LEAA Police Equipment Survey of 1972, Volume IV

Alarms, Security Equipment, Surveillance Equipment

Law Enforcement
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LEAA Police Equipment Survey of 1972, Volume IV

Alarms, Security Equipment, Surveillance Equipment

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FOREWORD

The Law Enforcement Standards Laboratory (LESL) of the National Bureau of Standards (NBS) furnishes technical support to the National Institute of Law Enforcement and Criminal Justice (NILECJ) program to strengthen law enforcement and criminal justice in the United States. LESL's function is to conduct research that will assist law enforcement and criminal justice agencies in the selection and procurement of quality equipment.

LESL is: (1) Subjecting existing equipment to laboratory testing and evaluation and (2) conducting research leading to the development of several series of documents, including national voluntary equipment standards, user guidelines, state-of-the-art surveys and other reports.

This document is a law enforcement equipment report developed by LESL under the sponsorship of NILECJ. Additional reports as well as other documents are being issued under the LESL program in the areas of protective equipment, communications equipment, security systems, weapons, emergency equipment, investigative aids, vehicles, and clothing.

Technical comments and suggestions concerning the subject matter of this report are invited from all interested parties. Comments should be addressed to the Law Enforcement Standards Laboratory, National Bureau of Standards, Washington, D.C. 20234.

Jacob J. Diamond, *Chief*
Law Enforcement Standards
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EXECUTIVE SUMMARY

I. SUMMARY OF BACKGROUND AND METHODOLOGY

A. Background

° Law Enforcement Standards Laboratory (LESL) was established in 1971 under the sponsorship of the NILECJ Advanced Technology Division (ATD).

° NILECJ asked the Behavioral Sciences Group of the National Bureau of Standards to develop and carry out a procedure to get information from the users of law enforcement equipment.

° "User" information would aid NILECJ in setting priorities for LESL programs and would provide some detailed information in support of the research to develop standards and guidelines.

° In addition, gathering information from the users would help to make police agencies aware of LESL and ATD.

° A nationwide mail sample survey was selected as the best procedure to collect user information.

° An Equipment Priorities Questionnaire (EPQ) and six Detailed Questionnaires (DQs) were developed and administered. A separate report was prepared for each of these seven questionnaires.

B. Design of Questionnaires

° Questionnaires were developed in conjunction with NILECJ, LESL, and cooperating police departments. Questionnaires were pretested at various times with approximately 45 police departments.

° The EPQ was designed to provide information about priority needs for standards for various types of equipment.

° In addition, the EPQ asked for data about numbers of full- and part-time officers, activities performed in the department, budget, size of jurisdiction, etc.

° The six DQs (Alarms, Security and Surveillance Equipment; Communications Equipment and Supplies; Handguns and Handgun Ammunition; Sirens and Emergency Warning Lights; Body Armor and Confiscated Weapons; and Patrol Cars) were each developed separately.

° The DQs asked about kinds and quantities of equipment in use, problems with existing equipment, suggestions for improving equipment, needs for standards related to the equipment, etc. Although entitled Detailed Questionnaires, these questionnaires were designed to give an overview of the use of specific items of equipment.

C. Sample

° The population sampled was made up of all police departments listed in a computerized file and maintained by the LEAA Statistical Service.

° Courts, correctional institutions, forensic labs, special police agencies, etc., were excluded.

° The sample was stratified by LEAA geographic region (10 regions) and by department type (7 department types: state police; county police and sheriffs; city departments with 1-9 officers; city departments with 10-49 officers; city departments with 50 or more officers, excluding the 50 largest cities; the 50 largest U.S. cities by population; and township departments).

° Overall, approximately 10 percent of the 12,836 departments in the population were selected as respondents (see table 1.2-2).

° The Equipment Priorities Questionnaire was sent to every sample department (1,386). Each Detailed Questionnaire was sent to all states, to all of the 50 largest cities, and to a randomly selected subsample of the main sample (about 530 departments received each DQ).

° Thus, states and the 50 largest cities were asked to fill in all 7 questionnaires. Each of the remaining 1,286 departments was asked to fill in the EPQ and 2 of the DQs.

° The sample for the Alarms DQ consisted of 529 departments (see table 1.2-3).

D. Questionnaire Administration

° Stringent control of administration was required.

° Introductory letters were sent to heads of departments asking cooperation.

° On June 1, 1972, questionnaire packages were mailed.

° In July 1972, follow-up by self-return post card was begun.

° In August 1972, follow-up by telephone was begun. Departments which had not returned questionnaires were called. Also, calls were made to clear up ambiguities in the returned questionnaires. About 1,300 calls were made. About 70 percent of the sample departments were called at least once.

° Each questionnaire was edited and coded by a specialized team to ensure consistency; it was then keypunched and tabulated.

° Completed questionnaires were accepted for tabulation through January 7, 1973.

E. Rates of Return

° Eighty-three percent of the 1,386 departments returned usable EPQs.

° Eighty-four percent of the 528 departments returned usable Alarms DQs.

° Between 81 and 85 percent of the other DQ subsamples returned usable questionnaires.

° Highest rates of return (over 90%) were from states, the 50 largest cities, and cities with 50 or more officers.

° Lowest rates of return were from counties and townships (less than 78%).

F. Characteristics of Responding Departments

° The activities most commonly carried out by the respondents (to the EPQ) were serving traffic and criminal warrants (88%), traffic safety and traffic control (87%), and intradepartmental communications (87%).

° All of the responding 50 largest cities said they provided inhouse training and criminal investigations. This compared to 68 percent and 86 percent, respectively, of all responding departments.

° Only 13 percent of all respondents had crime laboratories. Seventy-three percent of the 50 largest cities and 55 percent of the states had crime laboratories.

° About three-fifths of the departments in all department types were providing emergency aid and rescue, ranging from 60 percent of the cities with 50 or more officers to 67 percent of the counties.

° Overall, the reported equipment budgets represented somewhat over 10 percent of the total budgets reported.

° Among department types, there was a wide range of total equipment expenditures, from a mean of about $10,000 for cities with 1-9 officers to a mean of almost $2.7 million for the 50 largest cities.

° One of the 50 largest cities reported an equipment budget of $40 million.

° Overall, the 50 largest cities reported a mean of 2,491 full-time sworn officers.

However, one of the 50 largest cities had 27 percent of all the full-time officers reported by that department type and another had about 12 percent.

G. Presentation of Data

° Data in this report are presented in two forms: text tables and full tables (app. B). Text tables do not always present a complete breakdown of the data.

° All tables (text and full) present the data in unweighted form (i.e., numbers and percentages of the responding departments from the sample for this questionnaire, not figures that have been weighted to expand the data to the total population of police departments in the U.S.).

° The sample selected for this questionnaire was not proportional to the total population of police departments. If decisions are to be made which require estimates of population figures, the appropriate extrapolation must be performed. (See app. B, p. B-1.)

II. SUMMARY OF RESULTS

A. Characteristics of Respondents

° In about half or more of the city (1-9), township, and city (10-49) departments, the Alarms DQ was filled in by the chief of the department.

° In responding states and larger city department types, the respondent tended to be a captain or lieutenant.

° In county departments, the respondent was most often a sheriff or deputy sheriff.

° More than half of the 447 respondents had had more than 15 years of law enforcement experience when they answered this DQ. Only 3 percent had fewer than 3 years of law enforcement experience.

B. "Direct-to-Police" Alarm Displays

° More than half of the responding departments in every department type except states had "direct-to-police" alarm displays.

° Over 90 percent of the responding cities (10-49) and cities (50+) had such alarm displays. Only 23 percent of responding states did.

° The majority of responding departments with "direct-to-police" alarm displays had more than one brand of display.

° The vast majority of departments with such displays reported at least one financial institution among their "direct-to-police" alarm subscribers.

° In responding townships, cities (1-9), cities (10-49), and cities (50+) with "direct-to-police" alarm service, the largest proportions of subscribers were small businesses.

° Responding counties and 50 largest cities reported that financial institutions made up the majority of their "direct-to-police" alarm subscribers.

° More than half of the responding 50 largest city, state, and city (50+) departments with such displays said they were now limiting subscribers to "direct-to-police" alarm displays or would have to limit subscribers in the future.

° The most frequent reasons given for limiting subscribers were limited space for panels, too many false alarms, and limited personnel for monitoring panels.

° In five of the seven department types, more than half of the departments with "direct-to-police" alarm displays reported at least one problem with those displays—county=48 percent and city (1-9)=35 percent.

° Less than one-fourth of the responding departments that did not have "direct-to-police" alarm displays said that they would provide that service within the next 5 years.

C. Numbers of Alarms and False Alarms

° Although no definition of "false alarm" was supplied in the questionnaire, it was assumed that most departments considered any alarm for which there was no evidence of unauthorized entry or property damage to be a false alarm.

° Only those departments with "direct-to-police" alarm displays were asked to supply data about numbers of alarms and false alarms.

° Responding 50 largest city departments reported a median of 500 alarms per department per month when all alarm receiving systems were combined. The median for responding states was about one-fifth as large.

° For the other five department types, the median numbers of alarms received per department per month: city (50+)=64, township=26, city (10-49)=20, city (1-9)=5, and county=5.

