you follow a regular exercise program?

[37] Yes (53,1) [20] No (53,2)

If yes,...

...is the program required or run by the department?

[0] Yes (54,1) [20] No (54,2)

...how often do you exercise?

[12] Daily (55,1) [9] Every 3 days (55,3)
[18] Every other day (55,2) [9] Other _____ (specify) (55,4)

...indicate what you do (e.g., calisthenics, jogging, sports, etc.)

C=24; R=5; S=1 (56)

31. Have you taken a physical fitness test in the past year?

[13] Yes, passed (57,1) [0] Yes, failed (57,2) [45] Not given (57,3)

32. When was the last time you received a complete physical examination by a physician?

[22] Less than 6 mos. ago (58,1) [3] 2 to 5 yrs. ago (58,4)
[20] 6 mos. to 1 yr. ago (58,2) [2] More than 5 yrs. ago (58,5)
[12] 1 to 2 yrs. ago (58,3)

33. Do you have another job in your off duty hours?

[2] Yes (59,1) [57] No (59,2) (082 / 76-80)

BE SURE TO ATTACH DEPARTMENT INJURY REPORT FORM

[ ] (1-3) 233 Forms Returned

ARREST AND SEARCH REPORT

TO BE COMPLETED BY OFFICERS FOR THAT TIME PERIOD STARTING WHEN AN ARREST HAS BEEN EFFECTED AND ENDING WHEN THE PRISONER IS ESCORTED TO A VEHICLE FOR TRANSPORTATION OR IS ESCORTED DIRECTLY TO THE STATION.

Date and time of incident ___/___/___ (mo. 4 / day 5-6 / yr.) at ___:___ (7-10) a.m. (11,1) / p.m. (11,2) Rank or title P-222; S-2 [ ] (12)

Years on force 5.1(230) (13-14) years ___ (15) months Shift start ___:___ (16-19) a.m. (20,1) / p.m. (20,2)

SECTION I

1. What is the maximum number of each of the following persons at the scene?

1.0(222) (21) Subjects 2.7(28) (22) Police officers (include yourself) 4.2(127) (23) Bystanders 1.0(43) (24) Other (specify) _____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex		Race	
Yourself	29.3(232) (25-26)	5 (27) ft. 11.3(232) (28-29) in.	185.9(232) (30-32) lbs.	M (33) 222	F 2	W=218; B=8; S=1	[ ] (34)
Other officer	29.6(206) (35-36)	5 (37) ft. 11.1(208) (38-39) in.	181.0(208) (40-42) lbs.	M (43) 201	F 2	W=196; B=7; S=1	[ ] (44)
Subject 1	24.0(216) (45-46)	5 (47) ft. 09.5(215) (48-49) in.	160.4(214) (50-52) lbs.	M (53) 189	F 16	W=102; B=94; S=16; X=1	[ ] (54)
Subject 2	___ (55-56)	___ (57) ft. ___ (58-59) in.	___ (60-62) lbs.	M (63) 1	F 2	___	[ ] (64)
Subject 3	___ (65-66)	___ (67) ft. ___ (68-69) in.	___ (70-72) lbs.	M (73) 1	F 2	___	[ ] (74)

3. Did the subject(s) speak or understand English?

[229] Yes (75,1) [1] No (75,2) [2] Uncertain (75,3)

4. Did you come within arm's length of the subject(s)?

[231] Yes (76,1) [1] No (76,2)

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[168] Yes (77,1) [62] No (77,2) (091 / 78-80)

6. Before you were injured, did the subject(s) ..

	Yes	No	Uncertain
...use profane language or gesture	[32] (4,1)	[64] (4,2)	[2] (4,3)
...act belligerently	[40] (5,1)	[57] (5,2)	[2] (5,3)
...try to escape	[20] (6,1)	[73] (6,2)	[4] (6,3)
...threaten you	[15] (7,1)	[75] (7,2)	[2] (7,3)
...assault you	[7] (8,1)	[90] (8,2)	[2] (8,3)
...Other (specify) _____			[6] (9)

7. Where did the incident take place? (Check one)

[109] On a street/sidewalk (11,1) [17] In a house (11,6)
[7] In an alley (11,2) [12] In an apartment (11,7)
[12] In a yard or field (11,3) [10] In apt. bldg. but not in apt. (11,8)
[7] In a tavern/lounge (11,4) [10] In another type of building (11,9)
[37] In another public place of business (11,5) [8] Other _____ (specify) (10-11,10)

8. Was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[36] Yes (12,1) [192] No (12,2)

9. Indicate your use of equipment (make one check for each item listed)

	Used	Weapon in hand not used	Available not used	Not available
Revolver	[7] (13,1)	[30] (13,2)	[162] (13,3)	[0] (13,4)
Rifle/shotgun	[1] (14,1)	[8] (14,2)	[74] (14,3)	[76] (14,4)
Night stick/baton	[3] (15,1)	[25] (15,2)	[133] (15,3)	[20] (15,4)
Mace or similar spray	[0] (16,1)	[2] (16,2)	[30] (16,3)	[123] (16,4)
Handcuffs	[124] (17,1)		[53] (17,2)	[0] (17,3)
Helmet	[1] (18,1)		[72] (18,2)	[83] (18,3)
Flashlight	[47] (19,1)		[121] (19,2)	[11] (19,3)
Other _____ (specify)	[5] (20,1)		[5] (20,2)	[21] (20,3)

SECTION II

10. When you joined the force, did you receive any training in how to search subjects?

[227] Yes (21,1) [3] No (21,2)

11. Have you received any refresher or roll call training in how to search subjects?

[87] Yes, less than 6 mos. ago (22,1) [47] Yes, 1 to 2 yrs. ago (22,3)
[44] Yes, 6 mos. to 1 yr. ago (22,2) [19] Yes, more than 2 yrs. ago (22,4)
[35] No (22,5)

12. When was the last time your immediate supervisor observed you searching a subject?

[87] In the last month (23,1) [10] 1 to 2 yrs. ago (23,4)
[44] 1 to 6 mos. ago (23,2) [10] More than 2 yrs. ago (23,5)
[18] 6 mos. to 1 yr. ago (23,3) [58] Never observed (23,6)

13. Was the subject(s) in this incident searched?

[211] Yes [14] No

If no, go to SECTION III.

14. How was the search conducted? (Check one)

[168] I searched subject(s) in presence of another officer

[13] I searched subject(s) alone

[26] Another officer searched the subject(s)

[1] Other (specify) _____

15. Was your revolver drawn during the search?

[10] Yes [199] No

16. Which search position was used?

[7] Prone [54] Spread-eagle, leaning against wall

[2] Kneeling [60] Spread-eagle, leaning against car

[83] Standing in the open [9] Other _____ (specify)

17. Did the search yield

	No	Yes	Specify
..weapons?	[166]	[39]	_____
..evidence?	[127]	[67]	_____

SECTION III

18. When you joined the force, did you receive any training in handcuffing procedures?

[22] Yes [7] No

19. Have you received any refresher or roll call training in handcuffing procedures?

[51] Yes, less than 6 mos. ago [21] Yes, more than 2 yrs. ago

[40] Yes, 6 mos. to 1 yr. ago [22] No

[31] Yes, 1 to 2 yrs. ago

20. When was the last time your immediate supervisor observed you handcuffing a subject?

[75] In the last month [11] 1 to 2 yrs. ago

[47] 1 to 6 mos. ago [12] More than 2 yrs. ago

[20] 6 mos. to 1 yr. ago [53] Never observed

21. Was the subject(s) in this incident handcuffed?

[138] Yes [76] No

If no, go to SECTION IV

22. Were hands behind back? [130] Yes [10] No

23. Were palms facing out ? [110] Yes [25] No

24. Was chain looped through belt? [4] Yes [130] No

25. Were cuffs double locked? [41] Yes [75] No

26. Was subject cuffed to you? [1] Yes [134] No

27. Was subject cuffed to another officer? [0] Yes [133] No

28. Was more than one subject cuffed?

[29] Yes, individually [13] Yes, together [103] No

SECTION IV

29. In what order did searching and handcuffing occur?

[122] Search then handcuff [32] Handcuff then search [36] Neither

30. During incident I was in .. [11] Plainclothes [204] Uniform

31. During incident, were you working from a dept. vehicle?

[185] Yes, marked [9] Yes, unmarked [18] No

32. Was your last working day on a different shift?

[37] Yes [187] No

If yes, it started at ____ a.m. / p.m.

[23] Yesterday [8] 3 days ago

[12] 2 days ago [12] Over 3 days ago

33. Assignment: (specify) EP-13; MD-153; IN-20; X-8 [31]

34. Years on assignment 2.7(192) Yrs. ____ Mos.

35. Last rest stop of 10 mins. or more (e.g., lunch, coffee, etc.) ____ a.m. / p.m.

36. Do you follow a regular exercise program?

[92] Yes [137] No

If yes, how often do you exercise?

[37] Daily [10] Every ____ days

[16] Every other day [24] Other _____

What do you do? (e.g., calisthenics, jogging, sports, etc.)

C-58; R-19; S-18; X-1 [62]
(specify)

Is the program required or run by the department?

[1] Yes [168] No

37. Have you taken a physical fitness test in the past year?

[4] Yes, passed [0] Yes, failed [178] Not given

38. When was the last time you received a complete physical examination by a physician?

[71] Less than 6 mos. ago [30] 2 to 5 yrs. ago

[67] 6 mos. to 1 yr. ago [22] Over 5 yrs. ago

[33] 1 to 2 yrs. ago

39. Do you have a job in your off-duty hours?

[49] Yes [172] No

092 [78-80]

[ ] (1-3) 31 Forms Returned

ARREST AND SEARCH INJURY REPORT Name _____

TO BE COMPLETED BY ALL OFFICERS INJURED DURING THAT TIME PERIOD STARTING WHEN ARREST HAS BEEN EFFECTED AND ENDING WHEN THE PRISONER IS ESCORTED TO A VEHICLE FOR TRANSPORTATION OR IS ESCORTED DIRECTLY TO THE STATION

Date and time of incident ____ / ____ / ____ (mo. 4, day 5-6, yr.) at ____ : ____ (7-10) a.m. / p.m. (11,1 11,2) Rank or title P-28; S-1; L-2 [12]

Years on force 3.0(30) (13-14) years ____ (15) months

Shift start ____ : ____ (16-19) a.m. / p.m. (20,1 20,2)

SECTION I

1. Before you were injured, what was the maximum number of each of the following persons at the scene?

1.0(27) (21) Subjects 2.7(27) (22) Police officers (include yourself) 3.5(8) (23) Bystanders 1.0(5) (24) Other (specify) _____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex	Race	
Yourself	27.2 (30) (25-26)	6 (27) ft. 00.3 (30) (28-29) in.	185.7 (30) (30-32) lbs.	M (33) 28 F 0	W=30	[34]
Other officer	26.8 (27) (35-36)	5 (37) ft. 10.8 (28) (38-39) in.	175.7 (28) (40-42) lbs.	M (43) 26 F 0	W=27	[44]
Subject 1	25.2 (27) (45-46)	5 (47) ft. 10.8 (27) (48-49) in.	170.5 (27) (50-52) lbs.	M (53) 23 F 4	W=16; B=8; S=2; X=2	[54]
Subject 2	____ (55-56)	____ (57) ft. ____ (58-59) in.	____ (60-62) lbs.	M (63) 1 F 2	_____	[64]
Subject 3	____ (65-66)	____ (67) ft. ____ (68-69) in.	____ (70-72) lbs.	M (73) 1 F 2	_____	[74]

3. Did the subject(s) speak or understand English?

[30] Yes [0] No [0] Uncertain

4. Before you were injured, did you come within arm's length of the subject(s)?

[27] Yes [2] No

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[27] Yes [3] No [101] [78-80]

6. Before you were injured, did the subject(s) ..

	Yes	No	Uncertain
.. use profane language or gesture	[18]	[6]	[1]
.. act belligerently	[20]	[4]	[1]
.. try to escape	[17]	[8]	[0]
.. threaten you	[13]	[9]	[1]
.. assault you	[14]	[9]	[0]

.. Other (specify) _____ [2] [9]

7. Where did the incident take place? (check one)

[13] On a street/sidewalk [3] In a house

[2] In an alley [3] In an apartment

[3] In a yard or field [1] In an apt. bldg. but not in apt.

[0] In a tavern or lounge [1] In another type of building

[0] In another public place of business [4] Other _____ (specify)

8. Before you were injured, was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[5] Yes [23] No

9. Indicate your use of equipment before you were injured (make one check for each item listed)

	Used	Weapon in hand not used	Available not used	Not available
Revolver	[1]	[0]	[23]	[0]
Rifle/shotgun	[1]	[1]	[7]	[12]
Night stick/baton	[0]	[1]	[11]	[10]
Mace or similar spray	[2]	[0]	[7]	[19]
Handcuffs	[13]		[11]	[0]
Helmet	[2]		[1]	[19]
Flashlight	[4]		[17]	[2]
Other _____ (specify)	[1]		[0]	[1]

SECTION II

10. When you joined the force, did you receive any training in how to search subjects?

[30] Yes [0] No

11. Have you received any refresher or roll call training in how to search subjects?

[15] Yes, less than 6 mos. ago [2] Yes, 1 to 2 yrs. ago

[0] Yes, more than 2 yrs. ago

[6] Yes, 6 mos. to 1 yr. ago [7] No

12. When was the last time your immediate supervisor observed you searching a subject?

[7] In the last month [0] 1 to 2 yrs ago

[15] 1 to 6 mos. ago [0] More than 2 yrs. ago

[2] 6 mos. to 1 yr. ago [6] Never observed

13. Was the subject(s) in this incident searched?

[22] Yes [4] No If no, go to SECTION III.

14. How was the search conducted? (check one)

[19] I searched subject(s) in presence of another officer
[0] I searched subject(s) alone
[4] Another officer searched the subject(s)
[1] Other (specify)_____

15. Was your revolver drawn during the search? [1] Yes [25] No

16. Which search position was used?

[1] Prone [0] Spread-eagle, leaning against wall
[1] Kneeling [8] Spread-eagle, leaning against car
[11] Standing in the open [3] Other_____ (specify)

17. Did the search yield

	No	Yes	Specify
.. weapons?	[20]	[4]	
.. evidence?	[16]	[6]	

SECTION III

18. When you joined the force, did you receive any training in handcuffing procedures? [27] Yes [1] No

19. Have you received any refresher or roll call training in handcuffing procedures?

[7] Yes, less than 6 mos. ago [2] Yes, more than 2 yrs. ago
[5] Yes, 6 mos. to 1 yr. ago [12] No
[3] Yes, 1 to 2 yrs. ago

20. When was the last time your immediate supervisor observed you handcuffing a subject?

[7] In the last month [0] 1 to 2 yrs. ago
[14] 1 to 6 mos. ago [0] More than 2 yrs. ago
[3] 6 mos. to 1 yr. ago [6] Never observed

21. Was the subject(s) in this incident handcuffed?

[20] Yes [9] No If no, go to SECTION IV

22. Were hands behind back [23] Yes [2] No
23. Were palms facing out? [13] Yes [6] No
24. Was chain looped through belt? [3] Yes [18] No
25. Were cuffs double locked? [7] Yes [12] No
26. Was subject cuffed to you? [0] Yes [21] No
27. Was subject cuffed to another officer? [0] Yes [21] No
28. Was more than one subject cuffed?

[4] Yes, individually [0] Yes, together [18] No

SECTION IV

29. In what order did searching and handcuffing occur?

[11] Search then handcuff [14] Handcuff then search [5] Neither

30. During incident I was in .. [5] Plainclothes [25] Uniform

31. Who injured you? (check one)

[24] Subject [1] Myself
[0] Subject's friend [2] Other_____ (specify)

32. What were you doing when injured?

[4] Pursuing subject [1] Searching subject
[1] Questioning subject [19] Restraining subject
[0] Awaiting assistance [5] Other_____ (specify)

33. What was used to cause your injury? (check one)

[3] Hands/arms [2] Revolver/pistol [0] Thrown object
[2] Legs/feet [0] Rifle/shotgun [12] Other(specify)
[7] Teeth [1] Knife/razor
[3] Other body part (specify)

34. Be sure to attach a copy of the dept. injury report form, making certain that it indicates the severity of injury, the part of body injured, the type of injury (i.e., laceration) and the cause of injury (i.e., fall, stab, slip, assault).

35. During incident, were you working from a dept. vehicle?

[23] Yes, marked [6] Yes, unmarked [1] No

36. Was your last working day on a different shift? [1] Yes [27] No

If Yes, it started at ___:___ a.m. / p.m.

[0] Yesterday [0] 2 days ago [0] 3 days ago [0] Over 3 days ago

37. Assignment: (specify) FP-4; MP-16; MT-1; IN-1

38. Years on assignment 17(26) Yrs. ___ Mos.

39. Last rest ston of 10 mins. or more ___:___ a.m. / p.m. (e.g., lunch, coffee, etc.)

40. Do you follow a regular exercise program?

[16] Yes [14] No If Yes, how often do you exercise?

[4] Daily [6] Every 3 days
[7] Every other day [0] Other_____

What do you do? (e.g., calisthenics, jogging, sports, etc.)

C-11; R-2; S-3
(specify)

Is the program required or run by the department? [0] Yes [27] No

41. Have you taken a physical fitness test in the past year?

[11] Yes, passed [1] Yes, failed [18] Not given

42. When was the last time you received a complete physical examination by a physician?

[12] Less than 6 mos. ago [5] 1 to 2 yrs. ago [1] Over 5 yrs. ago
[9] 6 mos. to 1 yr. ago [3] 2 to 5 yrs. ago

43. Do you have a job in your off-duty hours? [7] Yes [27] No

BE SURE TO ATTACH DEPARTMENT INJURY REPORT FORM

164 Forms Returned

TRANSPORTATION OF PRISONER REPORT

TO BE COMPLETED BY OFFICERS FOR THAT TIME PERIOD STARTING WHEN THE PRISONER IS ESCORTED TO A VEHICLE FOR TRANSPORTATION (OR IS ESCORTED DIRECTLY TO THE STATION) AND ENDING WHEN THE PRISONER IS DELIVERED INSIDE THE STATION

Date and time of incident ___/___/___ (mo. / day / yr.) at ___:___ a.m./p.m.

Rank or title P-159; S-3

Years on force 4.1 (161) years and ___ months

Shift start ___:___ a.m./p.m.

SECTION I

1. What was the maximum number of each of the following persons at the scene?

10(157) Subjects 2.6(159) Police officers (include yourself) 3.7(88) Bystanders 2.5(40) Other (specify) _____

2. For each person listed below indicate his age, height and weight using the spaces provided; circle "M" if male and "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex	Race
Yourself	28.5 (164)	5 ft. 11.5 (164) in.	185.3 (164) lbs.	M (33) F 0	W=154; B=4; S=1
Other officer	28.9 (147)	5 ft. 11.6 (149) in.	185.0 (149) lbs.	M (43) F 0	W=143; B=4
Subject 1	24.7 (156)	5 ft. 10.2 (156) in.	160.7 (155) lbs.	M (53) F 0	W=93; S=7
Subject 2		ft. in.	lbs.	M (63) F 2	
Subject 3		ft. in.	lbs.	M (73) F 2	

3. Did the subject(s) speak or understand English?

[162] Yes [1] No [1] Uncertain

4. Did you come within arm's length of the subject(s)?

[163] Yes [1] No

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[113] Yes [49] No

6. Did the subject(s)...

	Yes	No	Uncertain
...use profane language or gesture	42	96	3
...act belligerently	47	80	2
...try to escape	17	117	3
...threathen you	17	117	0
...assault you	8	123	1
...Other (specify)_____			5

7. Where did the incident take place? (Check one.)

[71] On a street/sidewalk [14] In a house
[6] In an alley [15] In an apartment
[9] In a yard or field [4] In an apt. bldg. but not in apt.
[3] In a tavern or lounge [3] In another type of bldg.
[29] In another public place of business [6] Other_____ (specify)

8. Was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[26] Yes [125] No

9. Indicate your use of equipment (make one check for each item listed).

	Used	Weapon in hand Not Used	Available Not Used	Not Available
Revolver	2	12	13	1
Rifle/shotgun	1	1	37	41
Night stick/baton	2	8	10	24
Mace or similar spray	0	0	38	87
Handcuffs	1		73	1
Helmet	0		41	82
Flashlight	30		98	12
Other _____ (specify)	2		3	2

SECTION II

10. When you joined the force, did you receive any training in how to transport prisoners?

[159] Yes [4] No

11. Have you received any refresher or roll call training in how to transport prisoners?

[32] Yes, less than 6 mos. ago [31] Yes, 1 to 2 yrs. ago
[27] Yes, 6 mos. to 1 yr. ago [8] Yes, more than 2 yrs. ago
[42] No

12. When was the last time your immediate supervisor observed you transporting a prisoner?

[94] In the last month [6] 1 to 2 yrs. ago
[30] 1 to 6 mos. ago [2] More than 2 yrs. ago
[10] 6 mos. to 1 yr. ago [20] Never observed

13. At the time of the incident I was in..

[7] Plainclothes (24,1) [132] Uniform (24,2)

14. Were you one of the arresting officers?

[149] Yes (25,1) [10] No (25,2)

15. Was the subject(s) searched by you or in your presence?

[157] Yes (26,1) [9] No (26,2)

If yes,...	Yes	No	Specify
...were weapons found?	[20] (27,1)	[137] (27,2)	
...was evidence found?	[37] (28,1)	[107] (28,2)	

16. Was the subject(s) handcuffed?

[83] Yes (29,1) [73] No (29,2)

17. How was the subject(s) transported?

[0] By foot entirely (30,1)
[10] By squadrol (30,4)
[134] Primarily by car without barrier between front and rear seats (30,2)
[1] Other (explain) (30,5)
[12] Same but with barrier (30,3)

SECTION III

ANSWER THIS SECTION IF A VEHICLE WAS USED

18. Was the vehicle searched before placing the subject(s) inside?

[63] Yes (31,1) [57] No (31,2)

19. Was the vehicle searched after the subject(s) was removed?

[74] Yes (32,1) [40] No (32,2)

If yes,...	Yes	No	Specify
...were weapons found?	[1] (33,1)	[83] (33,2)	
...was evidence found?	[7] (34,1)	[78] (34,2)	

* ADDITIONAL INFORMATION FROM QUESTIONS 20 and 21.

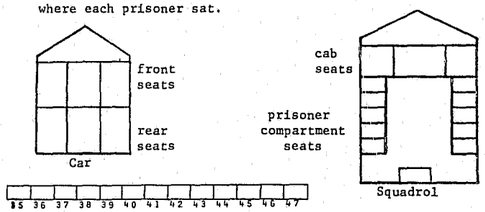
Was officer following IACP recommendations on seating positions of officer(s) and prisoner(s)?

Yes 109 No 43

Was officer carrying revolver on side away from prisoner?

Yes 100 No 51

20. In the appropriate diagram below place an "X" where you sat, an "O" where each other officer sat, and a "P" where each prisoner sat.



21. While in the vehicle, where was your revolver?

[1] In my right hand (53,1)
[0] In my left hand (53,2)
[120] On my right hip, in holster (53,3)
[37] On my left hip in holster (53,4)
[4] Other (explain) (53,5)

22. During incident, were you working from a dept. vehicle?

[145] Yes, marked (54,1) [3] Yes, unmarked (54,2) [10] No (54,3)

23. Was your last working day on a different shift?

[19] Yes (55,1) [135] No (55,2)

If yes, it started at ____ (56-59) a.m./p.m. (60,1 / 60,2)

[11] Yesterday (61,1)
[5] 3 days ago (61,3)
[7] 2 days ago (61,2)
[8] Over 3 days ago (61,4)

24. Assignment: (specify) EP-5; MP-121; FT-1; IN-6; X-2 (62)

25. Years on assignment 24(137) (63-64) Yrs. ____ (65) Mos.

26. Last rest stop of 10 mins. or more (e.g., lunch, coffee, etc.) ____ (66-69) a.m./p.m. (70,1 / 70,2)

27. Do you follow a regular exercise program?

[67] Yes (71,1) [87] No (71,2)

If yes, how often do you exercise?

[22] Daily (72,1)
[3] Every three days (72,3)
[28] Every other day (72,2)
[21] Other (72,4) ____

What do you do? (e.g. calisthenics, jogging, sports,)

(specify) C-30; R-10; S-15; X-2 (73)

Is the program required or run by the department?

[2] Yes (74,1) [115] No (74,2)

28. Have you taken a physical fitness test in the past year?

[47] Yes, passed (75,1) [0] Yes, failed (75,2) [114] Not given (75,3)

29. When was the last time you received a complete physical examination by a physician?

[47] Less than 6 mos. ago (76,1)
[72] 1 to 2 yrs. ago (76,3)
[12] Over 5 yrs. ago (76,5)
[43] 6 mos. to 1 yr. ago (76,2)
[16] 2 to 5 yrs. ago (76,4)

30. Do you have a job in your off-duty hours? [74] Yes (77,1) [85] No (77,2)

112 (78-80)

[ ] [ ] [ ] NO FORMS RETURNED (1-3)

TRANSPORTATION OF PRISONER - INJURY REPORT

Name ____

TO BE COMPLETED BY ALL OFFICERS INJURED DURING THAT TIME PERIOD STARTING WHEN THE PRISONER IS ESCORTED TO A VEHICLE FOR TRANSPORTATION (OR IS ESCORTED DIRECTLY TO THE STATION) AND ENDING WHEN THE PRISONER IS DELIVERED INSIDE THE STATION.

Date and time of incident ____ / ____ / ____ (mo. 4 / day 5-6 / yr.) at ____ : ____ (7-10) a.m. (11,1) / p.m. (11,2) Rank or title ____ [ ] (12)

Years on force ____ (13-14) years ____ (15) months

Shift start ____ : ____ (16-19) a.m. (20,1) / p.m. (20,2)

SECTION I

1. Before you were injured, what was the maximum number of each of the following persons at the scene?

____ (21) Subjects ____ (22) Police officers (include yourself) ____ (23) Bystanders ____ (24) Other (specify) ____

2. For each person listed below indicate his age, height and weight using the spaces provided: circle "M" if male or "F" if female; then write in his race. If more officers or subjects were present than the table allows, fill in the lines for the officer most directly involved (usually your partner) and for the subjects who were or could have been most trouble. If necessary, estimate age, height and weight.

	Age	Height	Weight	Sex	Race	
Yourself	____ (25-26)	____ (27) ft. ____ (28-29) in.	____ (30-32) lbs.	M (33) 1 / F 2	____	[ ] (34)
Other officer	____ (35-36)	____ (37) ft. ____ (38-39) in.	____ (40-42) lbs.	M (43) 1 / F 2	____	[ ] (44)
Subject 1	____ (45-46)	____ (47) ft. ____ (48-49) in.	____ (50-52) lbs.	M (53) 1 / F 2	____	[ ] (54)
Subject 2	____ (55-56)	____ (57) ft. ____ (58-59) in.	____ (60-62) lbs.	M (63) 1 / F 2	____	[ ] (64)
Subject 3	____ (65-66)	____ (67) ft. ____ (68-69) in.	____ (70-72) lbs.	M (73) 1 / F 2	____	[ ] (74)

3. Did the subject(s) speak or understand English?

[ ] Yes (75,1) [ ] No (75,2) [ ] Uncertain (75,3)

4. Before you were injured, did you come within arm's length of the subject(s)?

[ ] Yes (76,1) [ ] No (76,2)

5. Was it necessary to grasp, hold, support or touch the subject(s)?

[ ] Yes (77,1) [ ] No (77,2) [121] (78-80)

6. Before you were injured, did the subject(s) ..

	Yes	No	Uncertain
.. use profane language or gesture	(4,1)	(4,2)	(4,3)
.. act belligerently	(5,1)	(5,2)	(5,3)
.. try to escape	(6,1)	(6,2)	(6,3)
.. threaten you	(7,1)	(7,2)	(7,3)
.. assault you	(8,1)	(8,2)	(8,3)
.. Other (specify) ____			[ ] (9)

7. Where did the incident take place? (check one)

[ ] On a street/sidewalk (11,1)
[ ] In a house (11,6)
[ ] In an alley (11,2)
[ ] In an apartment (11,7)
[ ] In a yard or field (11,3)
[ ] In an apt. bldg. but not in apt. (11,8)
[ ] In a tavern or lounge (11,4)
[ ] In another type of building (11,9)
[ ] In another public place of business (10-11,10)
[ ] Other (specify) ____

8. Before you were injured, was there a physical barrier (e.g. patrol car, lamp post, door, etc.) between you and the subject(s)?

[ ] Yes (12,1) [ ] No (12,2)

9. Indicate your use of equipment before you were injured (make one check for each item listed).

	Used	Weapon in hand not used	Available not used	Not available
Revolver	[ ] (13,1)	[ ] (13,2)	[ ] (13,3)	[ ] (13,4)
Rifle/shotgun	[ ] (14,1)	[ ] (14,2)	[ ] (14,3)	[ ] (14,4)
Night stick/baton	[ ] (15,1)	[ ] (15,2)	[ ] (15,3)	[ ] (15,4)
Mace or similar spray	[ ] (16,1)	[ ] (16,2)	[ ] (16,3)	[ ] (16,4)
Handcuffs	[ ] (17,1)		[ ] (17,2)	[ ] (17,3)
Helmet	[ ] (18,1)		[ ] (18,2)	[ ] (18,3)
Flashlight	[ ] (19,1)		[ ] (19,2)	[ ] (19,3)
Other ____ (specify)	[ ] (20,1)		[ ] (20,2)	[ ] (20,3)

SECTION II

10. When you joined the force, did you receive any training in how to transport prisoners?

[ ] Yes (21,1) [ ] No (21,2)

11. Have you received any refresher or roll call training in how to transport prisoners?

[ ] Yes, less than 6 mos. ago (22,1)
[ ] Yes, 1 to 2 yrs. ago (22,3)
[ ] Yes, more than 2 yrs. ago (22,4)
[ ] Yes, 6 mos. to 1 yr. ago (22,2)
[ ] No (22,5)

12. When was the last time your immediate supervisor observed you transporting a prisoner?

[ ] In the last month (23,1)
[ ] 1 to 2 yrs. ago (23,4)
[ ] 1 to 6 mos. ago (23,2)
[ ] More than 2 yrs. ago (23,5)
[ ] 6 mos. to 1 yr. ago (23,3)
[ ] Never observed (23,6)

13. At the time of the incident I was in ..

☐ Plainclothes (24,1) ☐ Uniform (24,2)

14. Who injured you? (check one)

☐ Subject (25,1) ☐ Myself (25,3)
☐ Subject's friend (25,2) ☐ Other_____ (25,4) (specify)

15. In your opinion which of the following best describes the actions of the person checked above? (check one)

☐ Intended to injure me (26,1) ☐ Not intended to injure me, interfere or escape (26,4)
☐ Intended to interfere with performance of my duty (26,2) ☐ Unknown (26,5)
☐ Intended as part of escape (26,3) ☐ Other_____ (26,6) (specify)

16. What were you doing when injured?

☐ Escorting prisoner to vehicle (27,1) ☐ Removing prisoner from vehicle (27,4)
☐ Placing prisoner in vehicle (27,2) ☐ Escorting prisoner to station (27,5)
☐ Transporting prisoner in vehicle (27,3) ☐ Other (explain)_____ (27,6)

17. What was used to cause your injury? (check one)

☐ Hands/arms (29,1) ☐ Revolver/pistol (29,5) ☐ Thrown object (29,8)
☐ Legs/feet (29,2) ☐ Rifle/shotgun (29,6) ☐ Other (specify) (29,9)
☐ Teeth (29,3) ☐ Knife/razor (29,7) _____
☐ Other body part(specify)_____ (29,4)

18. Be sure to attach a copy of the dept. injury report form, making certain that it indicates the severity of injury, the part of body injured, the type of injury, (i.e., laceration) and the cause of injury (i.e., fall, stab, slip, assault).

19. Were you one of the arresting officers? ☐ Yes (30,1) ☐ No (30,2)

20. Was the subject(s) searched by you or in your presence?

☐ Yes (31,1) ☐ No (31,2) If Yes, ..

	No	Yes	Specify
.. were weapons found?	☐ 32,1	☐ 32,2	_____
.. was evidence found?	☐ 33,1	☐ 33,2	_____

21. Was the subject(s) handcuffed? ☐ Yes (34,1) ☐ No (34,2)

22. How was the subject(s) transported?

☐ By foot, entirely (35,1) ☐ By squadrol (35,4)
☐ Primarily by car without barrier between front and rear seats (35,2) ☐ Other (explain) (35,5) _____
☐ Same but with barrier (35,3) _____

SECTION III

ANSWER THIS SECTION IF A VEHICLE WAS USED

23. Was the vehicle searched before placing the subject(s) inside?

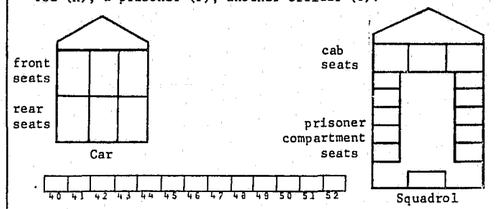
☐ Yes (36,1) ☐ No (36,2)

24. Was the vehicle searched after the subject(s) was removed?

☐ Yes (37,1) ☐ No (37,2) If Yes, ..

	No	Yes	Specify
.. were weapons found?	☐ 38,1	☐ 38,2	_____
.. was evidence found?	☐ 39,1	☐ 39,2	_____

25. In the appropriate diagram below place an "X" where you sat, an "O" where each other officer sat, and a "P" where each prisoner sat. If you were injured while in the vehicle, place a bar over the letter corresponding to the person or persons who most directly caused your injury, for example: You (X̄), a prisoner (P̄), another officer (Ō).



26. While in the vehicle, where was your revolver?

☐ In my right hand (53,1) ☐ On my right hip, in holster (53,3)
☐ In my left hand (53,2) ☐ On my left hip in holster (53,4)
☐ Other (explain)_____ (53,5)

27. During incident, were you working from a dept. vehicle?

☐ Yes, marked (54,1) ☐ Yes, unmarked (54,2) ☐ No (54,3)

28. Was your last working day on a different shift? ☐ Yes (55,1) ☐ No (55,2)

If Yes, it started at ___:___ (56-59) a.m. / p.m. (60,1 / 60,2)

☐ Yesterday (61,1) ☐ 2 days ago (61,2) ☐ 3 days ago (61,3) ☐ Over 3 days ago (61,4)

29. Assignment:(specify)_____ ☐ (62)

30. Years on assignment___ (63-64) Yrs. ___ (65) Mos.

31. Last rest stop of 10 mins. or more ___:___ (66-69) a.m. (70,1) / p.m. (70,2) (e.g., lunch, coffee, etc.)

32. Do you follow a regular exercise program?

☐ Yes (71,1) ☐ No (71,2) If Yes, how often do you exercise?

☐ Daily (72,1) ☐ Every 3 days (72,3)
☐ Every other day (72,2) ☐ Other_____ (72,4)

What do you do? (e.g., calisthenics, jogging, sports,)

(specify)_____ ☐ (73)

Is the program required or run by the dept.? ☐ Yes (74,1) ☐ No (74,2)

33. Have you taken a physical fitness test in the past year?

☐ Yes, passed (75,1) ☐ Yes, failed (75,2) ☐ Not given (75,3)

34. When was the last time you received a complete physical examination by a physician?

☐ Less than 6 mos. ago (76,1) ☐ 1 to 2 yrs. ago (76,3) ☐ Over 5 yrs. ago (76,5)
☐ 6 mos. to 1 yr. ago (76,2) ☐ 2 to 5 yrs. ago (76,4)

35. Do you have a job in your off-duty hours? ☐ Yes (77,1) ☐ No (77,2)

122 (78-80)

25 Forms Returned

PURSUIT DRIVING REPORT

TO BE FILLED OUT BY POLICE OFFICERS DRIVING AT HIGH SPEEDS IN PURSUIT OF A MOTORIST WHO KNOWINGLY REFUSES TO OBEY A SIGNAL FROM A POLICE OFFICER TO STOP: OR IN PURSUIT OF A MOTORIST WHO IS TRAVELING AT SPEEDS OF 25 MILES OR MORE OVER THE POSTED LIMIT.

Date ___/___/___ (Mo. 5, Day 6-7, Yr.) Assignment MP-12; MT-11; IN-1 (8) Age 28.0(24) (9-10) Years on Force 5.5(24) (11-12) Yrs. ___ Mos.

Time of pursuit incident ___ (13-16) AM/PM (17) Shift start ___ (18-21) AM/PM (22)

Type of patrol: [11] (23,1) One man [14] (23,2) Two man [0] (23,3) Other ___ (specify) Years on present assignment 2.5(23) (24-25) Yrs. ___ Mos.

1. How long had you been driving your vehicle without interruption prior to the pursuit incident?

[8] (26,1) Less than 15 minutes
[9] (26,2) 16 to 30 minutes
[2] (26,3) 31 to 45 minutes
[1] (26,4) 46 minutes to 1 hour
[1] (26,5) 1 to 2 hours
[4] (26,6) More than 2 hours

2. Number of occupants in police vehicle 2.2 (23) (27)

3. Check type of equipment used by occupant(s) on pursuit run:

	Driver	Passenger
Safety belt	[21] (28,1)	[12] (29,1)
Shoulder harness	[2] (30,1)	[2] (31,1)
Helmet	[2] (32,1)	[1] (33,1)

Was door locked on:

	Yes	No	Not Sure
Driver's side?	[13] (34,1)	[9] (34,2)	[2] (34,3)
Passenger's side?	[9] (35,1)	[6] (35,2)	[5] (35,3)

Did vehicle have:

Headrests?	[13] (36,1)	[10] (36,2)	[0] (36,3)

4. Weather Condition

[22] (37,1) Clear/cloudy
[0] (37,2) Snow
[0] (37,3) Fog
[2] (37,4) Rain
[0] (37,5) Sleet
[0] (37,6) Other ___ (specify)

5. Light Condition

[7] (38,1) Daylight
[1] (38,2) Dusk
[1] (38,3) Dawn
[14] (38,4) Dark (road lighted)
[1] (38,5) Dark (road unlighted)
[0] (38,6) Other ___ (specify)

6. Type of Police vehicle

[21] (39,1) Marked
[0] (40,1) 6 cylinder
[1] (41,1) Compact
[4] (39,2) Unmarked
[18] (40,2) 8 cylinder
[16] (41,2) Full size

Estimate mileage to nearest 1000; use odometer if available: [5][1][0][0][0] (42-43) (16)

7. Emergency Equipment Used

[21] (44,1) Turret Light
[3] (44,2) Spotlight
[22] (45,1) Siren
[13] (46,1) High beam headlights
[0] (47,1) None
[0] (48,1) Other ___ (specify)

8. Total Miles Driven:

During pursuit	3.1 (25) (49-50)	miles
Before pursuit	31.5 (23) (51-53)	miles
Entire shift	74.0 (24) (54-56)	miles

9. Pursuit speed

Average pursuit speed	65.8 (25) (57-59)	mph.
Top pursuit speed	80.2 (25) (60-62)	mph.
Average traffic speed	35.8 (25) (63-64)	mph.

10. How long did pursuit last? 3.5 (25) (65-66) minutes

11. How did pursuit end?

[18] (67,1) Apprehension, no accident
[0] (67,2) Pursued car escaped
[0] (67,3) Discontinued chase
[1] (67,4) Police vehicle involved in accident
[5] (67,5) Pursued car involved in accident
[1] (67,6) Other ___ (specify)

12. Were any of the following vehicle conditions present during pursuit?

	Yes	No	Not Sure	
Improperly inflated tires	[4] (68,1)	[18] (68,2)	[3] (68,3)	
Bald or worn tires	[0] (69,1)	[25] (69,2)	[0] (69,3)	
Tire blowout or flat	[0] (70,1)	[25] (70,2)	[0] (70,3)	
Front end shimmy	[6] (71,1)	[19] (71,2)	[0] (71,3)	
Sideways pull when braking	[2] (72,1)	[23] (72,2)	[0] (72,3)	
Sideways pull on straightaways	[1] (73,1)	[24] (73,2)	[0] (73,3)	
Engine miss on acceleration	[9] (74,1)	[16] (74,2)	[0] (74,3)	
Rocking or dipping when braking	[6] (75,1)	[17] (75,2)	[2] (75,3)	131 (78-80)
Binding steering wheel in full turns	[0] (5,1)	[24] (5,2)	[1] (5,3)	
Noticeable steering wheel play	[8] (6,1)	[17] (6,2)	[0] (6,3)	
Spongy or fading brakes	[8] (7,1)	[17] (7,2)	[0] (7,3)	
Faulty windshield wiper	[0] (8,1)	[23] (8,2)	[2] (8,3)	
Faulty ventilation/defroster	[0] (9,1)	[24] (9,2)	[1] (9,3)	
Faulty headlights	[0] (10,1)	[25] (10,2)	[0] (10,3)	
Other ___ (specify)	[2] (11,1)	[3] (11,2)	[0] (11,3)	

13. Check and give typical speed limit of road types encountered during pursuit and indicate traffic density (Heavy, Medium or Light). Also, give condition of each road type checked. If more than one road type was encountered, indicate the roads driven at the "start" and "end" of pursuit.