° Except for 50 largest city, state, and city (1-9) departments, there was a tendency for the greatest numbers of alarms to be received via "direct-to-police" alarm displays, followed by central stations and automatic dialers.

° Responding 50 largest city departments received the greatest number of alarms via central stations, followed by automatic dialers and "direct-to-police" alarm displays.

° Responding states, cities (10-49), cities (50+), cities (1-9), and 50 largest cities reported that, on the average, about 9 alarms in 10 were false alarms.

° Responding counties and townships reported that about three alarms in four were false alarms.

D. Night Vision Equipment

° Night vision equipment was mainly used by only three of the department types: 50 largest cities (49%), states (30%), and cities (50+) (14%).

° Of the responding departments with any night vision equipment (n=52), the most common device was the hand-held night scope not suitable for rifle (60%).

° The majority of users of night vision equipment reported no problems with this equipment.

° Majorities of the responding departments in the three largest department types said that they would be likely to buy at least one item of night vision equipment in the next 5 years, and more than one-fourth of the responding counties and cities (10-49) made this statement.

° About half of the responding 50 largest cities and about one-third of the states and cities (50+) said they would buy low-light level TV in the next 5 years.

° Forty-two percent of the responding states said they would buy night vision scopes suitable for rifle or hand-held.

° Most of the departments which said they would be buying a specified item of night vision equipment did not already have that particular item of night vision equipment.

E. Closed Circuit TV (CCTV) and Video Tape Recorder (VTR)

° There were large differences among department types in the use of CCTV and VTR.

Department type	Percent of responding departments having VTR	Percent of responding departments having CCTV
50 largest	89	71
State	68	45
City (50+)	53	37
City (10-49)	22	20
County	17	12
City (1-9)	8	6
Township	4	4

° In general, the responding departments which had CCTV also had VTR. Only a very few departments reported having CCTV but no VTR.

° The most commonly reported use for both CCTV and VTR was training.

° About one-third of the responding departments with CCTV systems used it in each of three other ways: Checking on prisoners, watching civil disturbances, and "other" surveillance within police buildings.

° About half of the responding departments with VTR were using that system for collecting evidence other than traffic violations and/or with closed circuit TV.

° The majority of departments with CCTV or VTR reported no problems with the system.

° More than half of the responding states, 50 largest cities, and cities (50+) said they would buy either CCTV or VTR or both within the next 5 years. About one-third of the cities (10-49) and one-fourth of the counties made that statement.

F. Cameras

° In every department type except townships and cities (1-9), more than 90 percent of the responding departments had at least one camera.

° The most commonly reported camera in six of the seven department types was a camera which uses special film for rapid automatic processing of pictures.

° More than 90 percent of the two largest city department types said they had 4 in x 5 in format cameras.

° Higher percentages of 50 largest city departments reported having each type of camera than any other department type.

° The majority of departments in each department type reported no problems for each type of camera.

LEAA POLICE EQUIPMENT SURVEY OF 1972

Volume IV: Alarms, Security Equipment, Surveillance Equipment

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The report outlines the methodology of and summarizes a portion of the data from the LEAA Police Equipment Survey of 1972. One of a series of 7 reports resulting from this nationwide mail survey of a stratified random sample of police departments, the present report summarizes the answers of 447 police departments concerning their use of alarm systems, cameras, security equipment, and surveillance equipment: Purchasing practices, typical patterns of use, and needs for standards for such equipment. The data are presented by all responding departments and by seven department types.

Key words: Alarm systems; cameras; police; police equipment; security equipment; standards; surveillance equipment.

1. INTRODUCTION

1.1. Project Background

During the past several years, law enforcement agencies in the United States have become more aware of the importance of equipment in the performance of their duties. Much of their equipment was originally designed for other uses and had to be modified for police use. Other items had to be used as given. No standards existed against which equipment performance could be measured nor were any standard test methods or procedures available. It has been difficult for agencies to compare the performance of equipment items. Recognizing this problem, the Law Enforcement Assistance Administration (LEAA) of the Department of Justice began a concentrated program in 1971, toward the improvement of law enforcement equipment.

As the first step in its program, LEAA in cooperation with the Department of Commerce established a Law Enforcement Standards Laboratory (LESL) at the National Bureau of Standards (NBS). The broad goal of LESL is to develop performance standards which can be promulgated by LEAA as voluntary aids for the selection of equipment by law enforcement agencies. Additionally, LESL is developing standard test methods and procedures, so that the relative performance of similar items may be evaluated by departments themselves.

In order to provide equipment user information for the program, the National Institute of Law Enforcement and Criminal Justice (NILECJ) of LEAA in 1971, asked the Behavioral Sciences Group of the Technical Analysis Division at NBS to gather information from the users of law enforcement equipment about their specialized equipment needs and problems. Although face-to-face interviews with a large sample of representatives from law enforcement agencies would have been desirable, time and manpower constraints led to the development of a nationwide mail sample survey having two general objectives: (1) To assist NILECJ in the establishment of priorities for LESL's standards development activities; and (2) to obtain detailed information about certain broad equipment categories in support of the research to develop standards and guidelines in these areas.

This report fulfills part of the second general objective. The associated survey questionnaire (see app. A) will be referred to as the Alarms, Security, and Surveillance Equipment Detailed Questionnaire (DQ). The remainder of the second objective is accomplished in the reports of the other five DQs: Patrol Cars; Communications

Equipment and Supplies; Handguns and Handgun Ammunition; Sirens and Emergency Warning Lights; and Body Armor and Confiscated Weapons. The first general objective (above) is accomplished in the report on the Equipment Priorities Questionnaire (EPQ).[1]

1.2. Sample Design

Although the objective of ATD is to serve all types of law enforcement agencies, this particular study was purposefully limited to police departments as the largest single group of law enforcement agencies with identifiable equipment needs. No attempt was made to survey correctional institutions, courts, forensic laboratories, or special police agencies such as park police, harbor patrols, or university police. The computerized directory of approximately 14,000 police agencies, compiled and maintained by LEAA's Statistics Division, provided the population from which the sample was drawn. Care was taken to exclude the double listings that existed for some agencies. (Details of the selection process are given in app. B of the Equipment Priorities Questionnaire.)

The final list of 12,842 departments was cross-stratified by LEAA geographic region and department type by the mutual agreement of NBS and NILECJ. The assignment of states to regions and the seven department types chosen for study are shown in table 1.2-1.

The breakdown of the population of police departments by cross-strata is exhibited in table 1.2-2. As can be seen from the table, there were no townships in regions 4, 6, 7, 8, 9, 10. Almost 63 percent of the departments were city police, 43 percent having 1-9 full-time officers. County departments comprised about 24 percent of the population. By region, the smallest (region 10) contained only 3.4 percent of the police departments, while region 5, the largest, had 22.5 percent. The variation in the number of departments in the cell (region/department type combination) was even greater than that across the strata, i.e., the number of departments in each cell ranged from 0 to 1,470.

The considerations discussed in the previous paragraph led to the sampling plan discussed briefly below. All of the state departments and the 50 largest city departments were included in the sample and were asked to complete all 6 DQs, i.e., they were sent the entire package of 7 questionnaires. For the remaining cells the variation in cell size presented a problem: If the same fraction of the entire population was to be selected from the members of each cell, a constant sampling fraction small enough to make the total sample manageable would yield too few sample units in small cells. To solve this problem, a fixed sample of 30 police departments/cell was chosen, wherever possible, resulting in a different sampling fraction for each cell. A fixed sample size of 30 departments/cell was chosen to facilitate the equitable distribution of the 6 DQs. This plan resulted in sending the Alarms DQ to 529 departments.

The departments were selected randomly within each cell, from the total cell population, each department (other than the states and 50 largest cities) receiving 2 DQs. Thus, in cells having 30 sample units, the Alarms DQ was mailed to 10 departments; cells having fewer sample units were allocated proportionally fewer Alarms DQs. Table 1.2-3 presents the total sample for the Alarms DQ by region and department type. Once the sample was selected, each sample unit was assigned a unique seven-digit identification number, coding region, type, and questionnaire assignment.

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[1] LEAA Police Equipment Survey of 1972, Vol. 1: The Need for Standards—Priorities for Police Equipment.

TABLE 1.2-1. *Stratification categories*

Department types	LEAA geographic region
State police	1 = Conn., Maine, Mass., N.H., R.I., Vt.
County police and sheriffs	2 = N.J., N.Y.
City with 1-9 officers	3 = Del., Md., Pa., Va., W. Va., D.C.
City with 10-49 officers	4 = Ala., Fla., Ga., Ky., Miss., N.C., S.C., Tenn.
City with 50 or more officers[1]	5 = Ill., Ind., Mich., Ohio, Wis., Minn.
The 50 largest U.S. cities[2]	6 = Ark., La., N. Mex., Okla., Tex.
Township departments	7 = Iowa, Kans., Mo., Nebr.
	8 = Colo., Mont., N. Dak., S. Dak., Utah, Wyo.
	9 = Ariz., Calif., Nev., Hawaii
	10 = Alaska, Idaho, Oreg., Wash.

[1] Does not include the 50 largest cities.
[2] By population, U.S. 1970 census.

TABLE 1.2-2. *Number of police departments by region and type*

Department type	LEAA region										
	1	2	3	4	5	6	7	8	9	10	Total
State	6	2	5	8	6	5	4	6	4	4	50[1]
County	66	84	257	764	536	506	413	288	103	120	3,137
City (1-9 officers)	27	348	713	979	1,470	703	611	283	135	217	5,486
City (10-49 officers)	40	237	166	344	508	230	142	71	168	79	1,985
City (50+ officers)	60	64	36	83	119	46	23	19	87	17	554
50 largest cities	1	4	5	8	10	8	3	1	8	2	50
Township	629	349	362	-	234	-	-	-	-	-	1,574
Total	829	1,088	1,544	2,186	2,883	1,498	1,196	668	505	439	12,836

[1] Questionnaires were actually sent to 56 state police departments since there were 6 state departments which listed 2 police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these six states as described in vol. I, app. B, p. B-2.

TABLE 1.2-3. *Number of departments selected to receive the Detailed Questionnaire: Alarms, security and surveillance systems by region and department type*

Department type	LEAA geographic region										
	1	2	3	4	5	6	7	8	9	10	Total
State[1]	6	2	5	8	6	5	4	6	4	4	50
County	10	10	10	10	10	10	10	10	10	10	100
City (1-9 officers)	9	10	10	10	10	10	10	10	10	10	99
City (10-49 officers)	10	10	10	10	10	10	10	10	10	10	100
City (50+ officers)	10	10	10	10	10	10	7	7	10	6	90
50 largest cities	1	4	5	8	10	8	3	1	8	2	50
Township[2]	10	10	10	-	10	-	-	-	-	-	40
Total	56	56	60	56	66	53	44	44	52	42	529

[1] Questionnaires were actually sent to 56 state police departments since there were 6 state departments which listed 2 police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these six states.
[2] Township departments exist only in regions 1, 2, 3, and 5.

1.3. Questionnaire Administration

From the beginning of the project, it was evident that stringent control would be required in administering the questionnaires to ensure a high rate of response. Computer-stored daily status records were input via a teletypewriter for each sample department. In general, the following procedure was used:

(1) Each department in the sample was mailed a letter, signed by the director of NILECJ, addressed to the head of the department. This letter introduced the survey and requested cooperation.

(2) About 1 week later, the questionnaire packages were mailed.

(3) Departments not returning the questionnaires within a month were identified by the computer and were sent a self-return post card requesting information as to the status of the questionnaires. Departments not receiving the questionnaire package were sent another; those not returning the post card were placed on a list for telephone follow-up.

(4) About a month and a half later, departments with which no contact had been made were called by telephone.

(5) Returned questionnaires were reviewed for completeness and either coded for keypunching or filed for telephone callback to supply missing data or to resolve ambiguities.

Considerable effort was expended to ensure a high rate of response, and this effort was rewarded with an 84 percent response for the Alarms DQ, and between 81 percent and 85 percent for each of the other questionnaires. In the course of the survey more than 70 percent of the sample departments were contacted at least once by telephone. More than 1,300 phone calls were made by the survey team.

The distribution of respondents (departments which returned usable Alarms DQs) is exhibited in table 1.3-1. The highest percentages of response were from the states and larger cities (89-94%), while counties and townships had the poorest response rates (under 77%).

TABLE 1.3-1. *Number of sample departments returning acceptable Detailed Questionnaires : Alarms , security and surveillance systems*

Department type	LEAA geographic region											Percent total sample
	1	2	3	4	5	6	7	8	9	10	Total	
State [1]	6	2	5	8	6	5	3	6	3	3	47	94
County	5	7	7	5	10	7	9	9	9	9	77	77
City (1-9 officers)	9	9	8	9	9	6	9	7	8	9	83	84
City (10-49 officers)	8	9	7	9	10	8	9	10	9	10	89	89
City (50+ officers)	10	6	10	10	10	10	5	6	8	6	81	90
50 largest cities	1	3	4	7	8	8	3	1	8	2	45	90
Townships [2]	6	6	6	-	7	-	-	-	-	-	25	62
Total	45	42	47	48	60	44	38	39	45	39	447	84
Percent total sample	80	75	78	86	88	83	86	89	86	93	84	

[1] Questionnaires were actually mailed to 56 state police departments since there were 6 states which listed 2 police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of the states.
[2] Township departments exist only in regions 1, 2, 3, and 5.

1.4. Development and Design of the Alarms DQ

The survey plan and questionnaire design (of all seven questionnaires) evolved over a 12-month period. During this time, the survey team consulted at length with NILECJ equipment experts, LESL program managers, and equipment manufacturers. In addition, the officers and administrators of about 45 police departments served as consultants and/or as respondents for pretests of various versions of the questionnaires.

The Alarms DQ, in its final form, is reproduced in appendix A. This DQ asked respondents to provide data about their "direct-to-police" alarm systems, night vision equipment, closed circuit television, cameras, and other security devices. Departments were asked about the use of this equipment in their departments and about problems, if any, with such equipment. The questionnaire was limited to general topics because: (1) It was not possible, considering the scope of the present survey, to explore in a detailed manner all of the complex components, accessories, and systems normally found in alarm, surveillance, and security systems, and (2) it was felt that the general data gathered in the present effort would provide important direction for research in the development of standards, the main objective of the survey.

1.5. Characteristics of Subsample Groups

The EPQ of the LEAA Police Equipment Survey requested data from each department about population served; physical size of jurisdiction served; type of jurisdiction; number of full- and part-time officers; approximate total, equipment, and personnel budgets during 1971; and activities handled by the department.

Table 1.5-1 presents a partial tabulation, by department type, of the responses to a checklist of 30 typical police activities by the respondents to the EPQ. (The EPQ respondents include, but are not limited to, the respondents to the Alarms DQ. See sec. 1.2.) The activities most frequently checked by all departments were: (1) Serve traffic and criminal warrants (88%), (2) traffic safety and traffic control (87%), and (3) communications for own department (87%). The activity with the most consistent level across all department types was that of emergency aid and rescue, ranging from 60 percent (cities with 50+ officers) to 67 percent (counties).

Higher percentages of state and 50 largest city departments than of other department types were handling certain of the 30 activities. For example, all of the 50 largest city departments responding, and 98 percent of the responding state departments said that their departments provided police training for their own department. These compare to 68 percent for all responding departments. All of the responding 50 largest cities said that they handled criminal investigation in their own departments. This compares to 86 percent of the total sample of departments. Although only 13 percent of the departments overall had crime laboratories, 73 percent of the 50 largest cities and 55 percent of the states had them.

Counties appeared to be the only department type with significant responsibilities for custody and detention for more than 1 week. Seventy-eight percent of those departments had custody/detention up to 1 year, as compared with 22 percent of all responding departments.

Tables 1.5-2 and 1.5-3 present summaries of descriptive data by department type and LEAA region, respectively. As can be seen from the column for "Annual equipment budget" (table 1.5-2), there was a wide range of expenditures among different department types: from a mean of about $10,000 for cities (1-9) to almost $2.7 million for the 50 largest cities. Overall, equipment budgets represented somewhat over 10 percent of the annual total budgets.

The mean number of part-time officers was based on those respondents having part-time officers in their departments. Of the 45 responding from the 50 largest cities, only 6 had part-time officers, including 1 city which had nearly 6,000. Thus, the mean

Table 1.5-1. *Activities handled by at least one-third of the departments by department type, and percent of total departments having each activity*

Description of activity	Percent of total departments having each activity							
	State	County	City (1-9)	City (10-49)	City (50+)	50 largest	Township	Total
Serve traffic and criminal warrants	70	89	84	89	94	87	93	88
Traffic safety and traffic control	92	56	94	96	96	98	94	87
Communications for own department	94	86	76	95	94	96	70	87
Criminal investigation	66	86	71	95	97	100	79	86
Police training for own department	98	55	48	77	87	100	42	68
Custody/detention—less than 1 day	·	79	51	73	72	80	43	65
Breath-alcohol test	89	46	47	72	83	91	49	64
Emergency aid and rescue	62	67	62	63	60	67	62	63
Public building protection	·	40	63	60	58	44	68	54
Service function	·	·	48	55	60	60	42	48
Animal control (dogcatcher)	·	·	58	63	42	·	37	44
Highway patrol	96	38	48	36	·	·	88	43
Maintenance of police buildings	51	36	34	41	48	47		40
Custody/detention—1 week or less	·	73		36	46	49		38
Communications for other agency	66	56		40	·	·		36
Serve civil process	·	88		°	·	·		32
Police training for other agency	77	·			42	84		24
Custody/detention—up to 1 year	·	78			·	·		22
Underwater recovery	34	42			·	42		19
Bomb disposal	45				·	82		17
Polygraph	62				36	90		17
Vehicle inspection	55					·		17
Crime laboratory	55					73		13
Narcotics laboratory analysis	43					62		11
Harbor patrol	·					·		7
Lab analysis for blood alcohol	34					53		7
Other	·							6
Coroner	·							5
Test for driver's license	34							3
Custody/detention—more than 1 year								3