	ROAD TYPE (Check one or more)	TYPICAL SPEED LIMIT	TRAFFIC DENSITY Heavy	Medium	Light	ROAD CONDITION Dry	Wet	Snowy	Icy	PURSUIT START (Check one)	PURSUIT END (Check one)
A	[12] Interstate system (12)	55.5 (11) mph (13-14)	[0] 15,1	[3] 15,2	[7] 15,3	[10] 16,1	[1] 16,2	[0] 16,3	[0] 16,4	[11] 42,1	[10] 43,1
B	[1] Other controlled access hwy. (17)	30.0 (1) mph (18-19)	[1] 20,1	[0] 20,2	[0] 20,3	[1] 21,1	[0] 21,2	[0] 21,3	[0] 21,4	[1] 42,2	[0] 43,2
C	[3] Major arterial route (22)	40.2 (5) mph (23-24)	[0] 25,1	[3] 25,2	[2] 25,3	[3] 26,1	[0] 26,2	[0] 26,3	[0] 26,4	[2] 42,3	[2] 43,3
D	[12] Local or residential street (27)	30.1 (11) mph (28-29)	[0] 30,1	[3] 30,2	[10] 30,3	[13] 31,1	[0] 31,2	[0] 31,3	[0] 31,4	[9] 42,4	[10] 43,4
E	[1] One lane or alley (32)	15.0 (1) mph (33-34)	[0] 35,1	[0] 35,2	[1] 35,3	[1] 36,1	[0] 36,2	[0] 36,3	[0] 36,4	[0] 42,5	[0] 43,5
F	[0] Other_____ (37)	_____ mph (38-39)	[0] 40,1	[0] 40,2	[0] 40,3	[0] 41,1	[0] 41,2	[0] 41,3	[0] 41,4	[0] 42,6	[0] 43,6

14. On which of the above roads did you reach top pursuit speed? A [11] 44,1 B [0] 44,2 C [2] 44,3 D [8] 44,4 E [0] 44,5 F [0] 44,6

15. If you experienced any difficulty with the following problems during this pursuit, check the degree.

	Moderate Difficulty	Extreme Difficulty	Almost Caused Accident
Avoiding parked cars	[7] 45,1	[0] 45,2	[0] 45,3
Control of skidding	[7] 46,1	[2] 46,2	[1] 46,3
Making left turns	[6] 47,1	[0] 47,2	[0] 47,3
Making right turns	[6] 48,1	[2] 48,2	[0] 48,3
Overdriving headlights	[6] 49,1	[0] 49,2	[0] 49,3
Maintaining steering control	[9] 50,1	[1] 50,2	[0] 50,3
Keeping vehicle in lane	[9] 51,1	[0] 51,2	[0] 51,3
Moving through narrow spaces	[7] 52,1	[1] 52,2	[0] 52,3
Judging distances	[7] 53,1	[0] 53,2	[0] 53,3
Passing other vehicles	[9] 54,1	[1] 54,2	[0] 54,3
Stopping on time	[9] 55,1	[3] 55,2	[0] 55,3

16. Indicate type of formal pursuit or emergency training received. (check as many as apply)

- [0] 56,1 None given
- [20] 56,2 Class Lecture
- [4] 57,1 Skid pan
- [7] 58,1 Practice Track
- [16] 59,1 Defensive Driving
- [1] 60,1 Other_____ (specify)

17. How long ago did you receive this training?

- [4] 61,1 Less than 6 months
- [3] 61,2 6 months to 1 year
- [6] 61,3 1 to 2 years
- [2] 61,4 2 to 5 years
- [4] 61,5 More than 5 years

18. What type of examination did you take?

- [5] 62,1 None
- [12] 62,2 Written
- [10] 63,1 On road
- [7] 64,1 Practice track
- [0] 65,1 Other_____ (specify)

19. When did you last receive refresher emergency or pursuit instruction lasting 30 minutes or more?

- [1] 66,1 Less than 6 months ago
- [4] 66,2 6 months to 1 year ago
- [7] 66,3 1 to 2 years ago
- [7] 66,4 More than 2 years ago
- [5] 66,5 None given

20. When was your emergency or pursuit driving last observed by your immediate supervisor?

- [8] 67,1 In the last month
- [2] 67,2 1 to 6 months ago
- [0] 67,3 6 months to 1 year ago
- [1] 67,4 1 to 2 years ago
- [1] 67,5 More than 2 years ago
- [13] 67,6 Never observed

21. When was emergency or pursuit driving last discussed in roll call training?

- [9] 68,1 In the last month
- [8] 68,2 1 to 6 months ago
- [1] 68,3 6 months to 1 year ago
- [2] 68,4 More than 1 year ago
- [4] 68,5 Never given

22. In the last 24 hours, how much of your off-duty time was spent driving a motor vehicle?

- [2] 69,1 None
- [7] 69,2 Less than one hour
- [7] 69,3 1 to 2 hours
- [6] 69,4 2 to 3 hours
- [1] 69,5 3 to 4 hours
- [0] 69,6 More than 4 hours

23. In the last 24 hours, how much of your off-duty time was spent working at a part-time job?

- [9] 70,1 None, but I have a part-time job
- [0] 70,2 Less than one hour
- [0] 70,3 1 to 2 hours
- [1] 70,4 2 to 3 hours
- [1] 70,5 3 to 4 hours
- [0] 70,6 More than 4 hours
- [14] 70,7 No part-time job

24. How many pursuit accidents have you had while driving since start of patrol assignment?

- [22] 71,1 None
- [2] 71,2 One
- [1] 71,3 Two
- [0] 71,4 Three or more

25. If you have changed shifts in the last three on-duty days, give start hour of prior shift:

_____ (72-73) AM / PM (74)

26. Type of duty on day before pursuit incident:

- [19] 75,1 Regular or routine tour
- [0] 75,2 Overtime (specify total overtime hours worked: [0] (76-77) hrs.)
- [1] 75,3 Other _____ (specify)

132 (78-80)

7 Forms Returned

Name_____

PURSUIT DRIVING ACCIDENT SUPPLEMENT

1 2 3 4

TO BE FILLED OUT BY A POLICE OFFICER INVOLVED IN AN ACCIDENT WHILE DRIVING AT HIGH SPEEDS IN PURSUIT OF A MOTORIST WHO KNOWINGLY REFUSES TO OBEY A SIGNAL FROM A POLICE OFFICER TO STOP; OR IN PURSUIT OF A MOTORIST WHO IS TRAVELING AT SPEEDS OF 25 MILES OR MORE OVER THE POSTED SPEED LIMIT.

Date ___/___/___ (Mo. (5) Day 6-7 Yr.) Time of pursuit accident _____ (8-11) AM / PM Assignment MP-4, IN-1, X-2 (13) Age 29.2 (7) (14-15)

Years on present assignment 2.2 (7) (16-17) Yrs.____ Mos. Shift start _____ (18-21) AM / PM (22,1 22,2)

Type of patrol: [3] 27,1 One man [3] 27,2 Two man [1] 27,3 Other_____ (Specify) Years on Force 2.5 (7) (28-29) Yrs.____ Mos.

1. How long had you been driving your vehicle without interruption prior to beginning the pursuit?

- [0] 30,1 Less than 15 minutes
- [2] 30,2 16 to 30 minutes
- [1] 30,3 31 to 45 minutes
- [0] 30,4 46 minutes to 1 hour
- [1] 30,5 1 to 2 hours
- [3] 30,6 More than 2 hours

2. Number of occupants in police vehicle at time of accident (including driver) 2.0 (6) (31)

3. Check type of equipment used by occupant(s) at time of accident.

	Driver	Passenger(s)
Safety belt	[6] 32,1	[4] 33,1
Shoulder harness	[1] 34,1	[1] 35,1
Helmet	[0] 36,1	[1] 37,1

Was door locked on:	Yes	No	Not Sure
Driver's side	[3] 38,1	[2] 38,2	[2] 38,3
Passenger's side	[0] 39,1	[2] 39,2	[2] 39,3
Did vehicle have headrests?	[4] 40,1	[1] 40,2	[1] 40,3

4. Type of Police Vehicle

- [6] 41,1 Marked
- [1] 41,2 Unmarked
- [0] 42,1 6 cylinder
- [6] 42,2 8 cylinder
- [0] 43,1 Compact
- [4] 43,2 Full size

Estimate mileage to nearest 1000; use odometer if available [4|1|0|0|0] (44-48) (4)

5. Emergency Equipment Used

- [0] 46,1 None
- [7] 46,2 Siren
- [5] 47,1 Spotlight
- [5] 48,1 Turret light
- [6] 49,1 High beam headlights
- [2] 50,1 Other_____ (specify)

6. Total miles Driven:

During pursuit 35 (7) (51-52) miles Before pursuit 26.0 (4) (53-55) miles

7. Pursuit Speed:

Average pursuit speed 53.2 (7) (56-58) mph

Top pursuit speed 66.0 (6) (59-61) mph

Average traffic speed 35.5 (6) (62-63) mph

8. Accident Speed:

Speed when danger of accident became apparent 16.0 (6) (64-65) mph

Speed when accident occurred 10.5 (6) (66-67) mph

9. How long did pursuit last before accident?

54 (7) (68-69) minutes

10. Were any of the following vehicle conditions present during pursuit?

	Yes	No	Not Sure
a. Improperly inflated tires	[0] 70,1	[5] 70,2	[2] 70,3
b. Bald or worn tires	[0] 71,1	[6] 71,2	[1] 71,3
c. Tire blowout or flat	[2] 72,1	[5] 72,2	[0] 72,3
d. Front end shimmy	[2] 73,1	[5] 73,2	[0] 73,3
e. Sideways pull on straightaways	[0] 74,1	[7] 74,2	[0] 74,3
f. Engine miss on acceleration	[5] 75,1	[2] 75,2	[0] 75,3
g. Sideways pull when braking	[4] 76,1	[3] 76,2	[0] 76,3
h. Rocking or dipping when braking	[3] 77,1	[4] 77,2	[0] 77,3
i. Binding steeringwheel in full turns	[0] 5,1	[6] 5,2	[1] 5,3
j. Noticeable steeringwheel play	[0] 6,1	[7] 6,2	[0] 6,3
k. Spongy or fading brakes	[7] 7,1	[0] 7,2	[0] 7,3
l. Faulty windshield wiper	[0] 8,1	[6] 8,2	[1] 8,3
m. Faulty ventilation / defroster	[0] 9,1	[6] 9,2	[1] 9,3
n. Faulty headlights	[1] 10,1	[6] 10,2	[0] 10,3
o. Other_____ (specify)	[1] 11,1	[3] 11,2	[0] 11,3

141 (78-80)

Which one of the above conditions contributed most to the cause of the accident? (check one)

[2] 12,1 None [1] 12,2 a. [0] 12,3 b. [1] 12,4 c. [0] 12,5 d. [0] 12,6 e. [0] 12,7 f. [0] 12,8 g. [0] 12,9 h. [0] 13,1 i. [0] 13,2 j. [3] 13,3 k. [0] 13,4 l. [0] 13,5 m. [0] 13,6 n. [0] 13,7 o.

Explain circumstances:_____

11. Check any of the following visual obstructions which contributed to the cause of the accident.

- [6] 14,1 None
- [0] 14,2 Rain, snow on windshield
- [0] 16,1 Other_____ (specify)
- [0] 15,1 Blinded by sunlight glare
- [1] 15,2 Blinded by headlight glare

12. How many pursuit accidents have you had while driving since start of patrol assignment?

[4] 17,1 None [1] 17,2 One [0] 17,3 Two [0] 17,4 Three or more

13. If you have changed shifts in the last three on-duty days, give start hour of prior shift: _____ (18-19) AM / PM (20,1 20,2)

14. Type of duty on day before pursuit accident

- [7] 21,1 Regular or routine tour
- [0] 21,2 Vacation
- [0] 21,3 Overtime (Total overtime hours worked: 00 (22) hrs)
- [0] 21,4 Other_____ (specify)

15. Check and give typical speed limit of road types encountered during pursuit and indicate traffic density (Heavy, Medium or Light). Also, give condition of each road type checked. If more than one road type was encountered, check the road driven at the "start" of the pursuit and the road on which the accident occurred.

	ROAD TYPE (Check one or more)		TYPICAL SPEED LIMIT	TRAFFIC DENSITY Heavy	Medium	Light	ROAD CONDITION Dry	Wet	Snowy	Icy	PURSUIT START (Check one)	ACCIDENT OCCURRENCE
A	[0]	Interstate system	0 (0) mph (23-24)	[0] (25,1)	[0] (25,2)	[0] (25,3)	[0] (26,1)	[0] (26,2)	[0] (26,3)	[0] (26,4)	[0] (47,1)	[0] (48,1)
B	[0]	Other controlled access hwy.	0 (0) mph (27-28)	[0] (29,1)	[0] (29,2)	[0] (29,3)	[0] (30,1)	[0] (30,2)	[0] (30,3)	[0] (30,4)	[0] (47,2)	[0] (48,2)
C	[4]	Major arterial route	35.5 (4) mph (31-32)	[1] (33,1)	[1] (33,2)	[2] (33,3)	[3] (34,1)	[0] (34,2)	[0] (34,3)	[1] (34,4)	[3] (47,3)	[1] (48,3)
D	[4]	Local or residential street	25.8 (3) mph (35-36)	[0] (37,1)	[2] (37,2)	[2] (37,3)	[3] (38,1)	[0] (38,2)	[0] (38,3)	[1] (38,4)	[3] (47,4)	[4] (48,4)
E	[0]	One lane or alley	0 (0) mph (39-40)	[0] (41,1)	[0] (41,2)	[1] (41,3)	[0] (42,1)	[0] (42,2)	[0] (42,3)	[1] (42,4)	[0] (47,5)	[0] (48,5)
F	[0]	Other (specify)	0 (0) mph (43-44)	[0] (45,1)	[0] (45,2)	[0] (45,3)	[0] (46,1)	[0] (46,2)	[3] (46,3)	[3] (46,4)	[0] (47,6)	[0] (48,6)

16. On which of the above roads did you reach top pursuit speed? [0] (49,1) A [0] (49,2) B [1] (49,3) C [2] (49,4) D [2] (49,5) E [0] (49,6) F

17. If you experienced any difficulty with the following problems during this pursuit, check the degree (check any that apply).

	Moderate Difficulty	Extreme Difficulty	Near Miss or Accident
a. Avoiding parked cars	[2] (50,1)	[0] (50,2)	[0] (50,3)
b. Control of skidding	[1] (51,1)	[1] (51,2)	[1] (51,3)
c. Making left turns	[2] (52,1)	[0] (52,2)	[1] (52,3)
d. Making right turns	[2] (53,1)	[0] (53,2)	[0] (53,3)
e. Overdriving headlights	[1] (54,1)	[0] (54,2)	[0] (54,3)
f. Maintaining steering control	[2] (55,1)	[0] (55,2)	[0] (55,3)
g. Keeping vehicle in lane	[2] (56,1)	[0] (56,2)	[0] (56,3)
h. Moving through narrow spaces	[0] (57,1)	[1] (57,2)	[0] (57,3)
i. Judging distances	[1] (58,1)	[0] (58,2)	[0] (58,3)
j. Passing other vehicles	[1] (59,1)	[1] (59,2)	[0] (59,3)
k. Stopping on time	[1] (60,1)	[1] (60,2)	[3] (60,3)

Which one of the above problems contributed most to accident?

[2] (61,1) None [0] (61,2) a. [0] (61,3) b. [1] (61,4) c. [1] (61,5) d. [0] (61,6) e. [0] (61,7) f. [0] (61,8) g. [0] (61,9) h. [0] (62,1) i. [0] (62,2) j. [1] (62,3) k.

Explain circumstances:

18. Indicate type of formal emergency or pursuit training received (Check one or more).

[2] (63,1) None given [2] (64,1) Defensive Driving [4] (66,1) Practice track
[3] (63,2) Class Lecture [2] (65,1) Skid pan [0] (67,1) Other (specify)

19. How long ago did you receive this training?

[1] (68,1) Less than 6 mos. [1] (68,3) 1 to 2 yrs. [2] (68,5) More than 5 yrs.
[0] (68,2) 6 mos. to 1 yr. [0] (68,4) 2 to 5 yrs.

20. What type of examination did you take? (check one or more)

[2] (69,1) None given [1] (72,1) On road [4] (73,1) Practice track
[2] (69,2) Written [0] (72,1) Other (specify)

21. When did you last receive refresher emergency or pursuit instruction lasting 30 minutes or more?

[1] (73,1) Less than 6 mos. ago [2] (73,3) 1 to 2 yrs. ago [2] (73,5) None given
[1] (73,2) 6 mos. to 1 yr. ago [0] (73,4) More than 2 yrs. ago

22. When was your emergency or pursuit driving last observed by your immediate supervisor?

[3] (74,1) Never observed [0] (74,4) 6 mos. to 1 yr. ago
[3] (74,2) In the last month [0] (74,5) 1 to 2 yrs. ago
[0] (74,3) 1 to 6 mos. ago [0] (74,6) More than 2 yrs. ago

23. When was emergency or pursuit driving last discussed in roll call training?

[1] (75,1) Not discussed [5] (75,2) In the last Mo. [0] (75,3) 1 to 6 mos. ago
[0] (75,4) 6 mos. to 1 yr. ago [0] (75,5) More than 1 yr. ago

24. In the last 24 hours, how much of your off-duty time was spent driving a motor vehicle?

[0] (76,1) None [0] (76,4) 2 to 3 hours
[2] (76,2) Less than one hour [2] (76,5) 3 to 4 hours
[2] (76,3) 1 to 2 hours [0] (76,6) More than 4 hours

25. In the last 24 hours, how much of your off-duty time was spent working at a part-time job?

[1] (77,1) None, but I have a part-time job
[0] (77,2) Less than one hour [1] (77,5) 3 to 4 hours
[0] (77,3) 1 to 2 hours [1] (77,6) More than 4 hours
[0] (77,4) 2 to 3 hours [3] (77,7) No part time job.

[1][4][2] (78 79 80)

145 Forms Returned

EMERGENCY DRIVING REPORT

[1][2][3][4]

TO BE FILLED OUT BY POLICE OFFICER DRIVING UNDER EMERGENCY CONDITIONS OTHER THAN IN PURSUIT OF A MOTOR VEHICLE OPERATOR.

Date / / (Mo. 5 Day 6-7 Yr.) Assignment MP-120; FT-1; MT-10; IN-1; TF-1; X-8 (8) Age 28.6 (144) (9-10) Years on Force 4.5 (143) (11-12) Yrs. Mos.

Time of emergency incident AM / PM (13-16 / 17,1 / 17,2)

Type of patrol: [1] (23,1) One man [2] (23,2) Two man [1] (23,3) Other Years on present assignment 2.4 (140) (24-25) Yrs. Mos.

Shift start AM / PM (18-21 / 22,1 / 22,2)

1. What was the nature of emergency call?

[16] (26,1) Officer in danger [3] (26,4) Ambulance
[22] (26,2) Crime in progress [18] (26,5) First aid/assistance
[27] (26,3) Fire [47] (26,6) Other (specify)

2. Number of occupants in police vehicle: 1.9 (137) (27)

3. Check type of equipment used by occupant(s) on emergency run.

	Driver	Passenger
Safety belt	[124] (30,1)	[17] (31,1)
Shoulder harness	[13] (30,2)	[3] (31,2)
Helmet	[3] (32,1)	[2] (33,1)

Was door locked on:

	Yes	No	Not Sure
Driver's side?	[37] (34,1)	[81] (34,2)	[15] (34,3)
Passenger's side?	[30] (35,1)	[63] (35,2)	[24] (35,3)

Did vehicle have:

Headrests?	[136] (36,1)	[4] (36,2)	[0] (36,3)

4. Weather Condition

[127] (37,1) Clear/cloudy [7] (37,4) Rain
[3] (37,2) Snow [2] (37,5) Sleet
[0] (37,3) Fog [3] (37,6) Other (specify)

5. Light Condition

[83] (38,1) Daylight [31] (38,4) Dark (road lighted)
[4] (38,2) Dusk [9] (38,5) Dark (road unlighted)
[0] (38,3) Dawn [1] (38,6) Other (specify)

6. Type of Police Vehicle

[137] (39,1) Marked [2] (39,2) Unmarked
[4] (40,1) 6 cylinder [87] (40,2) 8 cylinder
[0] (41,1) Compact [80] (41,2) Full size

Estimate mileage to nearest 1000, use odometer if available [4,0,0,0] (42-43) (85)

7. Emergency Equipment Used

[6] (44,1) None [69] (46,1) High beam headlights
[6] (44,2) Spotlight [107] (47,1) Turret light
[120] (45,1) Siren [23] (48,1) Other (specify)

8. Total Miles Driven:

During emergency run 3.6 (133) (49-50) miles
Before emergency run 25.9 (111) (51-53) miles
Entire shift 73.5 (110) (54-56) miles

9. Pursuit Speed

Average emergency speed 45.6 (121) (57-59) mph
Top emergency speed 55.3 (117) (60-62) mph
Average traffic speed 35.6 (111) (63-64) mph

10. How long did emergency run last? 4.8 (134) (65-66) minutes

11. How did emergency run end?

[118] (67,1) Successful [1] (67,3) Discontinued run
[5] (67,2) Police vehicle involved in accident [5] (67,4) Other (specify)

12. Were any of the following conditions present in your vehicle during the emergency run?

	Yes	No	Not Sure
Improperly inflated tires	[3] (68,1)	[103] (68,2)	[37] (68,3)
Bald or worn tires	[0] (69,1)	[128] (69,2)	[8] (69,3)
Tire blowout or flat	[1] (70,1)	[130] (70,2)	[1] (70,3)
Front end shimmy	[15] (71,1)	[117] (71,2)	[1] (71,3)
Sideways pull when braking	[15] (72,1)	[116] (72,2)	[2] (72,3)
Sideways pull on straightaways	[6] (73,1)	[124] (73,2)	[2] (73,3)
Rocking or dipping when braking	[14] (74,1)	[115] (74,2)	[4] (74,3)
Engine miss on acceleration	[44] (75,1)	[89] (75,2)	[2] (75,3)
Binding steering wheel in full turns	[4] (76,1)	[125] (76,2)	[3] (76,3)
Noticeable steering wheel play	[7] (77,1)	[123] (77,2)	[3] (77,3)
Spongy or fading brakes	[19] (5,1)	[112] (5,2)	[2] (5,3)
Faulty windshield wiper	[0] (6,1)	[121] (6,2)	[9] (6,3)
Faulty ventilation/defroster	[2] (7,1)	[121] (7,2)	[8] (7,3)
Faulty headlights	[0] (8,1)	[128] (8,2)	[3] (8,3)
Other (specify)	[6] (9,1)	[51] (9,2)	[0] (9,3)

[151] (78-80)

13. Check and give typical speed limit of road types encountered during emergency run and indicate traffic density (Heavy, Medium or Light). Also, give condition of each road type checked.

	ROAD TYPE (Check one or more)	TYPICAL SPEED LIMIT	TRAFFIC DENSITY Heavy	Medium	Light	ROAD CONDITION Dry	Wet	Snowy	Icy
A	20 Interstate system	60.4(26) mph	8	15	3	26	1	0	0
B	13 Other controlled access highway	50.5(19) mph	3	9	6	17	1	0	0
C	56 Major arterial route	35.7(64) mph	12	34	18	55	6	0	0
D	78 Local or residential street	30.6(89) mph	7	37	37	75	5	3	1
E	6 Other lane or alley	15.7(8) mph	1	3	4	6	1	0	6
F	3 Other _____ (specify)	35.2(3) mph	0	1	2	4	0	0	0

14. On which of the above roads did you reach top speed? 25 A 11 B 46 C 36 D 2 E 3 F

15. How long had you been driving your vehicle without interruption prior to the emergency run?

- 25 Less than 15 minutes
- 34 16 to 30 minutes
- 15 31 to 45 minutes
- 14 46 minutes to 1 hour
- 27 1 to 2 hours
- 17 More than 2 hours

16. If you experienced any difficulty with the following problems during this emergency run, check the degree.

	Moderate Difficulty	Extreme Difficulty	Near-Miss or Accident
Avoiding parked cars	10	0	0
Control of skidding	10	3	0
Making left turns	35	3	0
Making right turns	33	1	0
Overdriving headlights	24	1	0
Maintaining steering control	25	2	0
Keeping vehicle in lane	19	0	0
Moving through narrow spaces	31	3	0
Judging distances	22	0	0
Passing other vehicles	17	9	1
Stopping on time	26	2	0

16. Indicate type of formal emergency or pursuit training received. (check as many as apply)

- 14 None given
- 100 Class lecture
- 20 Skid pan
- 55 Practice track
- 60 Defensive driving
- 6 Other _____ (specify)

17. How long ago did you receive this training?

- 33 Less than 6 mos.
- 18 6 mos. to 1 yr.
- 12 1 to 2 yrs.
- 35 2 to 5 yrs.
- 27 More than 5 yrs.

18. What type of examination did you take?

- 29 None
- 32 On road
- 60 Practice track
- 72 Written
- 2 Other _____ (specify)

19. When did you last receive refresher emergency or pursuit driving instruction?

- 75 None given
- 18 Less than 6 mos. ago
- 11 6 mos. to 1 yr. ago
- 7 1 to 2 yrs. ago
- 26 More than 2 yrs. ago

20. When was emergency or pursuit driving last discussed in roll call training?

- 40 Never
- 27 In the last month
- 35 1 to 6 mos. ago
- 11 6 mos. to 1 yr. ago
- 20 More than 1 yr. ago

21. When was your emergency or pursuit driving last observed by your immediate supervisor?

- 24 In the last month
- 24 1 to 6 mos. ago
- 9 6 mos. to 1 yr. ago
- 1 1 to 2 yrs. ago
- 3 More than 2 yrs. ago
- 23 Never observed

22. During the last 24 hours, how much of your off-duty time was spent driving a motor vehicle?

- 1 None
- 25 Less than one hour
- 53 1 to 2 hours
- 30 2 to 3 hours
- 17 3 to 4 hours
- 13 More than 4 hours

23. During the last 24 hours, how much of your off-duty time was spent working at a part-time job?

- 39 None, but I have a part-time job
- 4 Less than 1 hr.
- 0 1 to 2 hrs.
- 4 2 to 3 hrs.
- 3 3 to 4 hrs.
- 87 More than 4 hrs.
- No part-time job

24. How many emergency run accidents have you had while driving since start of patrol assignment?

- 76 None
- 28 One
- 3 Two
- 30 Three or more

25. If you have changed shifts in the last three on-duty days give start hour of prior shift: _____ AM / PM

26. Type of duty on day before emergency run:

- 122 Regular or routine tour
- 0 Vacation day
- 4 Overtime (total overtime hours worked: 5.0(4) hrs.)
- 6 Other _____ (specify)

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Name 64 Forms Returned

EMERGENCY DRIVING ACCIDENT SUPPLEMENT

1 2 3 4

TO BE FILLED OUT BY A POLICE OFFICER INVOLVED IN AN ACCIDENT WHILE DRIVING UNDER EMERGENCY CONDITIONS OTHER THAN IN PURSUIT OF A MOTOR VEHICLE

Rank _____ Age 28.1(61) Date _____ Assignment MP-52; MT-4, TN-1, TX-5; X-1;

Years on Force 4.1(60) Yrs. _____ Mos. Time of emergency accident _____ Mo. 7 / Day 8-9 Yr. _____ AM/PM Shift start _____ AM/PM

Type of patrol: 32 One man 36 Two man 5 Other _____ (specify) Years on present assignment 2.1(60) Yrs. _____ Mos.

1. What was the nature of emergency call?

- 6 Officer in danger
- 18 Crime in progress
- 2 Fire
- 1 Ambulance
- 2 First aid/assistance
- 30 Other _____ (specify)

2. How long had you been driving your vehicle without interruption prior to beginning emergency run?

- 34 Less than 15 minutes
- 7 16 to 30 minutes
- 3 31 to 45 minutes
- 1 46 minutes to 1 hour
- 8 1 to 2 hours
- 17 More than 2 hours

3. Number of occupants in police vehicle at time of accident, including driver. 2.1(55)

4. Check type of equipment used by occupant(s) at time of accident.

	Driver	Passenger(s)
Safety belt	39	17
Shoulder harness	12	5
Helmet	4	0

Was door locked on:

	Yes	No	Not Sure
Driver's side?	25	29	5
Passenger's side?	30	15	8
Did vehicle have headrests?	47	11	0

5. Type of Police Vehicle

- 57 Marked
- 39 6 cylinder
- 0 Compact
- 5 Unmarked
- 18 8 cylinder
- 30 Full size

Estimate mileage to nearest 1000, use odometer if available 56,000 (40)

6. Emergency Equipment Used:

- 6 None
- 30 Siren
- 28 Spotlight
- 43 Turret light
- 8 High beam headlights
- 18 Other _____ (specify)

7. Total Miles Driven:

During emergency run 12(33) miles

Before emergency run 170(42) miles Entire shift 35.1(43) miles

8. Emergency Speed:

Average emergency speed 30.5(43) mph

Top emergency speed 35.5(48) mph

Average speed of traffic 30.2(49) mph

9. Accident speed:

Speed when danger of accident became apparent: 20.9(48) mph.

Speed when accident occurred 10.9(51) mph.

10. How long did emergency run last before accident?

2.5(51) minutes

11. Were any of the following vehicle conditions present during emergency run?

	Yes	No	Not Sure
a. Improperly inflated tires	2	57	3
b. Bald or worn tires	1	57	4
c. Tire blowout or flat	0	64	1
d. Front end shimmy	3	57	2
e. Sideways pull on straightaways	2	58	2
f. Engine miss on acceleration	5	54	3
g. Sideways pull when braking	6	57	3
h. Rocking or dipping when braking	6	52	5
i. Binding steeringwheel in full turns	0	57	5
j. Noticeable steeringwheel play	4	55	3
k. Spongy or fading brakes	2	57	3
l. Faulty windshield wiper	0	57	5
m. Faulty ventilation/defroster	0	60	2
n. Faulty headlights	0	58	2
o. Other _____ (specify)	27	22	1

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Which one of the above conditions contributed most to the cause of the accident? (Check one.)

- 40 None
- a. 1
- b. 1
- c. 0
- d. 0
- e. 0
- f. 3
- g. 0
- h. 1
- i. 1
- j. 0
- k. 0
- l. 0
- m. 0
- n. 2
- o.

Explain circumstances:

12. Check any of the following visual obstructions which contributed to the cause of the accident.

- 42 None
- 4 Rain, snow on windshield
- 0 Blinded by sunlight glare
- 0 Blinded by headlight glare
- 14 Other _____ (specify)

13. Check and give typical speed limit of road types encountered during the emergency run and indicate traffic density (heavy, medium or light) and condition of each road type checked. Also indicate the road on which the accident occurred.

ROAD TYPE (check one or more)	TYPICAL SPEED LIMIT	TRAFFIC DENSITY Heavy	Medium	Light	ROAD CONDITION Dry	Wet	Snowy	Icy	ACCIDENT OCCURRENCE
A [1] Interstate system	55.0 (1) mph (18-19)	[1] 20,1	[1] 20,2	[0] 20,3	[0] 21,1	[0] 21,2	[1] 21,3	[0] 21,4	[0] 42,1
B [2] Other controlled access hwy.	30.0 (2) mph (22-23)	[1] 24,1	[1] 24,2	[0] 24,3	[0] 25,1	[1] 25,2	[0] 25,3	[0] 25,4	[1] 42,2
C [29] Major arterial route	30.6 (27) mph (26-27)	[2] 28,1	[18] 28,2	[9] 28,3	[18] 29,1	[6] 29,2	[2] 29,3	[1] 29,4	[13] 42,3
D [27] Local or residential street	30.4 (26) mph (30-31)	[3] 32,1	[7] 32,2	[17] 32,3	[16] 33,1	[4] 33,2	[2] 33,3	[4] 33,4	[14] 42,4
E [2] One lane or alley	50.0 (2) mph (34-35)	[0] 36,1	[0] 36,2	[2] 36,3	[1] 37,1	[0] 37,2	[1] 37,3	[0] 37,4	[0] 42,5
F [5] Other _____ (specify)	30.3 (4) mph (38-39)	[2] 40,1	[1] 40,2	[1] 40,3	[3] 41,1	[0] 41,2	[0] 41,3	[2] 41,4	[4] 42,6

14. On which of the above roads did you reach top speed? A [1] 43,1 B [1] 43,2 C [23] 43,3 D [20] 43,4 E [1] 43,5 F [1] 43,6

15. If you experienced any difficulty with the following problems during the run, check the degree. (Check any that apply.)

	Moderate Difficulty	Extreme Difficulty	Near Miss Or Accident
a. Avoiding parked cars	[7] 44,1	[1] 44,2	[0] 44,3
b. Control of skidding	[2] 45,1	[9] 45,2	[0] 45,3
c. Making left turns	[1] 46,1	[3] 46,2	[1] 46,3
d. Making right turns	[2] 47,1	[1] 47,2	[1] 47,3
e. Overdriving headlights	[1] 48,1	[1] 48,2	[0] 48,3
f. Maintaining steering control	[5] 49,1	[3] 49,2	[0] 49,3
g. Keeping vehicle in lane	[2] 50,1	[1] 50,2	[2] 50,3
h. Moving through narrow spaces	[4] 51,1	[1] 51,2	[3] 51,3
i. Judging distances	[2] 52,1	[1] 52,2	[0] 52,3
j. Passing other vehicles	[2] 53,1	[2] 53,2	[4] 53,3
k. Stopping on time	[6] 54,1	[5] 54,2	[5] 54,3

Which one of the above problems contributed most to the accident?

[27] 55,1 None [1] 55,2 a. [3] 55,3 b. [3] 55,4 c. [0] 55,5 d. [0] 55,6 e.
[1] 55,7 f. [2] 55,8 g. [3] 55,9 h. [0] 56,1 i. [4] 56,2 j. [8] 56,3 k.

Explain circumstances: _____

16. Indicate type of formal emergency or pursuit training received (check one or more).

[13] 57,1 None given [10] 58,1 Skid pan [25] 60,1 Defensive driving
[37] 57,2 Class lecture [9] 59,1 Practice track [9] 61,1 Other _____ (specify)

17. How long ago did you receive this training?

[13] 62,1 Less than 6 mos. [7] 62,3 1 to 2 yrs. [3] 62,5 More than 5 yrs.
[12] 62,2 6 mos. to 1 yr. [10] 62,4 2 to 5 yrs.

18. What type of examination did you take? (check one or more)

[18] 63,1 None [27] 64,1 Written [4] 66,1 Other _____ (specify)
[14] 63,2 On road [12] 65,1 Practice track

19. When did you last receive refresher emergency or pursuit instruction lasting 30 minutes or more?

[30] 67,1 None given [4] 67,4 1 to 2 yrs. ago
[10] 67,2 Less than 6 mos. ago [10] 67,5 More than 2 yrs. ago
[6] 67,3 6 mos. to 1 yr. ago

20. When was your emergency or pursuit driving last observed by your immediate supervisor?

[27] 68,1 Never observed [0] 68,4 6 mos. to 1 yr. ago
[22] 68,2 In the last month [1] 68,5 1 to 2 yrs. ago
[6] 68,3 1 to 6 months ago [3] 68,6 More than 2 yrs. ago

21. When was emergency or pursuit driving discussed in roll call training?

[26] 69,1 In the last month [4] 69,3 6 mos. to 1 yr. ago [5] 69,5 Not discussed
[27] 69,2 1 to 6 mos. ago [1] 69,4 More than 1 yr. ago

22. In the last 24 hours, how much of your off-duty time was spent driving a motor vehicle?

[4] 70,1 None [18] 70,3 1 to 2 hrs. [8] 70,5 3 to 4 hrs.
[17] 70,2 Less than 1 hr. [7] 70,4 2 to 3 hrs. [6] 70,6 More than 4 hrs.

23. In the last 24 hours, how much of your off-duty time was spent working at a part-time job?

[76] 71,1 None, but I have a part-time job
[0] 71,2 Less than 1 hr. [0] 71,4 2 to 3 hrs. [1] 71,6 More than 4 hrs.
[0] 71,3 1 to 2 hrs. [1] 71,5 3 to 4 hrs. [22] 71,7 No part-time job

24. How many emergency run accidents have you had while driving since start of patrol assignment?

[40] 72,1 None [11] 72,2 One [4] 72,3 Two [6] 72,4 Three or more

25. If you have changed shifts in the last three on-duty days give start hour of prior shift: ____ AM/PM (73-74, 75,1 75,2)

26. Type of duty on day before emergency run accident:

[35] 76,1 Regular or routine tour [1] 76,2 Vacation day
[0] 76,3 Overtime (total overtime hours worked 2.0 (1) hrs.)
[4] 76,4 Other (specify) _____

1&2 (78-80)

413 Forms Returned

ROUTINE DRIVING REPORT (1 2 3 4)

THIS FORM COVERS ONE FULL DAY'S TOUR AND IS TO BE COMPLETED BY POLICE OFFICER DRIVING A VEHICLE WHILE PERFORMING ROUTINE DUTIES.

Date / / (Mo. 5 Day 6-7 Yr.) Rank P-408; S-1; L-1 (8) Assignment FP-2; MP-346; MT-5; IN-53; X-2. (9)

Age 29.2 (406) (10-11) Years on Force 4.4 (404) (12-13) Yrs. ____ Mos. Years on present assignment 2.3 (392) (14-15) Yrs. ____ Mos.

Shift start ____ (16-19) AM / PM 20,1 20,2 Shift end ____ (21-24) AM / PM 25,1 25,2 Odometer reading to nearest mile at shift start: [3][1][4][0][0] (367) (26-30)

Were there any unusual conditions such as sporting events, parades, inclement weather, or disturbances that resulted in a change in your routine duties? Yes [39] 31,1 No [349] 31,2 If Yes, describe circumstances: _____

1. Check the type of duty to which you are usually assigned and give the duty assigned today.

	Usual Duty	Today's Duty
One man patrol	[252] 32,1	[186] 33,1
Two man patrol	[129] 32,2	[110] 33,2
Three or more man patrol	[0] 32,3	[0] 33,3
Varies	[17] 32,4	
Other _____ (specify)	[3] 32,5	[6] 33,4

2. Type of police vehicle driven today.

[372] 34,1 Sedan [6] 34,4 Bus or van
[3] 34,2 Compact [9] 34,5 Squadrol
[0] 34,3 Canine patrol car [14] 34,6 Other _____ (specify)

Vehicle was: [331] 35,1 Marked [4] 35,2 Unmarked

Usual type of police vehicle driven:

[267] 36,1 Same as above, drive same car daily
[129] 36,2 Same as above, drive same type of car daily
[5] 36,3 Other _____ (specify)

3. Check emergency equipment available on your vehicle:

[5] 37,1 None [346] 39,1 Turret light
[400] 37,2 Siren [81] 40,1 Window/roof brakelights
[328] 38,1 Spotlight [62] 41,1 Other _____ (specify)

4. In your judgment, what was the actual percent of driving time during which you used the following items today?

Percent	Door Lock	Safety Belt	Shoulder Harness	Helmet
0 %	[179] 42,1	[57] 43,1	[296] 44,1	[313] 45,1
1-15%	[64] 42,2	[14] 43,2	[7] 44,2	[5] 45,2
16-30%	[23] 42,3	[17] 43,3	[0] 44,3	[3] 45,3
31-45%	[7] 42,4	[16] 43,4	[3] 44,4	[2] 45,4
46-60%	[19] 42,5	[19] 43,5	[5] 44,5	[2] 45,5
61-75%	[10] 42,6	[21] 43,6	[1] 44,6	[2] 45,6
76-90%	[18] 42,7	[40] 43,7	[0] 44,7	[1] 45,7
91+ %	[76] 42,8	[207] 43,8	[12] 44,8	[9] 45,8

5. How many routine driving (non-emergency) accidents have you had driving since start of assignment?

[212] 46,1 None [69] 46,2 One [53] 46,3 Two [61] 46,4 Three or more

6. Give odometer reading to nearest mile at shift end: ____ (47-51)

7. Give total time spent in each of the following activities today:

Driving police vehicle 4 (52) hrs. 10 (391) (53-54) mins.
Parked for surveillance/reporting 1 (55) hrs. 00 (317) (56-57) mins.
Issuing summons ____ (58) hrs. 15 (252) (59-60) mins.
Meal/gas stops ____ (61) hrs. 35 (348) (62-63) mins.
Other _____ (specify) ____ (64) hrs. 1 (158) (65-66) mins.

8. Give average length of time you spent in uninterrupted driving today.

[60] 67,1 Less than 15 minutes [37] 67,4 46 minutes to 1 hour
[35] 67,2 16 to 30 minutes [42] 67,5 1 to 1½ hours
[58] 67,3 31 to 45 minutes [32] 67,6 Over 1½ hours

9. What percent of your driving time was spent in each of the following densities of traffic today?

Heavy 20.1 (289) % (68-69) Medium 31.0 (362) % (70-71) Light 30.1 (328) % (72-73)

10. How many pursuit runs did you make today in which you drove 25 or more miles over the posted speed limit?

1.0 (30) (74) pursuit run(s)

What was the estimated length of each pursuit run? 171 (78-80)

1. 2.2 (33) miles (5-6) 2. 0.8 (8) miles (7-8) 3. 0.7 (4) miles (9-10)

How long did each pursuit run last?

1. 2.7 (30) mins. (11-12) 2. 2.5 (8) mins. (13-14) 3. 3.0 (4) mins. (15-16)

11. How many emergency runs did you make today?

0.7 (98) (17) emergency run(s)

What was the estimated length of each emergency run?

1. 2.8 (98) miles (18-19) 2. 2.0 (18) miles (20-21) 3. 0.8 (5) miles (22-23)

How long did each emergency run last?

1. 4.5 (96) mins. (24-25) 2. 3.5 (18) mins. (26-27) 3. 4.0 (6) mins. (28-29)

12. Indicate below the typical posted speed limit, and estimate your average cruising speed and the percentage of your driving time spent on the following types of roads:

	Typical speed limit	Average Cruis. speed	Percent of time
Interstate system	60.2 (193) mph (30-31)	60.1 (178) mph (32-33)	0.8 (169) % (34-35)
Other controlled access Highway	40.8 (102) mph (36-37)	40.7 (103) mph (38-39)	0.7 (98) % (40-41)
Major arterial route	35.4 (263) mph (42-43)	30.9 (258) mph (44-45)	20.4 (255) % (46-47)
Local or residential st.	30.3 (366) mph (48-49)	25.2 (360) mph (50-51)	50.6 (355) % (52-53)
One lane or alley	15.5 (167) mph (54-55)	10.3 (173) mph (56-57)	0.8 (168) % (58-59)
Other _____ (specify)	25.5 (11) mph (60-61)	16.0 (14) mph (62-63)	0.5 (19) % (64-65)
		Total	100%

13. Indicate the degree of difficulty you experienced in the following driving tasks during today's non-emergency routine driving.

	DEGREE OF DIFFICULTY					
	high		moderate		low	none
a. keeping in lane	4 (66,1)	3 (66,2)	7 (66,3)	22 (66,4)	60 (66,5)	309 (66,6)
b. avoiding pedestrian	1 (67,1)	2 (67,2)	7 (67,3)	11 (67,4)	60 (67,5)	318 (67,6)
c. avoiding tailgating	1 (68,1)	3 (68,2)	8 (68,3)	21 (68,4)	76 (68,5)	288 (68,6)
d. avoiding parked vehicle	2 (69,1)	2 (69,2)	10 (69,3)	14 (69,4)	67 (69,5)	304 (69,6)
e. avoiding fixed object	1 (70,1)	1 (70,2)	0 (70,3)	4 (70,4)	43 (70,5)	350 (70,6)
f. passing	4 (71,1)	6 (71,2)	17 (71,3)	43 (71,4)	94 (71,5)	237 (71,6)
g. making turns	4 (72,1)	7 (72,2)	16 (72,3)	30 (72,4)	85 (72,5)	257 (72,6)
h. changing lanes	3 (73,1)	8 (73,2)	25 (73,3)	49 (73,4)	94 (73,5)	221 (73,6)
i. parking	3 (74,1)	3 (74,2)	8 (74,3)	13 (74,4)	52 (74,5)	320 (74,6)
j. leaving parked position	1 (75,1)	4 (75,2)	10 (75,3)	24 (75,4)	90 (75,5)	277 (75,6)
k. crossing intersection	6 (76,1)	10 (76,2)	28 (76,3)	27 (76,4)	74 (76,5)	253 (76,6)

172 (78-80)

14. Were any of the following conditions present in your vehicle today?

	Yes	No	Not Sure
a. improperly inflated tires	15 (5,1)	337 (5,2)	45 (5,3)
b. bald or worn tires	12 (6,1)	372 (6,2)	5 (6,3)
c. tire blowout or flat	3 (7,1)	373 (7,2)	5 (7,3)
d. front end shimmy	53 (8,1)	345 (8,2)	3 (8,3)
e. engine miss on acceleration	140 (9,1)	255 (9,2)	7 (9,3)
f. sideways pull when braking	57 (10,1)	341 (10,2)	5 (10,3)
g. rocking or dipping when braking	52 (11,1)	341 (11,2)	7 (11,3)
h. sideways pull on straightaways	30 (12,1)	362 (12,2)	6 (12,3)
i. binding steeringwheel in full turns	23 (13,1)	371 (13,2)	5 (13,3)
j. noticeable steeringwheel play	43 (14,1)	355 (14,2)	4 (14,3)
k. spongy or fading brakes	53 (15,1)	344 (15,2)	4 (15,3)
l. faulty windshield wiper	11 (16,1)	360 (16,2)	28 (16,3)
m. faulty ventilation / defroster	13 (17,1)	377 (17,2)	10 (17,3)
n. faulty headlights	11 (18,1)	372 (18,2)	14 (18,3)
o. other_____ (Specify)	25 (19,1)	123 (19,2)	4 (19,3)

15. Give approximate number of hours of formal police department driver training received upon joining force or upon assignment to patrol vehicle driving.

30 (20,1)	None given	
56 (20,2)	Classroom lecture	6.6 (324) (21-22) hrs.
176 (23,1)	Practice track	4.4 (205) (24-25) hrs.
72 (26,1)	Simulator	2.7 (35) (27-28) hrs.
70 (29,1)	Skid pan	3.3 (70) (30-31) hrs.
22 (32,1)	Other_____ (Specify)	4.1 (43) (33-34) hrs.

16. How long ago did you receive this training?

50 (35,1)	Less than 6 months ago	120 (35,4)	2 to 5 years ago
37 (35,2)	6 months to 1 year ago	103 (35,5)	More than 5 years ago
66 (35,3)	1 to 2 years ago		

17. What type of examination did you take?

72 (36,1)	None given	378 (38,1)	Written
170 (36,2)	On road	13 (39,1)	Other_____ (specify)
142 (37,1)	Practice track		

18. When did you last receive refresher driving instruction lasting 30 minutes or more?

276 (40,1)	None given	40 (40,4)	1 to 2 yrs. ago
52 (40,2)	Less than 6 mos. ago	42 (40,5)	More than 2 yrs. ago
27 (40,3)	6 mos. to 1 yr. ago		

19. When was your routine driving last observed by your immediate supervisor?

121 (41,1)	Never observed	43 (41,4)	6 months to 1 year ago
188 (41,2)	In the last month	4 (41,5)	1 to 2 years ago
36 (41,3)	1 to 6 months ago	14 (41,6)	More than 2 years ago

20. When was routine driving last discussed in roll call training?

203 (42,1)	In the last month	17 (42,3)	6 months to 1 year ago
119 (42,2)	1 to 6 months ago	52 (42,4)	More than 1 year ago

21. Have you received any special training in the following?

Emergency pursuit driving	Yes 174 (43,1)	No 198 (43,2)
Defensive Driving	Yes 168 (44,1)	No 115 (44,2)

22. In the last 24 hours, how much of your off-duty time was spent driving a motor vehicle?

3 (45,1)	None	80 (45,4)	2 to 3 hours
55 (45,2)	Less than one hour	34 (45,5)	3 to 4 hours
187 (45,3)	1 to 2 hours	38 (45,6)	More than 4 hours

23. In the last 24 hours, how much of your off-duty time was spent working at a part-time job?

183 (46,1)	None, but I have a part-time job	15 (46,4)	2 to 3 hours
10 (46,2)	Less than one hour	23 (46,5)	3 to 4 hours
4 (46,3)	1 to 2 hours	20 (46,6)	More than 4 hours

24. If you have changed shifts in the last three on-duty days, give hours of prior shift:

_____ (47-50) AM / PM (51,1 51,2) to _____ (52-55) AM / PM (56,1 56,2)

25. To what type of duty were you assigned yesterday?

318 (57,1)	Regular or routine tour
10 (57,2)	Vacation day
13 (58,1)	Overtime (Total overtime hours worked 1.0 (13) (59) hrs.)
71 (60,1)	Other_____ (specify)

173 (78-80)

476 Forms Returned

Name_____ ROUTINE DRIVING ACCIDENT SUPPLEMENT (1 2 3 4)

THIS FORM IS TO BE COMPLETED BY POLICE OFFICER DRIVING A VEHICLE WHICH BECOMES INVOLVED IN AN ACCIDENT WHILE ON ROUTINE PATROL.

Date_____ (Mo. (s)/Day 6-7 /Yr.) Time of accident_____ (8-11) AM / PM (12,1 12,2) Assignment FP-4, MP-389, FT-1, MT-1, IN-14, TR-10, X-3 (13) Age 28.7 (468) (14-15)

Years on present assignment 2.4 (48) (16-17) Yrs. ___ Mos. Years on Force 4.5 (468) (18-19) Yrs. ___ Mos. Shift start (20-23) AM / PM (24,1 24,2) Shift end (25-28) AM / PM (29,1 29,2)

1. Check the type of duty to which you are usually assigned and give the duty assigned on day of accident.

	Usual Assignment	Assignment at Time of Accident
One man patrol	191 (30,1)	172 (31,1)
Two man patrol	192 (30,2)	137 (31,2)
Three or more man patrol	0 (30,3)	3 (31,3)
Varies	36 (30,4)	
Other_____ (specify)	41 (30,5)	35 (31,4)

2. Type of police vehicle driven at time of accident.

428 (32,1)	Sedan	3 (32,4)	Bus or van
4 (32,2)	Compact	19 (32,5)	Squadrol
1 (32,3)	Canine patrol car	12 (32,6)	Other_____ (specify)

Vehicle was: 393 (33,1) Marked 45 (33,2) Unmarked

Usual type of police vehicle driven:

236 (34,1)	Same as above, drive same car daily
189 (34,2)	Same as above, drive same type of car daily
31 (34,3)	Other_____ (specify)

3. Check emergency equipment in use at time of accident

364 (35,1)	None	73 (37,1)	Turret light
20 (35,2)	Siren	22 (38,1)	High beam headlights
36 (36,1)	Spotlight	36 (39,1)	Other_____ (specify)

4. Check type of equipment used by occupant(s) at time of of accident.

	Driver	Passenger(s)
Safety belt	300 (40,1)	140 (41,1)
Shoulder harness	23 (42,1)	14 (43,1)
Helmet	9 (44,1)	5 (45,1)

Was door locked on:	Yes	No	Not Sure
Driver's side	186 (46,1)	219 (46,2)	30 (46,3)
Passenger's side	250 (47,1)	107 (47,2)	59 (47,3)
Did vehicle have headrests?	319 (48,1)	81 (48,2)	11 (48,3)

5. Accident Speed:

Speed when danger of accident became apparent 10.9 (277) (49-50) mph

Speed when accident occurred 6.0 (283) (51-52) mph

Speed of surrounding traffic 25.2 (209) (53-54) mph

6. Give road type on which accident occurred:

12 (55,1)	Interstate system	218 (55,4)	Local or residential street
5 (55,2)	Other controlled access hwy.	26 (55,5)	One lane or alley
37 (55,3)	Major arterial route	62 (55,6)	Other_____ (specify)

What was posted speed limit_____ mph.

7. Were any of the following conditions noticeable before time of the accident?

	Yes	No	Not Sure
a. Improperly inflated tires	9 (56,1)	412 (56,2)	22 (56,3)
b. Bald or worn tires	3 (57,1)	418 (57,2)	19 (57,3)
c. Tire blowout or flat	2 (58,1)	438 (58,2)	2 (58,3)
d. Front end shimmy	27 (59,1)	440 (59,2)	9 (59,3)
e. Sideways pull on straightaways	18 (60,1)	415 (60,2)	8 (60,3)
f. Engine miss on acceleration	37 (61,1)	402 (61,2)	6 (61,3)
g. Sideways pull when braking	26 (62,1)	404 (62,2)	11 (62,3)
h. Rocking or dipping when braking	14 (63,1)	415 (63,2)	11 (63,3)
i. Binding steeringwheel in full turns	7 (64,1)	432 (64,2)	4 (64,3)
j. Noticeable steeringwheel play	28 (65,1)	412 (65,2)	5 (65,3)
k. Spongy or fading brakes	15 (66,1)	419 (66,2)	7 (66,3)
l. Faulty windshield wiper	2 (67,1)	425 (67,2)	13 (67,3)
m. Faulty ventilation / defroster	6 (68,1)	420 (68,2)	7 (68,3)
n. Faulty headlights	0 (69,1)	420 (69,2)	10 (69,3)
o. Other_____ (Specify)	27 (70,1)	403 (70,2)	3 (70,3)

Which of the above conditions contributed most to the cause of the accident? (check one)

366 (71,1) None 3 (71,2) a. 2 (71,3) b. 2 (71,4) c. 1 (71,5) d. 1 (71,6) e. 1 (71,7) f. 6 (71,8) g.
2 (71,9) h. 0 (72,1) i. 0 (72,2) j. 3 (72,3) k. 1 (72,4) l. 2 (72,5) m. 0 (72,6) n. 17 (72,7) o.

Explain circumstances: _____

8. Check any of the following visual obstructions which contributed to the cause of the accident.

359 (73,1)	None
39 (73,2)	Rain, snow on windshield
2 (74,1)	Blinded by sunlight glare
3 (74,2)	Blinded by headlight glare
62 (75,1)	Other_____ (specify)

9. Activity at time of accident:

10 (76,1)	Returning from an emergency or pursuit run
34 (76,2)	Following or stopping a traffic violator
32 (76,3)	Answering a non-emergency call
178 (76,4)	Routine cruising
187 (76,5)	Other_____ (specify)

1 8 1 (78 79 80)

(1 2 3 4)

10. Indicate the degree of difficulty you experienced in the following driving tasks during routine patrol on the day of the accident.

	DEGREE OF DIFFICULTY					
	high	moderate		low		none
	5	4	3	2	1	0
a. Keeping in lane	8 (5,1)	1 (5,2)	10 (5,3)	1 (5,4)	11 (5,5)	397 (5,6)
b. Avoiding pedestrian	7 (6,1)	1 (6,2)	6 (6,3)	2 (6,4)	7 (6,5)	373 (6,6)
c. Avoiding tailgating	3 (7,1)	1 (7,2)	5 (7,3)	7 (7,4)	7 (7,5)	375 (7,6)
d. Avoiding parked vehicle	4 (8,1)	2 (8,2)	6 (8,3)	1 (8,4)	7 (8,5)	397 (8,6)
e. Avoiding fixed object	8 (9,1)	2 (9,2)	7 (9,3)	2 (9,4)	11 (9,5)	370 (9,6)
f. Passing	8 (10,1)	4 (10,2)	9 (10,3)	3 (10,4)	10 (10,5)	384 (10,6)
g. Making turns	4 (11,1)	3 (11,2)	12 (11,3)	3 (11,4)	15 (11,5)	387 (11,6)
h. Changing lanes	5 (12,1)	3 (12,2)	9 (12,3)	3 (12,4)	10 (12,5)	389 (12,6)
i. Parking	5 (13,1)	2 (13,2)	5 (13,3)	3 (13,4)	6 (13,5)	399 (13,6)
j. Leaving parked position	5 (14,1)	3 (14,2)	7 (14,3)	2 (14,4)	14 (14,5)	388 (14,6)
k. Crossing intersection	4 (15,1)	3 (15,2)	9 (15,3)	1 (15,4)	11 (15,5)	387 (15,6)

Which of the above contributed most to cause of accident?

337 (16,1) None 8 (16,2) a. 2 (16,3) b. 1 (16,4) c. 2 (16,5) d. 10 (16,6) e. 5 (16,7) f. 6 (16,8) g. 1 (16,9) h. 3 (17,1) i. 5 (17,2) j. 9 (17,3) k. Explain circumstances:

11. Give approximate number of hours of formal police department driver training received upon joining force or upon assignment to patrol vehicle driving.

106 (18,1) None given
37 (18,2) Skid pan 2.6 (32) (19-20) hrs
82 (21,1) Simulator 5.4 (75) (22-23) hrs
133 (24,1) Practice track 8.0 (134) (25-26) hrs
164 (27,1) Classroom Lect. 8.7 (252) (28-29) hrs
27 (30,1) Other (specify) 4.0 (22) (31-32) hrs

12. How long ago did you receive this training?

77 (33,1) Less than 6 mos.
63 (33,3) 1 to 2 yrs.
56 (33,5) More than 5 yrs.
47 (33,2) 6 mos. to 1 yr.
86 (33,4) 2 to 5 yrs.

13. What type of examination did you take?

129 (34,1) None given
118 (35,1) On road
120 (36,1) Practice track
220 (34,2) Written
36 (37,1) Other (specify)

14. When did you last receive refresher driving instruction lasting 30 minutes or more?

74 (38,1) Less than 6 mos.
45 (38,3) 1 to 2 yrs.
249 (38,5) None given
60 (38,2) 6 mos. to 1 yr.
46 (38,4) More than 2 yrs.

15. When was routine driving last discussed in roll call training?

236 (39,1) In the last month
39 (39,3) 6 mos. to 1 yr. ago
137 (39,2) 1 to 6 mos. ago
32 (39,4) More than 1 yr. ago

16. When was your routine driving last observed by your immediate supervisor?

62 (40,1) Never observed
9 (40,4) 6 mos. to 1 yr. ago
334 (40,2) In the last month
46 (40,5) 1 to 2 yrs. ago
45 (40,3) 1 to 6 months ago
5 (40,6) More than 2 yrs. ago

17. Have you received any special training in the following?

Emergency pursuit driving: 157 (41,1) Yes 248 (41,2) No
Defensive Driving: 276 (42,1) Yes 165 (42,2) No

18. In the last 24 hours, how much of your off-duty time was spent driving a motor vehicle?

22 (43,1) None
88 (43,4) 2 to 3 hours
93 (43,2) Less than one hour
35 (43,5) 3 to 4 hours
162 (43,3) 1 to 2 hours
60 (43,6) More than 4 hours

19. In the last 24 hours, how much of your off-duty time was spent working at a part-time job?

105 (44,1) None, but I have a part-time job
2 (44,2) Less than one hour
12 (44,5) 3 to 4 hours
6 (44,3) 1 to 2 hours
5 (44,6) More than 4 hours
2 (44,4) 2 to 3 hours
327 (44,7) No part-time job

20. How many routine driving (non-emergency) accidents have you had driving since start of assignment?

273 (45,1) None 87 (45,2) One 59 (45,3) Two 41 (45,4) Three or more

21. If you have changed shifts in the last three on-duty days, give hours of prior shift:

_____ (46-49) AM / PM (50) _____ (51-54) AM / PM (55)

22. Type of duty on day before accident:

396 (56,1) Regular or routine tour 4 (56,2) Vacation
7 (56,3) Overtime (Total overtime hours worked: 4.5 (6) (57-58) hrs)
Other (specify) (56,4)

24. In which of the following, if any, were you involved at the time of the accident? (check one or more).

4 (59,1) Talking on radio
68 (65,1) Scanning traffic behind
83 (60,1) Listening to radio
190 (66,1) Scanning traffic ahead
12 (61,1) Talking to passenger(s)
112 (67,1) Scanning traffic to the side
53 (62,1) Scanning streets or other buildings
47 (63,1) Observing suspects or suspicious circumstances
11 (64,1) Talking or motioning to someone outside vehicle
144 (68,1) Other (specify)

(69-70) (78 79 80)

67 Forms Returned

Name _____

PARKED OR ROLLING AUTOMOBILE ACCIDENT SUPPLEMENT (1 2 3 4)

THIS FORM IS TO BE COMPLETED BY THE DRIVER OF A POLICE VEHICLE INVOLVED IN AN ACCIDENT AFTER IT HAS BEEN PARKED, WHETHER OCCUPIED OR UNOCCUPIED. EXCLUDE PARKING LOT ACCIDENTS AND ACCIDENTS OCCURRING WHILE MANEUVERING INTO OR OUT OF A PARKED POSITION.

Date ___/___/___ (Mo. 5 Day 6-7 Yr.) Time of parked accident _____ (8-11) AM / PM (12,1 12,2) Assignment FP-1; MP-38; MT-1; TN-6 TF-15; X-2 (13) Age 30.9 (67) (14-15)

Years on present assignment 2.1 (54) (16-17) Yrs. _____ Mos. Shift start ___:___ (18-21) AM / PM (22,1 22,2)

Type of patrol: 26 (23,1) One man 30 (23,2) Two man 11 (23,3) Other (specify) Years on Force 4.4 (65) (24-25) Yrs. _____ Mos.

1. Indicate type of police vehicle involved in accident.

57 (26,1) Sedan
3 (26,3) Squadrol
0 (26,5) Canine patrol car
0 (26,2) Compact
0 (26,4) Bus/van
5 (26,6) Other (specify)

a. Vehicle was: 42 (27,1) Marked 20 (27,2) Unmarked

2. Indicate use of the following devices at time of accident.

	Used	Not Used	Not Available
a. Four-way flasher light	13 (28,1)	41 (28,2)	4 (28,3)
b. Headlights	22 (29,1)	40 (29,2)	2 (29,3)
c. Parking lights	14 (30,1)	39 (30,2)	5 (30,3)
d. Siren	3 (31,1)	35 (31,2)	17 (31,3)
e. Flashing or turret light	17 (32,1)	27 (32,2)	17 (32,3)
f. Flares	1 (33,1)	44 (33,2)	10 (33,3)
g. Window or roof mounted tail lights	3 (34,1)	22 (34,2)	27 (34,3)
h. Other (specify)	4 (35,1)	6 (35,2)	0 (35,3)

3. Indicate position of gearshift lever at time of accident.

54 (36,1) Park
2 (36,3) Reverse
0 (36,5) Low
5 (36,2) Neutral
5 (36,4) Drive
0 (36,3) High

4. Was motor running at time of accident? 24 (37,1) Yes 40 (37,2) No

5. Indicate position of emergency brake at time of accident.

54 (38,1) Emergency brake on 11 (38,2) Emergency brake off

6. Were you in or near vehicle at time of accident?

24 (39,1) No
28 (39,2) Near vehicle
14 (39,3) In vehicle

If you were in vehicle, what were your doing?

3 (40,1) Surveillance
2 (40,4) About to vacate parking area
1 (40,2) Filling out report(s)
9 (40,5) Other (specify)
2 (40,3) Just completed parking

7. Indicate total number of occupants in vehicle (excluding yourself) at time of accident: 1.6 (10) (41)

8. Check purpose(s) for which police vehicle was parked:

1 (42,1) To assist at scene of accident
1 (43,1) To assist or protect a disabled vehicle
12 (44,1) To issue a traffic or parking violation
10 (45,1) At scene of emergency call or end of pursuit run
5 (46,1) At scene of non-emergency call
2 (47,1) Lunch or gas stop
2 (48,1) Observation of passing traffic or stake-out
0 (49,1) To serve as a road block
34 (50,1) Other (specify)

If police vehicle was disabled, what was the cause?

0 (51,1) Fire or explosion
0 (51,4) Out of gas
34 (51,6) Vehicle not disabled
0 (51,2) Flat tire
0 (51,5) Overheating
0 (51,3) Unknown mechenical Failure
1 (51,7) Other (specify)

9. For how long a period was car parked before damage occurred or was observed? 5.8 (63) (52-53) hours _____ (54-55) minutes

10. On or near what type of roadway was vehicle parked?

0 (56,1) Interstate system
47 (56,4) Local or residential street
2 (56,2) Other controlled access hwy
1 (56,5) One lane or alley
11 (56,3) Major arterial route
5 (56,6) Other (specify)

11. What was posted speed limit on roadway? 25.0 (57) (57-58) mph

12. What was condition of roadway?

62 (59,1) Dry 3 (59,2) Wet 0 (59,3) Icy 1 (59,4) Snowy

13. What was traffic density on roadway?

5 (60,1) Heavy 20 (60,2) Medium 44 (60,3) Light

14. Indicate position of parked vehicle.

47 (61,1) Level
9 (61,2) Slight incline (front end higher than rear)
6 (61,3) Slight incline (rear end higher than front)
1 (61,4) Sharp incline (front end higher than rear)
2 (61,5) Sharp incline (rear end higher then front)
0 (61,6) Other (specify)

15. On what section of road was police vehicle parked? Check one and follow the appropriate directions.

- [37] 62,1 At curb in legal parking zone
- [0] 62,2 At curb next to fire hydrant
- [1] 62,3 At curb in bus stop zone
- [5] 62,4 At curb in other no-parking zone

→ If police vehicle struck by other car, complete section on CURB PARKED VEHICLE

- [5] 62,5 Double parked in street → If police vehicle struck by other car, complete section on DOUBLE PARKED VEHICLE
- [2] 62,6 On shoulder or median strip → If police vehicle struck by other car, complete section on SHOULDER OR MEDIAN VEHICLE PARKING

- [0] 62,7 Blocking alley or driveway
- [1] 62,8 Across two or more lanes of traffic
- [7] 62,9 Other _____ (specify)

→ If check mark falls in this bracket, stop here and return this form.

CURB-PARKED VEHICLE ONLY

1. Indicate position of police vehicle relative to curb. [41] 63,1 Parallel [3] 63,2 Angle
   IF PARALLEL-PARKED:
   a. What was the approximate distance of front and back wheels from curb?

	Front Wheels		Back Wheels	
	8.5(42) ft. (64-65)	____ in. (66-67)	8.5(46) ft. (68-69)	____ in. (70-71)

   b. In what direction were front wheels turned?
   [11] 72,1 Toward curb [1] 72,2 Away from curb [31] 72,3 Straight
2. In what direction was police vehicle facing relative to other vehicles in its lane?
   [44] 73,1 Facing with the direction of other parked cars [0] 73,2 Facing opposite the direction of other parked cars
3. Estimate distance of police vehicle from nearest intersection: 100.1(44) ft. (74-76)

THE FOLLOWING QUESTIONS REFER TO CIRCUMSTANCES EXISTING WHEN THE POLICE VEHICLE WAS INITIALLY PARKED

4. What was the density of parked cars on portion of road where the police vehicle was initially parked?
   [14] 77,1 No parked cars [15] 77,2 Light congestion [12] 77,3 Moderate congestion [5] 77,4 Heavy congestion
   191 78-80
5. Were cars parked between police vehicle and nearest intersection forward to parked position [41] 5,1 Yes [24] 5,2 No
   How much space was between police vehicle and nearest forward vehicle? [19] 6,1 Less than full car length [4] 6,2 1-2 car lengths [5] 6,3 2-3 car lengths [5] 6,4 More than 3 car lengths
   In what position was nearest forward car parked? [28] 7,1 Parallel [1] 7,2 Angle [1] 7,3 Right angle [0] 7,4 Other _____ (specify)
6. Were cars parked between police vehicle and nearest intersection rearward to parked position [17] 8,1 Yes [25] 8,2 No
   How much space was between police vehicle and nearest rearward vehicle? [11] 9,1 Less than full car length [4] 9,2 1-2 car lengths [3] 9,3 2-3 car lengths [6] 9,4 More than 3 car lengths
   In what position was nearest rearward car parked? [18] 10,1 Parallel [2] 10,2 Angle [0] 10,3 Right angle [5] 10,4 Other _____ (specify)
7. Did accident result from the parking maneuvers of another vehicle? [13] 11,1 Yes [29] 11,2 No

DOUBLE PARKED-VEHICLE ONLY

1. How many full traffic lanes were left open:
   a. In direction police vehicle was facing? 2.2(3) 12 lanes
   b. Opposite to the direction police vehicle was facing? 2.5(3) 13 lanes
2. Did accident result from the attempt of another vehicle to pass police vehicle? [0] 14,1 Yes [5] 14,2 No
3. Estimate distance of police vehicle from nearest intersection: 60.2(5) 15-17 ft.

SHOULDER OR MEDIAN-PARKED VEHICLE ONLY

1. Indicate position of police vehicle relative to nearest lane of moving traffic
   [4] 18,1 Parallel [0] 18,2 Angle [0] 18,3 Right angle [0] 18,4 Other _____ (specify)
2. Estimate the distance of the police vehicle from the nearest lane of moving traffic 3.5(3) 19-21 ft.
3. If sighting of police vehicle was obstructed to any degree from moving traffic, indicate the obstruction.
   Police vehicle was parked:
   [0] 22,1 Just over rise or hill [0] 22,4 Near bushes or trees
   [0] 22,2 Just over embankment [0] 22,5 Just around curve
   192 78-80
   [0] 22,3 Near abuttment [0] 22,6 Other _____ (specify)

Table C-1

Non-Vehicular Accidents to Municipal Police in 1969 in a Large Middle Atlantic State (N=2,686)

Variable	f	%	Variable	f	%
Month			**Agency**		
January	260	10	Other person	1,026	38
February	163	6	Injured person	364	14
March	222	8	Objects/equipment	488	18
April	232	9	Working surfaces	599	22
May	274	10	Noxious gas, fumes	129	5
June	249	9	Plants, animals	85	3
July	203	8			
August	224	8	**Accident Type**		
September	215	8	Striking against	380	14
October	232	9	Struck by	955	36
November	181	7	Caught in/between	43	2
December	226	8	Falls--same level	374	14
			Falls--different level	88	3
Hours Worked			Slips & overexertion	710	26
1 hour or less	514	19	Burn, scald, electrocution	31	1
2 hours	368	14	Inhalation, absorption	51	2
3 hours	306	11			
4 hours	303	11	**Unsafe Act**		
5 hours	263	10	Unsafe use of equipment	691	26
6 hours	217	8	Gripping insecurely	333	12
7 hours	229	9	Other	112	4
8 hours or more	190	7	No unsafe act	1,550	58
Age			**Hazardous Condition**		
25 and under	493	18	Slippery	322	12
26 - 30	724	27	Unsafe planning, layout	685	26
31 - 35	475	18	Other	292	11
36 - 40	383	14	None	1,387	52
41 - 45	264	10			
46 and over	230	9	**Nature of Injury**[1]		
			Cuts, bruises	1,700	63
Dependency			Fractures	101	4
No dependents	249	9	Sprains	676	25
Spouse	1,155	43	Other	110	4
Spouse and other(s)	866	32			
Unknown	416	15	**Location of Injury**		
			Eyes	130	5
Length of Employment			Head, neck	227	8
1 year or less	125	5	Arms, wrist	242	9
1 - 2 years	206	8	Hands, fingers	547	20
2 - 3 years	233	9	Chest	233	9
3 - 4 years	338	13	Back	424	16
4 - 5 years	233	9	Internal	139	5
5 -10 years	465	17	Legs, knees	359	13
10 years or more	658	24	Ankles, feet, toes	290	11
			Other	95	4

[1]Disability was recorded as fatal in 13 cases (0.5%), and as "temporary total" disability in the remaining 2,673 cases.

CITY POLICE DEPARTMENT MEDICAL CASES 1970
LIST OF VARIABLES AS LOADED IN FILE NAMED MEDIC

01 Unit

01	District 1
02	" 2
03	" 3
04	" 4
05	" 5
06	" 6
07	" 7
08	" 8
09	" 9
10	" 10
11	" 11
12	" 12
13	" 13
14	" 14
15	" 15
16	" 16
17	" 17
18	" 18
19	" 19
20	" 20
21	" 21
22	Task force areas; Administration
23	Detective divisions; Intelligence; Vice, etc.
24	Youth divisions
25	Traffic divisions; Loop traffic; Special traffic
26	All others

02 Cause of Injury

01	Vehicular
02	Assault
03	Resisting arrest
04	Fight, riot or mob action
05	Gun shot - self inflected; Gun shot
06	Cut or stabbed - knife; Cut or stabbed - other
07	Hit by flying object - unknown
08	Human bite
09	Slip or fall - police action
10	Slip or fall - routine
11	Lifting
12	Attempting entrance; Jumping
13	Physical training
14	Enter or exit vehicle
15	Equipment failure
16	Frost bite; Animal bite; Overcome by fumes or smoke; Fire-chemical-electrical-etc.; Equipment repair; Explosion; Exposure to disease; Poisoning; Other

03 Type of Injury

01	Puncture
02	Laceration and abrasion
03	Contusion
04	Fracture-possible
05	Sprain; Dislocation-possible
06	Burn-thermal; Burn-electrical; Burn-chemical
07	Internal
08	Laceration and abrasion and contusion
09	Multiple injuries (all doubles and above except for criterion 08)

04 Part of Body

01	Head-face or scalp; Eyes; Nose; Mouth-teeth; Ears
02	Neck; Back
03	Chest; Abdomen
04	Groin
05	Arms; Legs
06	Feet or hands
07	The pair 01 and 02
08	The pair 01 and 03
09	The pair 01 and 04
10	The pair 01 and 05
11	The pair 01 and 06
12	The pair 02 and 03
13	The pair 02 and 04
14	The pair 02 and 05
15	The pair 02 and 06
16	The pair 03 and 04
17	The pair 03 and 05
18	The pair 03 and 06
19	The pair 04 and 05
20	The pair 04 and 06
21	The pair 05 and 06
22	Triples and above

05 Time

01	0001-0400
02	0401-0800
03	0801-1200
04	1201-1600
05	1601-2000
06	2001-2400

06 Man Days Lost

01 None - interpret as first aid or medical attention only
02 1 day
03 2-3 days
04 4-5 days
05 6-7 days
06 8-14 days
07 15-30 days
08 31-60 days
09 Over 60 days
10 Fatal (6000 days)

07 Month

01 January
02 February
03 March
04 April
05 May
06 June
07 July
08 August
09 September
10 October
11 November
12 December

CITY POLICE DEPARTMENT ACCIDENTS 1969 AND 1970
LIST OF VARIABLES AS LOADED IN FILE NAMED IPAX

01 Year of Birth (used to calculate ages assuming all born on January 1)

01 Under 20
02 20-24
03 25-29
04 30-34
05 35-44
06 45-54
07 55-64
08 65 and over

02 Vehicle type

01 Cars
02 Trucks (squadrols)
03 Other or unknown

03 Driver Action

01 Going straight ahead
02 Changing lanes
03 Making right turn
04 Making left turn
05 Making U turn
06 Slowing or stopping
07 Starting in traffic
08 Leaving parking place
09 Stopped in traffic
10 Parked
11 Backing
12 Driverless moving veh.

04 Apparent Violation

01 Disobeyed traffic signal; Passed stop sign
02 On wrong side of road
03 Overtook improperly
04 Made improper turn
05 Brakes inadequate
06 Failed to yield right of way
07 Speed too fast
08 Followed too closely
09 Other
10 No apparent violation

05 Street Type

01 Expressway
02 Exp'way Ent.; Exit ramp
03 Blvd.; Drive; Parkway
04 Business; Mfg.; C.T.A.; Thru
05 Local residential street
06 Alley
07 Driveway
08 Off-street

06 Year of Accident

01 1969
02 1970

07 Month of Accident

01 January
02 February
03 March
04 April
05 May
06 June
07 July
08 August
09 September
10 October
11 November
12 December

08 Day of Week

01 Sunday
02 Monday
03 Tuesday
04 Wednesday
05 Thursday
06 Friday
07 Saturday

09 Hour of Accident

01 0000-0359
02 0400-0759
03 0800-1159
04 1200-1559
05 1600-1959
06 2000-2359

10 Type of Accident

01 Pedestrian
02 Motor vehicle in traffic
03 Parked motor vehicle
04 Train; Bicyclist; Animal
05 Fixed object - on roadway
06 Other object - on roadway
07 Ran off road; Overturned in road; Other non-collision
08 Other

11 Manner of Collision

01 Parking maneuver
02 Turning maneuver
03 Rear end
04 Head on
05 Sideswipe, veh. in opposite direction
06 Sideswipe, veh. in same direction
07 Cutting in
08 Merging
09 Angle
10 Backing
11 Other
12 Unknown

12 Classification of Accident (by most serious item)

01 Injured or fatal driver or passenger
02 Injured or fatal pedestrian
03 Property damage only
04 Property damage only - M

13 Class of Most Serious Injury

01 A
02 B
03 C
04 Fatal

14 Weather Condition

01 Clear
02 Raining
03 Snowing
04 Fog or mist

15 Road Condition

01 Dry
02 Wet
03 Snowy; Icy
04 Const.; Repair

16 Light Condition

01 Daylight
02 Dawn; Dusk
03 Darkness

17 Street Light

01 On
02 Off
03 None

18 Traffic Control

01 Traffic signal
02 Stop sign
03 Officer; RR X-ing gates; RR X-ing signal; Other
04 No control

19 Arrests

01 Yes
02 No

1970 CITY POLICE TRAFFIC ACCIDENTS WITH SUPPLEMENTAL INFORMATION
LIST OF VARIABLES AS LOADED IN FILE NAMED IALL

01-05 Same as on IPAX
06-18 Same as IPAX 07-19

19 Years of Service

01 1 year
02 2 years
03 3 years
04 4-5 years
05 6-10 years
06 11-15 years
07 16-20 years
08 Over 20

20 Type of Vehicle Marking

01 Marked
02 Unmarked
03 3-Wheel
04 Squadrol
05 Other

21 Assignment

01 Radio assignment
02 Routine patrol
03 Pursuit
04 Miscellaneous

22 Location

01 At intersection
02 Not at intersection
03 Parking lot

23 Preventability

01 Preventable
02 Non-preventable
03 Unattended damage (parking lot, vandalism, etc.)

24 Cost of Repairs

01 $1-50
02 $51-100
03 $101-150
04 $151-200
05 $201-250
06 $251-300
07 $301-400
08 $401-500
09 Over $500

25 Warrant for Collection

01 Yes
02 No
03 Hit and Run

26-29 Same as MEDIC 01-04
30 Same as MEDIC 06

APPENDIX D

Department of Police
City of Miami, Florida

Operations

DISCHARGE OF FIREARMS
AND USE OF FORCE REPORT

To: CHIEF OF POLICE (through channels) Date:_____

From:_____ IBM #_____ Assignment_____ Case #_____

1. LOCATION OF INCIDENT_____ Date_____ Time_____ (1 - 4) AM [58] 5,1 PM [99] 5,2
2. OFFENDER
   a. Name_____ DOB_____ Race____ Sex: M [143] 6,1 F [15] 6,2
   b. Address_____ City_____ State_____
   c. Physical condition at time of incident: 1) Sober [63] 7,1 2) Had been drinking [26] 7,2 3) Drunk [33] 7,3 4) Other [31] 7,4 _____ (specify)
   d. Check the appropriate boxes showing when offender was violent:
      1) Before arrest [60] 8,1 2) During arrest [116] 9,1 3) After arrest [78] 10,1
   e. Medical treatment of offender required:
      Yes [ ] 11,1 No [ ] 11,2 If YES, where treated?_____ Date_____ Time_____

3. CHARGES	ARREST NUMBER	COURT - DATE & TIME

4. WITNESSES	ADDRESS	TELEPHONE

5. TOTAL NUMBER OF OFFICERS INVOLVED IN ARREST:____ (12) 1 44 / 2 60 / 3+ 45
6. OFFICER(S) RESISTED:
   a. Name_____ IBM #_____
      Unit #_____ (13 - 14) Assignment * 1 50
   a. Name_____ IBM #_____
      Unit #_____ (15 - 16) Assignment *
7. TOTAL NUMBER OF OFFICERS INJURED: 2 14 (17) (Report two officers most seriously injured below)
   a. Name_____ IBM #_____
      Age * (18 - 19) Years on force * (20 - 21)

ACTIVITY OF OFFICER AT TIME OF MOST SERIOUS INJURY (check one)

[7] 26,1	Pursuing offender	[12] 26,6	Moving offender to vehicle
[12] 26,2	Confronting offender	[5] 26,7	Placing offender in vehicle
[23] 26,3	Arresting offender	[2] 26,8	Transporting offender in veh.
[1] 26,4	Searching offender	[3] 26,9	Removing offender from veh.
[10] 26,5	Handcuffing offender	[11] 27,1	Other_____ specify

MOST SERIOUS INJURY (check one)

[8] 30,1	Cut or stab (open wound)	[21] 30,5	Sprain - strain
[8] 30,2	Scratch (superficial wound)	[0] 30,6	Dislocation
[22] 30,3	Bruise (intact skin surface)	[2] 30,7	Broken bone
[1] 30,4	Gunshot	[3] 30,8	Other_____ specify

SOURCE OF MOST SERIOUS INJURY (check one)

[3] 32,1	Implement_____ specify	[6] 32,5	Offender's teeth
[4] 32,2	Object_____ specify	[19] 32,6	Offender's feet/legs
[11] 32,3	Ground, sidewalk, etc.	[0] 32,7	Vehicle
[34] 32,4	Offender's hands/arms	[0] 32,8	Other_____ specify

   a. Name_____ IBM #_____
      Age * (22 - 23) Years on force * (24 - 25)

ACTIVITY OF OFFICER AT TIME OF MOST SERIOUS INJURY (check one)

[2] 28,1	Pursuing offender	[1] 28,6	Moving offender to vehicle
[2] 28,2	Confronting offender	[2] 28,7	Placing offender in vehicle
[5] 28,3	Arresting offender	[1] 28,8	Transporting offender in veh.
[0] 28,4	Searching offender	[1] 28,9	Removing offender from veh.
[4] 28,5	Handcuffing offender	[2] 29,1	Other_____ specify

MOST SERIOUS INJURY (check one)

[1] 31,1	Cut or stab (open wound)	[6] 31,5	Sprain - strain
[1] 31,2	Scratch (superficial wound)	[0] 31,6	Dislocation
[6] 31,3	Bruise (intact skin surface)	[0] 31,7	Broken bone
[0] 31,4	Gunshot	[0] 31,8	Other_____ specify

SOURCE OF MOST SERIOUS INJURY (check one)

[0] 33,1	Implement_____ specify	[0] 33,5	Offender's teeth
[1] 33,2	Object_____ specify	[6] 33,6	Offender's feet/legs
[3] 33,3	Ground, sidewalk, etc.	[0] 33,7	Vehicle
[5] 33,4	Offender's hands/arms	[0] 33,8	Other_____ specify

*See reverse side (over)

TYPE OF INJURY (check one)

49 [34,1] Struck by offender — 9 [34,3] Slip - fall

13 [34,2] Pushed or shoved by offender — 6 [34,4] Other (specify)

Part of body injured _____ [36]

Medical treatment required? Yes 25 [38,1] No 47 [38,2]

Is injury sufficiently severe to result in use of "D" days?