Table 1.5-2. *Descriptive data by department type (means)*

Department type	Area (mi²)	Population	Number of full-time officers	Number of part-time officers	Annual total budget	Annual equipment budget	Annual personnel budget
50 largest	187	851,342	2,491	1,115	$43,268,865	$2,669,920	$34,712,818
State	62,580	3,936,410	889	18	16,377,358	2,304,339	12,020,572
County	1,518	130,254	60	25	1,089,919	58,539	859,984
City (50+)	31	83,334	132	26	1,733,340	173,099	1,407,177
City (10-49)	12	15,849	22	9	257,927	24,362	206,187
Township	28	13,228	14	8	175,654	20,854	141,675
City (1-9)	9	5,038	8	5	82,381	9,764	60,061

TABLE 1.5-3. *Descriptive data by LEAA region (means)*

LEAA region	Area (mi^2)	Population	Number of full-time officers	Number of part-time officers	Annual total budget	Annual equipment budget	Annual personnel budget
1	750	158,112	96	18	$1,360,155	$135,130	$ 979,911
2	648	240,781	365	97	7,148,315	148,172	5,265,546
3	1,096	245,733	216	7	3,412,567	435,153	2,879,293
4	3,691	340,996	151	11	2,318,382	248,600	1,767,292
5	2,652	448,174	283	8	4,916,607	431,478	3,879,374
6	5,738	271,386	160	17	2,193,823	160,363	1,709,910
7	2,379	112,094	84	9	1,220,385	121,001	983,696
8	6,346	83,023	54	9	728,549	77,081	568,463
9	4,218	372,094	281	46	5,743,553	728,801	4,528,692
10	3,580	104,877	69	9	1,253,894	82,198	1,011,604

value of 1,115 for this department type is somewhat misleading. It should be noted that the category part-time officers included officers described as auxiliary, volunteer, reserve, school-crossing guard, dispatcher, summer, special agent, traffic supervisor, posse, and cadet. All of these classifications were counted in the part-time officer category since it has different meanings for different departments.

Variations in these descriptive averages by LEAA region (table 1.5-3) were considerably smaller than variations by department type. Regions 1 and 8 had smaller budgets than the others, primarily because each had only 1 of the 50 largest cities.

2. QUESTION BY QUESTION DISCUSSION

2.1. Advice to the Reader

In reading section 2, certain points should be kept in mind:

(1) This report is not an evaluation of any of the equipment described or discussed within it. It is a presentation of information and opinions of a stratified random sample of police departments given in response to a specific set of questions. It does not, in any way, reflect objective testing of any equipment by the National Bureau of Standards.

(2) The report reflects only what police departments were willing and able to say in response to a specific set of questions. In most cases, no attempt was made to verify the accuracy of the information given or the level of sophistication of the respondent.

(3) Each discussion begins with the presentation of the question that appeared in the questionnaire, and in most cases the choices supplied, if any, set off in bold face type. However, the reader is cautioned to become familiar with the questionnaire sent to sample departments (see app. A) and to evaluate the data in terms of the exact questions asked.

(4) The text tables that appear in section 2 are almost never the complete tables that were tabulated for that question. Data categories for text tables may have been collapsed from the full table, or certain categories of interest may have been singled out for fuller discussion. Appendix B contains the complete tables from which the text tables were extracted. Text tables have been numbered after the question number (e.g., the text tables for Question 6A would be numbered 6A-1, 6A-2, etc.). The tables in appendix B are also numbered the same as the question number, in the same manner. In some cases, tables that appear in appendix B will not have been discussed at all in the text.

(5) Data in the text of this report are usually presented by nearest whole percent of the group under consideration. In appendix B, the data are usually presented by number of respondents and percent. Because of statistical limitations imposed by the sample sizes used in this study, the reader is cautioned to be wary of assigning importance to percentage differences of less than 5 percent when percentages are based on the total number of respondents, and to percentage differences of less than 10 percent when percentages are based on one of the subsample groups (e.g., a particular department type or region). No statistical tests of significance are reported.

(6) Data were always tabulated by each of the choices supplied, if any, in the questionnaire. Any "other" choices written in by the respondents were also tabulated and/or recorded verbatim. In most cases, the numbers of respondents giving a specific "other" response do not reflect the numbers of respondents who might have marked that choice if it had been one of those provided. Therefore, in most cases, this report lists or gives examples of "other" responses, but does not present numbers or percents of departments giving that response. For those questions for which choices were not provided in the questionnaire, coding categories were developed after approximately one-fourth of the questionnaires had been returned.

(7) The following convention has been adopted in the report to designate the four city department types:

City with 1-9 officers=city (1-9)
City with 10-49 officers=city (10-49)
City with 50 or more officers=city (50+)[2]
The 50 largest cities=50 largest[3]

In table headings this same convention has been used.

(8) Questions which asked departments to identify manufacturers of their equipment were asked in this manner only to make the question clearer; not to evaluate a manufacturer's product.

(9) In an attempt to make this report more readable, the main topics of the questionnaire have been reordered in the report; the discussion of the findings does not follow the order of the questions. To find the discussion of a particular question quickly, consult the Contents or the List of Tables.

(10) When the subsample groups are discussed (e.g., "counties said..." or "cities (1-9) said...") the reference is to the responding departments from one of the sample strata. It is particularly important to note that when the text or tables refer to "all departments" or "all responding departments," the reference is to all responding departments from the sample described in section 1.2. This sample was not proportional to the total population of police departments, and although it is possible to do so, the data in this report have not been weighted to allow direct extrapolation to the total population. (See app. B, p. B-1.)

2.2. Discussion

2.2.1. Characteristics of Respondents

a. Rank/Title of Respondents

All of the questionnaires in the LEAA Police Equipment Survey were mailed to the chief (or highest official) of the department with a request that the questionnaires be directed to the person or persons within the department who were best qualified to answer the questions.

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[2] Excluding the 50 largest U.S. cities.
[3] By population, 1970 U.S. Census.

In general, the questionnaire on Alarm Displays, Security Equipment, and Surveillance Equipment was filled in by officers with high rank. In 73 percent of the responding city (1-9) departments the questionnaire was completed by the chief of the department; in township departments, 60 percent were filled in by the chief; and in city (10-49) departments 47 percent of these questionnaires were filled in by the chief. As might be expected, as the size of the city department increased, the percentages of chiefs completing this questionnaire decreased. (See table i.)

In county and state departments too, relatively high ranking officers filled in the alarms questionnaire. In 53 percent of the responding state departments this question-naire was completed by either a captain or a lieutenant. In 70 percent of the counties the form was answered by the sheriff or deputy sheriff.

TABLE i. *Percentages of city and township departments in which the alarms DQ was filled in by officer with specified rank/title*

Title/rank	Department type				
	City (1-9)	City (10-49)	City (50+)	50 largest	Township
Chief	73	47	28	2	60
Captain	2	15	26	18	12
Lieutenant	1	7	17	20	0
Sergeant	5	16	9	20	8

b. Number of Years of Law Enforcement Experience of Respondent

In general, the respondents to the DQ on Alarm Displays, Security Equipment, and Surveillance Equipment had been in law enforcement work for several years when they filled in the questionnaire. Fifty-two percent of the 447 responding departments said they had more than 15 years of experience in law enforcement. Eighty-five percent of all respondents had 6 or more years of experience. Only 3 percent of the 447 respondents said they had fewer than 3 years of such experience. (In the questionnaire, space was provided for the person who filled in the questionnaire and for two persons who may have helped fill in the questionnaire. Only the information from the primary respondent was included in this tabulation.)

Although a majority of the respondents in every department type reported having more than 10 years of experience in law enforcement, state departments and the two groups of largest city departments generally had the highest percentages of respondents with lengthy police service (see table ii.).

TABLE ii. *Cumulative percentages of departments in each department type whose respondents had specified number of years of law enforcement experience*

Number of years of law enforcement experience	Department type						
	State	County	City (1-9)	City (10-49)	City (50+)	50 largest	Township
			(Cumulative percentages)				
More than 10 years	93	54	60	73	83	80	72
More than 20 years	52	19	22	28	37	35	24
More than 25 years	22	10	12	15	17	8	8

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2.2.2. "Direct-to-Police" Alarm Displays[4]

> **1. Does your department now have** *one or more* **displays for "direct-to-police" burglar or robbery alarms from banks, savings and loans, or other businesses?**
>
> **Yes (If "Yes" continue with Questions 2 through 9)**
> **No (If "No" skip to Question 9)**

About two-thirds of the 447 responding departments had "direct-to-police" alarm displays for directly receiving burglar or robbery alarms from the community. There were, however, large differences among the seven department types. While more than half of the departments in six of the department types reported having this type of equipment, only 23 percent of the state departments reported having "direct-to-police" alarm displays. Medium-sized cities had the highest percentages of departments with this capability: 96 percent of cities (10-49) and 93 percent of cities (50+). (See table 1.)

As will be discussed further below, many of the responding departments said they were also able to receive alarms by means other than display units. A few respondents commented that they had display units for the protection of their own facilities. Some departments which did not have "direct-to-police" displays supplied data about other alarm systems in answer to Question 1. These data were deleted from Question 1 tabulations and were included in the tabulations for Questions 3 and 4.