Yes 3 [40,1] No 52 [40,2] Don't know 24 [40,3]

TYPE OF INJURY (check one)

11 [35,1] Struck by offender — 3 [35,3] Slip - fall

3 [35,2] Pushed or shoved by offender — 1 [35,4] Other (specify)

Part of body injured _____ [37]

Medical treatment required? Yes 1 [39,1] No 16 [39,2]

Is injury sufficiently severe to result in use of "D" days?

Yes 0 [41,1] No 16 [41,2] Don't know 2 [41,3]

8. IMPLEMENT(S) USED BY OFFICER(S): Please indicate the implement(s) used, the implements available for use, (present or on person) but not used, and the implements that were available, but you were unable to use.

	Handcuffs	Nightstick	MACE	Revolver	Hands	Other
Used	92 [42,1]	14 [43,1]	3 [44,1]	25 [45,1] (Serial #: _____)	118 [46,1]	22 specify [47,1]
Available for use but not used	35 [42,2]	82 [43,2]	66 [44,2]	104 [45,2]		1 specify [47,2]
Unable to use	7 [42,3]	13 [43,3]	16 [44,3]	6 [45,3]		0 specify [47,3]

IF AN OFFICER WAS INJURED: Please check the point (before, during, after injury) when the implement was used.

	Handcuffs	Nightstick	MACE	Revolver	Hands	Other
Before time of injury	8 [48,1]	1 [51,1]	0 [54,1]	1 [57,1] (Serial #: _____)	25 [60,1]	0 specify [63,1]
At time of injury	14 [49,1]	2 [52,1]	2 [55,1]	3 [58,1]	43 [61,1]	0 specify [64,1]
After time of injury	30 [50,1]	2 [53,1]	1 [56,1]	4 [59,1]	30 [62,1]	0 specify [65,1]

9. USE OF FORCE: At what point(s) did it become necessary to use force?

33 [66,1] Pursuing offender — 18 [69,1] Searching offender — 49 [72,1] Placing offender in vehicle

42 [67,1] Confronting offender — 54 [70,1] Handcuffing offender — 8 [73,1] Transporting offender in vehicle — 18 [75,1] Other

94 [68,1] Arresting offender — 48 [71,1] Moving offender to vehicle — 11 [74,1] Removing offender from vehicle — _____ specify

NARRATIVE: (Conversation with offender, degree of force used, and other information not covered above. Person preparing this report shall sign below last line of narrative)

		Officer #1	Officer #2	
*Assignment:	Patrol	96	46	**Hands first used
	K-9	19	6	Before 25
	Tactical	13	10	During 21
	Other	24	7	After 6
*Age	20 - 24	27	11	Not used 12
	25 - 29	29	5	
	30	24	6	
*Years on force:	1 - 4	51	17	
	5	29	6	
*Part of body:	Head	10	0	
	Back	4	1	
	Chest	8	1	
	Abdomen	0	1	
	Groin	4	1	
	Arm	11	5	
	Hand	16	3	
	Leg	8	0	

(76 – 80)

Signature: _____

APPENDIX E

Table E-1

Accident Reporting

Item	Ques. I.D.	Area Resp.		Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Departmental Accident Records	I-1	M.F.	Yes	23	100	16	100	21	100	20	100	14	100	14	100	10	100	118	100
			No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II-1	Occ.	Yes	21	91	15	94	20	95	20	0	14	100	13	93	8	80	111	94
			No	2	9	1	6	1	5	100	0	0	0	1	7	2	20	7	6
Same Records for Sworn & Civilian Per.	I-2	M.F.	Yes	19	83	15	94	19	90	20	100	14	100	10	71	9	90	106	90
			No	4	17	1	6	1	5	0	0	0	0	2	14	1	10	9	8
	II-2	Occ.	Yes	19	83	15	94	19	90	18	90	14	100	10	71	10	100	105	89
			No	3	13	1	6	2	10	2	10	0	0	0	0	0	0	8	7
Written Report of Injuries	I-3	M.F.	Yes	23	100	16	100	21	100	20	100	14	100	13	93	10	100	117	99
			No	0	0	0	0	0	0	0	0	0	0	1	7	0	0	1	1
	II-3	Occ.	Yes	22	96	16	100	20	95	20	100	13	13	13	93	9	90	113	96
			No	1	4	0	0	1	5	0	0	1	7	1	7	1	10	5	4
Written Report of Property Damage	I-5	M.F.	Yes	22	96	16	100	21	100	19	95	14	100	14	100	10	100	116	98
			No	1	4	0	0	0	0	1	5	0	0	0	0	0	0	2	2
	II-5	Occ.	Yes	21	91	14	88	18	86	20	100	13	93	9	64	9	90	104	88
			No	1	4	2	13	3	14	0	0	1	7	4	29	1	10	12	10
Central Anal. of Records	I-7	M.F.	Yes	21	91	15	94	13	62	14	70	9	64	4	29	5	50	81	69
			No	2	9	0	0	8	38	5	25	5	36	9	64	5	50	34	29
Super. Acci. Record File	I-9	M.F.	Yes	12	52	3	19	8	38	4	20	2	14	4	29	4	40	37	31
			No	10	43	13	81	13	62	16	80	11	79	10	71	5	50	78	66
	II-8	Occ.	Yes	9	39	3	19	4	19	3	15	3	21	2	14	4	40	28	24
			No	13	57	13	81	16	76	17	85	11	79	11	79	6	60	87	74
Indiv. Acci. Record File	I-10	M.F.	Yes	20	87	13	81	15	71	12	60	10	71	9	64	6	60	85	72
			No	2	9	3	19	6	29	8	40	4	29	5	36	4	40	32	27
	II-9	Occ.	Yes	15	65	11	69	9	43	8	40	6	43	7	50	5	50	61	52
			No	6	26	5	31	12	57	12	60	8	57	6	43	5	50	54	46

Table E-2

Most Standardized Accident Report Form[1]

Form	Ques. I.D.	Area	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
A.N.S. (N.S.C.) or N.H.T.S.A.	I-8	M.F.	15	65	10	63	10	48	8	40	3	21	2	14	3	30	51	43
	II-7	Occ.	10	43	8	50	4	19	4	20	2	14	0	0	1	10	29	25
City or State Workmen's Comp.	I-8	M.F.	2	9	2	13	3	14	6	30	6	43	5	36	4	40	28	24
	II-7	Occ.	7	30	4	25	10	48	12	60	8	57	6	43	7	10	4	46
Ins., Internal or Other	I-8	M.F.	5	22	4	25	6	29	4	20	4	29	0	0	1	10	24	20
	II-7	Occ.	3	13	3	19	3	14	2	10	1	7	1	7	0	0	13	11
None	I-8	M.F.	1	4	0	0	2	10	1	5	1	7	5	36	0	0	10	8
	II-7	Occ.	3	13	1	6	4	19	1	5	2	14	5	36	1	10	7	14

[1]Most departments report the use of more than one form. This table enumerates the single standard currently used by the respective departments which in the opinion of the investigators offers the most potential for producing nationwide comparisons among departments.

Table E-3

Motor Fleet Information Storage and Frequency of Summarization

Item	Ques. I.D.	Resp.	Population Group 1 M	1 Q-A	1 W.R.	2 M	2 Q-A	2 W.R.	3 M	3 Q-A	3 W.R.	4 M	4 Q-A	4 W.R.	5 M	5 Q-A	5 W.R.	6 M	6 Q-A	6 W.R.	7 M	7 Q-A	7 W.R.	Total M	Total Q-A	Total W.R.
Number of Accidents	I-11	MS	12	2	2	5	3	2	6	2	6	9	3	6	7	3	2	3	1	7	3	0	4	45	14	29
		C	8	0	0	4	1	0	5	0	0	2	0	0	0	0	0	1	0	0	0	0	0	20	1	0
		N.A.								(1)						(1)									(2)	
Number of Disabling Injuries	"	MS	5	5	3	8	3	2	4	2	8	11	2	5	5	2	4	3	1	8	3	0	4	39	15	34
		C	5	1	1	3	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	13	1	1
		N.A.		(2)			(2)			(2)			(1)			(3)									(10)	
Number of Days Lost	"	MS	5	4	4	7	3	3	7	2	6	10	2	6	6	2	2	4	0	5	3	0	4	42	13	30
		C	7	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	9	2	0
		N.A.		(1)			(1)			(3)			(1)			(3)			(2)						(11)	
No. of Miles Driven	"	MS	4	3	5	7	3	3	6	2	5	10	2	4	5	3	2	4	0	5	4	0	2	40	13	26
		C	7	1	0	1	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	10	2	1
		N.A.		(2)			(1)			(2)						(3)			(1)			(1)			(10)	
Police Veh. Damage Cost	"	MS	8	4	4	5	1	5	5	4	8	6	2	6	6	3	2	3	1	6	2	1	4	35	16	35
		C	6	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	8	0	1
		N.A.		(1)			(2)			(4)			(2)			(2)			(1)						(12)	
Priv. Property Damage Cost	"	MS	3	2	4	4	2	4	3	2	7	6	1	6	6	2	2	3	1	4	2	0	5	27	10	32
		C	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	0
		N.A.		(8)			(4)			(6)			(4)			(3)			(2)			(1)			(28)	
Pub. Prop. Damage Cost	"	MS	2	1	4	4	1	5	3	2	7	4	0	6	5	3	2	3	1	4	2	0	3	23	8	31
		C	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	1	0
		N.A.		(9)			(4)			(7)			(7)			(3)			(2)			(2)			(34)	

M - Summarized monthly or more frequently; Q-A - Quarterly to annually; W.R. - When requested

MS- Manually stored; C - card, tape, disc storage; N.A. - not available

CONTINUED

4 OF 6

Table E-4

Occupational Accident Information Storage and Frequency of Summarization

Item	Ques. I.D.	Resp.	Population Group 1 M	1 Q-A	1 W.R.	2 M	2 Q-A	2 W.R.	3 M	3 Q-A	3 W.R.	4 M	4 Q-A	4 W.R.	5 M	5 Q-A	5 W.R.	6 M	6 Q-A	6 W.R.	7 M	7 Q-A	7 W.R.	Total M	Total Q-A	Total W.R.
Number of Loss Time Injuries	II-10	MS	8	5	3	6	3	4	4	2	8	8	2	6	6	1	2	1	1	7	1	0	6	34	14	36
		C	2	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
		N.A.		(2)						(4)			(3)			(3)			(2)						(14)	
Number of Medical Aid Injuries	"	MS	10	2	2	3	4	5	4	1	9	7	1	7	6	1	3	1	1	6	1	0	6	32	10	38
		C	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1
		N.A.		(3)						(4)			(4)			(2)			(4)						(17)	
Number of Prop. Damage Accident	"	MS	3	3	4	4	2	4	4	0	9	6	2	9	3	1	5	1	1	5	1	0	6	22	9	42
		C	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1
		N.A.		(4)			(3)			(4)			(2)			(3)			(3)						(19)	
Number of Man Days Lost	"	MS	6	4	4	5	2	4	4	3	6	8	2	6	6	1	2	3	0	5	1	0	5	33	12	32
		C	3	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	2	2
		N.A.		(2)			(1)			(3)			(3)			(3)			(3)			(1)			(16)	
Number of Man Days Worked	"	MS	4	3	3	5	3	3	5	1	6	8	1	6	6	1	2	3	0	5	2	0	4	33	9	29
		C	4	1	1	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	5	2	4
		N.A.		(2)						(5)			(3)			(3)			(3)			(1)			(17)	
Average No. of Employees	"	MS	4	6	2	6	3	3	5	1	9	10	1	7	6	1	2	4	0	4	1	0	5	36	12	32
		C	5	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1
		N.A.		(2)			(1)			(2)			(1)			(2)			(2)			(1)			(11)	
Cost of Injuries	"	MS	1	3	1	2	2	4	3	2	8	5	1	5	5	1	2	1	1	4	1	0	4	18	10	28
		C	1	1	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	1	2
		N.A.		(9)			(4)			(5)			(6)			(3)			(5)			(2)			(34)	
Property Damage Cost	"	MS	1	2	2	2	2	4	3	0	7	5	1	6	6	1	2	1	1	4	1	0	5	19	7	30
		C	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1
		N.A.		(9)			(5)			(8)			(6)			(3)			(5)			(1)			(37)	

M - Summarized monthly or more frequently; Q-A - Quarterly to annually; W.R. - When requested

MS - Manually stored; C - card, tape, disc storage; N.A. - not available

Table E-5

Police Personnel Strength and Administration

Item	Ques. I.D.	Resp. (Grouped)	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Sum of Patrol and Traffic	III-1	1-25	0	0	0	0	0	0	0	0	1	7	10	71	9	90	20	17
		26-50	0	0	0	0	0	0	4	20	12	86	2	14	0	0	18	15
		51-100	0	0	0	0	2	10	12	60	1	7	0	0	0	0	15	13
		101-250	0	0	3	19	15	71	4	20	0	0	0	0	0	0	22	19
		251-500	1	4	10	63	4	19	0	0	0	0	0	0	0	0	15	13
		500+	18	78	1	6	0	0	0	0	0	0	0	0	0	0	19	16
		Total	19	83	14	88	21	100	20	100	14	100	12	86	9	90	109	92
Total Full-Time Sworn Personnel	III-1	1-50	0	0	0	0	0	0	0	0	3	21	14	100	10	100	27	23
		51-100	0	0	0	0	0	0	10	50	11	79	0	0	0	0	21	18
		101-200	0	0	0	0	7	33	10	50	0	0	0	0	0	0	17	14
		201-500	0	0	5	31	14	67	0	0	0	0	0	0	0	0	19	16
		501-1000	5	22	11	69	0	0	0	0	0	0	0	0	0	0	16	14
		1001+	18	78	0	0	0	0	0	0	0	0	0	0	0	0	18	15
		Total	23	100	16	100	21	100	20	100	14	100	14	100	10	100	118	100

Table E-6

Accident Review Board

Item	Ques. I.D.	Resp.	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Occ. Acc. Review Board	III-6a	Yes	8	35	6	38	8	38	5	25	6	43	4	29	0	0	37	31
		No	15	65	10	63	12	57	15	75	7	50	9	64	10	100	78	66
M.F. Acc. Review Board	III-6b	Yes	18	78	14	88	15	71	11	55	9	64	6	43	2	20	75	64
		No	5	22	2	13	6	29	9	45	4	29	7	50	8	80	41	35
Highest Mbr. of Board	III-7	C,D,C*	5	22	4	25	8	38	4	20	2	14	0	0	0	0	23	19
		Bur.Chf.	8	35	6	38	5	24	5	25	5	36	3	21	3	30	35	30
		Other	3	13	3	19	3	14	2	10	4	29	4	29	1	10	20	17
Authority to Enforce	III-9	Yes	10	43	7	44	10	48	5	25	9	64	3	21	2	20	46	39
		No	7	30	6	38	5	24	6	30	2	14	3	21	0	0	29	25
Right to Appeal	III-11	Yes	15	65	12	75	13	62	9	45	11	79	6	43	1	10	67	57
		No	2	9	1	6	1	5	2	10	0	0	0	0	0	0	6	5
Employee Re-payment	III-12	Yes	8	35	6	38	3	14	3	15	7	50	4	29	1	10	32	27
		No	12	52	10	63	17	81	13	65	5	36	8	57	5	50	70	59

*Commissioner, Director, Chief

Table E-7

Patrol, Shift Rotation and Outside Employment

Item	Ques. I.D.	Resp.	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
% 1-Man Cars on Day Shift	III-2	100%	3	13	4	25	7	33	14	70	12	86	11	79	8	80	59	50
		Less	13	57	8	50	9	43	6	30	2	14	2	14	1	10	41	35
% 1-Man Cars on Eve Shift	III-2	100%	2	9	1	6	6	29	12	60	9	64	10	71	8	80	48	41
		Less	14	61	11	69	10	48	8	40	5	36	3	21	1	10	52	44
% 1-Man Cars on Night Shift	III-2	100%	2	9	1	6	6	29	12	60	5	36	10	71	8	80	44	37
		Less	14	61	11	69	10	48	8	40	9	64	3	21	1	10	56	47
Rotation of Shift	III-3	*	10	43	7	44	5	24	7	35	6	43	5	36	3	30	43	36
		Other	9	39	6	38	11	52	7	35	6	43	5	36	5	5	49	42
		None	2	9	3	19	4	19	6	30	2	14	1	7	1	1	19	16
% Force with Outside Employment	III-4	1-20%	7	30	5	31	10	48	1	5	3	21	4	29	4	40	34	29
		21-50	7	30	4	25	1	5	7	35	6	43	8	57	0	0	33	28
		51-100	3	13	4	25	6	29	8	40	4	29	2	14	5	50	32	27
		Total	17	74	13	81	17	81	16	80	13	93	14	100	9	90	99	84

*Day-Eve-Night, monthly

Table E-8

Program Administration

Item	Ques. I.D.	Area Resp.		Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Gen. Order	IV-10	M.F.	Yes	13	57	8	50	6	29	3	15	5	36	4	29	0	0	39	33
			No	7	30	8	50	15	71	17	85	8	57	10	71	10	100	75	64
	IV-10	Occ.	Yes	8	35	7	44	5	24	2	10	1	7	4	29	0	0	27	23
			No	10	43	8	50	15	71	18	90	11	79	10	71	9	90	81	69
Formal Prog.	IV-1	M.F.	Yes	16	70	11	69	5	24	4	20	6	43	1	7	1	10	44	37
			No	6	26	5	31	16	76	16	80	8	57	13	93	9	90	73	62
	IV-4	Occ.	Yes	10	43	6	38	2	10	3	15	7	50	4	29	0	0	32	27
			No	12	52	10	63	19	90	17	85	7	50	9	64	10	100	84	71
Off. Assigned	IV-2	M.F.	Yes	15	65	10	63	7	33	5	25	9	64	3	21	0	0	49	42
			No	7	30	6	38	14	67	14	70	5	36	10	71	10	100	66	56
	IV-5	Occ.	Yes	6	26	6	38	3	14	3	15	7	50	4	29	0	0	29	25
			No	15	65	8	50	18	86	16	80	6	43	9	64	9	90	81	69
Staff Asst.	IV-2	M.F.	Yes	14	61	7	44	6	29	2	10	5	36	2	14	1	10	37	31
			No	1	4	3	19	1	5	3	15	4	29	1	7	0	0	13	11
	IV-5	Occ.	Yes	5	22	4	25	2	10	0	0	7	50	3	21	0	0	21	18
			No	1	4	1	6	0	0	2	10	0	0	1	7	0	0	5	4
Reports to...	IV-2	M.F.	Chief	4	17	4	25	6	29	4	20	5	36	1	7	0	0	24	20
			Bur.Chf.	7	30	4	25	0	0	1	5	1	7	1	7	1	10	15	13
			Other	4	17	2	13	1	5	0	0	3	21	1	7	0	0	11	9
	IV-5	Occ.	Chief	1	4	2	13	1	5	3	15	3	21	3	21	0	0	13	11
			Bur.Chf.	4	17	3	19	2	10	0	0	2	14	0	0	0	0	11	9
			Other	0	0	1	6	1	5	0	0	2	14	1	7	0	0	5	4
% of Time on Safety	IV-2	M.F.	1-5%	2	9	1	6	3	14	1	5	4	29	3	21	0	0	14	12
			6-60	8	35	6	38	2	10	3	15	3	21	0	0	0	0	22	19
			100	3	13	1	6	1	5	0	0	0	0	0	0	0	0	5	4
	IV-5	Occ.	1-10%	1	4	1	6	1	5	2	10	3	21	3	21	0	0	11	9
			11-80	4	17	2	13	1	5	1	5	2	14	0	0	0	0	10	8
			100	1	4	2	13	0	0	0	0	0	0	0	0	0	0	3	3
Evaluation of Proced.	IV-13	M.F.	Yes	4	17	4	25	2	10	4	20	1	7	0	0	0	0	15	13
			No	15	65	11	69	17	48	12	60	10	71	11	79	6	60	82	69
	IV-13	Occ.	Yes	2	9	3	19	2	10	3	15	0	0	0	0	0	0	10	8
			No	15	65	12	75	17	48	12	60	11	71	11	79	7	70	85	72

Table E-9

Purchase and Use of Protective Products

Item	Ques. I.D.	Resp.	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Eye, Face Eq.	IV-9	R.P.*	11	48	10	63	9	43	7	35	4	29	5	36	3	30	49	42
		M.U.	6	26	7	44	7	33	3	15	3	21	2	14	1	10	29	25
Safety Glasses	"	R.P.	4	17	3	19	3	14	1	5	0	0	1	7	0	0	12	10
		M.U.	2	9	2	13	2	10	0	0	0	0	0	0	0	0	6	5
Head Eq.	"	R.P.	14	61	13	81	15	71	10	50	9	64	7	50	5	50	73	62
		M.U.	9	39	10	63	14	67	7	35	7	50	4	29	2	20	53	45
Body, Leg Eq.	"	R.P.	8	35	6	38	5	24	6	30	3	21	0	0	0	0	28	24
		M.U.	6	26	5	31	1	5	1	5	1	7	0	0	0	0	14	12
Arm, Hand Eq.	"	R.P.	6	26	4	25	2	10	2	10	1	7	1	7	0	0	16	14
		M.U.	3	13	2	13	0	0	1	5	1	7	1	7	0	0	8	7
Respiratory Equipment	"	R.P.	9	39	6	38	3	14	6	30	6	43	2	14	2	20	34	29
		M.U.	5	22	6	38	3	14	3	15	4	29	1	7	1	10	23	19
Hearing Eq.	"	R.P.	6	26	4	25	1	5	4	20	3	21	3	21	2	20	23	19
		M.U.	3	13	3	19	0	0	2	10	3	21	1	7	1	10	13	11
Foot Eq.	"	R.P.	2	9	2	13	1	5	1	5	0	0	1	7	0	0	7	6
		M.U.	0	0	1	6	1	5	1	5	0	0	0	0	0	0	3	3
Safety Trng. Eq.	"	R.P.	5	22	4	25	3	14	1	5	3	21	3	21	1	10	20	17
		M.U.	1	4	4	25	3	14	1	5	1	7	1	7	0	0	11	9
Safety Sign & Warning Devices	"	R.P.	8	35	4	25	4	19	3	15	2	14	1	7	1	10	23	19
		M.U.	5	22	3	19	2	10	1	5	1	7	1	7	0	0	13	11

*R.P. - Regular Purchase, M.U. - Regular Purchase and Must Use. 1-2% of the departments reporting indicated they required the use of some protective equipment not regularly purchased by the Department.

Table E-10

Safety Procedures Currently Operative

Item	Ques. I.D.	Area	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Formal Acci. Investigating Procedure	IV-11	M.F.	20	87	13	81	21	100	15	75	12	86	10	71	5	50	96	81
		Occ.	7	30	10	63	14	67	10	50	7	50	8	57	3	30	59	50
Safety Committee	"	M.F.	10	43	12	75	7	33	7	35	5	36	3	21	1	10	45	38
		Occ.	2	9	6	38	4	19	3	15	3	21	2	14	0	0	20	17
Planned Safety Inspec.	"	M.F.	14	61	8	50	6	29	7	35	7	50	3	21	2	20	47	40
		Occ.	2	9	4	25	4	19	2	10	3	21	4	29	1	10	20	17
Safety Inspection Check List	"	M.F.	12	52	9	56	7	33	9	45	6	43	5	36	4	40	52	44
		Occ.	4	17	3	19	3	14	3	15	3	21	5	36	2	20	23	19
Job Safety Anal. Proced. and File	"	M.F.	4	17	3	19	1	5	3	15	5	36	0	0	0	0	16	14
		Occ.	3	13	4	25	2	10	2	10	4	29	0	0	0	0	15	13
Employee Safety Observ.	"	M.F.	8	35	10	63	5	24	5	25	6	43	5	36	4	40	43	36
		Occ.	5	22	6	38	4	19	4	20	5	36	5	36	3	30	32	27
Quality Control of Purchases	"	M.F.	10	43	7	44	6	29	9	45	7	50	4	29	2	20	45	38
		Occ.	4	17	7	44	4	19	7	35	6	43	4	29	2	20	34	29

Note:

In response to a question concerning physical examinations of personnel, 56 (48%) specified the administration of physicals at entry or promotion. From a different viewpoint, physicals were reported to be administered a) annually by 23 (19%), b) biannually by 4 (3%) and c) at other intervals by 22 (19%).

Table E-11

Safety Training Programs Currently Operative

Item	Ques. I.D.	Population Group 1 f	1 %	2 f	2 %	3 f	3 %	4 f	4 %	5 f	5 %	6 f	6 %	7 f	7 %	Total f	Total %
Pursuit Driving	IV-11	12	52	8	50	9	43	8	40	8	57	5	36	2	20	52	44
Defensive Driving	"	17	74	9	56	11	52	10	50	10	71	4	29	1	10	62	53
Motorcycle Driving	"	15	65	10	63	13	62	7	35	8	57	2	14	0	0	55	47
Use of Per. Protec. Equip. (M.F.)	"	11	48	8	50	11	52	12	60	9	64	6	43	3	30	60	51
Techniques of Safe Lifting	"	8	35	2	13	2	10	1	5	2	14	1	7	0	0	16	14
Use of Firearms	"	19	83	12	75	18	86	13	65	11	79	9	64	6	60	88	75
Office Safety	"	3	13	1	6	2	10	2	10	3	21	3	21	0	0	14	12
Techniques of Arrest	"	17	74	13	81	19	90	12	60	10	71	9	64	4	40	84	71
Techniques of Crowd Control	"	17	74	13	81	19	90	14	70	9	64	9	64	6	60	87	74
Use of Personal Protec. Eq. (Occ.)	"	13	57	11	69	15	71	10	50	6	43	7	50	2	20	64	54

Table E-12

Disabling Injuries While Making Arrests
Three-Year Averages
1967 - 1969

Population Group	Debts.[1]	Sworn Personnel	Total Arrests	Disabling Injuries While Making Arrests	Disabling Injuries Per Arrest	Arrests Per Injury
I	1	29,762	193,037	678	.00351	285
	5	4,738	179,156[2]	189	.00105	984
	8	1,498	87,821	22	.00025	3,992
Total		35,998	460,014	889	.00193	517
Mean		11,999	153,338	296	--	--

[1]Number indicates population size rank within population group from general survey departments list.

[2]Does not include arrests of females under 15 years of age.

Table E-13

Injuries Resulting from Assaults on Officers
1968

Population Group	Dept.[1]	Sworn Personnel	Total Assaults	Rate Per 100 Officers	Assault With Injury	Rate Per 100 Officers	Assault With Disabling Injury	Rate Per 100 Officers
I	1	29,904	NA	---	---	---	805	2.7
	2[3]	11,928	NA	---	481	4.0	---	---
	7[3]	3,219	NA	---	425	13.2	---	---
	13[3]	1,734	NA	---	---	---	11	0.6
	21[2]	810	71	8.8	43	5.3	---	---
	24	936	57	6.1	35	3.7	---	---
II	11	709	277	39.1	102	14.4	---	---
V	5	50	8	16.0	5	10.0	1	2.0
I Total		48,531	128	7.3	984	5.8	816	2.6
Mean		8,088	64	---	246	---	408	---
I, II Total		49,240	405	16.5	1,086	6.2	---	---
Mean		7,034	135	---	217	---	---	---
II, V Total		759	285	37.5	107	14.1	1	2.0
Mean		380	142	---	54	---	1	---

NA - Not Available

[1]Number indicates population size rank within population group from general survey departments list.

[2]This department reported only those assaults occurring while making an arrest.

[3]These departments reported injuries resulting from assaults which would tend to be a higher figure than assaults with injury.

Table E-14

Injuries Resulting from Assaults on Officers
1969

Population Group	Dept.[1]	Sworn Personnel	Total Assaults	Rate Per 100 Officers	Assault w/Injury	Rate Per 100 Officers	Assault/w Disabling Inj.	Rate Per 100 Officers
I	1	31,902	1,865	5.9	---	---	886	2.8
	2[4]	12,177	NA	---	506	4.2	---	---
	5	5,020	342	6.8	---	---	179	3.6
	7[4]	3,419	NA	---	400	11.7	---	---
	13[4]	1,786	NA	---	---	---	5	3.0
	21[2]	802	129	16.1	61	7.6	---	---
	24	1,009	141	14.0	101	10.0	---	---
	26	897	271	30.2	98	10.9	---	---
II	11	697	495	71.0	157	22.5	---	---
V	5	54	5	9.3	5	9.3	---	---
	NC[3]	48	2	4.2	0	0.0	---	---
VII	NC[3]	12	13	108.3	10	83.3	---	---
I								
Total		57,012	2,748	6.9	1,166	6.4	1,119	2.9
Mean		7,656	550	---	192	---	373	---
I,II								
Total		57,709	3,243	8.1	1,323	7.0	1,119	2.9
Mean		6,786	540	---	185	---	373	---
II, V, VII								
Total		811	515	63.5	172	21.2	---	---
Mean		203	129	---	43	---	---	---

NA - Not Available

[1]Number indicates population size rank within population group from general survey departments list.

[2]This department reported only those assaults occurring while making an arrest.

[3]These departments are not part of the general survey and are listed according to population size within their respective population group.

[4]These departments reported injuries resulting from assaults which would tend to be a higher figure than assaults with injury.

APPENDIX F

IDR FUNCTION
Department A

General Organization

Police department A has no formal policy for either vehicular or non-vehicular safety. A specialist has been assigned full-time responsibility for motor fleet safety, but no one is assigned to coordinate personnel safety. It is not known how frequently safety is discussed with the Chief.

Responsibility for vehicular safety, which consists mainly of record-keeping, lies within the inspections division; whereas record-keeping for non-vehicular line-of-duty injuries is carried on informally through notations on arrest reports or the sick leave slip. Accidental injuries are not differentiated from illness in formal absence reports. The chain of command for communicating the details of vehicular accidents involves a link through the administrative services bureau to the Chief. The line of communication for non-vehicular injury is undetermined.

Injury and Damage Investigation

If damage or injury in motor vehicle accidents results in over $100 in compensation, the driver/victim prepares the state accident report and an investigating sergeant completes a report. In cases of injury or extensive property damage, the accident investigation section is also called. In some cases a followup report is made. Copies of the state report are sent to the assistant chief, administrative service bureau for recording; to the driver's commanding officer through his bureau chief for review; and to the director of fiscal and property management for processing. The supervisor verifies the severity of injury and since cars are leased from the city, the amount of damage is verified by the city garage.

Formal review of vehicular accidents is undertaken by the accident review board in cases of damage of $100 or more or in circumstances that may lead to civil suit. Members of the board include a captain from the operations bureau, a sergeant or above from each bureau and a member of equal rank to the driver. The board decision is limited to a judgment of whether the accident was preventable or non-preventable. Preventable accidents are categorized into two classes: 1) failed to exercise reasonable care or deviated inexcuseably from general safety principles and 2) guilty of two or more preventable accidents within a 12-month period or operated vehicle with utter disregard for self or others. Final decision for discipline rests with the division commander. In cases of high loss (over $1,000) a city review board is convened.

Although department regulations require reporting of all accidents, those under $100 damage or those involving minor injury require only an interdepartmental memo describing the incident. An unknown number of accidents go unreported each year. As was indicated non-vehicular injuries are not governed by a formal reporting procedure.

Training and Safety

Although the general accident reporting system is inadequate, there is some communication of experience and recommendation of training. Recruit safety training in use of firearms, techniques of arrest and crowd control is given. Video tape recordings of role playing situations are used at the academy. During the discussions that follow the recordings, special attention is given to hazard factors and whether officers acted correctly or incorrectly. No job safety analysis procedures are used. Each recruit receives the NSC Defensive Driving Course plus emergency and pursuit driving training consisting of eight hours lecture and one-half hour behind-the-wheel, and 16 hours lecture and one-half hour on training course, respectively. If the recruit is not able to meet the performance criteria of driver training he is asked to leave the academy. No indication of the number of failures was given. Two additional weeks of training are given when officers are assigned motorcycle duty.

Retraining and Supervisor Observation

Problem drivers can be assigned to retraining although this is seldom done. There is no program for periodic driver retraining. Roll call training is separate for each division, no outlines are provided at present, but a program to coordinate training is underway. General in-service training is limited currently to new procedures or equipment, however, when an officer is transferred from a department, he receives pre-service and in-service training. Newly promoted sergeants are given an orientation that includes discussion of case descriptions of recent police vehicle accidents.

Recruit evaluation is performed in the field by specially trained (40 hours) field training officers. Their instruction guide requires them to fill in the dates when certain aspects of operation are explained, demonstrated and practiced. The guide includes driving habits, arrest procedures, handling of prisoners and pursuit driving. A progress report for each new officer is filled out weekly over a six-month period and includes general ratings of driver ability but does not include specific safety observation in non-vehicular operations.

There is no indication that observation following recruit evaluation is conducted on a regular basis or that the personal safety of an individual or officers under him is a factor in promotion.

Physical Fitness

The only physical fitness program in existence comes through the Police Athletic Association. There is no annual or required physical examination. In cases of serious or extended illness, physical examination is required. Sick leave benefits for department A policemen are six months of full pay for injury or illness. At the end of six months the city has the option to put them on pension or to continue with sick pay.

Fleet Operation

Department A uses vehicles from the city motor vehicle division. Specifications for new vehicles are drawn up by the director and let for bids. The vehicles are replaced every two years or 80,000 miles. During the first month, the vehicle is given a safety check using an internally devised form. Routine maintenance is done every 2,500 miles. There is no standard inspection checklist for use when removing a vehicle from the pool. Vehicles are not repaired until $100 damage is accumulated. Therefore, the minor accident problem is unassessable. Repair costs on each vehicle are kept and billed to the police department as a separate cost item.

Policemen use their own cars for vice stakeouts and other duties of this type.

The personal driving record of all new recruits is checked carefully. Instances of drunken driving, recklessness or a high number (unspecified) of violations will prevent hiring. During the recruit phase, vision, hearing and motor coordination tests are given. No retesting is done.

IDR FUNCTION
Department B

General Organization

Police department B has a formal safety policy for vehicular and non-vehicular safety administered by the safety division. The director of the safety division is responsible for vehicular and non-vehicular safety for which he has a staff of seven. One of his staff members is assigned the responsibility for fleet safety and is supervised in this duty by the director.

The chain of command between the director of the safety division and the Commissioner of Police includes only one intermediate link, the director of the administration bureau.

Injury and Damage Investigation

All vehicular accidents must be reported by the victum before the end of his tour of duty. An investigation of the accident is made immediately by the accident investigation district (AID) of the department. The extent of damage to the police vehicle(s) involved is verified by the department's garage.

The commanding officer of the AID reviews the victim's and investigator's reports and recommends a finding on the preventability of the accident. Final determination of the preventability of an accident is the decision of the safety officer. All accidents occurring under emergency conditions; all accidents determined preventable; all accidents determined non-preventable that the safety officer feels were preventable; or one of a number of non-preventable accidents involving the same officer are referred to the accident review board. The accident review board, of which the safety officer is chairman, recommends corrective action in cases of preventable accidents where the driver is found negligent.

All injuries from vehicular and non-vehicular accidents must be reported by the victim within two working days after they occur. If the victim is unable to complete the report form, his supervisor is responsible for its completion. On the eighth day of the injury, the victim's district or unit is responsible for completing another report. The victim's commanding officer verifies the service-connection of the injury, subject to the review of the safety officer, and the compensation clinic verifies the severity of the injury. Since the compensation clinic is only open Monday through Friday, it is the opinion of the safety officer that days-lost-per-injury rates are inflated by weekend injuries resulting in automatic days off until they can be verified on Monday.

An officer's absence from duty is listed as injured-on-duty by his commanding officer except when he cannot establish service-connection of the injury. In that case, the officer is listed as sick until the service-connection is verified.

Vehicular accident reports are used by AID for updating spot maps kept to identify high frequency areas. High frequency areas are investigated by

AID for the cause of the accidents, and warnings are issued to the officers in the area. Copies of accident and injury reports are filed in the central records unit.

Summaries of vehicular accidents are produced by the safety division in monthly, semi-annual and annual reports that give breakdowns such as type of vehicle, type of accident, length of service of driver and emergency vs. routine assignment. Injuries are summarized in monthly and annual reports giving breakdowns by part of body and type of injury as well as discussions of medical costs and limited duty assignments. These summaries are sent to all top commands including personnel, training, medical and maintenance. Because of the newness of the safety program in this department the safety officer felt the effects of the distribution of these summaries could not yet be determined.

Training and Safety

In the opinion of a member of the academy staff, there is close cooperation between the academy and the safety officer. In addition to the annual and semi-annual reports received from the safety division, the training staff is kept informed of safety problems by its membership on the accident review board. Material is added to recruit lessons in response to specific safety problems.

The recruit training curriculum of 444 hours includes patrol procedures, defensive tactics, crowd control and physical training. Job safety analysis is a method used in teaching foot and motor patrol duty including instruction on injury avoiding procedures.

Recruits are given lectures on driving, including emergency and defensive driving and are tested on a skill course. Recruits must pass a written and a road test after this training. Specialized training for motorcyclists is given by the highway patrol.

Retraining and Supervisor Observation

Retraining is scheduled on an "as needed" basis for one-day courses in the academy. Retraining topics include crowd control, search and seizure, and defensive and pursuit driving.

Recruits are observed by their street supervisors and non-recruit officers by district commanders in their policing procedures. Immediate supervisors of all officers below the rank of sergeant assigned to fleet, traffic, juvenile and detective units are responsible for conducting road tests of their men once every four months. A standardized form is used and a discussion of the officer's driving habits follows the test. The tester may offer suggestions to the officer or send him to the academy for retraining. Driver retraining is scheduled first to include all problem drivers and then remaining class openings are filled by officers referred by their supervisors.

Roll call training, a 10 minute session, is conducted by the district commander, one of his subordinates or a member of the safety division staff. The academy produces guides for roll call training, which include safety, and

makes periodic assessments of the quality of the training. Bulletins that contain safety hints are issued by the academy to officers.

Officers are given a series of directives and pamphlets that contain standard operating procedures but no procedures handbook is available to them. The captain of each division is responsible for orientation of transferred employees - an informal procedure.

Promotion decisions are not based on safety records. Competitive exams are critical in determining promotion because selections must be made from a rank order list of applicants of which no more than two consecutive names can be turned down without substantial reasons.

Compensation Practice

Uniformed employees accrue sick days up to 200 days at the rate of 1-3/4 days per calendar month. At retirement 50 percent of the accrued sick leave, but not more than 60 days, can be collected. Civilian employees accrue sick days up to 200 days at the rate of 1-2/3 days per calendar month. At retirement 30 percent of the accrued sick leave, but not more than 60 days, can be collected. Both uniformed and civilian employees receive full pay benefits for the duration of a disability resulting from on-duty injuries.

Compensation can be denied an officer if his injury resulted from lack of conformity to prescribed procedures. This, however, is a very rare occurrence. The safety officer is responsible for investigating compensation claims.

Physical Fitness

This department has no formal physical fitness program. Recruits receive 14 hours of physical training, but no further training is available.

Recruits must pass a physical examination before they are accepted into the academy. No further physical exams are required by the department. Physical fitness is not tested; however, officers are subject to reprimand or dismissal if they fail to exercise weight control.

Fleet Operation

The research and planning division determines the distribution of department vehicles. Cars are not drawn from a central pool but remain with the district to which they are assigned. The department garage inspects new vehicles and in-service vehicles twice a year, as prescribed by law. The garage inspector and foreman are responsible for following up on these inspections.

Patrolmen are responsible for checking out their vehicle before each tour. They report defects to their sergeant who sends the vehicle to the garage for repairs. The garage foreman is responsible for having repairs made on the vehicle and for making the final test to be sure it is ready to return to patrol functioning.

A master record is kept on all vehicles by the garage inspector. It contains entries for all mechanical work done on the vehicle and all accident involvement of the vehicle.

Officers are required to have valid drivers' licenses before they are accepted into the force. They are given physical examinations, including vision and hearing, motor coordination tests and road tests. Their personal driving record is also checked.

Reexamination of drivers' hearing, vision or other physical condition only occurs in the event of an officer having a series of accidents suspected of being related to his physical condition.

Problem drivers are sent to the academy where they receive personal counseling on their driving problem and retraining with emphasis in areas connected with their problem. They are tested at the end of this retraining before returning to patrol duty. Problem drivers may receive only warnings about improving their driving without going through the academy's retraining. If improvement does not result the officer may be grounded. An officer is not subject to payment of any property damage resulting from his accident involvement.

A record is kept on each officer including the results of all physical and skill tests he is given and all accidents in which he is involved with entries of decisions made by the accident review board.

Officers are required by written orders to have their seat belts fastened whenever the car is in motion. Special emphasis is placed by the department on using seat belts in high speed and emergency driving. The safety officer feels most officers probably don't make use of their seat belts except during high speed and emergency driving.

IDR FUNCTION
Department C

General Organization

Police department C has a formal safety policy for both vehicular and non-vehicular safety. The safety officer and his staff of three comprise the safety unit located in the police academy. The safety officer devotes approximately 70 percent of his time to safety functions. He prepares reports for the commanding officer of the police academy who reports to the chief of personnel. The chief of personnel reports to the chief inspector who reports directly to the Police Commissioner.

The safety officer acts as consultant to the academy in developing recruit and in-service lesson plans, to the personnel and staff services bureau on in-service training, to the planning division on research projects and to the motor transport division on new vehicle equipment. He sends recommendations to the equipment section for the purchase of safety equipment.

The safety officer has the authority to make recommendations to the chief inspector through the commanding officer of the police academy that disciplinary action be taken for safety infractions. The chief inspector has the authority to issue the order for the disciplinary action to be taken.

Injury and Damage Investigation

Reports are filed by the victim on each accident involving a police vehicle. Every accident is investigated by a supervising officer. The reports of the accident and of the investigations are reviewed by the victim's commanding officer. The victim's captain determines if the officer was negligent (no written definition) and notes his determination on the report form. These reports are then forwarded to the motor transport division.

A vehicular accident case is referred to the motor transport hearing board by the investigating captain or by the motor transport division if it determines that the extent of damage to the police vehicle or the severity of personal injury involved warrants it. As a result of their findings the hearing board may prefer disciplinary charges, disqualify an officer from operating department vehicles for a period of time or put the officer on probation. This type of action is usually the result of an officer being involved in a number of the same type of accident.

The hearing board need not be convened in order for disciplinary action to be taken. The investigating captain can ground an officer or send him to the police academy for retesting.

All vehicular and non-vehicular injuries are reported by the victim's supervisor at the time of the accident. The injured officer must report to the police surgeon within 24 hours for verification of severity of both disabling and non-disabling injuries. The victim's captain must investigate and report on the injury within 24 hours of its occurrence. Reports on personal injury are kept by the personnel safety unit.

Property damage to police equipment, other than to police vehicles, is reported to the administrative services division. The safety officer does not receive copies of these reports.

Vehicular accidents are summarized by the motor transport division at annual and semi-annual intervals. Accidents are analyzed by type of vehicle and emergency vs. routine activity, as well as other details. A copy of each summary report is sent to all command personnel.

Vehicular and non-vehicular injuries are summarized monthly, quarterly and yearly by the safety officer. Monthly summaries are routed to the commanding officer of the police academy who adds recommendations to them for changes in equipment or training material and may issue training bulletins in response to safety problems evident in the injury report. The summaries then go to the chief of personnel. He adds his recommendations to the report and forwards those needing action to the chief inspector. The chief inspector approves and enacts the recommendations, or may turn them down, and forwards those reports he believes of particular importance to the Police Commissioner.

Quarterly reports on injuries are prepared by the safety officer for the department of personnel for publication. Yearly injury summaries are prepared by the safety officer for inclusion in the department's annual report. These annual injury summaries include activity engaged in when injured and a breakdown of the type of assaults resulting in injury to officers.

Training and Safety

Because the safety unit of department C is within the police academy, current injury data are considered in the creation and revision of lesson plans. As patterns of safety infractions are noted in the safety unit, recruit lesson plans are modified to highlight these safety problems.

The recruit training curriculum consists of 312 hours of lectures, demonstrations and exercises in police procedures and laws, and lessons on concepts of civics, psychology and sociology. In these 312 hours, safety is emphasized in the procedural training lessons that include job safety analyses. The recruits also receive 56 hours of instruction in the use of firearms and 192 hours of physical training.

A formal examination system exists involving a written examination and field performance ratings that include points of safety.

Driver training consists of a series of lectures designed by New York University and Brooklyn College that includes defensive driving, use of police vehicles and emergency and pursuit driving. After the lecture series, the recruits are tested on the road and then sent to a field training program for training in the specific type of driving they will be doing on the job. The field training varies from two hours to two months, depending on the degree of specialized skill necessary for the type of driving to which the officer is assigned. Training for motorcycle driving is especially lengthy and intensive.

The final decision on the acceptability of a recruit's driving is made by his supervisor in the district to which he is assigned on the basis of an informal practical driving test.

Retraining and Supervisor Observation

Officers who are away from pursuit driving or motorcycle assignment for six months or more are retested and, if needed, given retraining before they return to their specialized driving assignment. Each officer involved in a vehicular accident must attend an eight-hour retraining program. This retraining is in addition to the motor transport hearing board procedure of sending problem drivers to be retrained.

Each year all officers are given two days of retraining in disorder control and two days of retraining in the use of firearms. At the time of this firearm retraining, the officers' weapons are inspected and repaired. Officers on special assignment receive five days of retraining for their specialized functions once each year of their assignment. In addition, 13 courses are scheduled regularly in advanced and specialized training. In response to problems in areas of specific skills, additional courses are set up from time to time.

At the precinct level, there is a retraining program that consists of 10 one-hour sessions of films and discussions each year. These discussions allow for time to consider problems specific to a given precinct.

The police academy periodically issues bulletins of two types; bulletins distributed monthly to superior officers only and bulletins distributed to all force members bimonthly. These bulletins, which contain safety information, as well as injury and accident reports and other bulletins of information, are routed to precinct supervisors who maintain files of roll call training guides. Roll call training occupies approximately five minutes of time before each tour starts and is given by a sergeant trained in conducting roll call training.

A formalized program of supervisor observation is followed in department C. Squad members are evaluated monthly according to a standardized form on activities such as arrests, summonses and reporting. Superior officers are evaluated also on a standardized form, twice a year by their supervisors. Although competitive examination scores are the primary consideration for promotion up to the rank of captain, these supervisor evaluations are given some consideration in determining promotion and reassignment. The safety record of men serving under a precinct captain, a monthly injury rate score, is also taken into consideration for promotion and reassignment.

Physical Fitness

Recruits are given a physical fitness test and a medical exam before they are accepted into the academy. The recruit must pass another physical fitness test to graduate from the academy. Very rarely does a recruit fail to pass this test. Recruits are given a medical examination again at the end of the one year probationary period. No further physical fitness or medical examinations are given by the department.

Recruits receive 192 hours of physical training, including calisthenics, boxing and unarmed defense. Aside from this recruit training there is no formal physical fitness program in the department. There are, however, swimming pool and gym facilities available to all officers. Also, some commands have established their own physical fitness program for their members.

Fleet Operation

New vehicles are checked by the motor transport division to be sure they meet specifications. These vehicles are also given a road test. The vehicles then are assigned to specific commands by the motor transport division as directed by the chief inspector.

Precinct commanders are responsible for vehicles assigned to their precinct and division commanders for vehicles assigned to the precincts within their divisions. Daily inspection of vehicles is carried out by the precinct supervisors. This inspection is not extensive, consisting largely of a cleanliness and equipment check. The precinct commander checks weekly and the division commander monthly to see that inspections have been carried out. The officer to which a vehicle is assigned is responsible for inspecting it before his tour of duty.

Every 3,000 miles or 30 days, a vehicle is recalled for an extensive preventive maintenance inspection. The first 3,000 mile check a vehicle receives involves a 30-item checklist. The checklist becomes increasingly longer at each successive 3,000 mile inspection.

It is the opinion of a motor transport division representative that vehicles do not easily pass these 3,000 mile inspections. The repair shop's foreman is responsible for insuring that these inspections and any necessary repairs are completed. Each field supervisor is responsible for keeping track of preventive maintenance inspections due on vehicles assigned to his command. The motor transport division keeps a master record on each vehicle including all repairs and inspections it receives and notifies the respective commands when vehicles are due for inspection.

A patrolman takes a defective vehicle directly to a repair shop where the foreman is responsible for the completion of the necessary repair work. Defective vehicles reported to field supervisors are sent by them to the repair shop before the next tour begins.

Officers are required to have a valid driver's license before they are accepted into the police academy. New recruits are given a physical examination including tests of vision, color, depth and peripheral, perception and hearing tests. Officers are given driving tests specific to the type of driving that will be required of them in their assignments, such as pursuit driving tests for those who will be exposed to pursuit driving. No retesting of physical condition or driving ability is done regularly except that done by the state, which requires a vision examination of all licensed drivers every three years. Driver training and testing of recruits is as described earlier.

Records are kept on each department driver reporting all accidents and all disciplinary action taken against him for accident involvement. These records are not used in evaluating officers for promotion.

Officers are urged but not required to wear safety belts. It is accepted that an officer might, in some instances, feel hampered by a safety belt in performing his duty and would therefore not use it.

IDR FUNCTION
Department D

General Organization

Police department D has no formal safety policy for either vehicular or non-vehicular safety. No one is assigned within the department to coordinate safety on full-time basis. Vehicular safety is discussed with the Chief, but infrequently.

Responsibility for vehicular safety, which consists mainly of record-keeping and accident investigation, is the function of the accident investigation unit; whereas record-keeping for non-vehicular line-of-duty injuries is done by the personnel unit. The chain of command for communicating the details of vehicular accidents involves two links filtering through the operations division to the Chief. Non-vehicular injury reports filter through the administration division to the Chief; the chain of communication involves three links.

Injury and Damage Investigation

Reports are filed on every vehicular injury and property damage case within five to six days of the occurrence. A report form is completed by the victim, his supervisor and an investigator from the accident investigation unit. All fatal or near-fatal accidents are also investigated by homicide in the same manner as any civilian case.

Reports are filed on every non-vehicular injury. A report form is completed by the victim and his supervisor immediately after the occurrence.

The extent of bodily injury is verified by the city doctor within 24 hours of the occurrence of either a vehicular or non-vehicular injury. The motor pool verifies property damage cases before equipment is returned to use. In an unknown number of cases, an officer's injury is not verified immediately and leave taken resulting from it is charged to "sick" leave. At a later date the city doctor, after examination, may change "sick" leave days to "disability" leave if he concludes that the time off-duty was attributable to the injury as reported.

Non-vehicular injury reports and the physician's report are reviewed by immediate supervisors. Disciplinary action, where necessary, is taken by the commanding officer although no formal hearing is held. In the case of vehicular accidents, reports are sent to the city safety review board for hearing at the discretion of either the accident investigation unit or the city safety director. The board is composed of personnel from several city departments including police and fire as well as the city safety director. When a preventable accident has occurred, disciplinary action normally is taken only after a recommendation by the review board. The only written designation of what constitutes a preventable accident involves disobeying a traffic control sign or signal. In this case, the loss of 24 hours earned overtime in addition to any demerits issued is allowed.

Except for use in making repairs on damaged vehicles and information purposes, vehicular and non-vehicular injury and property damage reports are filed only in the personnel records by date within the department. Copies are also sent to the city safety director and the insurance carrier.

Department vehicular accident reports are summarized on a monthly basis using accident type and "fault" - "not-at-fault" categories. No summary of non-vehicular injuries is circulated. All recording and analysis is done manually.

Summaries of vehicular accidents are circulated to the Chief and all captains. No recommendations are contained in the summaries and it is not known what action is taken based on these reports.

Training and Safety

Feedback of injury and property damage data to training is infrequent and informal although examples of accidents occurring to department D police are presented in recruit training. Recruit training using both lecture and demonstration includes basic patrol, arrest, self-defense and crowd control techniques, and firearm training. No job safety analysis procedures are used. Classroom and behind-the-wheel pursuit and defensive driver training is given to recruits. Skid pan training is also provided. Some evaluation of performance is made, however, no one has failed this evaluation to date. One hundred sixty hours of behind-the-wheel training is given to motorcyclists. In this case, performance is evaluated stringently and a number of applicants do not pass the requirements. No periodic retraining of drivers is given following recruit training.

Retraining and Supervisor Observation

Problem drivers are grounded or given informal training and can return to vehicles in a short time. Retraining in other areas is given on an irregular basis. Training bulletins are issued biweekly to every officer. When training bulletins over a seven year period were examined, however, it was found that safety topics were not discussed frequently. Firearm retraining emphasizing safe usage is given on a regular basis.

Recruit evaluation in the field is performed, however, checklists do not include safety-related performance criteria. Supervisors accompany men on radio calls whenever possible, although no formal evaluation procedure is set up. A city vehicle safety observation report covering all city operated vehicles is used by supervisors on a random basis to evaluate driver safety. But this is done informally and much less frequently than in former years. No data is available on the numbers of observations made or the contents of these reports.

There is no formal procedure for handling transferred employees. Any in-service training is carried on through commanding officers. Roll call training is handled by the sergeant and supervised by lieutenants but the frequency and content of training is left to the commanding officer's discretion. A standard operating procedures manual containing department rules and regulations is given to each officer.

Promotion and general evaluation of excellence rests on areas other than the personal safety of individual officers or the men under them. Seniority is the biggest determiner of promotion possibility.

Compensation Practice

Each officer in department D is allowed 12 sick days annually. Sick days are accrued up to 60 days. When sick days are accrued over the number 60, one-half continue to be accrued up to 120 and the other half is added to vacation leave in the following year. An officer can be paid for only 60 days sick leave at retirement. On-duty injuries are not charged against sick leave but officers are allowed 180 disability days with full pay. Thereafter they are placed on disability payroll indefinitely with two-thirds pay until they return to work or are placed on disability pension.

The police department compensation practices do not differ from those of other employees in the city D. Disability compensation on retirement is not based on continued or repeated absences attributable to on-duty injury, but rather on three doctors' evaluations that are examined by the city pension board.

Failure to obey standard safety procedures does not constitute grounds for reducing amount of compensation, unless a suspension occurs. Suspension is rare. Also, officers are not liable personally for damages to police vehicles or other police property.

Physical Fitness

Police department D has no formal physical fitness program. The only required physical examination occurs at entry to the force. At this time, a complete physical including electrocardiogram and full back X-rays is given. An agility test is required also. An interview with the city medical department doctor, who has responsibility for physical care of police, indicated that due to the shortage of manpower the civil service board sometimes overrules the physician in decisions to hire personnel. It was his feeling that medical standards for police should be upgraded.

Fleet Operation

Department D has a municipal motor pool that maintains all city vehicles, including the police fleet. Specifications for new vehicles are drawn up by the municipal motor pool, conforming as much as is economically feasible with the features desired by the police department. When new vehicles arrive, they are put through the state motor vehicle inspection procedures by municipal garage mechanics who have been trained by the state. Vehicles then are assigned to the police department and may be removed from service for repairs at the discretion of the municipal motor pool.

Once in service, vehicles are rechecked annually using the state motor vehicle inspection procedures. In addition, groups of vehicles are chosen throughout the year for a checkover. Every 2,000 miles the vehicle is greased, the oil changed and brake linings and steering are checked. Every eight hours the vehicle is filled with gas and given a walk-around inspection and tire

check by the garage attendant. Additional inspection duties rest with the officer, and he is reminded of these duties by a dashboard sticker.

Work orders for repairs may be initiated by the officer or the municipal garage. If repairs cannot be made within 15 minutes, the officer is assigned a spare vehicle.

The superintendent of the municipal motor pool supervises new vehicle inspections. All other inspections and all work orders are supervised by the foremen.

A master record is kept on each vehicle and includes accidents, repairs and inspections. Additional records are kept on mileage and repair costs.

Every officer is required to have a valid driver's license when he joins the force. His personal driving record is also checked before he joins, but not after. After the training received in the academy, no retraining of drivers is given. Training is not revised or updated on the basis of accident experience. No driver reexamination is given, except for that required by the state of all drivers over 60. No accident related standard for identifying problem drivers exists. The department requires that safety belts be worn.

Accidents come before a city safety review board that can dispense punishment ranging from demerits to loss of earned overtime. There is, however, no accident related standard for identifying problem drivers.

IDR FUNCTION
Department E

General Organization

Police department E has a formal policy for motor fleet safety but none for personnel safety. The traffic services division records accident report data, however, summaries of traffic and personal injuries are sent to the Chief through the office of administrative services. No personnel are assigned full-time to either motor fleet or personnel safety. Rather, a personnel and fleet safety board constitutes the main mechanism for controlling fleet accidents and assists all department commanders with this function. The board also has the function of enacting general fleet safety programs.

Injury and Damage Investigation

Reports are filed on every vehicular injury and property damage case. Reports are completed by the victim and the traffic accident investigator immediately and sent to the traffic service section for recording and then to the commander of the involved personnel and the personnel and fleet safety board for processing. Commanders review and classify the accident, recommend disposition and forward their recommendations to the board that judges on preventability of the accident. Preventability is defined as failure to operate a vehicle in accordance with rules of the road and principles of defensive driving, or as operator negligence. The personnel and fleet safety board makes a final decision on the case and sets the discipline if the accident is judged preventable. In cases of disagreement with the board's decision, a commander may appear in person before the board. In any case, the board's decision is final, subject to the review of the director of the office of administrative services. Penalties include the following: divisional warning, divisional admonishment, official reprimand, loss of regular day(s) off, day(s) of suspension and loss of compensatory day(s) off.

Disabling and first-aid non-vehicular injuries are reported. All injuries are verified by the central receiving hospital. If a man has been off duty for five or more days the police department must okay his return to work.

Records of vehicular accidents are forwarded to personnel along with the board action and entered in officers' files. Non-preventable traffic accident reports are sent to the traffic analytical unit for logging. Preventable accidents are sent to the internal affairs division for processing of penalties. Non-vehicular injuries are not made a part of the permanent record of an officer.

Vehicular accident frequency reports are summarized monthly and forwarded to the Chief. Disabling injuries, days lost and damage costs are summarized annually. All but cost data is handled by computer. Reports on the number of lost time and first-aid injuries are recorded immediately and summarized daily; number of man days lost is recorded on computer and summarized quarterly. No recommendations are contained in the summaries, and it is not known what action is taken based on these reports.

Training and Safety

Feedback of vehicular injury and property damage information to training is informal. During the five-month recruit training period at the academy, lecture and demonstrations include safe use of firearms, techniques of arrest, transporting prisoners, handling chemical agents, techniques of crowd control and use of protective equipment. Pursuit driver training, consisting of eight hours behind the wheel and four hours in class, is completed in the academy. A defensive driving course also containing eight hours behind the wheel and four in class is given to all personnel. Motorcycle training includes 80 hours behind the wheel and 56 hours in the classroom. Motorcycle riding exercises, emphasizing maneuverability, are used for training and evaluative purposes.

No job safety analysis procedures are used in preparing training courses. Training officers selected by the commander train and evaluate new recruits in the field.

Retraining and Supervisor Observation

There is a formal training program for problem drivers consisting of a two-day course. Several training bulletins on safe driving were published in 1964, but there is no formal schedule for the introduction of safety topics into training bulletins or roll call training, which is given department-wide and is based on the contents of the bulletins.

There is no formal program for supervisory monitoring of field performance nor is there a formal procedure for the training of transferred employees.

Promotion and evaluation of general excellence rests on factors other than an officer's personal safety record or the safety record of his subordinates.

Compensation Practice

Department E police are allowed 12 to 14 days illness annually. These days can be accrued to 100. At the time of retirement, the officer is given half pay for all unused sick days. The police have different compensations from other public employees and have a separate and special board for their hearings. In order to receive disability compensation, they must have received treatment within the last 365 days. If sick leave is misused, officers are suspended for a specific number of days, or if involved in extreme accidents or damage, can be forced to resign. There are situations of gross neglect that can be defined and can force an officer to receive only 50 percent of his Workmen's Compensation.

If an officer is injured on duty, he receives full pay up to one full year, at which time a board decides whether he will be retired and at what percentage of his pension. If a man is retired for an on-duty disability, he can receive between 50 and 90 percent of his pension. If he is retired because of an off-duty disability, he receives 40 percent of his pension. The state defines for police and firemen "presumed injury on duty," which after five years of service are heart trouble, hernia, TB or pneumonia.

Physical Fitness

Department E has strong informal requirements for physical fitness. While at the academy, a man must compete in numerous physical-contact sports. This practice is encouraged after graduation. Each officer is supposed to have an annual physical, but actually one is given approximately every two and a half years. At that time both muscle tone and weight criteria are to be met. If an overweight condition of 10 pounds or more is found, the officer is put into a program of monthly reexamination on his day off.

Additional physicals are given when one assumes a command position.

Fleet Operation

Department E has its own garage. Detailed performance specifications for the purchase of new automobiles and motorcycles have been drawn up that include test track evaluation of a manufacturer's demonstrator model before purchase. The evaluation includes both roadability and brake tests. All cars purchased are given a complete inspection and road test. Thereafter a general preventive maintenance schedule is followed every 3,000 and 9,000 miles. The 3,000 mile maintenance covering 26 checkpoints, includes replacement of safety belts if condition is "not perfect," check of brake lining, windshield wipers, tires, etc.; while the 9,000 mile check is more complete. There is no formal followup procedure to see that the 3,000 and 9,000 mile maintenance schedules are maintained. Also, there is no formal procedure for reporting defective vehicles. Repair cost reports by year, model and type of expense are maintained on computer.

Motor fleet drivers are given initial and periodic hearing and vision examinations. Past driving history is fully checked with special emphasis on accidents involving inattention and right-of-way violations. Also, motor coordination and driving tests are given before selection is final. No accident related standard for identifying problem drivers exists. The department requires that safety belts be worn.

IDR FUNCTION
Department F

General Organization

Technically, the safety officer in department F is an officer within the traffic division; actually, the chief of traffic functions as the safety officer. A formal safety program has yet to be developed. Concern is with vehicular accidents more than non-vehicular accidents. The Commissioner receives monthly summaries of personal accidents.

Injury and Damage Investigation

All vehicular accidents must be reported; as must all cases of injury from vehicular or non-vehicular causes. Vehicular accident reports are filed immediately by: a) the officer himself (if physically possible), b) the immediate supervisor and c) the traffic investigation section. The extent of injury always is verified by the police department physician before any time off is taken.

The accident reports are forwarded to the safety section for review. The safety section meets daily and defines the previous day's accidents as "preventable" or "non-preventable." The section consists of one lieutenant and two sergeants. The chain of command suggests discipline that can vary from a reprimand to days off without pay or even part of the cost of repair. The findings of the safety section are sent to the officer's supervisor through the chain of command. The officer's commander decides what disciplinary action will be taken.

Training and Safety

Currently, the recruits attend the academy for 14 weeks. The recruits have a "field day," one day per week during training. The students receive driver training, part of which is the NSC Defensive Driving Course. After completing the course, they are tested for a department driver's license. This license is in addition to the state driver's license.

For at least the first month after completing the academy, the rookie works with an experienced partner assigned by the district captain. The immediate supervisors conduct quarterly evaluations of the new men. Semi-annual evaluations of the experienced staff are conducted by their immediate supervisors. Safety is not a part of these evaluations.

Annually, all policemen return to the academy for 40 hours of in-service/ refresher training. During this time each man must requalify in firearms.

Newly promoted sergeants receive two days of supervisor training at the academy. The K-9 squad receives additional training at the academy. The traffic department trains the motorcyclists.

Roll call training is the responsibility of the shift commander and a roll call training officer who has attended the academy.

Retraining and Supervisor Observation

Forty hours of retraining is scheduled for each man annually. Safety is part of the program. Supervisors receive their safety retraining by means of an open panel discussion. Last year every man received defensive driving refresher training.

Compensation Practice

Retirement and compensation is decided by the city retirement board. To obtain a medical pension, a man must be proven incapable of performing police duties. A medical pension is highly desirable because this kind of pension has been declared tax free by IRS. Also, a man who retires on a medical pension receives 66-2/3 percent of his current salary.

The director of personnel stated that both civilian and sworn personnel have unlimited sick days; however, more than eight sick days per year is considered excessive. Misuse of sick leave is brought to the attention of the director of personnel who turns it over to the deputy commissioner for disciplinary action. The disciplinary actions vary from verbal warnings to being dropped from the force. If it is a situation of neglect, the officer can be charged and brought before a board similar to a military court martial.

Physical Fitness

The department has a full-time physician plus 10 part-time doctors from various medical and psychological fields.

There is an initial complete recruit physical. After that an officer has a physical every two years in which only his weight and hypertension are noted. After 40 years of age a complete physical is required every year. There is no physical fitness requirement or standard.

A man found to be overweight is reexamined every six months. Being overweight affects promotion.

Fleet Operation

The police department vehicles are rented from the city and serviced at the city garage. All city cars are the same. Extra police equipment is added after delivery.

Police vehicles return to the garage for routine maintenance every four weeks. The sergeant at each district is responsible for seeing that all vehicles return for their routine maintenance. All vehicles receive a safety check every time they are at the garage. No written safety checklist is used.

There is a difference in definition of an accident between the city garage and the police. The city garage considers everything that requires repair beyond the routine maintenance an accident. Sometimes the police ignore the side scratches or little dents. Before repair work will be done by the garage, they must have an accident report.

A standard checklist must be completed before a vehicle is taken from any of the police motor pools or before it is taken out for a shift. The city garage maintains a computerized record of all vehicles, inspections and repairs.

IDR FUNCTION
Department G

General Organization

Police department G does not have a safety officer. Safety services are provided by a city safety coordinator; however, the city safety coordinator deals only in motor vehicle accidents, not in other types of accidents, involving the police. Since the city safety coordinator is responsible for all city safety activity for all city employees except the unifcrmed divisions of the police and fire departments, there is a fragmentation of safety efforts that is apparent to both the city safety coordinator and the police department. No formal program exists for either vehicular or non-vehicular safety.

Injury and Damage Investigation

All types of accidents are reported. All forms are to be filled out on the day of the accident; however, there are occasional delays. There is no on-site verification of the extent of property damage or injury. Verification of injury is done by the physician.

Spot checks of non-vehicular accidents are made, especially when critical areas are suspected. All motor vehicle accidents are investigated by a departmental accident prevention unit. The investigation consists of taking the statements of both drivers and completing a standard report. A hearing board also reviews accident reports at their weekly meeting. The city safety coordinator can recommend action to be taken on motor vehicle accident reports, but the final decision rests with the police department itself and the hearing board.

The city safety coordinator also uses accident reports to prepare summaries every four weeks. The summaries are used to pinpoint problem areas.

When computing severity rates, sick leave absences are separated from on-duty injury absences; however, colds or flu resulting from exposure to the weather are classified as on-duty injuries.

Training and Safety

The director of the police academy indicated that he does not maintain a liaison with the city safety coordinator.

Safety training in the academy includes use of accident classification manuals, first-aid and discussion of case histories of police deaths. The city safety coordinator also has a one-hour session with the cadets. At present there is no driver training. There are plans to introduce one week of driver training, especially of the pursuit variety, into the academy curriculum.

Course outlines used at the academy present police tasks in a step-by-step procedure fashion. Injury hazards are pointed out at each step. With the exception of the introduction of driver training, the contents of training are not revised on the basis of accident experience.

In addition to regular academy training, cadets receive 20 hours of training on the job, three days at the county jail and four weeks with a tactical unit.

During the first year after graduating from the academy recruits are evaluated monthly. There is no specific observation of safety in this procedure, although it is brought in informally.

There is no in-service training that includes everyone; however, there are two consultants to a training needs committee that recommends new training for specific parts of the department. The recommendations go to a training design committee that does the actual structuring of the training.

A pupil-coach approach is used in training transferred employees and new employees just out of the academy. Orientation of transferred employees is the responsibility of the receiving department.

Roll call training is conducted by each precinct's training sergeant. He uses training guides prepared by the training unit. His presentation is supplemented by special television programs twice a week. The T.V. broadcasts cover the full gamut of police work.

The state civil service commission assessed the quality of training in 1963. The state law enforcement training commission also reviews the curriculum and the academy director occasionally assesses training quality. He relies on street supervisors to tell him when academy graduates are not learning what is needed on the street.

Compensation Practice

Sick days are earned on the basis of 12 current days plus three accumulative days per year. Of the 12 current days, for every two days not used within the year the employee is credited with one bonus vacation day and the two days are accrued. This is not a conversion of sick days to vacation days, it is a bonus setup. Sick days accrue in two banks, one of current days the other of accumulated days, and form a combined maximum of 250 days. An off-duty accident is carried as sick time. The employee is also carried as sick for on-duty injuries until the medical department declares that a disability exists. This usually happens after the first or second day of the injury.

Police officers are allowed disability days; however, civilian employees, including cadets, are not.

Workmen's compensation is available after department benefits run out. An employee may be placed on three-fourths disability retirement until 25 years from his date of employment, at which time he could receive full retirement pay.

A police officer can be held liable to pay for non-vehicular equipment by a trial board. In addition, an accident review committee can determine negligence that will result in forfeiture of leave days, suspension, etc., but not in the payment of property damage.

Physical Fitness

There is a voluntary sports program,but no formal physical fitness program exists. A physical examination including physical fitness criteria must be passed during the pre-employment checks and at one year after joining the force. If criteria are not met at the end of the one-year confirmation physical, the officer is discharged. Physicals are required before promotions and annually; however, the annual physicals frequently are not given. Summaries of sick days and disability days are maintained but no special studies or reports have been made.

Fleet Operation

Police department G maintains its own vehicles. It has a motor service bureau for this purpose.

Specifications for new vehicles are developed by the city's department of public works and modified by the motor service bureau based on its own experience and that of field personnel. When new vehicles arrive, the head of the motor service bureau and a representative of the public works department check to see that the vehicles meet contract specifications. The motor service bureau then checks the vehicles for proper functioning. Finally, vehicles are sent out for radio installation and rechecked for function on return.

Four people are responsible for in-service inspection: the driver, the sergeant who checks tires and trunk contents daily, the mechanic who greases, oils and checks over the vehicle and an inspector, assigned to a precinct by the motor service bureau, who checks precinct vehicles once a month. Repairs are instituted by notation in a work order book. Followup on repairs is done daily, and a daily report is sent to the motor transportation department.

There is no master record for keeping all information on a vehicle in one place.

In order to drive a department vehicle, an officer must have a departmental driving card issued by the motor service bureau after an informal driving examination consisting largely of driving around for about five miles. In addition, he must have a state license for which he is reexamined every three years.

At present, there is no formal driver training for automobile drivers; however, freeway drivers do spend one week with a veteran driver before going on their own. There is a one-week course for scooter drivers and a very extensive six-week course for motorcyclists. Only one or two out of 15 officers pass the motorcycle course.

There is no requirement that safety belts be worn, although officers are encouraged to wear them.

There is no specific accident related standard used to identify problem drivers. Identification is left up to the commanding officer and retraining is given when a series of accidents occurs. Disciplinary action is at the

discretion of the commanding officer who may issue a warning, lift the departmental driving card or assign the man to a walking beat.

IDR FUNCTION
Department H

General Organization

The safety program for police department H stems almost entirely from the city safety director. The safety officer of the police department collects injury reports and acts as a liaison between the city safety office and the police department. His office is in the labor relations bureau of the patrol division. The chain of command from the safety officer goes through his division commander to the bureau commander and then the Chief of Police. The city safety director and the safety officer of the police department are responsible only for injury reporting. Vehicular safety is the responsibility of the department's garage.

Injury and Damage Investigation

All vehicular and non-vehicular injuries are reported by the victim's supervisor within three working days of their occurrence. The severity of an injury is verified by the city employee medical clinic if the injury necessitates taking time off. Injuries to officers resulting from assaults are filed on an offense report.

Reports are filed on all vehicle accidents whether or not injury occurs. Each accident is investigated by the traffic investigation bureau and presented to the police accident examining board. The board determines whether the officer was negligent and recommends disciplinary action, taking the driver's previous driving record into account. The Chief of Police then decides what final action will be taken.

Injury reports are summarized annually by the city safety officer and are sent to the Chief of Police and to the department's safety officer. Reports of vehicular accidents are not summarized.

Training and Safety

Included in the 540 hours of lectures and demonstrations given to recruits in department H's academy is training in self-defense tactics, use of firearms, traffic safety, hot wires, gas leaks and techniques of arrest. Procedural training includes job safety analysis instruction.

Recruits receive 14 hours of driving training consisting of four hours of instruction and examination by members of the state motor vehicle administration, eight hours of the National Safety Council's Defensive Driving Course and two hours of lecture and films on pursuit driving. A satisfactory rating by their instructor passes recruits on this training.

Retraining and Supervisor Observation

No retraining in driving is given by the department. Problem drivers may be sent to an outside defensive driving course for retraining on their own time.

The only topic of retraining regularly given by the department is firearms training. Training bulletins, which contain safety information at times, are issued by the training bureau and other bureaus.

Roll call training is handled by sergeants or lieutenants. Guides for roll call training are produced by the training bureau and frequently include safety. This training is assessed continually and revised by the chief of administration and the training bureau staff.

There is no formal procedure for orienting transferred employees. A standard operating procedures manual is given to each officer.

Recruits are on probation for their first 12 months of field assignment. Their work is evaluated by their supervisors and command officers and adherence to safety requirements is monitored at this time. After recruit observation, supervisors continue periodically to assess the job efficiency of their men. Safety is included in these assessments. Promotions are made on the basis of a competitive examination, not taking into consideration an officer's safety record, nor that of men in his command.

Compensation Practice

Officers accumulate one and one-half sick days per month of service. These are accumulated up to 90 days for reserve sick leave. Any additional days earned over the 90-day limit are credited as vacation days. An officer leaving the force for any reason is entitled to full pay for all accumulated sick days earned.

Officers injured on duty are entitled to one year of full pay if they are disabled for that period of time. If after one year they still cannot return to duty, they receive full pay for as many sick days as they have earned. When earned sick days are used up, the disabled officer receives one-half pay until he becomes eligible for retirement. Retirement pension is full salary.

Compensation practices for police differ from those for other public employees. Failure to obey standard safety procedures does not constitute grounds for reducing amount of compensation.

Physical Fitness

There is no formal physical fitness program. Officers initially are given a complete physical examination as well as tests of physical fitness, agility and coordination. These tests and a weight requirement must be passed before an applicant is admitted into the academy. A physical examination must be passed again every year,but no additional fitness tests are given.

Fleet Operation

Vehicles are kept by the district to which they are assigned and are inspected and repaired by the department's garage. New vehicles are equipped with special police vehicle equipment and are given an inspection by the department's garage. This inspection follows the state inspection checklist.

In-service vehicles are inspected using the same checklist every 10,000 miles, or every six months. Garage mechanics are responsible for these inspections and their supervisor follows up to see that the inspections are carried out. In addition, the patrolmen and their supervisors are responsible for making constant visual checks on the condition of their vehicles.

The patrolman reports a defective vehicle to the garage and is issued a spare vehicle for use while repairs are being made. The shop foreman insures the completion of the repair work by the garage mechanics.

A master record is kept on each vehicle that includes defects, accident involvement, repairs and inspection.

Officers are required to have a valid driver's license before they are accepted into the academy. Their personal driving record is checked at this time. Before graduation from the academy they must retake and pass the state licensing test. No later retesting of officers' driving is done by the department.

Officers are required to wear safety belts when driving or riding in police vehicles.

IDR FUNCTION
Department I

General Organization

Although department I has no formal safety program for vehicular or non-vehicular safety, it does have a safety unit. The safety unit is a part of the inspection division of the inspectional services bureau. The safety officer spends approximately 35 percent of his time on safety and has no additional staff. He reports to the director of the inspection division who reports directly to the Chief of Police on safety matters. Monthly summaries of vehicular accidents, and non-vehicular and vehicular injuries are compiled by the safety officer and sent through the director of the inspections division to the Chief and to the personnel bureau. The accident summaries give breakdowns according to assignment and activity at the time of the accident, plus damage costs and an indication of emergency or pursuit conditions. The injury summaries give breakdowns according to assignment, type of injury, circumstances of the accident and days lost for both disabling and non-disabling injuries.

The safety officer's liaison with other units in the department is limited The personnel unit receives the monthly accident and injury summaries as well as copies of each completed accident and injury report form. The safety officer's liaison with the training unit consists of a one-hour training lecture he delivers to new recruits.

Injury and Damage Investigation

Reports of all vehicular accidents are completed by the victim and by a patrol accident investigator before the end of the tour of duty during which the accident occurred. In cases of major injury or major property damage in a vehicular accident, a report is filed by an officer in the accident investigation unit. Responsibility for an accident is determined by the victim's supervisor, when it is his first accident in a 12-month period, or by the accident review board, which reviews all vehicular accidents that are not an officer's first accident in a 12-month period.

The city equipment and automotive services director estimates that approximately 25 percent of the vehicular accidents are chargeable. An employee who is found chargeable for an accident may be required to settle any claim for property damage resulting from the accident. This is not required frequently. An employee having had two chargeable accidents in a 12-month period, is required to submit to a physical examination, attend the city driver education-qualification course and is suspended from operation of city vehicles for 60 days. An employee having had three chargeable accidents in a 12-month period, is removed permanently from operation of city vehicles.

An employee may appeal a decision of the accident review board to be reviewed by the board a second time. The second decision of the board can be appealed to the City Manager.

An injury resulting from a vehicular or a non-vehicular accident is reported by the victim's supervisor on a formal report form within 10 days of the injury and by the victim in a memo format as soon as possible after the injury. The extent of the injury is verified by one of a number of physicians authorized by the city for this purpose.

Reports on non-vehicular property damage accidents not resulting in injury are informal memo reports and are not reviewed by the safety officer.

Although no units other than the safety office receive copies of the accident and injury reports, the original report forms are circulated for review through the victim's immediate supervisor, his commanding officer, the division commanding officer, the city and police personnel departments and, in the case of vehicular accidents, the city equipment and automotive services director.

Training and Safety

Except for the one-hour safety lecture given by the safety officer to new recruits and informal communication between training personnel and the safety officer, no direction for training material content is given by the safety officer. The training curriculum begins with seven weeks of classroom instruction including such topics as driving, arrest and patrol procedures, use of firearms and techniques of crowd control. The next four weeks are spent in field training that includes at least 40 hours of actual driving by the recruit. Training is completed by six weeks of classroom instruction including discussion of the field training experience plus more in-depth study of the topics covered during the first seven weeks. For three months on his first patrol assignment the recruit works with a field training officer and is evaluated on his driving and his execution of official procedures. A checklist is used in these evaluations.

Throughout all procedural training, instructors are asked to bring safety precautions to the attention of the recruits.

Retraining and Supervisor Observation

All officers receive retraining in use of firearms two or three times a year. In addition, as commanding personnel in the training division feel there is a need for it, retraining programs are set up that vary from a couple of hours to several days and cover investigation, crowd control, patrol techniques and traffic investigation. These retraining courses are not designed with a major emphasis on safety.

The inspection division, wherein the safety unit is located, is responsible for observation of officers who are no longer recruits. These observations are not yet made on a regular basis. Each officer is observed about twice a year by an officer from the inspection division. In addition, each supervisor is responsible for observing men under his command as often as possible. These observations are primarily for procedural inspection, safety being given only minor attention. The observations may result in comments to the officer on areas for improvement.

Three types of roll call materials are used in conducting roll call training by members of each unit who have been trained specifically for this function. These materials are the International Association of Chiefs of Police Guides and the department's own quarterly information bulletin and educational bulletin, which announces courses at local schools that would be of interest to the officers. The information bulletins mention safety in some cases but are not written with safety as their major topic.

Transferred employees receive informal orientation from their new supervisors and from on-the-job experience. Candidacy for promotion is determined by a competitive examination, weighted 50 percent, an interview conducted by a board of police administrators from departments outside of department I, weighted 40 percent, and the employee's rating by his supervisor, weighted 10 percent. Safety does not play a large part in the evaluation for promotion of an employee.

Compensation Practice

Sworn personnel are allowed 30 days of sick leave per year. These may be accumulated up to 150 days for sick leave use and up to 90 days for cash payment upon retirement. Civilian employees are allowed one day of sick leave per month and accumulate these days in the same manner as sworn personnel.

All expenses are paid in the event of an on-duty injury, and full salary is continued up to one year while the victim is disabled. After one year, a disabled employee is placed on disability pension that pays one-half the amount of the employee's salary. Compensation for on-duty injuries is the same for civilian as for uniformed personnel. Disability pension is based on a report of examination by the employee's private physician and, in some cases, on an additional examination by the city health director.

Neither the amount of compensation nor the number of paid disability days are reduced for failure to follow standard safety procedures.

Physical Fitness

There is no formal physical fitness program or in-service physical examination program in police department I. Officers must pass only the physical examination given by the city health department as an entrance requirement.

Fleet Operation

Patrol cars are assigned to each beat by the city equipment and automotive services department. These cars remain within the beat to which they are assigned and are serviced by one of four district garages. Detective cars and miscellaneous service cars are drawn directly from the municipal pool on a daily basis and are serviced at the municipal garage. Administrative duty cars are assigned on a 24-hour basis and are serviced by the municipal garage.

New cars are equipped by the municipal garage with special equipment and then are inspected according to a thorough departmental checklist. In-service basic squad cars are inspected by the same checklist on a weekly basis. Cars drawn from the municipal pool are inspected every 1,000 miles or 100 hours by

a less thorough checklist. The foreman of each district garage is responsible for insuring proper inspection of squad cars. The foreman of the municipal garage is responsible for insuring proper inspection of cars in the city pool. All foremen are answerable to the shop superintendent who is responsible for insuring the completion of inspections. Officers are instructed strictly not to operate a vehicle with defective equipment and are reminded of the instructions by a dashboard sticker in each vehicle.