TABLE 1. *Percentages of departments in each department type which had "direct-to-police" alarm displays*

Department type	Percent of departments having displays
City (10-49) [n=89]	96
City (50+) [n=81]	93
50 largest [n=45]	64
Township [n=25]	64
City (1-9) [n=83]	52
County [n=77]	51
State [n=47]	23

> **2. Which manufacturers made the "direct-to-police" alarm displays that you have in your department?**
> **Manufacturers**

Although departments were asked to provide information about manufacturers of the "direct-to-police" alarm displays in their departments, it was determined from follow-up telephone calls that departments sometimes provided names of distributors, installers, or service companies instead of manufacturers. In addition, some respondents added names of businesses associated with alarm receiving equipment other than displays: automatic dialers, devices with microphones to monitor activity after an alert at a local business, and fire alarm devices. Such extraneous references were excluded when known, but it cannot be estimated how many were counted as "manufacturers" when qualifying information was unavailable.

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[4] A variety of terms is used by police departments for these units. Beside "displays," they are known as annunciators, modules, and boxes. From the answers to the questionnaires and from the follow-up telephone calls, it appeared that the term "display" was generally interpreted correctly.

Manufacturer data were tallied in two ways: According to (a) the number of different manufacturers cited by each department and (b) the number of departments which had displays made by each manufacturer.

Of the 298 departments with displays, 77 percent had fewer than four different brands of displays in the department. Two-fifths of respondents cited only one manufacturer. Cities (50+), one of the largest users of "direct-to-police" alarm displays, had the highest proportion of departments reporting four or five different brands of displays within the same department (28%). (See table 2-1.)

Four manufacturers of display units were named by substantially more respondents than other companies. Manufacturers A and C were most often cited by departments. Forty-seven percent of the departments with "direct-to-police" displays had at least one display made by manufacturer A and 41 percent had at least one made by manufacturer C. Manufacturers E and B were each mentioned by more than one-fourth of departments.

Displays by other manufacturers were less often cited. Display panels made by manufacturer D were used by 11 percent of departments and other brands of displays were each used by 3 percent or fewer of the responding departments with displays. (See table 2-2.)

TABLE 2-1. *Of the 298 departments having "direct-to-police" alarm displays, percentages having specified number of different brands of displays within department*

Number of different manufacturers	Percent of departments having displays [n=298]
1	40
2 or 3	37
4 or 5	15
6 or more	4
unknown	2
no answer	2

TABLE 2-2. *Of the 298 departments having "direct-to-police" alarm displays, percentages[1] reporting at least one display by specified manufacturer*

Manufacturer	Percent of departments having "direct-to-police" display[1] [n=298]
A	47
C	41
E	29
B	26
D	11
Miscellaneous[2]	44

[1] Percentages add to more than 100 percent since multiple answers were allowed.
[2] Each manufacturer in this category was cited by 3 percent or fewer of the responding departments with displays.

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5. About how many *direct-to-police* **tie-ins does each kind of** *subscriber* **have on your department's alarm displays?**

Number   *Type of Subscriber*

         Financial Institutions (banks, savings and loans, etc.)
         Jewelry Stores
         Small Businesses (other than jewelry stores)
         Large Businesses (other than jewelry stores)
         Schools
         Residences
         Other (specify)

Departments were asked to specify the subscribers to their "direct-to-police" alarm displays. In a few cases departments specified that they had included numbers of residences subscribing to automatic dialers. These data were deleted, since this question specifically requested data about "direct-to-police" displays. It is possible that some departments may have included data for other types of receiving systems in their tallies without indicating it on the questionnaire. It should also be noted that the numbers of subscribers may sometimes be based on estimates rather than actual records.

Of the 298 departments with "direct-to-police" alarm displays, almost all (91%) had financial institutions among their subscribers. Within all department types, except townships and state departments, at least 90 percent of the departments with "direct-to-police" alarm displays had financial institutions as subscribers. Other kinds of businesses (small businesses, large businesses, and jewelry stores) were also common subscribers to "direct-to-police" alarm displays. Less than one-third (30%) of departments with displays reported having residences among their subscribers and only 18 percent reported schools as subscribers, but townships were much more likely to have residences (69%) and schools (44%) as subscribers.

More than one-third of the responding departments wrote in "other" types of subscribers not listed in the questionnaire. These included:

       government offices and buildings
       clubs, fraternal organizations
       churches, museums, historical buildings
       military-associated offices and buildings
       businesses unclassified by the department according to size (large or small)
       public utilities, telephone company
       professional offices and centers
       hospitals, nursing homes
       alarm companies
       police department facilities

(See table 5-1.)

Although the vast majority of the responding departments with "direct-to-police" displays had at least one financial institution as a subscriber, financial institutions did not always comprise the bulk of subscribers reported by those departments with displays. In townships and the three smaller city department types, the largest proportions of subscribers were small businesses. In addition, cities (1-9), cities (50+), and townships reported about the same percentages of large business subscribers as financial institutions. (See table 5-2.)

Means and medians for each department type for each type of subscriber are presented in appendix B.

TABLE 5-1. *Of the departments in each department type[1] having "direct-to-police" alarm displays, percentages [2] having at least one subscriber of the specified kind*

Kind of subscriber	Department type					
	City (1-9) [n=43]	City (10-49) [n=85]	City (50+) [n=75]	County [n=39]	50 largest [n=29]	Township [n=16]
Financial institutions	93	93	92	92	90	81
Small businesses[3]	53	75	83	31	17	94
Large businesses[3]	35	61	80	21	28	50
Jewelry stores	35	58	76	5	10	12
Residences	14	31	44	21	10	69
Schools	14	21	23	3	7	44
Other	16	35	39	18	59	44
No answer/unknown	2	2	7	0	3	0

[1] Excluding state departments in which only 11 respondents answered.
[2] Percentages add to more than 100 percent since multiple answers were allowed.
[3] Other than jewelry stores.

TABLE 5-2. *Of total numbers of subscribers to "direct-to-police" alarm displays reported in each department type, percentages of specified type*

Kind of subscriber	Department type						
	50 largest [n=2,284]	County [n=219]	State [n=219]	City (1-9) [n=447]	City (10-49) [n=1,602]	City (50+) [n=4,902]	Township [n=432]
Financial institutions	68	51	47	23	22	21	16
Small businesses[1]	13	14	21	38	41	34	43
Large businesses[1]	8	5	19	21	14	19	12
Residences	*	19	1	4	10	16	18
Jewelry	1	1	5	7	5	5	*
Schools	3	3	5	3	3	3	6
Other	7	6	2	5	5	2	4

[1] Other than jewelry stores.
*Less than 1 percent.

6. Does your department now *limit*, or may have to limit in the future, the *number* of subscribers you can accept for " direct-to-police" tie-ins?

Yes

No (If " No" Skip to Question 8)

7. (If "Yes" to Question 6) We must limit the number of subscribers for " direct-to-police" tie-ins for the following reason(s): (Mark X by Each Item That Applies)

Limited Space for Panels

Limited Personnel for Monitoring Panels

Too Many False Alarms

Each Alarm System May Need Its Own Kind of Display

Inadequate Servicing by Alarm Companies

Possible competition with Central Stations

Other (specify)

The seven department types fell into two groups in their answers to this question. Of the departments in each department type with "direct-to-police" alarm displays, much higher percentages of the three largest department types (50 largest cities, states, and cities (50+)) said they were limiting or would have to limit the numbers of subscribers to their systems. Less than one-third of the departments with displays in the other four department types said they were limiting or would have to limit tie-ins. (See table 6.)

It is useful at this point to present data from both Question 1 and Question 6 to show the overall pattern among the seven department types in their operation of "direct-to-police" alarm systems. Although a high percentage of the responding state departments with displays said that they were or would have to limit numbers of subscribers (table 6), that percentage was based on just 11 state departments with displays. Table 6/1 shows that almost three-quarters of the responding states did not have "direct-to-police" alarm displays. However, higher percentages of the responding 50 largest city and city (50+) departments did have "direct-to-police" alarm displays, and about half of the responding departments in those two department types also said they were limiting or would have to limit numbers of subscribers. (See table 6/1.)

Of the 117 responding departments which saw some need for limiting the numbers of subscribers (26% of all responding departments and 39% of al responding de-

TABLE 6. *Of the departments in each department type with "direct-to-police" alarm displays, percentages which said they were limiting or might have to limit subscribers to "direct-to-police" tie-ins*

Department type	Percent of departments
50 largest [n=29]	79
State [n=11]	64
City (50+) [n=75]	56
City (10-49) [n=85]	31
City (1-9) [n=43]	21
Township [n=16]	19
County [n=39]	18

TABLE 6/1. *Percentages of responding departments in each department type (a) which had "direct-to-police" alarm displays and did/will limit numbers of subscribers, (b) which had such displays and did not/will not limit subscribers, and (c) which did not have displays*

	Percent		
Department type	With displays and did/will limit subscribers	With displays and did not/will not limit subscribers	Without displays
City (50+) [n=81]	52	41	8
50 largest [n=45]	51	13	33
City (10-49) [n=89]	29	65	4
State [n=47]	15	8	74
Township [n=25]	12	52	36
City (1-9) [n=83]	11	40	47
County [n=77]	9	40	48

TABLE 7. *Of the 117 departments which said they did/will limit subscribers to "direct-to-police" alarm displays, percentages[1] citing specified reason for limitation*

Reason for limiting subscribers	Percent of departments which did/will limit subscribers [n=117]
Limited space for panels	81
Too many false alarms	50
Limited personnel for monitoring panels	46
Each alarm system may need its own kind of display	29
Inadequate servicing by alarm companies	19
Possible competition with central stations	16
"Other" reasons	17

[1] Percentages add to more than 100 percent since multiple answers were allowed.

partments with "direct-to-police" alarm displays), the most frequent reason given for limiting tie-ins was limited space for display panels (81%). Two other reasons were mentioned by about half of those that did/will limit subscribers: too many false alarms (50%) and limited personnel for monitoring panels (46%). (See table 7.)