Officers report defective vehicles to their district garage or the municipal garage, as applicable, where the foreman assigns a mechanic the responsibility for the needed repairs and issues the officer a new vehicle.

A master record is kept on each vehicle including repairs and inspections. Accident involvement is kept in an additional set of records and cost of repairs records are computerized.

Officers are required to have, or to obtain as recruits, a valid driver's license. Their driving record is checked before they are accepted into the academy. They must also pass a physical examination including hearing and vision tests. Retraining, rechecking of driving records and physical examinations are not repeated after acceptance into the force except as described earlier, in the event of two chargeable accidents in a 12-month period.

Officers are required to wear seat belts by general order. The opinion of the director of city equipment and automotive services is that most officers follow this order.

IDR FUNCTION
Department J

General Organization

Department J has a city safety coordinator responsible for the safety of all municipal employees. Since the police department does not have a single individual assigned to full-time coordination of safety activities, the city safety coordinator maintains liaison with several individual department members responsible for personnel, training and other operations related to employee safety.

Injury and Damage Investigation

All accidents of all types are reported. Accident reports must be filled out by the end of the work day on which the accident occurred and must be forwarded to the city safety director within 48 hours. While the officer directly involved completes the basic report forms, his supervisor appends a narrative report and verifies the severity of injury or property damage.

For all motor vehicle accidents, the officer involved must call another officer, usually a sergeant, to investigate. Investigation of non-motor vehicle accidents depends on the severity; an on-site investigation usually is made only if the officer must be hospitalized. All accident investigations are formal police investigations with report copies sent for review to the supervisor, bureau commander, Chief of Police, city safety coordinator and, in the case of motor vehicle accidents only, the municipal interdepartmental fleet safety committee, which meets weekly.

The disposition of a case rests largely on administrative authority. Disciplinary action may be taken with or without advisory board recommendation.

The city safety coordinator maintains files of accident reports that are used to produce semi-annual summaries. A copy is also placed in the officer's personnel folder.

When computing severity rates, sick leave absences are separated from on-duty injury absences; however, some cases of colds or flu resulting from exposure to the weather may be classified as on-duty injuries at the discretion of the city safety coordinator.

Training and Safety

During recruit training, a defensive driving course and a four-hour course in weapons and safety features is given. The city safety coordinator also has a scheduled session to discuss safety with the cadets.

Instruction on various aspects of police work is presented in a step-by-step fashion, and injury hazards are pointed out at each step. Lesson plans are also up-dated by instructors on the basis of current policy injury information. To keep course content current, the police department participates in an exchange of training materials with other departments in the state.

Forty-eight hours of driving instruction are given in the academy. Successful completion is required, and performance criteria relate to turning in a blind alley, high speed and sudden stops, driving among cones and performance in traffic. Driving training has been up-dated as the result of accident experience, as illustrated by the recent addition of a defensive driving course.

After 16 weeks of academy training, the cadet spends six weeks in a pupil-coach arrangement with a veteran officer. One week is spent in traffic and five in patrol. The officer-coach observes and evaluates the new officer's performance, including the safety aspects of the job.

Supervisors periodically check their men and assess safety performance along with other aspects of job performance.

There is no formal procedure for orienting transferred employees. The receiving unit is responsible for whatever orientation takes place.

Whenever a group of men are on the day shift (shifts rotate every three weeks), 40 hours of training is given. It includes requalification on the firearms range and whatever else is determined to be needed. Other in-service training includes a Red Cross course and 80 hours of supervisor's training.

Roll call training, given by the sergeant in charge, consists largely of going over training bulletins and general orders.

Training bulletins are roughed out by an individual qualified in the topic area. The draft then goes through the planning and research unit and is issued by the training division. Every officer receives a copy of the training bulletin. He must sign for it and keep it in a book with other training bulletins he has received.

The quality of training is assessed from time to time by the Chief through the academy staff.

Compensation Practice

Each officer in department J is allowed 15 sick days per year. These may accrue without limit and have a value at retirement. After the seventh use of sick time during any calender year, the first two days of sick time are at no pay.

An off-duty injury is considered a sick day. On-duty injuries may be applied against injury leave at the rate of 180 days per injury. Injury leave may occur periodically if it is the result of certified recurrence of the same injury. The 180-day limit on injury leave may be extended by vote of the city council. When requested, such extensions usually are granted. When injury leave is exhausted, the officer is placed on disability retirement.

Whenever an officer reports sick or injured, his sergeant calls at his home to check on him and verify the sickness.

Police department compensation practices do not differ from those of other city employees. Repeated or continued absences are not required to qualify for disability compensation on retirement.

Physical Fitness

No formal physical fitness program exists. There is a voluntary sports program.

A physical examination is required on entry. It includes physical fitness performance criteria and a physical qualifications check for driving. No physical is required again until age 45, at which time an annual physical, including a physical qualifications check for driving, but no physical fitness performance criteria, is required. If the physical indicates the officer is no longer able to perform, a report is sent to the Chief. Whenever a problem requiring medical attention is found, the officer is referred to his family physician.

Medical records are kept on an individual basis. No summaries are made and no special studies have been conducted.

Fleet Operation

Department J has a municipal garage that maintains all city vehicles. The police department has a garage for washing and other minor maintenance activities. Specifications for new vehicles are set by the police department's planning and research group and the city garage. When new vehicles arrive, they are put through a thorough inspection by the service manager of the city garage.

Once the vehicle is in service, the officer driving it must inspect the vehicle. Whenever a defect is noted, the officer writes it up and reports to the police garage. Although police vehicles have priority, the time required for repair varies with the time of day and manpower available. Minor repairs can be made immediately if the officer requests permission to go directly to the city garage. The service manager of the city garage said that a preventive maintenance program does not exist.

A master record on each vehicle is kept at the city garage. It contains a complete history on the vehicle from date of delivery.

Before starting on duty, each driver must check his vehicle using a standard checklist. The sergeant supervises these inspections.

In selecting drivers, the pre-employment background check goes into the applicant's driving record. Once on the force, his driving record within the city, but not elsewhere, is kept up to date to evaluate his performance. All drivers must pass the driving course given in the academy.

When driving or riding in a vehicle, all officers must wear a safety belt. Sergeants are assigned the responsibility of spot checking in compliance with this requirement.

There is no specific accident related standard used to identify problem drivers, however, at each review meeting of the interdepartmental fleet safety committee, accident records are reviewed. If in the opinion of the committee a record is too high, the officer is identified as a problem driver. Once so identified, actions can range from no action at all, through reprimands and retraining, to reassignment to non-driving tasks.

APPENDIX G

QUALIFICATIONS AND TRAINING FOR THE IDR DIRECTOR

The Position of IDR Director

It is recommended that the IDR director be a sworn member of the department with a rank equal to or higher than the director of planning and research, inspections, personnel or other similar units. Although a civilian may be assigned to direct the IDR function because of his personal qualifications, better cooperation probably would be given to a member of the force who is familiar with and shows competence in the performance of the police function and is aware of the attitudes of his fellows. Of primary importance is his acceptance as an integral part of the police management team. Anectdotal evidence from several departments plus the difficulties encountered by city safety administrators in obtaining the cooperation of police officials support these recommendations.

Training Needs

The cooperation of activities within the IDR function is complex and involves knowledge and skills normally not acquired at the academy. These can be categorized broadly in terms of the professional safety function, as modified to fit police needs. As a result, training in occupational safety and its related disciplines must precede or accompany assignment to the position of IDR director.

A survey (1) conducted by the American Society of Safety Engineers indicates that 1,012 courses in safety and related fields are offered by 280 institutions. This survey offers an excellent source document for the listing of available courses in the following categories:

1. Industrial Safety/Industrial Accident Prevention
2. Safety Engineering
3. Management and Administration
4. Safety Education
5. Driver and Traffic Safety
6. Fire Protection
7. Industrial Hygiene, Health and Environmental Health.

Unfortunately, no single course can be recommended to fulfill the special training needs of an IDR director for municipal police; however, basic concepts of industrial safety and safety engineering and management should provide the training foundations for such a position.

With the availability of these general programs throughout the nation, it is possible to provide in-service training that will create a knowledgeable and effective IDR staff. A focal point for such training on an informal basis has been the workshops conducted at the National Safety Congress for the last

three years. It is recommended strongly, however, that the LEAA fund the development of an IDR training curriculum and program that would be offered periodically to police personnel on a regional basis.

As has been implied throughout this report IDR covers a diversity of disciplines. The unique hazards presented by the necessities of police action make problems of injury and damage reduction more challenging than those encountered in most industrial or public employee operations. As a result, training in the scientific areas of the safety discipline is mandatory. Knowledge of such areas as physics, chemistry and mathematics is also desirable.

Essential Qualifications for IDR Director

Obviously, the director of IDR must have a deep understanding of the tasks performed in all areas of police operations. Rockwell (2) in speaking of the safety professional in industry states, "Since safety is not a criterion in its own right but is intimately tied into production, the safety specialist must understand the principles of work design so that accident prevention complements production." By the same token injury and damage reduction efforts must complement the police mission.

The primary functions of the IDR director are: a) to analyze ID problems with a view to hazard discovery, b) to interpret and communicate these problems intelligably, c) to recommend and participate in the implementation of countermeasure efforts and d) to evaluate the results of countermeasure efforts on a short term and long term basis.

To analyze injury and damage statistics properly, the IDR director must have a working knowledge of descriptive and inferential statistics. Descriptive statistics are used to present an organized, precise and realistic profile of a department's experience, while inferential statistics enable the evaluation of countermeasure results in terms of significant or meaningful changes in ID rates, as distinguished from chance deviations.

Communication and interpretation of ID summary data to the Chief or his deputy and other department commanders is a key activity of the IDR director. The information within the report and the points of emphasis must be tailored for the target of the ID summary. Again, a combined knowledge of the tasks or various units, together with a knowledge of applied statistics, is necessary. Familiarity with the concepts of workmen's compensation and cost accounting would also be of valuable assistance in presenting these summaries.

The analysis of injury and damage problems should be combined with knowledge of industrial engineering, human factors, industrial hygiene and applied psychology to produce adequate IDR program recommendations. The IDR director should be knowledgeable in at least one of these areas, preferably with a college degree, and be able to comprehend and use the information from other disciplines as presented in books, manuals or training programs. Because of the general emphasis on training as a frequently used countermeasure, a knowledge of basic training techniques and design of curricula is desirable also.

To evaluate the results of countermeasure efforts, the IDR director must be familiar with the experimental design and the corresponding use of control

groups, random assignment, sampling and related topics. It is likely that firm grounding in an applied science at the college level will provide sufficient knowledge to exercise the evaluation process.

REFERENCES

1. American Society of Safety Engineers. Status report: Educational opportunities. Chicago:ASSE, 1969.

2. Rockwell, T. H. Design specifications for a safety engineer. ASSE Journal, 1962, 7(2), 16-19.

APPENDIX H

GENERAL ORDER AND SETTING FORTH DEPARTMENT IDR POLICY
AND COMMAND RESPONSIBILITIES

This department believes that injury and damage reduction is an integral part of efficient police work. It shall be the policy of this department to conduct all operations with the minimum of hazard to personnel, vehicles and other departmental property and to support comprehensive programs to prevent and mitigate injuries and property damage at all times.

The reduction of personnel injuries and vehicle damage are command responsibilities. Every effort is to be expended to meet the goals of injury and damage reduction as defined in this order, and each commander is accountable for his actions directed toward this end. The commander who delegates his interest and his action in the injury and damage reduction effort will not fulfill his obligation to his department.

Command Responsibility

1. The Chief is responsible for the development and implementation of an effective injury and damage reduction (IDR) function. He is also responsible for the establishment of sufficient controls to assure that maximum command effort is expended to supporting, implementing and enforcing all programs undertaken to reduce injury and damage.

2. The deputy chief and his assistants will direct the attention of all commanders to the subject of injury and damage reduction. Such direction will be frequent enough to maintain a sense of the urgency and importance of the IDR effort.

3. Commanding officers are responsible for:

   a. Setting an example in accord with the department IDR efforts

   b. Reviewing all reports of injury and damage events and making recommendations for retraining or diciplinary action where necessary

   c. Periodically reviewing injury and damage records of supervisors and the men under their command

   d. Recommending retraining or discipline for supervisors whose subordinates are responsible for an excessive number of preventable injuries and property damage cases.

4. Supervisors are responsible for:

   a. Setting an example in accord with the department IDR efforts

b. Injury and damage reduction to the same extent that they are responsible for the efficient accomplishment of crime prevention and the other aspects of the department mission

c. The installation of safe equipment, facilities and work methods

d. Adequate inspection and prompt maintenance of equipment and facilities

e. Detection and prompt correction of hazardous conditions and unsafe practices

f. Vigorous and continuous training in injury and damage reduction through individual personnel contacts

g. Recommending retraining for personnel found to be deficient in safe driving practices

h. Enforcement of department rules and procedures

i. Immediate investigation and reporting of injury and damage events

j. Prompt execution of measures to prevent the recurrence of injury and damage.

IDR Function and Responsibility

The director of the injury and damage reduction (IDR) function will assist the Chief in fulfilling IDR responsibilities and recommend programs for the reduction of injury and damage throughout the department.

(The purposes and duties of the IDR function as well as its organizational status have been presented in the text and should be used as a guide for developing this section of the general order on a local level.)

DRIVER IMPROVEMENT WORK SHEET*

NAME_____ I.D._____ DATE_____
Last, First Initial

Area | Rater | I.D. | Total Time Observed

RATING KEY
1 - Negligent
2 - Often Negligent
3 - Usually Complies
4 - Complies

A.	PRE-DRIVING				
	1. Is physically prepared to start shift.	1	2	3	4
	2. Visually checks for damage or defects.	1	2	3	4
	3. Checks wheels and tires.	1	2	3	4
	4. Checks Form 33 for completeness and uncorrected defects.	1	2	3	4
	5. Allows adequate time for engine warm up.	1	2	3	4
	6. Checks brakes, lights, horn, siren and gauges.	1	2	3	4
	7. Adjusts mirror and seat.	1	2	3	4
	8. Secures loose articles within vehicle.	1	2	3	4
	9. Fastens seat belt.	1	2	3	4
B.	GENERAL DRIVING HABITS				
	1. Backs cautiously.	1	2	3	4
	2. Accelerates smoothly.	1	2	3	4
	3. Stops smoothly.	1	2	3	4
	4. Prepares for hazards at intersections.	1	2	3	4
	5. Prepares for hazards near parked vehicles.	1	2	3	4
	6. Makes turning, stopping intentions obvious.	1	2	3	4
	7. Safe path and speed on turns.	1	2	3	4

*Source, The Driver, California Highway Patrol

B. GENERAL DRIVING HABITS (Continued)

8.	Overtakes and passes with adequate clearance.	1	2	3	4
9.	Spots distracted drivers.	1	2	3	4
10.	Taps horn when in doubt.	1	2	3	4
11.	Allows a "space cushion" when following.	1	2	3	4
12.	Watches well ahead in traffic.	1	2	3	4
13.	Doesn't "wander" within lane.	1	2	3	4

C. EXPRESSWAY DRIVING

1.	Merges safely at proper speed.	1	2	3	4
2.	Enters off ramps at safe speed.	1	2	3	4
3.	Minimizes lane changing.	1	2	3	4
4.	Avoids "blind spots."	1	2	3	4
5.	Anticipates movements of overtaken vehicle.	1	2	3	4
6.	Is constantly aware of traffic at rear and sides.	1	2	3	4
7.	Maintains an "out" on both sides.	1	2	3	4
8.	Provides an "in" for merging traffic.	1	2	3	4

D. NIGHT DRIVING

1.	Drives within headlight visibility.	1	2	3	4
2.	Maintains clean windshield and windows.	1	2	3	4
3.	Lowers beams before required distance.	1	2	3	4
4.	Avoids visual "fixation" on approaching lights.	1	2	3	4
5.	Uses lights prior to complete darkness.	1	2	3	4

E. EMERGENCY OPERATION

1.	Drives at reasonable speeds.	1	2	3	4
2.	Overtakes on left.	1	2	3	4
3.	Uses siren properly.	1	2	3	4
4.	Doesn't depend on siren audibility:	1	2	3	4
5.	Uses headlights to advantage.	1	2	3	4
6.	Slows prior to potentially hazardous areas.	1	2	3	4

F. STOPPING VIOLATORS

1.	Selects safe area for stop.	1	2	3	4
2.	Positions his vehicle properly.	1	2	3	4
3.	Sets emergency brake.	1	2	3	4
4.	Cautious in opening door into traffic.	1	2	3	4
5.	Uses warning lights properly.	1	2	3	4
6.	Allows violator to leave first.	1	2	3	4

G. SPECIAL AREA CONDITIONS

1.	Slows prior to entering curves.	1	2	3	4
2.	Drives within own lane on curves.	1	2	3	4
3.	Properly controls skid on ice, snow, etc.	1	2	3	4
4.	Proper speed in fog, rain, etc.	1	2	3	4
5.	All windows defrosted before operation.	1	2	3	4
6.	Other_____.	1	2	3	4
7.	Other_____.	1	2	3	4
8.	Other_____.	1	2	3	4

H.	ATTITUDES				
	1. Observes all traffic laws.	1	2	3	4
	2. Courteous to pedestrians and other drivers.	1	2	3	4
	3. Good posture and alert.	1	2	3	4
	4. Stays calm in annoying situations.	1	2	3	4
	5. Resists urge to "experiment" with horsepower.	1	2	3	4

COMMENTS:

What corrective action was taken to eliminate deficiencies?

APPENDIX J

TASK HAZARD ANALYSIS METHOD

Step 1 - Observe Task

To obtain the basic steps for various police tasks, a number of methods can be used. Certainly, observation of task performance is the primary technique and should be used if at all possible. In these cases, the supervisor should select the more experienced and cooperative officer and brief him on his intention. He then should accompany the officer and observe and record the basic task steps. He should check all his observations with the officer.

The difficulties of the supervisor observing subordinates carrying out field questioning, arrest, search, handcuffing and transportation of prisoners are obvious. If observation is not possible, it is recommended that a sampling of personnel be required to describe a selected task in a step-by-step fashion soon after they complete it. In these cases, personnel would be briefed on the listing of basic task steps.

Table J-1 shows a completed Task Hazard Analysis for two-man car response to a radio call indicating the presence of a prowler in a building at night. The left hand column of the table shows the basic task steps. If subordinates are asked to describe a selected task, then they should be given a form containing only the left hand column of Table J-1 on which they would list the sequence of steps.

The observational or memory techniques of listing task steps can be supplemented with other input. The department's training material and other standard sources, such as the IACP training keys and NUTI traffic law enforcement series, offer useful information for assembling task steps. Discussion among supervisors should be conducted to refine the listing of basic task steps. Such cooperative effort will also assist in gaining the acceptance of all supervisors concerned when the final THA is produced.

Step 2 - List Hazards

In obtaining information on the hazards connected with each step, the same three methods can be used. In the observational method, the supervisor accompanies the selected officer a second time, briefs him on his intentions and observes the task in terms of its hazards and potential hazards.

The supervisor should attempt to be as specific as possible in noting down hazards. The codes at the top of column two of the THA will assist the supervisor in this process. He should also make every attempt to record hazards and potential hazards immediately. The code abbreviation plus one or two key words is sufficient to give an indication of the accident type. For example, "Ob. prowler/lookout" is sufficient to note that the prowler or a lookout may be watching for an approaching police vehicle. Where more than a single hazard is attached to a given step use the coding shown on the THA example.

After observation and recording has been completed, the supervisor should recheck his listing with the officer observed. His experience with the job may include some ideas that might never occur to the supervisor.

POLICE ACTION: Radio call response, prowler in building at night
TYPE OF PATROL: Two-man

TABLE J-1 TASK HAZARD ANALYSIS — WORKSHEET

PERSONAL EQUIPMENT - REQUIRED: Revolver, flashlight, baton, handcuffs
RECOMMENDED: Helmet, safety shoes

SEQUENCE OF BASIC TASK STEPS	HAZARDS OR POTENTIAL HAZARDS	RECOMMENDED PROCEDURE(S) TO COUNTERACT HAZARD
BREAK TASK DOWN INTO ITS BASIC STEPS, e.g., WHAT IS DONE FIRST, WHAT IS DONE NEXT AND SO ON. YOU CAN DO THIS BY (1) OBSERVING THE TASK, (2) HAVING THE OFFICER FILL OUT THIS COLUMN OF THE FORM, (3) DRAWING ON YOUR OWN KNOWLEDGE AND OTHER SOURCES OR (4) A COMBINATION OF ALL THREE. RECORD THE TASK STEPS IN NORMAL ORDER OF OCCURRENCE. DESCRIBE WHAT IS DONE, NOT DETAILS OF HOW IT IS DONE. FOR EXAMPLE, THE TASK OF PASSING A MOTOR VEHICLE ON THE HIGHWAY MIGHT CONTAIN THE FOLLOWING STEPS: 1. Move car into left lane 2. Accelerate as you move left 3. Pass vehicle in right lane 4. Return to right lane 5. Decelerate to normal speed	FOR EACH TASK STEP, ASK YOURSELF WHAT INJURIES OR PROPERTY DAMAGE EVENTS COULD HAPPEN TO AN OFFICER. YOU CAN DO THIS BY (1) OBSERVING THE TASK, (2) INTERVIEWING THE OFFICER TO OBTAIN INCIDENT REPORTS, (3) DRAWING ON YOUR OWN KNOWLEDGE OR OTHER SOURCES FOR PAST INJURY AND PROPERTY DAMAGE OCCURRENCES OR (4) A COMBINATION OF ALL THREE. ASK YOURSELF: CAN THE OFFICER OR HIS VEHICLE BE STRUCK BY SOMEBODY OR SOMETHING; CAN HE BE CAUGHT IN OR BETWEEN SOMETHING, ETC. RECORD AND NUMBER HAZARDS AND POTENTIAL HAZARDS. **Accident**: MV - Motor vehicle; St - Struck by/against; Cw - Contact with; Ca - Caught between, in, on; F - Fall below, same level; Sh - Shot **Assault**: HV - Hit by vehicle; HF - Hit by fist, hand, arm, foot; HO - Hit by object; HTO - Hit by thrown object; Sh - Shot; Sb - Stabbed; Bi - Bit; O - Observed **Ambush**: HV - Hit by vehicle; HTO - Hit by thrown object; Bb - Bombed; Sh - Shot; O - Observed	FOR EACH HAZARD OR POTENTIAL HAZARD, ASK YOURSELF HOW SHOULD THE OFFICER PERFORM THE TASK STEP TO AVOID POTENTIAL INJURY OR DAMAGE, OR WHAT SHOULD THE OFFICER DO OR NOT DO TO AVOID POTENTIAL INJURY OR DAMAGE. YOU CAN GET YOUR ANSWERS BY (1) OBSERVING THE TASK FOR LEADS, (2) DISCUSSING PRECAUTIONS WITH EXPERIENCED OFFICERS, (3) DRAWING ON YOUR OWN EXPERIENCE OR (4) A COMBINATION OF ALL THREE. BE SURE TO DESCRIBE THE PRECAUTIONS THE OFFICER MUST TAKE SPECIFICALLY. DON'T LEAVE OUT IMPORTANT DETAILS. NUMBER EACH SEPARATE RECOMMENDED PRECAUTION WITH THE SAME NUMBER YOU GAVE THE POTENTIAL INJURY OR DAMAGE EVENT THAT THE PRECAUTION SEEKS TO AVOID. USE SIMPLE "DO OR DON'T" STATEMENTS TO EXPLAIN RECOMMENDED PRECAUTIONS, AS IF YOU WERE TALKING TO THE OFFICER.
1. Drive to scene of call by shortest route	A-1 (a) MV - Police vehicle colliding with other police vehicle (b) MV - Police vehicle colliding with non-police vehicle B-1 -- O - Prowler, lookout C-1 -- O - Sniper	A-1 (a) Notify dispatcher of specific approach route and direction/ Switch to car-to-car communication channel if available (b) Preplan approach routine for prowlers with partner/ Obey speed limits and traffic control signals/ Use emergency equipment if necessary/ Allow for other drivers to respond to signals/ Fasten safety belts B-1 -- Turn off emergency equipment at proper distance/ Reduce speed to watch for lookouts or suspects on approach/ Cut engine and coast into area if possible C-1 -- Observe roofs and windows on approach/ Call for assistance
2. Park at scene of call	A-2 (a) MV - Police vehicle struck by other vehicle (b) MV - Officer struck by other vehicle B-2 -- O - Prowler, lookout C-2 -- Sh - Sniper	A-2 (a) Park near curb or set four-way flasher if appropriate (b) Open car door only part way/ Exit from vehicle after carefully checking passing traffic B-2 -- Know local area/ Plan parking site/ Observe for lookouts/ Park several doors from scene/ Avoid slamming doors, loud talk/ Use hand signals C-2 -- Know local area/ Plan parking site/ Observe for sniper from vehicle/ Do not stand in street looking around/ Double park further from scene of call/ Exit between two cars
3. Cover escape routes and approach building	A-3 (a) F - Tripping, slipping, twisting (b) Sh - Own gun (c) Sh - Occupant (d) Sh - Other officer B-3 -- Sh - Prowler C-3 -- Sh - Sniper	A-3 (a) Use flashlight, holding away from body/ Observe area for debris, holes, etc./ Select and scan next location before moving/ Move deliberately if light unavailable (b) Keep revolver in holster, release holster safety only if necessary (c) Avoid lighted backgrounds/ Keep low when passing lighted windows/ Use shrubbery, wall or fence as cover (d) Do not deviate from prearranged approach plan unless absolutely necessary/ Contact additional officers arriving on scene B-3 -- Do not bunch up/ Avoid lighted backgrounds/ Keep low when passing lighted windows/ One officer moves inside while other covers/ Choose next location before moving/ Cross least number of lines of fire possible. C-3 -- Do not bunch up/ Seek substantial cover or make yourself as small a target as possible/ Do not stand in street searching for sniper's location/ Allow time for eyes to become adjusted to dark/ Move rapidly past lighted or open spaces/ Use zig-zag maneuvers/ Select next location so you don't get boxed in
4. Inspect premises for means of entry	A-4 (a) F - Tripping, slipping, twisting (b) St - Falling object, glass (c) Sh - Own gun (d) Sh - Occupant B-4 (a) Sh - Prowler (b) HTO - Thrown object C-4 -- Sh - Sniper	A-4 (a) Observe ground area and building using flashlight when necessary/ Do not move through entryway or gate before checking interior (b) Observe roof area using flashlight/ Remove excess glass with baton, if window entry must be used (c) If drawn, keep safety on, gun uncocked, finger off trigger (d) Call out to person to approach/ Remain under cover or behind barrier until identification is made B-4 (a) Stay close to wall/ Keep low when moving past windows/ Avoid being silhouetted in light/ Have other officer cover if possible (b) Observe roof area using flashlight if necessary/ Listen for unusual sounds or movement overhead C-4 (a) Repeat step C-3

When observation is not possible, hazard description can be obtained by asking officers and supervisors to recall incidents connected with each of the task steps that resulted or could have resulted in injury or property damage. Again, the hazard descriptions gathered from either or both of the above methods can be supplemented by reviewing appropriate reference material.

Step 3 - List Countermeasures

Once the hazards and potential hazards at each step are defined, countermeasures to eliminate or reduce the effects of potential hazards should be defined. At this point, Haddon's (Chapter 5) energy transfer concepts should be considered both in preventing the buildup of hazard and in mitigating its effects. First, the total task should be examined with the question in mind -- Is there a way to perform the task that will eliminate hazards and still achieve the objective?

If hazards cannot be eliminated by use of better equipment or change in procedures, each step should be studied, asking the question -- What should the officer do, or not do, to prevent or reduce the injury and damage resulting from this hazard? Answers to this question must be specific. Phrases such as "be alert" or "be cautious" are useless in THA because they do not state what to do or how to do it.

Where procedural solutions to hazards are doubtful, consider the use of other types of equipment, protective clothing and assistance of other officers.

Step 4 - Checkout with Personnel

When the THA has been completed the supervisor should check the solution through reobservation and discussion with his subordinates and other supervisors. Such discussions create awareness of task hazards and ID countermeasures.

The finished Task Hazard Analysis should be reviewed by the Supervisory IDR Committee and if approved, made available to all supervisors whose men perform the task analyzed.

The following benefits are derived from doing a task hazard analysis:

1. Supervisors learn more about the tasks they supervise.

2. Subordinate participation strengthens the expressed attitude of the department toward reduction of injury and damage.

3. Both supervisors and subordinates begin to tie injury and damage reduction to efficiency and error reduction.

APPENDIX K

Personnel Performance Observation

Name: William Smith ID #

Date	Task Observed	Performance Errors	Correction Given	Supervisor
8-7-71	Searching suspect	Approached from front, subject not off-balance Failure to check lapels.	Verbal	Adams
8-25-71	Searching suspect	none	—	Adams
10-1-71	Stopping Violator	Poor location	Verbal	Adams

(FRONT)

Injury and Damage Experience

Date	ID** Type	Veh.* Type	Assign-* ment	Circumstances	Error	Supervisor
9-2-71	Assault	None	Foot patrol	pushed by escaping suspect	Turned back on suspect	Adams

*Use department designation
**Accident, assault or ambush

(BACK)

Personnel Activity Observation

Activity: Intersection Driving Behavior

Observation Period: 9-1-71 to 12-1-71

Date	Officer Observed	Performance Deficiencies	Corrective Measures	Supervisor
8-12-71	Crane	ST-LTW	Verbal	Adams
8-14-71	Jones	N	—	Adams
8-15-71	Green	B	Verbal	Adams

(FRONT)

Code for Supervisor Observation

Activity: Intersection Driving Behavior

N - None

Approach { B - Foot over brake on approach; LR - Looks left then right

Preparation for Turn { TL - Enters turn lane early; ST - Signals turn at least ½ block before intersection

Right Turn { RTC - Keeps close to right hand curb; RTS - Turns smoothly/watches for pedestrians

Left Turn { LTW - keep wheels straight until turn; LTO - Doesn't try to beat oncoming traffic; LTM - Checks mirror to make sure driver not passing on left

(BACK)

POLICIES AND PROCEDURES GOVERNING
DAILY AND WEEKLY VEHICLE INSPECTIONS*

POLICY:

It is the policy of this Department that personnel, while assigned to or operating a Department vehicle, shall:

1. Be responsible for the vehicle and be held accountable for the equipment assigned to the vehicle.

2. Conduct a daily inspection before each tour of duty to insure that the vehicle is safe, properly equipped and in a serviceable condition. [Special attention shall be given to checking the tires, steering and brake systems.]

PROCEDURE:

The daily inspection requires that the officer(s) assigned to the motor vehicle shall make a thorough inspection of the vehicle in coordination with the officer(s) being relieved. If the vehicle is found to be damaged or unfit for service, notation shall be entered on the Daily Inspection Report and reported to a supervisory official who shall promptly investigate and fix responsibility for such defect or damage. This official shall make a detailed written report of the incident with recommendations to the Commanding Officer.

Fire extinguishers that are found not fully charged shall be promptly taken to the Police Service Shop to be exchanged for a fully charged extinguisher.

Whenever equipment or supplies have been expended during a tour of duty, personnel assigned shall replace such equipment or supplies before being relieved.

In addition to the daily inspection required by personnel assigned to each departmental vehicle, a weekly inspection of every vehicle and the equipment assigned to each vehicle shall be conducted by supervisory officials of the organizational element.

When officials are conducting the Weekly Vehicle Inspection and discrepancies are found, the officials shall review prior daily inspection reports, if necessary to affix responsibility. Necessary corrective action shall then be taken. If an operator fails to report a defect which is later discovered, it shall be assumed that the defect occurred during the tour of duty in which discovered; and the

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*Source: General Order No. 21, 1970, Metropolitan Police Department of the District of Columbia.

[]Not contained in General Order No. 21.

operator shall be held accountable.

RESPONSIBILITIES:

A. Commanding Officers shall be responsible for:

1. The care and maintenance of the Department vehicles and the equipment assigned to their organizational element.

2. Investigation of all damage to Departmental vehicles and the loss of equipment assigned to the vehicle with proper report and recommendation through channels where necessary.

3. The status of all vehicles inoperable due to repairs.

B. Supervisory Officials (Lieutenants and Sergeants) shall be held responsible for:

1. Supervising the weekly inspection.

2. Making on-the-spot corrections as required.

3. Reviewing and approving the Vehicle Inspection and Activity Report to insure compliance with this directive.

4. Making periodic checks of vehicles during their tour of duty to prevent officers from making unnecessary out-of-service requests and assisting them when necessary to insure maximum utilization of time and equipment.

5. Providing relief operators when necessary.

QUALITY OF SHOP, STATION (TERMINAL)
OR GARAGE HOUSEKEEPING

1. Are yards and outdoor premises clean?
2. Are roadway markings, lane numbers, markings for parking areas kept freshly and neatly painted or outlined?
3. Are buildings kept attractively painted?
4. Are windows clean? Are missing, broken or cracked window panes renewed?
5. Are skylights clean? Are missing, broken or cracked panes renewed?
6. Are building entrances unobstructed?
7. Are indoor traffic lanes kept freshly painted?
8. Are floors kept clean of oil, grease, water, dirt or trash?
9. Are aisles kept clear?
10. Are stairs kept clear?
11. Are fire escapes unobstructed?
12. Is loose material left around building columns or walls or under benches?

    Soft drink bottles?
    Discarded lunch boxes?
    Short pieces of pipe?
    Defective automotive parts?
    Timbers or wooden blocks no longer needed?
13. Are approved containers or waste or trash cans or bins provided?
14. Are they emptied regularly?
15. Are automotive maintenance or overhaul pits satisfactorily clean?

Source: Motor Vehicle Safety Manual. N.S.C., 1966.

16. Is the area under automotiye hoists kept clean?

17. Are lighting fixtures dirty?

18. Are work benches and tool carts kept satisfactorily clean?

19. Are tools kept in a designated place when not in use?

20. Is portable equipment kept in a designated place when not in use?

21. Is material stored or piled neatly and safely?

22. Is fire-fighting equipment kept in a well-known, well-marked place?

23. Is fire-fighting equipment kept free of obstructions?

24. Are old brooms, mops and other gear disposed of when no longer usable?

25. Are bulletin boards kept "up-to-date" by being stripped periodically of out-of-date notices, letters, greeting cards and the like?

26. Are locker rooms, change rooms, rest rooms, wash rooms kept neat and clean?

27. Are there any protruding nails, bolts, wire, splinters, glass or other sharp objects?

28. Are warning or caution signs in good condition?

29. Are hose and portable electric cords allowed to become a tripping hazard when they could be kept overhead?

30. Is sawdust allowed to accumulate on the floor?

31. Are office areas kept neat and free of samples, experimental material, defective parts, catalogs and discarded clothing?

32. Are desks and shop work benches neatly maintained?

QUALITY OF SHOP, STATION (TERMINAL) OR GARAGE MAINTENANCE

1. Are floors and stairways in good condition?

2. Are handrails provided on stairways and kept in good condition?

3. Are aisle and work area markings provided and well maintained?

4. Are machine tools kept well painted?

5. Are moving machinery parts well guarded?

6. Is materials handling equipment in good repair?

   Cranes?
   Hoists?
   Conveyors?
   Forklift power trucks? Pallets?
   Hand trucks?
   Wheel barrows?
   Carts?
   Dollies?

7. Are ropes, chains, cables and slings in good condition?

8. Are elevators and manlifts well guarded and in good repair?

9. Are platforms and scaffolds in good condition?

10. Are ladders in safe condition; equipped with safety shoes?

11 Are pressure vessels regularly inspected?

12. Is compressed air equipment and piping in good condition?

13. Is gasoline and diesel oil dispensing equipment in good condition?

14. Is lubricating and transmission oil dispensing equipment O.K.?

15. Is ventilating equipment in good condition?

16. Is heating equipment in good condition?

17. Is general overhead lighting system adequate? Well maintained?

18. Is pit, storeroom and other special lighting adequate? Well maintained?

19. Is fire-fighting equipment adequate? Well maintained?

    Fire estinguishers? (CO_2, dry powder?)

    Fire hose?

    Overhead and "beneath vehicle" sprinklers?

20. Is a safe storage provided for flammable liquids? Well maintained?

21. Are doors and windows kept in easy operating condition?

22. Are sufficient work benches provided? Well maintained?

23. Are vices, grinders and welding equipment in good condition?

24. Are portable electric tools safely grounded? Checked periodically?

25. Are tool rooms provided and are they properly supervised?

26. Is first-aid equipment kept in an accessible place? Well maintained?

27. Are washroom and locker room facilities adequate? Well maintained?

28. Are storage tanks provided? Well maintained?

29. Are tire storage facilities provided? Well maintained?

30. Are waste disposal drums or bins provided? Well maintained?

31. Is adequate personal protective equipment provided and well maintained?

    Safety hats or caps?
    Goggles, safety glasses, eye shields, face shields?
    Respirators?
    Gloves?

32. Do roofs leak?

APPENDIX O

CONTINUED

5 of 6

STAFF INSPECTION AUDIT OF IDR FUNCTION

IDR Management

1. Has Chief clearly defined role of the IDR director, his responsibility and authority?
2. Has the current Chief published a general order outlining his policies concerning IDR?
3. Does IDR director report directly to Chief, assistant chief, bureau commander?
4. Have IDR committees been named? Are they functioning as specified?
5. Are top command personnel attending IDR committee meetings regularly?
6. Is Chief kept advised of all IDR deficiencies and follow-up actions through the IDR director or the IDR policy committee?
7. Is current IDR policy known to all personnel? Command? Supervisory? Subordinate?

IDR Manning

1. What is the current manning status of authorized IDR positions?
2. Are assigned IDR personnel qualified to fill their respective positions? Have they received formal IDR or safety training?
3. Do primary duty IDR officers have additional duties not related to their job?

IDR Function

1. Does the IDR director attend high level staff meetings?
2. Are all IDR functions integrated under the IDR director?

3. Have comprehensive IDR programs been established and published?

4. Are published programs adequate? Do they cover:

   a. IDR Committees

   b. Task Hazard Analysis

   c. Driving and Personnel Training

   d. Supervisory Training

   e. Personnel Performance Inspection

   f. Equipment and Vehicular Inspection

   g. Injury and Damage Investigation

   h. Employee Selection and Health

   i. Bilevel ID Reporting?

5. Does IDR function have the cooperation of all units?

IDR Committees

1. Have IDR committees been organized properly on all personnel levels?

2. Have required permanent members of each committee been designated by letter, memo?

3. Are regular meetings being held at least monthly?

4. Is an agenda notice being provided to members in advance of meetings?

5. Does agenda include a review of pertinent ID incidents, department ID experience and current ID problems?

6. Are IDR committee minutes prepared, forwarded and acted upon as required?

IDR Inspection

1. Have appropriate IDR inspection checklists been developed and results recorded?

2. Have corrective actions been taken and follow-up monitored?

3. Are commanders briefed on the results of performance, equipment and facilities inspections?

4. Is incidence of equipment failure recorded?

IDR Records

1. Are procedures established to insure prompt and accurate reporting of all ID events?

2. Is the ID information analyzed centrally so that the report of the event is tied directly to injury and damage cost data?

3. Is all of this information being processed in some ADP mode?

4. Is the bilevel data collection system being used? How effective is the technique in providing IDR countermeasures?

Employee Health

1. Is there an entry physical examination program for all personnel?

2. Is there a formal physical fitness program with established performance standards?

3. Are assignees to this program designated by department physician?

4. Is there a formal weight control program?

5. Are vision tests made at stated intervals?

6. Are audiometric tests given to all personnel at stated intervals?

7. Is injury due to accident, assault or ambush verified by medical staff?

Protective Equipment

1. Is need determined before personnel protective equipment is issued?

2. Is training in use of personnel protective equipment given before it is issued?
3. Is wearing of personnel protective equipment enforced?
4. Have performance specifications been written for critical protective equipment?
5. Are specifications for purchase of equipment checked by IDR staff?
6. Are IDR performance tests required for vehicles and other critical or protective equipment?

VEHICLE SPECIFICATIONS AND TESTING*

Requirements

Vendors, or manufacturers, submitting bids for this order will furnish a vehicle for testing and demonstrator purposes. This vehicle shall be equipped with brakes, suspension, including springs, stabilizer bars, torsion bars, shock absorbers and steering gear called for as part of the specifications required as chassis components on all vehicles in this requisition. The demonstrator vehicles will be subjected to a brake and roadability test as described below. The City of Los Angeles will not be responsible for the condition of vehicles when returned to vendors after testing and all cars tested will be at the owner's risk for any damage occurring for any reason. Vehicles will be tested and driven by employees of the L.A.P.D. prior to the time of the testing. Only persons so designated by the L.A.P.D. will be permitted as passengers. Vendors or manufacturers' representatives will be permitted to witness the testing but may offer no direction to the driver, passenger or L.A.P.D. employees participating in the testing or in any way supervising the testing. However, advice may be solicited from them by the L.A.P.D. employees supervising the tests.