Some of the "other" reasons given for limiting subscribers were: department had limited phone lines, certain specifications (such as city ordinances) would have to be met by subscribers, and departments felt repair people disrupted their operations.

8. What problems have you had, if any, with the *displays themselves?* **(Mark X by Each Item That Applies)**

    We Have *No Problems* **with Our Displays**
    Displays Are Too Large
    Too Many Different Types of Alarm Signals (lights, buzzers, bells, etc.)
    No Way to Tell When an Alarm System is On or Off
    Department Cannot Test Alarm System Automatically
    Frequent Component Failures (lights on displays, for example)
    Other (specify)

Relatively high percentages of the responding departments with displays checked at least one problem associated with these displays. In all but two department types more than half of the departments with displays cited at least one problem: county (48%) and city (1-9) (35%). (See table 8-1.)

About half of the 189 departments that cited problems with "direct-to-police" alarm displays marked "too many different types of alarm signals" (53%) and about half marked "department cannot test alarm system automatically" (49%). More than one-third of the departments citing problems said the displays had frequent component failures (38%). (See table 8-2.)

TABLE 8-1. *Of the departments in each department type with "direct-to-police" alarm displays, percentages citing at least one problem with those displays*

Department type	Percent of departments with displays citing problem
City (50+) [n=75]	82
State [n=11]	73
City (10-49) [n=85]	71
Township [n=16]	63
50 largest [n=29]	55
County [n=39]	48
City (1-9) [n=43]	35

TABLE 8-2. *Of the 189 departments citing problems with "direct-to-police" alarm displays, percentages citing specified problem*

Problem	Percent of departments citing problems [n=189]
Too many different alarm signals	53
Department cannot test system automatically	49
Frequent component failures	38
Displays too large	30
No way to tell if on or off	14
Other	29

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9. Will your department be likely to provide a service of "direct-to-police" tie-ins within the next 5 years?

Yes
No

Although this question was intended for all responding departments, it appears that some of the respondents that already had "direct-to-police" alarm displays interpreted the question as asking whether they would increase subscribers. In addition, it is possible that some of the respondents who did not have alarm displays in their departments may not have had only alarm displays in mind when they answered this question. Nevertheless, data for responding departments which did not have alarm displays will be presented here.

Less than one-quarter of the responding departments which did not have "direct-to-police" alarm displays at the time of the survey said that they would be providing such tie-ins within 5 years. Very few of the states without alarm displays (9%) said they would be providing that service, but more than a third of the cities (1-9) that did not have displays said that they would have them within 5 years. (See table 9/1.)

TABLE 9/1. *Of the departments which did not have "direct-to-police" alarm displays, percentages which will provide such tie-ins within the next 5 years*

Will provide within next 5 years	Department type[1]				
	State [n=35]	County [n=37]	City (1-9) [n=39]	50 largest [n=15]	All departments [n=145]
Yes	9	16	38	20	23
No	88	73	51	80	70
No answer/don't know	3	11	10	0	7

[1] Data are not presented for city (10-49), city (50+), and townships since fewer than 10 of the responding departments in those department types did not have "direct-to-police" alarm displays.

2.2.3. Numbers of Alarms and False Alarms

Before discussing reported numbers of alarms and false alarms, it is necessary to define carefully the meaning of the term "false alarm" because it is often defined differently by police departments and equipment manufacturers. Police departments usually define a false alarm as any alarm for which, upon investigation, there is no evidence of unauthorized entry or property damage. Companies which manufacture, maintain, and/or service alarm systems, and researchers in the field, usually make more precise distinctions between "actual" alarms (those associated with unauthorized entry or property damage) and several other categories of alarms, e.g., those caused by telephone line disturbances, electrical storms, equipment malfunctions, and human error. Because no definition of the term false alarm was supplied in this questionnaire, it is probable that the data supplied by the respondents (police departments) utilized the former definition, i.e., a false alarm is any alarm for which no evidence of unauthorized entry or property damage is found. It is important to note, however, that from the police department point of view, any alarm requires a response and represents a commitment of departmental resources. It is unrealistic to expect many of the responding departments to have maintained detailed breakdowns of the causes of false alarms. Such data have little relevancy to police department operations and are difficult, if not impossible, for them to acquire.

3. About how many *alarms* **(both real and false) are** *usually* **received by your department in a** *month*?

4. For this average number of alarms per *month*, **about how many of them are** *false alarms*?

  Alarms That Come From:
  Displays in department
  Printing Receiving System (gives printed message to indicate alarm)
  Central Stations who pass alarm on to police by phone
  Automatic Dialer which gives taped emergency message
  Other (specify)
 Total

Only those departments with "direct-to-police" alarm displays ("Yes" to Question 1) were asked to answer these questions. The alarms received by departments with alarm displays were of particular interest to the Law Enforcement Standards Laboratory. Alarms received via other types of alarm systems were included mainly for comparison with alarms received via alarm displays. A few of the departments which did not have "direct-to-police" alarm displays did answer these questions, and their answers were included in the tabulations. The percentages of departments in each department type answering Questions 3 and 4 roughly paralleled the percentages of departments with "direct-to-police" alarm displays. Less than one-fourth of the responding state departments reported alarms received by any means, and more than 95 percent of the responding cities (10-49) and cities (50+) reported receiving some alarms. (See table 3-1.)

TABLE 3-1. *Percentages of responding departments in each department type answering questions 3 and 4 (reporting number of alarms received per month)*

Department type	Percent of responding departments
City (50+)	96
City (10-49)	96
50 largest	73
Township	72
County	57
City (1-9)	55
State	23

Using the numbers of alarms supplied by the responding departments, mean and median numbers of alarms received per department type per month were calculated. These two statistical measures of central tendency showed that in some cases (the responding states and 50 largest cities in particular) the data were heavily influenced by a few departments with extremely large numbers of alarms. Although appendix B presents both means and medians, the discussion and text tables will deal only with medians[5]—the measure of choice when the data were skewed.

The median number of alarms per month reported by the responding 50 largest cities was about 5 times greater than the median for responding state departments.

[5] If the number of alarms received by each responding department is set down in order from smallest to largest, the median is the number exactly in the middle of that distribution. That is, half of the responding departments reported receiving fewer than the median number of alarms, and half reported receiving more than the median number of alarms.

Among the city department types, the median numbers of alarms per month appeared to be related to the size of the department type. (See table 3-2.)

When the data were broken down by means of receiving alarms for each department type, it appeared that with the exception of the 50 largest cities, states, and cities (1-9) there was a tendency for the greatest number of alarms to be received via "direct-to-police" alarm displays. The next greatest number were received via central stations, and the next greatest number were received via automatic dialers. The median numbers of alarms for responding 50 largest city departments showed highest numbers of alarms received via central stations, followed by those received via automatic dialers and direct-to-police alarm displays. Printing receiving system data are not reported separately because only eight departments reported receiving any alarms via that system. "Other" alarms are not reported separately, either. The "other" alarms were almost always described as "at-the-scene" audible alarms which sound at the subscriber's site and result in a telephone call to the police department, or a response by a patrolman nearby. (See table 3-3.)

The numbers of alarms and false alarms reported by the responding departments showed that about 9 alarms in 10 were false alarms (ones for which there was no evidence of unauthorized entry or property damage). That is, overall, 92 percent of all the alarms reported by the responding departments were labeled by them as false alarms. (See discussion in sec. 2.2.3.) Counties and townships, which received relatively smaller numbers of alarms per department, reported lower percentages of false alarms; 75 percent and 73 percent, respectively.

TABLE 3-2. *Of the departments reporting numbers of alarms per month, median number of alarms (of all kinds) per month by department type*

Department type	Number of departments supplying data	Median number of alarms per month
50 largest	28	520
State	8	120
City (50+)	73	64
Township	18	26
City (10-49)	84	20
City (1-9)	45	5
County	43	5

TABLE 3-3. *Of the departments reporting numbers of alarms per month, median numbers of alarms received via specified means of receiving*[1]

| Department type | Median numbers of alarms per month via: | | |
	Alarm displays	Central stations	Automatic dialer
50 largest	68	238	150
City (50+)	38	25	17
State	35	5	10
City (10-49)	15	10	3
Township	17	5	3
City (1-9)	5	9	4
County	4	2	2

[1] Medians calculated using only those departments which reported alarms received via each alarm receiving system separately. The medians presented in table 3-2 included data from those departments which gave only total numbers of alarms received each month.

Responding county departments reported a lower percentage of false alarms received via alarm displays in the department than did the other department types. Responding townships reported a much lower percentage of false alarms received via central stations. (See table 3/4.)

TABLE 3/4. *Of the departments reporting numbers of alarms and false alarms, percentages of total alarms (question 3) that were reported to be false alarms (question 4) for specified alarm receiving system by department type*

Alarm receiving system	Department type						
	County	50 largest	City (1-9)	Township	City (50+)	City (10-49)	State
Displays in department	71	89	91	91	93	94	97
Central stations	91	93	92	54	81	80	80
Other systems	100	94	83	96	75	97	*
Automatic dialer	80	98	88	87	82	81	93
All systems[1]	75	94	91	73	88	93	97

[1] "All systems" percentages include the numbers supplied by departments which gave only total alarms and false alarms but did not specify alarm receiving system.
*No "other" alarms were reported.

2.2.4. Night Vision Equipment

10. Do you use night vision equipment in your department?
Yes
No (If " No" Skip to Question 14)

11. (If " Yes" to Question 10) Mark X by each of the following kinds of night vision equipment that you use in your department.
Night Vision Scopes *suitable for rifles* **(can also be hand-held when needed)**
Hand-held Passive Image Intensifier (Nightscope) *not suitable for rifle mounting*
Hand-held Infrared Device which is *not suitable for rifle mounting*
Low-light Level (Closed Circuit) TV (operates under nighttime conditions *without* **artificial light)**
Other (specify)

Only 52 of the 447 responding departments (12%) reported that they were using any night vision equipment at the time of the survey. All but 5 of these departments belonged to 1 of the 3 largest department types: 50 largest cities, cities (50+), or states. About half of the 50 largest cities (49%) and about one-third of the states (30%) reported at least one item of night vision equipment in their departments. None of the cities (1-9) or townships reported having this equipment. (See table 10.)

Among the departments that had any night vision equipment, the most common item was the hand-held night scope—not for rifle (60% of those with any night vision

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equipment). The other types of night vision equipment listed in the questionnaire (hand-held scope suitable for rifle, hand-held infrared device, and low-light level TV) were each cited by slightly more than one-fourth of the departments with any night vision equipment. There did not appear to be any major differences among the three department types which were the primary users of night vision equipment except that cities (50+) were slightly less likely to have hand-held nightscope than were states and 50 largest cities. (See table 11.)

TABLE 10. *Numbers and percentages of departments in each department type reporting any night vision equipment*

Department type	Number departments having any	Percent departments having any
50 largest	22	49
State	14	30
City (50+)	11	14
County	4	5
City (10-49)	1	1
City (1-9)	0	0
Township	0	0

TABLE 11. *Of the departments with any night vision equipment ("Yes" to question 10), percentages[1] having each type of night vision equipment*

Night vision device	Department type[2]			
	All departments [n=52]	50 largest [n=22]	State [n=14]	City (50+) [n=11]
Hand-held nightscope (not for rifle)	60	68	64	45
Hand-held infrared device	29	27	29	27
Night vision scope suitable for rifle	27	32	21	36
Low-light level TV	27	27	29	27
Other	4	0	14	0

[1] Percentages add to more than 100 percent since multiple answers were allowed.
[2] Only states, 50 largest cities, and cities (50+) are reported since fewer than 5 responding departments in each other department type reported any night vision equipment.

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12. Does your department have any problems with *any* **of these night vision devices?**

    Yes

    No (If "No" Skip to Question 14)

13. (If "Yes" to Question 12) Mark X for *each problem* **you have had for** *each kind of equipment:*

| Problem | Kind of Equipment | | | |
	Night vision scope suitable for rifle and hand use	Hand-held nightscope not suitable for rifle	Hand-held infrared device not suitable for rifle	Low-light level TV
Poor image quality (resolution)				
Difficult to choose the appropriate lens				
Regular camera lenses cannot be used with night vision devices				
Device is too delicate for normal use				
Poor reliability (failures with tubes, power supplies, etc.)				
Other problem (specify)				

Most of the 52 responding departments with night vision equipment (69%) reported "no problems" with any of this equipment. Within the three largest department types, a slightly smaller percentage of the states with this equipment (21%) reported problems than did cities (50+) and the 50 largest cities. These percentages are based on relatively small numbers of departments, however. (See table 12.)

Using only those responding departments which had each type of night vision equipment, it appears that approximately equal percentages of the users of each device said "No problems." Since the percentages were based on such small numbers of respondents, the differences shown in table 13/11 are not likely to be significant.

TABLE 12. *Of those departments with any night vision equipment, percentages reporting at least one problem with this equipment*

Department type	Percent of departments with at least one problem
City (50+) [n=11]	36
50 largest [n = 22]	32
State [n = 14]	21
All departments [n = 52]	29

NOTE: Only states, 50 largest cities, and cities (50+) are reported since fewer than 5 responding departments in each other department type reported any night vision equipment.

Because only a few of the users of each night vision device mentioned problems, and because only a few departments mentioned each problem, examples of the problems mentioned are listed below by night vision device, without numbers or percentages of departments. For such a small numerical base, any detailed discussion would be unjustified. (See table 13.)

TABLE 13/11. *Of those departments having each type of night vision equipment, percentages reporting "no problem"*

Night vision device	Number of responding departments with that night vision device	Number of departments with equipment saying "no problems"	Percent of departments saying "no problems"
Hand-held infrared device	15	12	80
Low-light level TV	14	11	79
Night vision scope suitable for rifle	14	10	71
Hand-held nightscope (not for rifle)	31	20	65

TABLE 13. *Examples of problems mentioned for each night vision device*

Night vision device	Problems mentioned
Hand-held infrared device	Poor image quality Heavy, bulky device Difficult to get good camera results Poor identification Greater amplification needed Not suitable for populated areas
Low-light level TV	Poor image quality Lens problems Too delicate Heavy, bulky (housing and camera) Poor identification Too costly Lack of adequate service facilities
Night vision scope suitable for rifle	Poor image quality Lens problems Limit on distance at which equipment is usable Unavailability of adapters for front lenses and cameras Not suitable for use when light source is a) from oncoming vehicles' headlights and reflected on the lens; and b) from the interior of a building under surveillance from outdoors
Hand-held nightscope (not for rifle)	Poor image quality Lens problems Heavy, bulky device Difficulty in using; problem in getting good camera results Limitations: distance for use/amplification Poor identification Unavailability of adapters for front lenses and cameras

14. What night vision devices, if any, will your department *be likely to buy* **in the next 5 years? (Mark X by Each Item That Applies)**

We will probably *not buy* **any night vision devices in that time.**

Night Vision Scope *suitable as rifle and hand scope*

Hand-held Passive Image Intensifier (Nightscope) *not* **suitable for rifle mounting**

Hand-held Infrared Device *not* **suitable for rifle mounting**

Low-Light Level (Closed Circuit) TV (operates under nighttime conditions *without* **artificial light)**

Other (specify)

Although only 39 percent of the 447 responding departments said they would buy at least 1 item of night vision equipment in the next 5 years (data collected in summer 1972), the majorities of responding departments in the 3 largest department types (50 largest cities, cities (50+), and states) said they would be buying night vision equipment. Only small percentages of responding townships and cities (1-9) said they would be buying such equipment in the near future. (See table 14-1.)

In the three largest department types, smaller percentages of the responding departments said they would be buying hand-held infrared devices than the other three night vision items. Almost half of the responding 50 largest city departments said they would buy low-light level TV in the next 5 years, and 42 percent of the state departments said they would buy night vision scopes suitable for rifles in that time period. Between about 10 and 15 percent of the responding cities (10-49) said they would buy each of the night vision devices, and between about 5 and 10 percent of the departments in the other three department types were planning to buy each item. (See table 14-2.)

Most of the responding departments which said they would be buying a specified item of night vision equipment did not already have that particular item of night vision equipment. Most of the items specified for purchase in the near future were to provide night vision capability where none existed or to add a different kind of night vision capability, rather than to buy more of an item that a department already had. The only instance in which this was not the case was in state departments buying hand-held nightscopes not suitable for rifles—approximately half of the state departments which said they would buy hand-held nightscopes (not for rifles) already had that item of night vision equipment in their departments. (See table 14/11.)

TABLE 14-1. *Percentages of departments in each department type which said they would buy any night vision equipment in the next 5 years* [1]

Department type	Percent of departments
50 largest [n=45]	73
State [n=47]	64
City (50+) [n=81]	56
City (10-49) [n=89]	37
County [n=77]	25
City (1-9) [n=83]	16
Township [n=25]	12
All departments	39

[1] Data collected in the summer of 1972.

TABLE 14-2. *Percentages of departments in each department type which said they would buy specified item of night vision equipment in the next 5 years*[1]

Department type	Low-light level TV	Nightscope for rifle or hand-held	Hand-held nightscope (not for rifle)	Hand-held infrared device
50 largest	49	22	36	11
City (50+)	34	26	21	12
State	36	42	23	6
City (10-49)	11	16	12	15
County	9	9	8	2
City (1-9)	5	12	5	5
Township	4	8	8	8
All departments	20	19	15	9

[1] Data collected in the summer of 1972.