Roadability Test

Vehicles will be tested and evaluated for stability, cornering, driver comfort and safety at low and high speeds. The testing will be conducted at the Pomona Fair Ground Sports Car Track or other suitable facility designated by the L.A.P.D. The actual test shall consist of practice laps and four timed laps to be driven by four separate drivers. This portion of the test will be individually evaluated, separately and apart, by each individual driver on forms provided for this purpose. Those vehicles which are reported as unsatisfactory in handling and steering characteristics must be corrected and approved before qualifying for the purposes of this bid.

Brake Test

The brake test shall consist of two portions as follows:

1. Four (4) stops from 90 MPH at approximately 20 ft. second per second deceleration rate at two-minute intervals, followed by a "panic" or all-wheel lock stop from 60 MPH to determine the vehicle's ability to stop in a straight line with the braking system warm.

2. Approximately five minutes following Part 1, the above cycle will be repeated.

At the completion of the Roadability and Brake Tests, the vehicles tested will remain in custody and possession of the L.A.P.D. They will be

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*Source: Los Angeles Police Department Specifications for 1971 Automobiles

returned to the police garage, the brake shoes removed and impounded as a control and check of the brakes to be supplied with the vehicles purchased in this requisition. At this time the shock absorbers and springs will be examined as a further control of suspension supplied. Manufacturers or vendors shall furnish a complete set of brake shoes, which will be installed by the L.A.P.D. on vehicles returned to the suppliers. The low bidders vehicle will be held as a control until the first deliveries are made. Vehicle brake tests will be evaluated by the use of decelerometer and pressometer to determine fade characteristics. Failure to pass the test will be considered as disqualifying the vehicle for this bid. All components of the brake and suspension systems furnished on vehicles in this bid shall be identical to those submitted on vehicles for test. Due to the greater than average height of police personnel, bidders will submit head and leg room measurements as shown on the form provided with these specifications.

APPENDIX Q

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Ala.	Montgomery	City	Report of Automobile or Truck Accident	CM #1	----
	Montgomery	Police	Traffic Accident Report	----	----
	Montgomery	Police	Hit & Run Report	----	----
	Montgomery	City	Employees Injured While On Duty - Accident Report	----	----
	Montgomery	Police	Sick Leave Report and Injured Report, On or Off Duty	----	----
Ark.	----	MV	Motor Vehicle Accident Report (Driver's Report)	SR 1	2/69
	----	Hwy.	Report of Motor Vehicle Traffic Accident	1048	5/69
	----	Hwy.	Instructions for Completing the Arkansas Report of Motor Vehicle Traffic Accidents	----	7/67
	Little Rock	----	Automobile Accident or Loss Report	G 1536-8	----
	Little Rock	SAF	Vehicle Inspection	100	----
	Little Rock	----	Vehicle Inspection Sheet	----	----
	Little Rock	----	Accident Evaluation by Department Head	----	----
	Little Rock	City	Employee's On The Job Accident Report	P-3	----
Ariz.	----	MV	Motor Vehicle Accident Report	SR 1	12/69
	----	Hwy.	Traffic Accident Report	AHD-1	10/68
	----	City	Employer's Report of Injury	41	1/69
	Mesa	City	Accident Interview and Investigation Form	----	----
	Mesa	City	Report of Accident Involving City Equipment	----	----
	Mesa	Police	Motor Vehicle Accidents	----	----
	Mesa	Police	Miscellaneous Incident Report	2	----
	Mesa	Police	Supplementary Incident Report	----	----
	Phoenix	City	Vehicle Accident Report	60-101D	8/70
	Phoenix	City	Supervisor's Report of Injury	60-62D	6/67
	Phoenix	City	Accident Report Form	150-10D	6/65
	Tucson	Police	Vehicle Collision Work Sheet	----	----
	Tucson	Police	Driving Record	----	----
	Tucson	City	Report of Industrial Injury	----	----
	Tucson	Police	Officer's Report	1214-12	----
Calif.	----	Hwy.	Traffic Accident Report	110	5/68
	----	Hwy.	Accident Prevention Report	208	1/70
	----	Hwy.	Departmental Report of Industrial Injury	128	5/66
	----	MV	Employer's Report of Industrial Injury	67 L.A.	----
	----	MV	Supervisor's Report of Accident	78	----
	Blythe	Police	Vehicle Maintenance and Inspection Report	----	----
	Burlingame	City	Monthly Safety Report	----	----
	Long Beach	Police	Vehicle Accident Report	130A	68
	Long Beach	Police	Vehicle Injury Accident Report	130B	68
	Long Beach	City	Employee Vehicle Accident Report	P33	----
	Long Beach	Police	Property Damage Report	----	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Calif.	Long Beach	Police	Traffic and Safety Suggestions	285	4/70
	Long Beach	City	Vehicle Accident Review Board	P.50	1/69
	Long Beach	City	Accident Investigation Report	P.46	----
	Los Angeles	Police	Accident History	04.12.0	5/70
	Los Angeles	Police	Discharge of Firearms Report	03.20.0	12/67
	Los Angeles	City	Vehicle Damage Log	15.67	----
	Oakland	Police	Vehicle Collision Report	536-564	8/69
	Oakland	City	Supervisor's Occupational Injury Report	400-179	9/64
	Oakland	Police	Accident Record Card (Personnel)	----	----
	Oakland	City	Employee's Report of Injury	600-29	1/54
	San Diego	Police	Traffic Accident Report	PD.154	----
	San Diego	City	Employee's Report of Industrial Injury	PEA-1531	10/69
	San Diego	Police	Non-Vehicle Property Damage	PD-153	----
	San Francisco	Police	Vehicle Accident Report - Injury Accidents	PR.3.0.18	----
	San Francisco	Police	Vehicle Accident Report - Property Damage	PR.3.0.26	----
	San Francisco	Police	Hit and Run	PR.3.0.1	----
	San Francisco	City	Employer's Report of Industrial Injury	2	8/61
	Santa Ana	City	Motor Transportation Accident Register	----	----
	Santa Ana	City	Report of Industrial Injuries to Personnel	----	----
	Santa Ana	City	Employee Injury Register	----	----
Colo.	----	MV	Investigator's Traffic Accident Report	DR-447	1/70
	----	MV	Instructions - Investigator's Traffic Accident Report	DR-447	1/70
	Denver	MV	Report of Motor Vehicle Accident	----	----
	Denver	Police	Accidents Involving Police and Sheriff's Vehicles	299	5/69
	Denver	Police	Chase or Accident Involving Police Fleet Vehicles	----	----
	Denver	Police	Non-Traffic Accident Report	210	8/54
	Denver	City	Supervisor's Report of Personal Injury	ADM4	5/69
	Denver	Comp.	Employer's First Report of Accident or Occupational Disease	SF-1R47	5/69
	Denver	Comp.	Surgeon's Supplemental Report	----	----
	Denver	Comp.	Attending Physician's Report	I.C.37R45	----
	Denver	Comp.	Supplemental Report of Accident	S.F.2	7/69
	Denver	City	Safety and Claims - Accidents and Injuries	731	3/70
	Denver	City	Safety and Claims	731	4/70
	Denver	Police	Police Surgeon's Report	151	----
	Denver	Police	Report of Damaged or Defective Vehicle	267	8/62
	Denver	Police	Personal Injury Record	----	----
	Denver	Police	Absence Report	148	11/63
	Denver	City	Reporting and Investigation of Employee Accidents and Injuries (Memo #65A)	----	----
	Grand Junction	Comp.	Employee's Report of Accident	----	----
	Pueblo	City	Accident Investigation Report	AIR-1	1/65

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Conn.	Bridgeport	Police	Report of Vehicular Accident Involving Police Vehicle	7/1/70 PD	----
	Bridgeport	Police	Report of Personal Injury	2087	----
Del.	----	Police	Accident Investigation Report	----	----
	----	Comp.	Employer's First Report of Injury	1	----
Wash. D.C		Police	Traffic Accident Report	PD 10	1/69
		City	Supervisor's Report of Accident	100	10/69
		City	Supervisor's Report of Accident - Instruction and Code Information	P.O. 101	2/70
		Police	Sick or Injury Report	PD-42	11/69
		Comp.	Official Superior's Report of Injury	C.A.2	12/61
		Comp.	Request for Examination and/or Treatment	CA-16	12/67
		Comp.	Employee's Notice of Injury or Occupational Disease	CA-1	5/68
		Police	Accident Report Card	PD-840	10/69
Fla.	----	Hwy.	Florida Traffic Accident Report	FHP-3	1/62
	----	Comp.	First Report of Injury	SE1	11/69
	----	Comp.	Employer's Supplemental Report of Injury	SF-3	11/69
	Miami	City	Driver's Accident Report	1006	3/65
	Miami	City	Supervisor's Vehicle Accident Report	ACP2	4/68
	Miami	City	Supervisor's Report of an Injury	ACP1	8/69
	Miami	City	Personal Injury Report	1005	5/65
	Miami	City	Estimate - Mobile Equipment Pool	----	----
	Miami	MV	Vehicle Safety Inspection	MV1-12	3/69
	Miami	Police	Uniformed Police Work Sheet	317-A	----
	Miami	Police	Discharge of Firearms and Use of Force Report	RF#64	1/69
Ga.	----	Safety	Investigator's Accident Report	ARD#13	1/65
	----	Comp.	Employer's First Report of Injury	15	----
	Marietta	Comp.	Statement of Claim	GH-24	6/67
Id.	----	MV	Motor Vehicle Accident Report	----	----
	----	MV	Officer's Report of Motor Vehicle Accident	----	----
	----	Comp.	Employer's Supplemental Report	14	----
	----	Comp.	Notice of Injury and Claim for Compensation	1	4/64
	Burley	City	Supervisor's Report of Injury	----	----
	Burley	City	Supervisor's Accident Report	----	----
	Pocatello	City	Motor Vehicle Accident Investigation	SRE-284	----
	Pocatello	City	Supervisor Accident Report	----	----
	Pocatello	Police	Injured In Line of Duty Report	----	----
	Pocatello	Police	Police Department Report	----	----
Ill.	----	Hwy.	Report of Motor Vehicle Accident	SR-1	----
	----	Comp.	Employer's Report of Compensable Injury	45	----
	Chicago	Police	Police Vehicle Accident and Damage Report	CPD-11.172	4/67
	Chicago	Police	Traffic Accident Report	CPD-81.917	4/67

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Ill.	Chicago	Police	Police Vehicle Accident Record Card	CPD-14.277	2/69
	Chicago	Police	Injury on Duty Report	CPD-11.107	8/66
	St. Charles	Police	Police Report of Motor Vehicle Traffic Accident	Traffic 1	----
	St. Charles	Police	Field Hospitalization Case Report	SCPD-65-6	----
Ind.	----	Police	Investigator's Report	ARB-2	1960
	Indianapolis	Police	Report of Personal Injury to Police Officer While in the Performance of His Duty	1PD41-99	----
	Indianapolis	Police	City Liability Accident Report	PD#1-1-22	----
Ia.	----	----	Investigating Officer's Report of Motor Vehicle Accident	PB-15920	5/69
	Keokuk	Police	Employee's Report of Injury - Fire and Police Departments	----	----
Kan.	----	MV	Kansas Motor Vehicle Department Accident Report	199T	----
	Topeka	Police	Coded Accident Form	----	----
	Wichita	Police	Accident Record	----	----
	Wichita	Police	Vehicle Accident Review and Disposition	----	----
	Wichita	Police	Special Report - Accident Involving Police Vehicle	----	----
	Wichita	City	Supervisor's Report of an Accident (Non-Traffic) On-Duty	000-040	----
Ky.	----	Comp.	Employer's First Report of Injury	S.F. 1	1964
	Henderson	Police	Traffic Accident Report	----	----
	Henderson	City	Damage or Claims Report	P-3	8/67
	Louisville	Police	Damaged Mobile Equipment Report	----	----
	Louisville	Police	Report of Injury While In Line of Duty	----	----
La.	----	MV	Uniform Motor Vehicle Traffic Accident Report (Civilian)	----	----
	----	MV	Uniform Motor Vehicle Traffic Accident Report (Police Vehicle and Department Civilian)	----	----
	Lafayette	City	Vehicle Accident Report	17	4/69
	Lafayette	----	First Report of Injury	15	8/64
	New Orleans	Comp.	First Report of Injury	----	----
Me.	----	Police	Traffic Accident Report	13:20	----
	----	Hwy.	Driver's Report of Traffic Accident	----	----
	----	Comp.	Employer's First Report of Injury	21	4/67
	----	Comp.	Employer's Supplemental Report	----	----
	Portland	City	Accident Investigation Report	----	----
Md.	Baltimore	Police	Vehicle Report	68/5	----
	Baltimore	Police	Accident Report	68/10	----
	Baltimore	Police	Accident Report	68/10-A	----
	Baltimore	Police	Statement of Accident	67/191	----
	Baltimore	Police	Medical Report of Injury	68/409	----
	Baltimore	Police	Accident Photo Request	68/363	----
	Baltimore	Police	Accident Statistical Card	D26032	----
	Baltimore	Police	Accident Report Code Sheet	17-PB	----
	Baltimore	Police	Daily Safety Check Sheet - District	68/339	----
	Baltimore	Police	Weekly Fleet Safety Check - District (Central District Vehicle Inspection)	----	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Md.	Baltimore	Police	Vehicle Inspection Report	M-68/25	----
	Baltimore	Police	Inspectional Services Division Staff Inspections Section Follow-Up Form	----	----
	Baltimore	Police	Exterior Physical Check List	----	----
	Baltimore	Police	Physical Condition Check List	----	----
Mass.	----	MV	Operator's Report of Motor Vehicle Accident	TR2-045217	7/69
	Worcester	Police	Motor Vehicle Damage Report	23A	----
	Worcester	Police	Report of Personal Injury	66	6/66
Mich.	----	Police	Official Traffic Accident Report	----	----
	----	Police	Traffic Accident Supplementary Report	----	----
	----	Police	Official Traffic Accident Report	UD-10C	9/66
	----	Comp.	Employer's Basic Report of Injury	100	3/69
	Detroit	City	Vehicle Accident Report	CofD-113-RE	7/60
	Detroit	City	Report of Accident or Disability	CofD-28RE	2/62
	Detroit	Police	Report of Medical Division	CofD697RE	----
	Detroit	City	Accident Board of Inquiry	CofD146NO	7/66
	Detroit	Police	Activity Log	CofD64LO	9/67
	Detroit	Police	New Car Preparation	----	----
	Detroit	Police	Motor Service Bureau - Inspection Sheet	----	----
	Detroit	City	Vehicle Accident Analysis	----	----
	Detroit	Police	Vehicle Inspection Report	CofD177IN	----
	Detroit	Police	Daily Equipment Inspection Check Sheet	CofD635RE	----
	Detroit	Police	Investigation Squad Daily Activity Report	----	----
	Detroit	Police	What to Do in Case of Vehicle Accident	CofD320R	7/64
	Grand Rapids	City	Personal Injury Report	112	12/68
	Grand Rapids	Police	Police Report Form	1409	----
	Grand Rapids	City	Accident and Claim Division	----	----
	Saginaw	City	Report of Personal Injury	----	----
Minn.	----	MV	Motor Vehicle Accident Police Report	2704A	----
	Duluth	City	Accident Report	----	----
	Duluth	Comp.	First Report of Injury	F20-271	4/70
	Minneapolis	Comp.	Automobile Accident Report	CL15-b	7/66
	Minneapolis	City	Supervisor's Injury Report	----	----
	Rochester	Police	Road Test for New Recruits	----	----
	Rochester	Police	Squad Car Drivers Check List for Vehicle Condition	----	----
	Rochester	City	Medical Identification Form	----	----
	Rochester	City	Report of Employee Work Accident	----	----
Miss.	Brookhaven	----	Untitled (Vehicle Accident Report)	----	----
	Brookhaven	----	Accident Investigation Report	----	----
	Canton	Police	Offense Report	----	----
	Jackson	City	Accident Report Involving City Equipment	----	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Miss.	Jackson	City	Report of Personal Injury to City Employee	----	----
	Jackson	City	Supervisor's Report of Personal Injury	----	----
Mont.	Great Falls	City	City Injury - Accident Report Form	----	----
	Great Falls	City	City Property Damage Report	73408	6/67
Mo.	Kansas City	Police	Missouri Uniform Accident Report	#9PD	1/70
	Kansas City	Police	Vehicular Accident Report	#9PD	1/65
	Kansas City	Police	Vehicular Accident Information Involving Police Equipment	154	1/65
	Kansas City	Police	General Order	----	----
	Kansas City	Police	Animal Bite Report	73	4/64
	Kansas City	Police	Monthly Vehicle and Equipment Inspection Report	363	1/70
	Kansas City	Police	Inspection Record -- Condition of Car and Equipment	269	11/61
	Kansas City	Police	Sick Report/Return to Duty	315	11/67
	Kansas City	Police	Accident Control Record	----	----
	St. Louis	Police	Vehicular Accident Report	29	----
	St. Louis	Police	Vehicle Accident Statistics	----	----
	St. Louis	Police	Injury and Sick Report (Attempted Suicide)	10	----
	Springfield	City	Accident Investigation Report	----	----
	Springfield	City	Supervisor's Report of Injury	----	----
	Springfield	City	National Fleet Safety Contest	----	----
Neb.	----	Comp.	First Report of Alleged Accident or Occupational Disease	1026C	----
	----	MV	Investigator's Motor Vehicle Accident Report	40	3/70
Nev.	Carson City	----	Witness Card	LC-3468	5/55
	Carson City	Comp.	Automobile Accident or Loss Notice	H-CL 223	9/57
	Las Vegas	----	Supervisor's Investigation Report	----	----
N. H.	----	MV	Report of Motor Vehicle Accident	FR1	----
	----	Labor	Notice of Accidental Injury or Occupational Disease	C12362	12/67
	----	Labor	Employer's Supplemental Report of Injury	C1884	2/67
	Manchester	Police	Accident Report	----	----
N. J.	----	MV	Motor Vehicle Accident Report	----	----
N. M.	----	MV	Uniform Accident Report	----	----
	Albuquerque	City	City of Albuquerque Automobile Accident Report	----	----
	----	----	Supervisor's Report of Employee Injury	P100263	----
	----	----	Vehicle Accident and Personal Injury Record	----	----
	----	City	Injury and Accident Report	----	----
N. Y.	----	MV	Report of Motor Vehicle Accident	MV104	11/69
	----	MV	Police Accident Report	MV104A	11/68
	New York City	Police	Accident Report	M.T.6	----
	New York City	Police	Accident Report - City Involved	U.F. 18	1/66
	New York City	Police	Supervisor's Report of Employee's Injury/ Sickness	P.A. 9	11/63
	New York City	Police	Sick Report	----	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
N. Y.	New York City	Police	Aided and Accident Card	U.F. 6	2/61
	New York City	Police	Precinct Record Card	----	----
	New York City	Police	Personal Injury Record	----	----
	New York City	City	Auto Inspection Guide	216	4/65
	New York City	City	Preventive Maintenance Schedule	CRS#27A	----
	Albany	Police	Accident Report - Property Damage	PD1	----
	Port Authority	T.E.	Employee's Motor Vehicle Accident Record	PA 2398	9/60
	Port Authority	T.E.	Motor Vehicle Accident Report	Pa621	8/66
	Port Authority	T.E.	Guide Book for Completing the Motor Vehicle Accident Report	----	----
	Port Authority	T.E.	Motor Vehicle Accident Report Coding Book	----	7/69
	Port Authority	T.E.	Employee's Report of Injury	A 48942	----
	Port Authority	T.E.	Employee Safety Progress Report	----	8/70
	Port Authority	T.E.	Motor Vehicle Accidents Port Authority Fleet	3rd Quar.	1970
	Port Authority	T.E.	Motor Vehicle Accidents Port Authority Fleet	4th Quar.	1969
	Rochester	Police	Police Accident Report	CR-176-A	----
	Rochester	Police	Police Vehicle Traffic Record	----	----
	Rochester	Police	Rochester Police Bureau Fleet Accident Record	----	----
	Rochester	Police	Instructions for Completing Police Fleet Accident Report	----	----
	Rochester	Police	Report of Police Officer Injured	CR-66	----
	Troy	Police	Report of Police Officer Injured on Duty	----	----
	Troy	Police	Auto Accident Report - Property Damage Only	----	----
N. C.	High Point	City	Personnel Accident Report	----	----
	High Point	Hosp.	High Point Memorial Hospital Admission Form	----	----
	High Point	Police	Vehicle Location Report	----	----
	High Point	----	Vehicle Check List	----	----
N. D.	----	MV	North Dakota Motor Vehicle Accident Report	SR-1	
Ohio	----	MV	Motor Vehicle Accident Report	BMV16-001	11/68
	----	Hwy.	Motor Vehicle Accident Report	DHS 1	----
	Akron	Police	Police Traffic Accident Report	----	----
	Akron	Comp.	Automobile Accident or Loss Notice	F.12855	3/67
	Akron	Police	Offense or Incident Report	P.D.#124	----
	Akron	City	Supervisor's Report of Injury	WK-2-1	----
	Beachwood	Police	Police Report of Motor Vehicle Traffic Accident	----	----
	Beachwood	Police	Accident Diagram	----	----
	Bedford	City	Injury Report	----	----
	Cleveland	City	Motor Vehicle Accident Report	----	----
	Cleveland	City	Supervisor's Report of Employee Injured	----	----
	Cleveland	Police	Accident Statement Form	----	----
	Cleveland	City	Supervisor's "Classification of Accident Report"	----	----
	Cleveland	City	Accident Control Bulletin	----	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Ohio	Columbus	City	Vehicle Accident Report	IR-1	1/66
	Columbus	Police	Procedure to Follow When a Member or Employee Is Involved in a Motor Vehicle Accident	----	----
	Columbus	Police	Traffic Collision Report	A-36.148	----
	Columbus	Police	Card Layout for the Traffic Accident Card	----	----
	Columbus	City	Preliminary Report Motor Vehicle	----	----
	Columbus	Police	Certificate of Disability	SO-937	----
	Columbus	City	Departmental Report of Injury	----	----
	Columbus	City	Report of First Aid	----	----
	Columbus	Police	Official Report	S-36.145	7/70
	Columbus	----	New Equipment Check Sheet	----	----
	Columbus	Police	Ambulance Cruiser/Cruiser Equipment and Appearance Report Form	V.10.113	----
	Columbus	City	Vehicle Maintenance and Repair Record	----	----
	Columbus	Police	Inter-Departmental Fleet Safety Committee Report	----	----
	Columbus	Police	Exchange of Identification Information	U.20.104	----
	Columbus	MV	Motor Vehicle Accident Record	----	----
	Dayton	Police	Dayton Police Department Accident Report	S24	1/59
	Dayton	City	Employee Injury Report	P-7-S-68	10/63
Okla.	Chickasha	Police	Official Police Traffic Collision Report	DPS-67-1	7/69
	Oklahoma City	MV	Operator's Report of Motor Vehicle Accident	----	----
	Oklahoma City	City	Official Injury Report Form	----	----
Ore.	----	Police	Accident Report	OD-46	11/67
	----	MV	Oregon Traffic Accident and Financial Responsibility Report	OD-32	8/69
	----	Comp.	Workman's and Employer's Report of Occupational Injury or Disease	WCD-801	10/66
	Salem	City	Occupational Injury or Disease Report	----	----
	Salem	City	Accident and City Property Damage Report	----	----
Pa.	----	Revenue	Police Accident Report	RTS-45	8/65
	----	Revenue	Traffic Accident Report	RTS-600	7/68
	Philadelphia	Police	Traffic Accident Report	75-86	1/63
	Philadelphia	Police	Injured Employee Report	75-132	----
	Philadelphia	Police	Motor Vehicle Operator's Record	75-173	4/60
	Philadelphia	Police	Total Summary of Accident Statistics	----	----
	Pittsburgh	Police	Traffic Accident Report	10.0	----
	Pittsburgh	Police	Aided Injury Animal Bite Report	5.0	----
	Pittsburgh	Police	Personal Injury Record	----	----
R. I.	Providence	Police	Investigator's and Police Accident Report	S9.A	----
	Providence	MV	Operator's Motor Vehicle Accident Report	SR21	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
S. C.	----	Hwy.	Uniform Traffic Collision Report	TR-310	1/70
	Columbia	Police	Offense Report	16	----
S. D.	----	Safety	Investigating Officer's Report of Motor Vehicle Accident	----	----
	Sioux Falls	Police	Vehicular Information Involving Police Cars	27	----
Tenn.	Nashville	Police	Traffic Accident Report	MPD 107B	----
Tex.	Baytown	City	Vehicle Accident Report	----	----
	Baytown	City	Accident Report-On-The-Job-Injury	----	----
	Dallas	Police	Motor Vehicle Accident Report	69-10	
	Dallas	Police	Accident Procedure - Motor Vehicle	----	----
	Dallas	City	Accident Investigator's Report	1A	
	Dallas	City	Accident Report Involving City Equipment or Privately-Owned Equipment Used on City Business	P-8	----
	Dallas	----	Wreck Damage Estimate	----	----
	Dallas	----	Automobile Inspection Report	----	----
	Dallas	City	Report of Employee Injury	P-4	7/59
	Houston	Police	Houston Police Department	18201	----
	Houston	Police	Injury Card	18202	----
	Houston	Police	Police Officer's Confidential Accident Report	18203	----
	San Antonio	Police	Texas Police Officer's Accident Report	----	----
	San Antonio	City	Employee Driver Record	----	----
	San Antonio	City	Employee Accident Report	A-4	----
Ut.	----	Safety	Driver's Report of Traffic Accident	SR11(P32)	4/70
	----	Safety	Investigating Officer's Report of Traffic Accident	SR9(P28)	----
	Salt Lake City	Comp.	Automobile Accident or Loss Notice	LC3554-5	3/64
	Salt Lake City	Police	City Equipment - Accident Report	----	----
	Salt Lake City	City	Supervisor's Report of Employee Accident	C-2	----
Va.	----	MV	Untitled (Vehicle Accident Report)	SR-300	6/66
	Arlington	Police	Traffic Accident Report	PD2020-37	3/68
	Arlington	Per.	Accident Investigation Report	1.1070-16	1/67
	Arlington	Hwy.	I.B.M. Accident Code	----	----
	Norfolk	Comp.	Automobile Accident or Loss Notice	CL-162G	----
	Norfolk	Comp.	Fleet Supervisor's Report of Accident Investigation	SA-27a	10/64
	Norfolk	Police	Division of Police	----	----
	Virginia Beach	Police	Daily Accident Summary	CG18,087	----
Wash.	----	Police	Uniform Police Traffic Collision Report	SF8714A	11/69
	----	MV	Motor Vehicle Accident Report	SF4859	7/67
	Seattle	Police	Vehicle Damage Instructions	8-24-1	1/70
	Seattle	Police	Illness and/or Injury Report	2.11	3/70
	Seattle	Police	Intra-Department Communication	----	----
	Arlington	City	Waiver for Any Driving Exercise at the Arlington Emergency Driving Training Course	----	----

Injury and Damage Report Forms Collected from Cooperating Cities

STATE	CITY	DEPT.	TYPE OF REPORT	NUMBER	REV. DATE
Wash.	Yakima	Police	Information Report	----	----
W. Vir.	----	MV	Uniform Police Traffic Accident Report	DMV-17-F	1/69
	----	MV	Operator's or Owner's Accident Report	DMV-121.F	1969
Wyo.	Cheyenne	Police	Accident Investigation Report	PD-5	----

APPENDIX R

APPENDIX R

Issued June 27, 1967

Highway Safety Program Standard 10

TRAFFIC RECORDS

Introduction

Four classes of routinely collected information comprise the data base for all aspects of a coordinated State traffic safety program (a) data pertaining to drivers, their licensing, violation records, and financial responsibility, (b) vehicle data such as make, model, and serial number, (c) highway data on a milepost basis of bridges, structures, tangents, curves, intersections, and traffic control devices, and (d) accident data linked to the involved drivers, vehicles, and highway locations.

With modern electronic data processing systems, all of these data are amendable to efficient handling, including acquisition, encoding, storage and retrieval. Without efficient handling methods, costs become prohibitive and data cannot be fully or properly used.

The objective of the data systems program will be to upgrade all aspects of the accident information system, starting with the collection of raw data, followed by its encoding, storage, retrieval, analysis, and ultimate dissemination to users. Particular attention will be directed toward making State data useful to State and community executives and to their program directors and planners.

Background

. . . the most definitive, objective, and specialized accident investigation of which we are capable will be useless unless its results can be fed into a record system, correlated with other relevant data, and made to serve some purpose other than mere accumulation.

Uniform, complete, and accurate accident reports, stored in one center in every State, subject to rapid retrieval and analysis, and compatible with a national record system at the Federal level, can tell us not only how many accidents we have, but what kind of accidents they are, where and when they occur, the physical circumstances and the people, injuries, death and damage they involve, what emergency services and enforcement agencies responded and how, and what judicial actions resulted, to mention only the most obvious possibilities.

. . . No other part of the State program is as basic to ultimate success, nor as demanding of complete cooperation at every jurisdictional level . . . .

Report No. 1700, House of Representatives 89th Congress, 2d Session, July 15, 1966, pp. 10 and 11.

Purpose

To assure that appropriate data on traffic accidents, drivers, motor vehicles, and roadways are available to provide:

1. A reliable indication of the magnitude and nature of the highway traffic accident problem on a national, State and local scale.
2. A reliable means for identifying short-term changes and long-term trends in the magnitude and nature of traffic accidents.
3. A valid basis for:

A. The detection of high or potentially high accident locations and causes

B. The detection of health, behavioral and related factors contributing to accident causation

C. The design of accident, fatality, and injury countermeasures

D. Developing means for evaluating the cost effectiveness of these measures

E. The planning and implementation of selected enforcement and other operational programs.

Standard

Each State, in cooperation with its political subdivisions, shall maintain a traffic records system. The Statewide system (which may consist of compatible subsystems) shall include data for the entire State. Information regarding drivers, vehicles, accidents, and highways shall be compatible for purposes of analysis and correlation. Systems maintained by local governments shall be compatible with, and capable of furnishing data to the State system. The State system shall be capable of providing summaries, tabulations and special analyses to local governments on request.

The record system shall include: (a) certain basic minimum data and (b) procedures for statistical analyses of these data.

The program shall provide as a minimum that:

I. Information on vehicles and system capabilities includes (conforms to Motor Vehicle Registration standard):

A. Make
B. Model year
C. Identification number (rather than motor number)
D. Type of body
E. License plate number
F. Name of current owner
G. Current address of owner
H. Registered gross laden weight of every commercial vehicle
I. Rapid entry of new data into the records or data system
J. Controls to eliminate unnecessary or unreasonable delay in obtaining data
K. Rapid audio or visual response upon receipt at the records station of any priority request for status of vehicle possession authorization
L. Data available for statistical compilation as needed by authorized sources
M. Identification and ownership of vehicles sought for enforcement or other operational needs

II. Information on drivers and system capabilities includes (conforms to Driver Licensing standard):

A. Positive identification
B. Current address
C. Driving history
D. Rapid entry of new data into the system
E. Controls to eliminate unnecessary or unreasonable delay in obtaining data which is required for the system
F. Rapid audio or visual response upon receipt at the records station of any priority request for status of driver license validity
G. Ready availability of data for statistical compilation as needed by authorized sources
H. Ready identification of drivers sought for enforcement or other operational needs

III. Information on types of accidents includes:

A. Identification of location in space and time
B. Identification of drivers and vehicles involved
C. Type of accident
D. Description of injury and property damage
E. Description of environmental conditions
F. Causes and contributing factors, including the absence of or failure to use available safety equipment

V. There are methods to develop summary listings, cross tabulations, trend analyses and other statistical treatments of all appropriate combinations and aggregations of data items in the basic minimum data record of drivers and accident and accident experience by specified groups.

V. All traffic records relating to accidents collected hereunder shall be open to the public in a manner which does not identify individuals.

VI. The program shall be periodically evaluated by the State and the National Highway Safety Bureau shall be provided with an evaluation summary.

STATE OF: _____

UNIFORM POLICE TRAFFIC CRASH REPORT

Sheet..... of.....

SUMMARY: Total No. Killed ..... | Total No. Injured ..... | Total No. Vehicles ..... | ☐ Property Damage only

Additional Rep'ts Attached | Alcohol ☐ Influence | ☐ Pedestrian | ☐ Motorcycle | Emergency ☐ Med. Serv. | Suppl. ☐ Diagram/Narr. | (Specify Other) ☐ .....

PHOTOS TAKEN BY: Police ☐ other ☐ none ☐

Time

Date of Crash (Month-Day-Yr)	Day of Week	Time of Crash	Date Police Notified (Month-Day-Yr)	Time Police Notified	Time Arrived at Scene

Location

IN: Name of City or Town | Name of County

ON: No. (Name) of Highway or Street | At Intersection ☐ of | No. (Name) of Highway or Street

AT: (Distance) ☐ Feet ☐ Miles | (Direction) North ☐ E ☐ S ☐ W ☐ | (Reference) of

☐ Not at Intersection

Specific Landmark or Reference Incl. Nearest Milepost, Intersection, Ramp, Interchange, Bridge, City/Town Line, County Line, etc.

Driver No. 1

Name of Driver | Sex

Address

License No | State | Date of Birth

Type of License | License Restrictions ☐ None

In Armed Forces ☐ Yes ☐ No | CODES | Injury Class | Safety Belt | Ejected ☐ Yes ☐ No

Vehicle No. 1

Model Yr | Make | Model | Body Style or Type

License Plate No | State | Year | Odometer

Vehicle Identification No. (VIN) | Trailer Plate No. | State

Name of Registered Owner

Address of Owner

No. of Occ's

Veh. Drivable ☐ Yes ☐ No | Veh. Removed To

Driver No. 2

Name of Driver | Sex

Address

License No | State | Date of Birth

Type of License | License Restrictions ☐ None

In Armed Forces ☐ Yes ☐ No | CODES | Injury Class | Safety Belt | Ejected ☐ Yes ☐ No

Vehicle No. 2

Model Yr | Make | Model | Body Style or Type

License Plate No | State | Year | Odometer

Vehicle Identification No. (VIN) | Trailer Plate No. | State

Name of Registered Owner

Address of Owner

No. of Occ's

Veh. Drivable ☐ Yes ☐ No | Veh. Removed To

Other Persons

Occup't of Veh. .... | (Specify Other) ..... | Seat Pos: ... | Injury Class: ... | Safety Belt: .... | Ejected ☐ Yes ☐ No

Name | Sex

Address | Age

Occup't of Veh. .... | (Specify Other) ..... | Seat Pos: .... | Injury Class: .... | Safety Belt: .... | Ejected ☐ Yes ☐ No

Name | Sex

Address | Age

Occup't of Veh. .... | (Specify Other) ..... | Seat Pos: ... | Injury Class: ... | Safety Belt: ... | Ejected ☐ Yes ☐ No

Name | Sex

Address | Age

Occup't of Veh. .... | (Specify Other) ..... | Seat Pos: .... | Injury Class: .... | Safety Belt: .... | Ejected ☐ Yes ☐ No

Name | Sex

Address | Age

Witness ☐ | Ped. No. ..... | (Specify Other) ..... | Seat Pos: ... | Injury Class: ... | Safety Belt: ... | Ejected ☐ Yes ☐ No

Name | Sex

Address | Age

Witness ☐ | Ped. No. ..... | (Specify Other) ..... | Seat Pos: ... | Injury Class: ... | Safety Belt: ... | Ejected ☐ Yes ☐ No

Name | Sex

Address | Age

INJURED TAKEN TO: BY:

ENFORCEMENT ACTION *(Citations, Arrests, Violations, etc.)*

ALCOHOL TEST:
☐ Requested for: ☐ Driver No. 1
☐ Administered to: ☐ Driver No. 2
☐ No Test ☐ Pedestr. No. ....

Codes

SEAT POSITION:
1 2 / 3 4 5
6—Station Wagon *(Rear or sidefacing seats only)*
7—Motorcycle Passenger
8—Occup't of Bus, Truck, or Other Veh.
9—Position Unknown

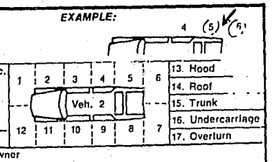
INJURY CLASSIFICATION:
1—Fatal Injury
2—Disabling Injury
3—Non-Disabling (Evident)
0—No Injury
4—Possible Injury
5—Unknown If Injured

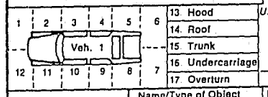
SAFETY BELT OR HARNESS:
0—Not Installed
1—Not Fastened
2—Fastened
3—Belt Failure
4—Unknown If Used

Vehicle Damage

Instructions:
(1) CIRCLE the No. in the box for each damaged area.
(2) DRAW ARROWS to indicate direction of initial impact.

EXAMPLE:





Use this space for sketching damage to trailers, buses, motorcycles, etc.

Hazardous Materials Carried: ☐ Yes (Veh. No. .) ☐ No

OTHER PROPERTY DAMAGED — Name/Type of Object Hit:

Location: ..... Feet off. ☐ Right or: ☐ Left Edge of Roadway or: ☐ In Roadway

Name of Owner

Address of Owner

Weather:	Light Conditions:	Road Surface Condition:	Road Character: (Mark Two)	Road Conditions or Defects:	Traffic Controls: (Mark All That Apply)
☐ Clear	☐ Daylight	☐ Dry	☐ Straight	☐ No Apparent Defects, etc	☐ No Control Present
☐ Cloudy	☐ Dawn ☐ Dusk	☐ Wet	☐ Curved (and)	☐ Under Constr./Repair.	☐ Stop Sign
☐ Raining	☐ Dark *(Street Lights On)*	☐ Snowy	☐ Level	☐ Soft/Defective Shoulder	☐ Stop/Go Signal or Flasher
☐ Snowing	☐ Dark *(Street Lights Off)*	☐ Icy	☐ Upgrade	☐ Obstruction—No Warning	☐ Caution Flasher
☐ Fog	☐ Dark *(No Lights)*	☐ ..... *(Specify Other)*	☐ Hillcrest	☐ Debris on Roadway	☐ R.R. Gates/Signals
☐ ..... *(Specify Other)*	☐ ..... *(Specify Other)*		☐ Downgrade	☐ Reduced Road Width	☐ Police Officer
				☐ Holes, Ruts, Bumps	☐ ..... *(Specify Other)*
				☐ ..... *(Specify Other)*	☐ Control Not Operating

☐ Traffic Signal ☐ Yield Sign ☐ Not Visible/Legible

Posted Speed Limit: ..... (mph)

DIAGRAM or SKETCH *(Draw scene as observed, also indicate what probably happened by locating impact point & paths of traffic units prior to and after impact; refer to vehicles by No.; use supplemental sheet if more space is necessary.)*

Indicate North by Arrow

Time Travel Lane(s) Cleared:

DESCRIPTION *(Describe, in your opinion, what happened; refer to vehicles by No.: use supplemental sheet if additional space is required.)*

Driver-Vehicle Actions: 1	2		1	2
☐	☐ Going Straight Ahead		☐	☐ U-Turn
☐	☐ Turning Left		☐	☐ Turning Right
☐	☐ Slowing/Stopping in Roadway			
☐	☐ Overtaking		☐	☐ Passing
☐	☐ Entering/Leaving Parked Position			
☐	☐ Parked		☐	☐ Backing
☐	☐ ..... *(Specify Other)*			

Pedestrian Actions:
☐ Crossing at Intersection
☐ Crossing—Not at Intersection
☐ Walking in Roadway with Traffic
☐ Walking in Roadway Against Traffic
☐ Standing / Playing / Working } in Roadway
☐ Getting on/off Vehicle
☐ Not in Roadway
☐ ..... *(Specify Other)*

Recommended Police, Engineering & Other Agency Actions:

Police Agency | Date Report Completed

Officer's Signature | Badge No. | Reviewed by:

TRC 6-69 Printed in U.S.A.

POLICE REPORT OF MOTOR VEHICLE TRAFFIC ACCIDENT

TIME

DATE OF ACCIDENT _____ | TIME OF ACCIDENT ☐A.M. ☐P.M. | ARRIVED AT SCENE ☐A.M. ☐P.M.

LOCATION

PLACE WHERE ACCIDENT OCCURRED: County _____ City, town or township _____ State _____

If accident was outside city limits, indicate distance from nearest town _____ miles ☐ North ☐ S ☐ E ☐ W of _____ City or Town

ROAD ON WHICH ACCIDENT OCCURRED _____ Give name of street or highway number (U.S. or State). If no highway number, identify by name.

AT ITS INTERSECTION WITH _____ Name of intersecting street or highway number

IF NOT AT INTERSECTION _____ feet ☐ North ☐ S ☐ E ☐ W of _____ Show nearest intersecting street or highway, house no., bridge, RR crossing, alley, driveway, culvert, milepost, underpass, or other landmark.

VEHICLE NO. 1 — Total number vehicles involved

CODE FOR INJURY

(Use only the most serious one in each space for injury)
K—Dead before report made.
A—Incapacitating injury rendering person unable to perform normal activities as walking or driving or to leave scene without assistance.
B—Nonincapacitating evident injury as oozing of blood, abrasions, lump on head, etc.
C—Possible injury indicated by complaint of pain, blackout, limping, nausea, etc.

First Aid given by:

Injured taken to:

VEHICLE _____ License Plate _____
Year Make Type (sedan, truck, taxi, bus, etc.) Year State Number

VEHICLE REMOVED TO _____ By _____
Name and Address

OWNER _____ Address _____
Print or type FULL name Street or R.F.D. City and State

DRIVER _____ Address _____
Print or type FULL name Street or R.F.D. City and State

Driver's License _____ State Number Specify Type Date of Birth _____ Month Day Year

OCCUPANTS (Shown by seated positions: FC, FR, etc.)

_____ Address _____
Name Street or R.F.D. City and State

_____ Address _____

_____ Address _____

Age	Sex	Injury

VEHICLE NO. 2 or PEDESTRIAN

First Aid given by:

Injured taken to:

VEHICLE _____ License Plate _____
Year Make Type (sedan, truck, taxi, bus, etc.) Year State Number

VEHICLE REMOVED TO _____ By _____
Name and Address

OWNER _____ Address _____
Print or type FULL name Street or R.F.D. City and State

DRIVER (or Pedestrian) _____ Address _____
Print or type FULL name Street or R.F.D. City and State

Driver's License _____ State Number Specify Type Date of Birth _____ Month Day Year

OCCUPANTS (Shown by seated positions: FC, FR, etc.)

_____ Address _____
Name Street or R.F.D. City and State

_____ Address _____

_____ Address _____

Age	Sex	Injury

DAMAGE

VEHICLE DAMAGE SEVERITY

Unit #1 _____

Unit #2 _____

CODE FOR VEHICLE DAMAGE SEVERITY

1—Disabling damage prevents vehicle from being driven without major repairs or without further damage to itself.
2—Functional damage is any non-disabling damage that affects the operation of a motor vehicle or its parts.
3—Other motor vehicle damage is any damage that is not disabling or functional damage.
4—No motor vehicle damage.

DAMAGE TO PROPERTY OTHER THAN VEHICLES _____ Name object and state nature of damage

Name and address of owner of object struck _____

WITNESSES (Name and addresses)

ACTIONS TAKEN (Arrests, etc.) | REPORTING OFFICER

ORM TRAFFIC 1 (Police) Rev. 1971 100M17101 COMPLETE REVERSE SIDE Stock No. 321.16

ROAD SURFACE (Check one)

- ☐ Dry
- ☐ Wet
- ☐ Snowy or Icy
- ☐ _____ Specify other

LIGHT CONDITIONS (Check one)

- ☐ Daylight
- ☐ Dawn or dusk
- ☐ Darkness

ROAD CHARACTER (Check one or more)

Driver 1	Driver 2	
☐	☐	1 lane or alley
☐	☐	2 lanes
☐	☐	3 lanes
☐	☐	4 lanes
☐	☐	Divided road or one way street
☐	☐	Expressway or toll road
☐	☐	Unpaved any width

WHAT DRIVERS WERE GOING TO DO BEFORE ACCIDENT (Check one for each driver)

Driver 1	Driver 2		Driver 1	Driver 2		Driver 1	Driver 2		Driver 1	Driver 2	
☐	☐	Go straight ahead	☐	☐	Make right turn	☐	☐	Make U turn	☐	☐	Backing
☐	☐	Overtake	☐	☐	Make left turn	☐	☐	Stopped	☐	☐	Remained parked

WHAT PEDESTRAIN WAS DOING (Check one)

- ☐ Crossing or entering at intersection or crosswalk
- ☐ Crossing or entering not at intersection or crosswalk
- ☐ Walking in roadway—with traffic
- ☐ Walking in roadway—against traffic
- ☐ Standing in roadway
- ☐ Pushing or working on vehicle
- ☐ Other working in roadway
- ☐ Playing in roadway
- ☐ Other in roadway
- ☐ Not in roadway

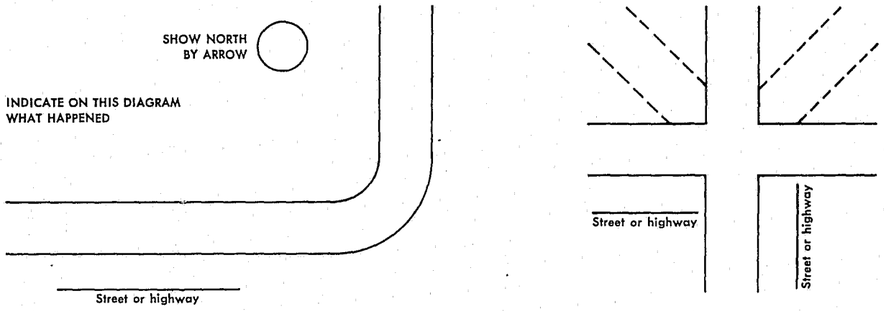
CONTRIBUTING CIRCUMSTANCES (Check one or more for each driver)

Driver 1	Driver 2		Driver 1	Driver 2		Driver 1	Driver 2		Driver 1	Driver 2	
☐	☐	Excessive speed	☐	☐	Drove left of center	☐	☐	Had been drinking	☐	☐	Other mechanical defects
☐	☐	Speed too fast for conditions	☐	☐	Improper overtaking	☐	☐	Other improper driving	☐	☐	Road defect
☐	☐	Failed to yield right of way	☐	☐	Followed too closely	☐	☐	Pedestrian error	☐	☐	Other not involving driver error
☐	☐	Passed stop sign	☐	☐	Made improper turn	☐	☐	Inadequate brakes			
☐	☐	Disregarded traffic signal	☐	☐	Driver inattention	☐	☐	Defective tires			

DESCRIPTION & DIAGRAM OF ACCIDENT DESCRIBE WHAT HAPPENED: (Refer to vehicles by number)

SHOW NORTH BY ARROW

INDICATE ON THIS DIAGRAM WHAT HAPPENED



SUPPLEMENTARY REPORT

APPENDIX S

CODING GUIDE FOR STANDARD FORM: POLICE INJURY AND DAMAGE EVENT

1. IDE # (injury & damage event number assigned centrally rather than by the field investigator)

2. # Killed (total number of persons killed in the event)

3. # Injured (total number of persons injured in the event)

4. Police Property Damage (an on-scene estimate of amount of damage to police property)
   - 99 Unknown
   - 98 Not Applicable
   - 97 Other
   - 96 None ($0 dollars)
   - 01 $ 1-50
   - 02 $ 51-100
   - 03 $101-150
   - 04 $151-200
   - 05 $201-250
   - 06 $251-300
   - 07 $301-350
   - 08 $351-400
   - 09 $401-450
   - 10 $451-500
   - 11 Over $500

5. # of Pages (total number of pages including the two pages of the form and each page of all attachments as of initial completion of report)

6. General Type of Event
   - 01 Accident
   - 02 Assault
   - 03 Ambush
   - 04 Near Miss

7. Specific Type of Event
   - 10 Vehicle Accident (police vehicle)
     - 11 Patrol car
     - 12 Patrol wagon
     - 13 Truck
     - 14 Motorcycle (2-W)
     - 15 Motorcycle (3-W)
     - 16 Motor scooter
     - 17 Aircraft
     - 18 Boat
     - 19 Other
   - 30 Non-Vehicle Accident
     - 31 Fall (same level)
     - 32 Fall (different level)
     - 33 Trip, slip or twist (no fall)
     - 34 Contact with noxious substance (smoke inhalation, acid, gas)
     - 35 Fire
     - 36 Exposure to extreme temperature (hot)
     - 37 Exposure to extreme temperature (cold)
     - 38 Explosion (accidental only)
     - 39 Strenuous effort (push, pull, lift, pry)
     - 40 Electric shock
     - 41 Animal related
     - 42 Struck by
     - 43 Caught in, under, between
     - 44 Other
   - 60 Assault or Ambush
     - 61 With gun
     - 62 With knife
     - 63 With club, stick
     - 64 With person (hands, feet, teeth)
     - 65 With bomb
     - 66 With thrown object
     - 67 With other

8. Type of Call
   - 99 Unknown
   - 98 Not Applicable
   - 10 Calls Handled as Emergencies
     - 11 Police accident
     - 12 Other accident (includes fires)
     - 13 Officer in trouble
     - 14 Crime in progress
     - 15 First aid/assistance
     - 16 Ambulance
     - 17 Disturbance (family)
     - 18 Disturbance (other)
     - 19 Other emergency calls
   - 30 Calls Not Handled as Emergencies (routine response)
     - 31 Service calls (escort, administrative, standby, subpoena)
     - 32 Police accident
     - 33 Other accident
     - 34 Crime in progress (e.g., misdemeanors)
     - 35 First aid/assistance
     - 36 Ambulance

37 Disturbance (family)
38 Disturbance (other)
39 Other non-emergency calls
50 Pursuit

9. Duty Status
99 Unknown
01 On Duty
02 Line of duty
03 Not in line of duty
04 Off Duty

10. Supplementary Report Number
01 Assistance and Rescue
02 Daily Activity Report for Motorcycles, etc.
03 Motorcycle Accident Report
04 Field Interrogation Report
05 Field Interrogation Injury Report
06 Unprovoked Assault, Ambush, Booby Trap
07 Summons, Prearrest Report
08 Summons, Prearrest Injury Report
09 Arrest and Search Report
10 Arrest and Search Injury Report
11 Transportation of Prisoner Report
12 Transportation of Prisoner Injury Report
13 Pursuit Driving Report
14 Pursuit Driving Accident Supplement
15 Emergency Driving Report
16 Emergency Driving Accident Supplement
17 Routine Driving Report
18 Routine Driving Accident Supplement
19 Parked or Rolling Automobile Accident Report
20 Alcohol Influence Test
21 Emergency Medical Service Data
22 Other Local Form A
23 Other Local Form B

11. General Location
99 Unknown
01 Inside Police Building
02 Inside Other Building
03 Outside on Road or Roadside (controlled access roads only)
04 Outside on Road or Roadside (other than controlled access roads)
05 Outside in Parking Lot
06 Outside in Other Area

12. # of Employees Involved
(number of police employees only)

13. State
99 Unknown
01 Alabama
02 Alaska
03 Arizona
04 Arkansas
05 California
06 Colorado
07 Connecticut
08 Delaware
09 District of Columbia
10 Florida
11 Georgia
12 Hawaii
13 Idaho
14 Illinois
15 Indiana
16 Iowa
17 Kansas
18 Kentucky
19 Louisiana
20 Maine
21 Maryland
22 Massachusetts
23 Michigan
24 Minnesota
25 Mississippi
26 Missouri
27 Montana
28 Nebraska
29 Nevada
30 New Hampshire
31 New Jersey
32 New Mexico
33 New York
34 North Carolina
35 North Dakota
36 Ohio
37 Oklahoma
38 Oregon
39 Pennsylvania
40 Rhode Island
41 South Carolina
42 South Dakota
43 Tennessee
44 Texas

45 Utah
46 Vermont
47 Virginia
48 Washington
49 West Virginia
50 Wisconsin
51 Wyoming

14. City

15. District (where event occurred)

16. Address of Building

17. Floor
99 Unknown
98 Not Applicable
01 1st Floor (ground level)
02 2nd Floor
03 3rd Floor
04 4th Floor
05 5th Floor or Higher Floor
08 Roof
09 Basement

18. Room (number or name)

19. Area (corner or section of area within room)

20. Name of Roadway

21. At Intersection With

22. If Not at Intersection -- _____Feet.
(Indicate number of feet.)

23. N E S W Circle one.
(North, east, south, west)

24. Of_____
(specific reference or landmark, i.e., nearest milepost, bridge, interchange, etc.)

25. Month
99 Unknown
01 January
02 February
03 March
04 April
05 May
06 June
07 July
08 August
09 September
10 October
11 November
12 December

26. Day
99 Unknown
01 1st Day
31 31st Day

27. Year
99 Unknown
71 1971
72 1972
Etc.

28. Day of Week
99 Unknown
01 Sunday
02 Monday
03 Tuesday
04 Wednesday
05 Thursday
06 Friday
07 Saturday

29. Hour (2400)
(Insert time in hours and minutes using the 24 hour clock system.)
0099 Unknown
0000 Midnight
0130 1:30 A.M.
1508 3:08 P.M.
Etc.

30. Weather
99 Unknown
98 Not Applicable
97 Other
01 Clear
02 Cloudy
03 Rain
04 Snow/Sleet
05 Fog

31. Surface
99 Unknown
98 Not Applicable
97 Other
01 Concrete

02 Black Top
03 Brick/Cobblestone
04 Gravel
05 Dirt/Grass
06 Sand
07 Tile
08 Plastic
09 Wood
10 Glass
11 Metal
12 Carpet/Rug

32. Surface Condition
99 Unknown
98 Not Applicable
97 Other
01 Dry
02 Wet
03 Icy/Snowy
04 Firm
05 Loose
06 Oily or Slick

33. Light Condition
99 Unknown
98 Not Applicable
10 Outside
11 Daylight
12 Dawn
13 Dusk
14 Dark (street lights on)
15 Dark (street lights off/absent)
20 Inside
21 Daylight (good lighting)
22 Dark (poor lighting)
23 Dark (no lighting)

34. Property Name
(This excludes motor vehicles — when appropriate give model, #, year, size, brand, etc.)

35. Property Location
(In the case of portable properties, note where they may currently be found.)

36. Property Ownership
99 Unknown
98 Not Applicable
97 Other
01 Police
02 Other City Agency
03 Police Employee's Personal Property
04 Private Corporation
05 Private Individual
06 Rented by Police

37. Police Employee's Name

38. Police Employee's Employee #

39. Police Employee's Social Security #

40. Police Employee's Rank

41. Police Employee's Division
(If coded locally, enter appropriate #'s.)

42. Police Employee's Unit

43. Age
(Code to closest full year, e.g., 21¼ is listed as 21. If the date is precisely half way, always move forward, e.g., 21½ is coded as 22. Try to be exact, though a reasonable estimate is acceptable. Age is useful in determining fitness for duty problems, strenuous work assignments, etc.)
99 Unknown
01 One Year Old
02 Two Years Old
24 Twenty-Four Years Old
Etc.

44. Sex
01 Male
02 Female

45. Role in Injury & Damage Event
99 Unknown
97 Other
01 Police Operator
02 Other Operator
03 Passenger in/on Police Vehicle
05 Police Pedestrian
06 Other Pedestrian
07 Witness
08 Assailant (person assaulting)
09 Bystander
10 Ambusher
11 Person Rescued or Assisted

46. Hours Worked Before Accident (nearest hour)

47. Police Action
99 Unknown
98 Not Applicable
97 Other
10 Arrest Related
11 Field interrogation
12 Search
13 Arrest
14 Transport of prisoner
15 Pursuit by vehicle
16 Pursuit on foot
30 Not Related to Arrest
31 Police accident investigation
32 Other accident investigation (includes fires)
33 Officer in trouble
34 First aid/assistance
35 On routine vehicle patrol or service call
36 On routine foot patrol or service call
37 On emergency response by vehicle
38 On emergency response by foot
39 Sitting in parked vehicle

48. Length of Service
99 Unknown
00 Less Than 1 year
01 At Least 1 But Not More Than 2 Years
02 At Least 2 But Not More Than 3 Years
03 At Least 3 But Not More Than 4 Years
04 At Least 4 But Not More Than 5 Years
05 At Least 5 But Not More Than 6 Years
06 At Least 6 But Not More Than 10 Years
10 At Least 10 But Not More Than 15 Years
15 At Least 15 But Not More Than 20 Years
20 Twenty Years or More

49. Time in This Position
(number of years in this particular position, e.g., motorcycle patrol, no matter where assigned or to which unit)
99 Unknown
00 Less Than 1 Year
01 At Least 1 But Not More Than 2 Years
02 At Least 2 But Not More Than 3 Years
03 At Least 3 But Not More Than 4 Years
04 At Least 4 But Not More Than 5 Years
05 At Least 5 But Not More Than 6 Years
06 At Least 6 But Not More Than 10 Years
10 At Least 10 But Not More Than 15 Years
15 At Least 15 But Not More Than 20 Years
20 20 Years or More

50. Type of Assignment
99 Unknown
97 Other
01 Administrative
02 Patrol
03 Investigation
04 Special Assignment

51. Seat Position
99 Unknown
98 Not Applicable
97 Other
01 FL - Front Left
02 FC - Front Center
03 FR - Front Right
04 RL - Rear Left
05 RC - Rear Center
06 RR - Rear Right
07 Motorcycle Passenger
08 Station Wagon - Side or Rear Facing
09 Occupant of Bus or Other Vehicle

52. Driver License #

53. Driver License
- 99 Unknown
- 01 Alabama
- 02 Alaska
- 03 Arizona
- 04 Arkansas
- 05 California
- 06 Colorado
- 07 Connecticut
- 08 Delaware
- 09 District of Columbia
- 10 Florida
- 11 Georgia
- 12 Hawaii
- 13 Idaho
- 14 Illinois
- 15 Indiana
- 16 Iowa
- 17 Kansas
- 18 Kentucky
- 19 Louisiana
- 20 Maine
- 21 Maryland
- 22 Massachusetts
- 23 Michigan
- 24 Minnesota
- 25 Mississippi
- 26 Missouri
- 27 Montana
- 28 Nebraska
- 29 Nevada
- 30 New Hampshire
- 31 New Jersey
- 32 New Mexico
- 33 New York
- 34 North Carolina
- 35 North Dakota
- 36 Ohio
- 37 Oklahoma
- 38 Oregon
- 39 Pennsylvania
- 40 Rhode Island
- 41 South Carolina
- 42 South Dakota
- 43 Tennessee
- 44 Texas
- 45 Utah
- 46 Vermont
- 47 Virginia
- 48 Washington
- 49 West Virginia
- 50 Wisconsin
- 51 Wyoming

54. Safety Belt Use
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None
- 01 Lap Belt Not Installed
- 02 Lap Belt Not Fastened
- 03 Lap Belt Fastened
- 04 Lap Belt Fastened But Belt Failed
- 05 Lap Belt, Unknown if Used
- 11 Shoulder Belt Not Installed
- 12 Shoulder Belt Not Fastened
- 13 Shoulder Belt Fastened
- 14 Shoulder Belt Fastened But Belt Failed
- 15 Shoulder Belt, Unknown if Used
- 21 Combined Lap and Shoulder Belts Not Installed
- 22 Combined Lap and Shoulder Belts Not Fastened
- 23 Combined Lap and Shoulder Belts Fastened
- 24 Combined Lap and Shoulder Belts Fastened But Failed
- 25 Combined Lap and Shoulder Belts, Unknown if Used

55. Apparent Violation
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None (no apparent violation)
- 01 Excessive Speed
- 02 Speed Too Fast for Conditions
- 03 Failed to Yield Right of Way
- 04 Failed to Heed Traffic Signal
- 05 Passed Stop Sign
- 06 Drove Left of Center
- 07 Improper Overtaking
- 08 Followed Too Closely
- 09 Improper Turn
- 10 Driver Inattention
- 11 Had Been Drinking

56. Nature of Injury
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 01 Amputation
- 03 Backstrain
- 05 Bites (animal or insect)
- 07 Bites (human)
- 09 Burns (chemical)
- 11 Burns (electrical)
- 13 Burns (hot substances)
- 15 Burns (radiation, sunburn)
- 17 Concussion (or any head blow causing unconsciousness)
- 19 Contagious Disease (excluding respiratory infection)
- 21 Contusions (bruises, no broken skin)
- 23 Crushing
- 25 Cuts, Scratches, Abrasions (minor)
- 27 Cuts, Scratches, Abrasions (severe)
- 29 Dislocation
- 31 Drowning
- 33 Electrocution
- 35 Emotional Stress
- 37 Exhaustion, Overexertion,
- 39 Foreign Body in Eye, Nose, etc.
- 41 Fracture
- 43 Freezing
- 45 Gunshot Wound
- 47 Hearing Loss - Total
- 49 Hearing Loss - Partial
- 51 Heart Attack
- 53 Heat Exhaustion
- 55 Hernia
- 57 Infection (non-respiratory)
- 59 Infection (Respiratory includes colds, flu, pneumonia.)
- 61 Poisoning (gas or solid)
- 63 Shock (state of shock)
- 65 Skin Irritation
- 67 Smoke Inhalation
- 69 Sprain (pulled muscles; ligaments, tendons)
- 71 Vision Loss - Total
- 73 Vision Loss - Partial
- 75 Complaint of Pain
- 77 Internal Injury (includes hemorrhage)
- 79 Multiple Injury*

57. Part of Body Affected
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None
- 10 Head Area
  - 11 Ears
  - 12 Eyes
  - 13 Scalp and skull
  - 14 Nose
  - 15 Jaw
  - 16 Teeth
  - 17 Neck
  - 18 Multiple head injuries**
- 30 Arm - Hand Area
  - 31 Upper arm
  - 32 Elbow
  - 33 Lower arm
  - 34 Wrist
  - 35 Hand, not finger
  - 36 Finger
  - 37 Multiple arm-hand injuries
- 40 Trunk Area
  - 41 Abdomen (includes internal organs)
  - 42 Back (includes spine)
  - 43 Chest (includes ribs, breast bones and internal organs)
  - 44 Shoulder
  - 45 Hips
  - 46 Groin
  - 47 Buttocks
  - 48 Multiple trunk injuries**
- 50 Leg - Foot Area
  - 51 Thigh
  - 52 Knee
  - 53 Lower leg (above ankle)
  - 54 Ankle
  - 55 Foot (not ankle or toes)
  - 56 Toes
  - 57 Multiple leg-foot injuries**

*Whenever "multiple injury" is coded, give the codes for each injury in the Supplementary Information section. List them in order from most severe to least severe, e.g., "Multiple Injuries: 41, 69."

**Whenever a "multiple" category is used, that category should be listed in the Supplementary Information section and the specific codes, in order of severity from most severe to least severe, should be given, e.g., "Multiple Head Injuries: 12, 15, 18."

60 Body Systems
- 61 Circulatory (heart, blood vessels)
- 62 Digestive (mouth, throat, stomach, intestines)
- 63 Respiratory (lungs)
- 64 Nervous
- 65 Reproductive
- 66 Excretory
- 67 Multiple body systems involved**

70 Multiple Body Parts Involved**

58. Degree of Injury
- 99 Unknown
- 98 Not Applicable
- 01 Fatal
- 02 Disabling
- 03 Medical Attention
- 04 First Aid Only

59. Injury Source
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 01 Impact With Vehicle Interior
- 02 Impact With Vehicle Exterior (pedestrian injuries)
- 03 Impact With Ground or Floor
- 04 Impact With Other Fixed Object
- 05 Impact From Weapon - Gunshot
- 06 Impact From Weapon - Knife
- 07 Impact From Weapon - Club, Stick
- 08 Impact From Weapon - Other Held Object
- 09 Impact From Weapon - Thrown Object
- 10 Contact With Electrical Source
- 11 Contact With Extreme Temperature
- 12 Contact With Bacteria or Other Disease-Producing Agents
- 13 Contact With Noxious Substances (gas, smoke, acid)
- 14 Contact With Suffocating Material (water, earth)

60. Pedestrian Action
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 10 Roadway Related
  - 11 Crossing or entering at intersection or crosswalk
  - 12 Crossing or entering not at intersection or crosswalk
  - 13 Walking in roadway - with traffic
  - 14 Walking in roadway - against traffic
  - 15 Standing in roadway to direct traffic not at accident scene
  - 16 Standing in roadway at accident scene
  - 17 Standing in roadway, other reason
  - 18 Getting on, off, into or out of vehicle
  - 19 Working on or pushing vehicle
  - 20 Other working in roadway
  - 21 Coming out from behind or between
  - 22 Playing in roadway
  - 23 Other in roadway
  - 24 Not in roadway
- 30 Non-Roadway Related
  - 31 Walking
  - 32 Running after
  - 33 Running away from
  - 34 Climbing or jumping
  - 35 Carrying
  - 36 Standing
  - 37 Forced entry to building or room
  - 38 Crowd or riot control

61. Other Person #1: Name

62. Other Person #1: Address

63. Age (See Data Element 43.)

64. Sex (See Data Element 44.)

**Whenever a "multiple" category is used, that category should be listed in the Supplementary Information section and the specific codes, in order of severity from most severe to least severe, should be given, e.g., "Multiple Head Injuries: 12, 15, 18."

65. Role in ID Event (See Data Element 45.)

66. Occupant of Vehicle #

67. Driver's License #

68. Driver's License State (See Data Element 13.)

69. Driver's License Expiration Date

70. Seat Position (See Data Element 51.)

71. Type of License
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None
- 01 Regular Operator
- 02 Chauffeur
- 03 Motorcycle
- 04 Learner's Permit
- 05 Temporary
- 06 Probationary
- 07 Military
- 08 Mixed (e.g., car and motorcycle)
- 09 License Available, But Expired

72. License Restrictions
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None
- 01 Eye Glasses or Contact Lenses
- 02 Special Controls or Equipment
- 03 Restricted Time
- 04 Restricted Geography

73. Safety Belt Use (See Data Element 54.)

74. Apparent Violation (See Data Element 55.)

75. Nature of Injury (See Data Element 56.)

76. Part of Body (See Data Element 57.)

77. Degree of Injury (See Data Element 58.)

78. Injury Source (See Data Element 59.)

79. Pedestrian Action (See Data Element 60.)

80. Other Person #2: Name

81. Other Person #2: Address

82. Age (See Data Element 43.)

83. Sex (See Data Element 44.)

84. Role in ID Event (See Data Element 45.)

85. Occupant in Vehicle #

86. Driver's License #

87. Driver's License State (See Data Element 13.)

88. Driver's License Expiration Date

89. Seat Position (See Data Element 51.)

90. Type of License (See Data Element 71.)

91. License Restriction (See Data Element 72.)

92. Safety Belt Use (See Data Element 54.)

93. Apparent Violation (See Data Element 55.)

94. Nature of Injury (See Data Element 56.)

95. Part of Body (See Data Element 57.)

96. Degree of Injury (See Data Element 58.)

97. Injury Source (See Data Element 59.)

98. Pedestrian Action (See Data Element 60.)

99. Injured Taken to

100. Injured Taken by

101. Vehicle #1: Year

102. Vehicle #1: Make

103. Vehicle #1: Model

104. Body Style

105. License Plate #

106. License Plate State (See Data Element 13.)

107. License Plate Year

108. Vehicle # (police)

109. VIN (manufacturers) Vehicle Identification Number

110. Vehicle Area Damaged
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None (no damage to vehicle)
- 10 Front Left
- 11 Front Center
- 12 Front Right
- 21 Right Side - Front Quarter
- 22 Right Side - Front Door Area
- 23 Right Side - Rear Door Area
- 24 Right Side - Rear Quarter
- 31 Rear Right
- 32 Rear Center
- 33 Rear Left
- 41 Left Side - Rear Quarter
- 42 Left Side - Rear Door Area
- 43 Left Side - Front Door Area
- 44 Left Side - Front Quarter
- 50 Hood
- 51 Windshield
- 52 Side Windows - Right Side
- 53 Side Windows - Left Side
- 54 Rear Window
- 55 Trunk
- 56 Undercarriage
- 60 Multiple areas (2 to 4 areas)*
- 70 Multiple areas (5 or more areas)*

111. # of Occupants

112. Vehicle Mobility
- 99 Unknown
- 98 Not Applicable
- 01 Driveable
- 02 Not Driveable

113. Vehicle Removed to

114. Vehicle Action
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 01 Going Straight Ahead
- 02 Left Turn
- 03 Right Turn
- 04 U-Turn
- 05 Passing
- 06 Being Passed
- 07 Backing
- 08 Slowing
- 09 Stopped in Road
- 10 Parked
- 11 Skidding or Sliding
- 12 Running Off Road
- 13 Pulling to Curb
- 14 Pulling From Curb
- 15 Changing Lanes to Left
- 16 Changing Lanes to Right
- 17 Merging
- 18 Avoiding Object
- 19 Avoiding Other Vehicle
- 20 Unattended Vehicle Parked
- 21 Unattended Vehicle Moving

115. Type of Patrol Car
- 99 Unknown
- 98 Not Applicable
- 01 One Man
- 02 Two Man
- 03 Three Man or More

*Whenever "multiple areas" is coded, give the codes for each area separately in the Supplementary Information section, e.g., "Multiple Areas: 12, 21, 22."

116. Role of Vehicle
- 99 Unknown
- 98 Not Applicable
- 01 Striking
- 02 Struck
- 03 Striking and Struck

117. Possible Vehicle Defects
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 96 None
- 01 Tires
- 02 Brake System
- 03 Suspension System
- 04 Steering System
- 05 Electrical System
- 06 Fuel System
- 07 Ventilation System
- 08 Exhaust System
- 09 Headlights
- 10 Tail Lights
- 11 Side Lights
- 12 Windshield Wipers
- 13 Engine
- 14 Power Transmission System
- 15 Lubrication
- 16 Wheels (other than tires)
- 17 Frame
- 18 Body (includes doors)
- 19 Multiple Defects*

118. Vehicle #2: Year

119. Vehicle #2: Make

120. Vehicle #2: Model

121. Body Style

122. License Plate #

123. License Plate State (See Data Element 13.)

124. License Plate Year

125. VIN (manufacturers) Vehicle Identification Number

126. Vehicle Area Damaged (See Data Element 110.)

127. # of Occupants

128. Vehicle Mobility (See Data Element 112.)

129. Vehicle Removed to

130. Vehicle Action (See Data Element 114.)

131. Role of Vehicle (See Data Element 116.)

132. Vehicle Defects (See Data Element 117.)

133. Registered Owner's Name

134. Registered Owner's Address

135. Registered Gross Laden Weight (for commercial vehicles only)

136. Trailer License #

137. Trailer License State

138. # of Vehicles Involved (total number in event)

139. Vehicle Accident Type
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 01 Collision With Motor Vehicle (moving)
- 02 Collision With Motor Vehicle (parked or stopped)
- 03 Chain Reaction, Multiple Vehicle Collision
- 04 Collision With Pedestrian
- 05 Collision With Train
- 06 Collision With Pedalcycle
- 07 Collision With Animal
- 08 Collision With Fixed Object
- 09 Collision With Other Object

*When this category is coded, list each defect code separately in the Supplementary Information section, e.g., "Multiple Defects: 9, 10, 11."

10 Hit and Run
20 Overturning
21 Jacknife
22 Other Non-Collision (fire, sudden stop or start, carbon monoxide poisoning, bee in vehicle, bridge collapse, etc.)

140. Relation to Intersection
(An intersection is the area inside the extended curb lines of roads that meet. Driveways and alleys are not intersections. An intersection accident is one in which the initial impact occurs within the area of an intersection.)
99 Unknown
98 Not Applicable
01 At Intersection
02 At Non-Intersection
03 Intersection - Related
04 Driveway Access Accident
05 Alley Access Accident

141. Collision Type
99 Unknown
98 Not Applicable
97 Other
01 Head-On
02 Rear-End, Front to Back
03 Rear-End, Back to Back
04 Sideswipe, Same Direction
05 Sideswipe, Opposite Direction
06 Turning Movement, Same Direction
07 Turning Movement, Opposite Direction
08 Turning Movement, Intersecting Paths
09 Angle, Intersecting Paths
10 Front and Rear (as in "chain reaction," multiple vehicle collisions)

142. Traffic Controls
99 Unknown
98 Not Applicable
97 Other
96 None (no controls present)
01 Stop Sign
02 Yield Sign
03 Stop/Go Signal
04 Caution Flasher
05 RR Gates or Signals
06 Temporary Lane Control Devices
07 Police Officer
08 Control Not Operating
09 Control Not Visible

143. Witness Statement Attached
01 Yes
02 No

144. Enforcement Actions

145. Name of Person Completing This Report

146. Date

147. Confirmation of Report Accuracy by Employee

148. Date

149. Confirmation of Report Accuracy by Supervisor

150. Date

151. Narrative

152. Event Diagram

153. Directional Arrow

154. Supplementary Information

APPENDIX T

CODING GUIDE FOR SUPERVISOR'S REPORT: POLICE INJURY AND DAMAGE EVENT

S1. ID #
S2. Name of Employee
S3. Social Security #
S4. Date of Event
S5. Leave Date

Injury and Damage Event number.

The date on which the employee failed to complete one full shift, as a result of the ID event. An event occurring on July 1 producing a disabling injury would produce a "leave date" of July 2.

S6. Return Date

Date Employee returns.

S7. Death Date

When appropriate.

S8. Estimated Total Days Lost

The supervisor's best guess as to how many days the employee will lose. This estimate is made when the supervisor completes this form. This should occur within 48 hours after the event took place.

S9. Actual Total Days Lost

Completed by the supervisor or by the IDR director. On the employee's return to work, notification from the supervisor to the IDR director is given.

S10. Degree of Disability
- 01 Permanent Total
- 02 Permanent Partial
- 03 Temporary Total

S11. Z.16 Status
- 01 Chargeable
- 02 Not Chargeable

S12. Days Charged

S13. Preventability
- 01 Preventable
- 02 Not Preventable

S14. Claim Status
- 01 Claim Expected
- 02 Claim Not Expected
- 03 Uncertain

S15. Compensation Forms Completed

Circle appropriate response.

S16. Fitness for Duty
- 99 Unknown
- 98 Not Applicable
- 96 Other
- 01 Work Fatigue (working part-time elsewhere)
- 02 Work Fatigue (overtime)
- 03 Work Fatigue (from regular work)
- 04 Recurrence of Old Physical Problem
- 05 Physical Illness - Temporary
- 06 Emotional Upset - Temporary
- 07 Allergy Problem
- 08 Suspected Alcohol or Drug Problem
- 09 Overweight
- 10 Underweight
- 11 Handicap - Senses (hearing, seeing)
- 12 Handicap - Deformity or Impaired Function
- 13 Physical Illness - Permanent
- 14 Emotional Illness - Permanent or Recurring

S17. Human Error — Select two when appropriate.
- 10 Vehicle Related Acts
  - 11 Failed to control skidding
  - 12 Failed to avoid parked cars
  - 13 Failed to maintain steering control
  - 14 Failed to use emergency equipment
  - 15 Failed to use safety belts
  - 16 Failed to check rear before backing
  - 17 Failed to secure vehicle before leaving it
  - 18 Failed to use flares or lights at accident scene
  - 19 Failed to give right of way
  - 20 Failed to check vehicle for defects
  - 21 Failed to signal
  - 22 Failed to look before pulling out/in
  - 23 Operating too slow
  - 24 Operating too fast
  - 25 Operating in wrong lane or position
  - 26 Operating over an excessive time period
  - 27 Passing on hill or curve
  - 28 Following too closely
  - 29 Improper turn
  - 30 Improper lane change
  - 31 Improper parking
  - 32 Disregard for traffic control
  - 33 Misjudged clearance
  - 34 Overloaded vehicle
  - 35 Unauthorized use of vehicle
  - 36 Unable to see
  - 37 Fell asleep
  - 38 Under influence of alcohol
  - 39 Under influence of drugs
  - 40 Operator not attentive (distracted)

- 50 Acts Not Related to Vehicle
  - 51 Failed to follow verbal procedures
  - 52 Failed to follow written procedures
  - 53 Failed to get help
  - 54 Failed to use proper equipment (equipment available)
    - 55 goggles, glasses
    - 56 face shield
    - 57 helmet or hat
    - 58 gloves
    - 59 high visibility vest or jacket
    - 60 foot or leg protection
    - 61 special pants
    - 62 life jacket
  - 70 Failed to secure one's own weapon
  - 71 Failed to search
  - 72 Failed to detect concealed weapon
  - 73 Failed to secure equipment
  - 74 Failed to secure prisoners
  - 75 Failed to check equipment for defects
  - 76 Failed to maintain attention
  - 77 Failed to turn off equipment
  - 78 Failed to clean equipment
  - 79 Improper operation of equipment
    - 80 improper use of body
    - 81 used hands, not proper tool
    - 82 insecure grip
    - 83 lifted with back, not legs
    - 84 overexertion
  - 85 Deactivated safety equipment (removed, plugged...)
  - 86 Unauthorized use of equipment
  - 87 Haste, taking shortcuts
  - 88 Horseplay
  - 89 Overloading
  - 90 Unsafe carrying, placing, loading

S18. Kind of Human Error
- 99 Unknown
- 98 Not Applicable
- 01 Act Performed Intentionally
- 02 Act Performed Unintentionally
- 03 Act Omitted

S19. Human Error #2 — See Data Element S17.

S20. Kind of Human Error — See Data Element S18. This should apply to Human Error #2 when appropriate.

S21. Dangerous Conditions #1 — Select two when appropriate.
- 99 Unknown
- 98 Not Applicable
- 97 Other

10 Dangerous Equipment (defective, inadequate)
- 11 Vehicle related
- 12 Not related to vehicle

20 Dangerous Environmental Factors
- 21 Weather related
- 22 Noise related
- 23 Ventilation related
- 24 Illumination related
- 25 Terrain related
- 26 Animal related
- 27 Fire related
- 28 Space related

40 Dangerous Procedures
- 41 Authorized in writing
- 42 Authorized orally
- 43 Unauthorized

50 Dangerous Public Factors
- 51 Dangerous persons (criminals, assailants, resisters)
- 52 Defective premises of others
- 53 Defective equipment of others

S22. Awareness by Supervisor
- 01 Presence of Dangerous Condition Known
- 02 Presence of Dangerous Condition Not Known

S23. Dangerous Condition #2 — When appropriate.

S24. Awareness by Supervisor — See Data Element S22.

S25. Managerial Inadequacy — Select two when appropriate.
- 99 Unknown
- 98 Not Applicable
- 97 Other
- 10 Personnel Inadequacies
  - 11 Not enough manpower
  - 12 Too many persons to supervise effectively
  - 13 Inadequate employee selection
  - 14 Inadequate employee assignment
  - 15 Poor distribution of manpower
- 20 Training Inadequacies
  - 21 Inadequate training for employee
  - 22 Inadequate training for supervisor
  - 23 Inadequate orientation to new task
- 30 Operating Procedure Inadequacies
  - 31 Inadequately written procedures
  - 32 No written procedures
  - 33 Responsibility not clear
  - 34 Inadequate communication
  - 35 Unnecessary procedure
  - 36 Not enough time for safe performance
  - 37 Inadequate planning
  - 38 Inadequate monitoring or inspection

- 40 Equipment Inadequacies
  - 41 Not enough equipment available
  - 42 Improper maintenance of equipment
  - 43 Inadequate instructions on equipment
  - 44 Inadequate design of equipment

S26. Managerial Inadequacy #2 — See Data Element S25.

S27. Task Performed? — Describe exactly what employee was doing. What was his objective?

S28. Type of Procedures
- 01 Authorized in Writing
- 02 Authorized Orally
- 03 Unauthorized

S29. Procedures Followed? — Circle one.

S30. Frequency of Task Performance
- 01 Hourly
- 02 Daily
- 03 Weekly
- 04 Monthly
- 05 Quarterly
- 06 Yearly
- 07 Performed Less Than Once a Year

S31. Frequency of Human Error — Apply only to Human Error #1.
- 01 Every Time Task is Performed
- 02 Nearly Every Time Task is Performed
- 03 Sometimes When Task is Performed
- 04 Almost Never When Task is Performed

S32. Frequency of Dangerous Condition — Apply only to Dangerous Condition #1.
- 01 Every Time Task is Performed
- 02 Nearly Every Time Task is Performed
- 03 Sometimes When Task is Performed
- 04 Almost Never When Task is Performed

S33. When Did You Last Observe the Employee Perform This Task?
- 01 Today, Performed Safely
- 02 Within Last Week, Performed Safely
- 03 Within Last Month, Performed Safely
- 04 Within Last Quarter, Performed Safely
- 05 Within Last Year or Longer, Performed Safely
- 06 Today, Not Performed Safely
- 07 Within Last Week, Not Performed Safely
- 08 Within Last Month, Not Performed Safely
- 09 Within Last Quarter, Not Performed Safely
- 10 Within Last Year or Longer, Not Performed Safely
- 11 Never

S34. Should a Job Safety Analysis be Performed on This Task? Circle one.

S35. If No Change Is Made, What Is the Likelihood That Another Similar Event Will Occur Within a One Month Period?
01 100%
02 75%
03 50%
04 25%
05 0%
06 Don't Know

S36. Other File # - Case

S37. Other File # - Medical

S38. Other File # - Compensation

S39. Other File # - Vehicle Repair

S40. Other File # - Property Repairs (other than vehicle)

S41. Other File # - Other (local file of interest)

S42. Other File # - Other (local file of interest)

S43. Estimated Medical Cost

S44. Estimated Vehicle Cost

S45. Estimated Property Cost

S46. Estimated Compensation Cost

S47. Estimated Other Cost

S48. Estimated Total Cost

S49. Actual Medical Cost

S50. Actual Vehicle Cost

S51. Actual Property Cost

S52. Actual Compensation Cost

S53. Actual Other Cost

S54. Actual Total Cost

S55. Suggested Corrective Action

S56. Action Taken With Employee
01 Informal Instruction
02 Formal Training
03 Discipline
04 Change of Assignment or Responsibility

S57. Supervisor's Signature

S58. Date

S59. IDR Director's Signature

S60. Date

S61. One Month Up-Date Completed Circle one.

S62. Initials

S63. Six Month Up-Date Completed Circle one.

S64. Initials

END