TABLE 14/11. *Percentages of departments in each department type which currently had/will buy and which currently did not have/will buy specified item of night vision equipment*

Department type	Night vision device							
	Low-light TV		Nightscope for rifle or hand-held		Hand-held night-scope (not for rifle)		Hand-held infrared device	
	Now have/will buy	Don't now have/will buy	Now have/will buy	Don't now have/will buy	Now have/will buy	Don't now have/will buy	Now have/will buy	Don't now have/will buy
50 largest [n=45]	9	40	4	18	7	29	2	9
City (50+) [n=81]	2	32	1	25	0	21	1	11
State [n=47]	6	30	4	36	13	11	2	4
City (10-49) [n=89]	0	11	0	16	0	12	0	15
County [n=77]	0	9	0	9	1	6	1	1
City (1-9) [n=83]	0	5	0	12	0	5	0	5
Township [n=25]	0	4	0	8	0	8	0	8
All departments [n=447]	2	18	1	17	2	13	1	8

2.2.5. Closed Circuit Television (CCTV) and Video Tape Recorders (VTR)

Discussions with police departments during survey administration and comments written on returned questionnaires indicated that the use of closed circuit television (CCTV) and video tape recorders (VTR) was often related. Although there were cases in which CCTV was used alone or VTR was used alone, in many cases CCTV and VTR were employed as parts of a single system. For this reason, these two items of equipment will be discussed together.

15. Does your department use closed circuit TV which requires daylight or artificial illumination?

Yes

No (If " No" Skip to Question 18)

18. Does your department have a video tape recorder?

Yes

No (If " No" Skip to Question 21)

There were large differences among the seven department types in their use of CCTV and VTR. Almost all (89%) of the responding 50 largest city departments had VTR, more than two-thirds of the states had VTR, and more than half (53%) of responding cities (50+) had VTR. Fewer than 10 percent of the cities (1-9) and townships, however, reported having VTR. The same relative trend was reported for CCTV use among the department types, but in nearly every department type higher percentages of departments used VTR than had CCTV. (See table 15/18-1.)

A cross tabulation was performed to attempt to show the relationship between the use of CCTV and VTR. In the smaller department types, the majorities of departments had neither CCTV nor VTR. Seventy-one percent of the responding 50 largest cities, however, and 40 percent of states had both CCTV and VTR. It also appears from this cross tabulation that larger departments which had CCTV were also likely to have VTR capability; only a very few departments reported having CCTV and no VTR. Relatively high percentages of departments in the larger department types did report having VTR capability without having CCTV. (See table 15/18-2.)

Although it is not possible to conclude from these data that departments which had both closed circuit TV and video tape recorders used these two systems together, there are indications in Question 19 that many did. Comments from departments revealed that a reference to having VTR capability might mean any one of three types of VTR systems: (1) a video tape recorder which could only be used in conjunction with a CCTV, (2) a video tape recorder system (generally portable) which included a camera, and (3) a video tape recorder which could be used for both, or either, of these applications.

TABLE 15/18-1. *Percentages of responding departments in each department type which had CCTV and/or VTR*

Department type	With VTR	With CCTV
50 largest	89	71
State	68	45
City (50+)	53	37
City (10-49)	22	20
County	17	12
City (1-9)	8	6
Township	4	4

TABLE 15/18-2. *Percentages of departments in each department type*
with specified combination of CCTV and VTR

Department type	Neither CCTV nor VTR	Both CCTV and VTR	VTR only	CCTV only
Township	92	0	4	4
City (1-9)	90	5	4	1
County	78	6	9	5
City (10-49)	72	15	7	6
City (50+)	44	35	19	2
State	28	40	28	4
50 largest	11	71	18	0
All departments	62	23	12	3

16. (If " Yes" to Question 15) In which of the following ways do you use closed circuit TV in your department? (Mark X by Each Item That Applies)

Checking on prisoners
Police line-ups
Surveillance within department' s buildings (other than prisoners and line-ups)
Watching activity during civil disturbances
Surveillance of " high crime" districts
Training
Other (specify)

19. (If " Yes" to Question 18) How does your department use the video tape recorder? (Mark X by Each Item That Applies)

With closed circuit TV
Police line-ups
Recording traffic violations
Collecting evidence at scene of crime (other than traffic violations)
Training
Other (specify)

Since the choices supplied for these two questions were necessarily different (because of the different characteristics of CCTV and VTR), it was possible to compare the responses of the users for only two categories: training and police line-ups. By far the most common use of both of these systems was for training. Sixty-eight percent of the 116 responding departments with closed circuit televisions used them for training and 86 percent of the 156 departments with video tape recorders used them for training. About one-fifth of the users of each of these systems said they used them for police line-ups, one of the less frequent uses of either system.

The 116 responding departments with closed circuit television were using this system in three primary ways other than training: 37 percent of these departments used CCTV for checking on prisoners, 37 percent used it for surveillance within the department buildings (other than prisoners/line-ups), and 37 percent used it for watching civil disturbances. There were only a few department type differences in use of CCTV: A much smaller percentage of the states with CCTV used it for checking prisoners (5%) than the other department types. The 50 largest cities with CCTV were more likely to use it for watching civil disturbances (56%) than were cities (50+) or cities (10-49). Cities

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(10-49) with CCTV were less likely than the larger department types to use CCTV for "other" surveillance in police buildings. (See table 16/15.)

About one-third of the responding departments with CCTV listed some use for this system other than the categories listed in the questionnaire:

° Use with drunken drivers
° Booking/interrogation
° Other surveillance (such as surveillance of narcotics and vice operations)
° Traffic/parades
° Miscellaneous other uses as for court-related taping, community services, administrative matters, external ground security, and CCTV network reception.

The majority (86%) of the 156 responding departments with video tape recorders were using them for training. In addition, almost half of the departments with VTR were using them for collecting evidence other than traffic violations (49%) and with closed circuit TV (47%). About one-fourth of the VTR users were recording traffic violations with that device.

Cities (10-49) with VTR were the only department type in which the highest percentage of departments with VTR used it for a purpose other than training—80 percent of the cities (10-49) with VTR users said they used it for collecting evidence other than traffic violations, while only 65 percent used it for training. A smaller percentage of county VTR users than any other department type used VTR for recording traffic violations. (See table 19/18.)

It is of interest that 101 of the 156 responding departments with VTR (65%) also had CCTV (table 15/18), but only 74 of those departments (47%) said VTR was used with CCTV.

Forty-three percent of the responding departments with VTR systems listed at least one "other" use for the system. In some cases these were the same "other" activities that were listed by closed circuit television users:

° Use in regard to drunken drivers
° Other surveillance
° Bookings/interrogation/evidence
° Administrative tasks/community service/public relations
° Traffic-related uses

TABLE 16/15. *Of the departments in specified department type [1] with closed circuit television, percentages[2] using it for specified purpose*

	Department type				
CCTV use	All departments [n=116]	State [n=21]	50 largest [n=32]	City (50+) [n=30]	City (10-49) [n=18]
Training	68	81	75	63	56
Checking on prisoners	37	5	44	40	39
"Other" surveillance in police buildings	37	48	37	40	22
Watching civil disturbances	37	43	56	27	17
Police line-ups	18	14	19	17	17
Surveillance of high crime districts	9	14	12	3	11
Other	32	29	25	37	33

[1] Counties, cities (1-9), and townships are not presented since fewer than 10 of the responding departments in these departments types had CCTV.
[2] Percentages add to more than 100 percent since multiple answers were allowed.

TABLE 19/18. *Of the departments in specified department type[1] with video tape recorder, percentages[2] using it for specified purpose*

VTR use	Department type					
	All departments [n=156]	50 largest [n=40]	State [n=32]	City (50+) [n=43]	County [n=13]	City (10-49) [n=20]
Training	86	95	94	91	69	65
Collecting evidence other than traffic	49	40	37	49	54	80
With CCTV	47	45	53	51	31	45
Traffic violations	27	20	28	30	8	35
Police line-ups	19	20	9	26	15	25
Other	43	50	37	40	46	45

[1] Cities (1-9) and townships are not presented since fewer than 10 of the responding departments in those department types had VTR.

[2] Percentages add to more than 100 percent since multiple answers were allowed.

17. Tell us about any problems that your department has with this closed circuit TV system.

20. What problems, if any, has your department had with the video tape recorder?

About the same percentage of VTR users reported at least one problem with that system as users of CCTV. And within the department types, about the same percentages of the responding departments which had each system reported problems. However, state and 50 largest city departments with VTR and those with CCTV were slightly more likely to cite problems with those two systems than were the smaller department types. (See table 17/15 and 20/18-1.)

The respondents' narrative answers were used to develop codes for this question. A wide variety of problems was mentioned for these systems, but no single problem was cited by as many as 10 percent of the users of either system. (See table 17/15 and 20/18-2.)

TABLE 17/15 and 20/18-1. *Of the departments in specified department type[1] having CCTV or having VTR, percentages citing at least one problem[1] with the system*

Citing problem with	Department type					
	All departments	State	50 largest	City (10-49)	City (50+)	County
CCTV	37	47	44	33	31	*
VTR	36	44	47	30	35	15

[1] Answers such as "few problems" or "normal wear and tear" were counted as "no problems."

*Townships, cities (1-9), and counties are not presented for CCTV since fewer than 10 of the responding departments in those department types had CCTV. Townships and cities (1-9) are not presented for VTR because there were fewer than 10 VTR users.

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TABLE 17/15 and 20/18-2. *Of the 116 departments having CCTV and the 156 departments having VTR, the percentages[1] citing specified problem with those systems.*

Problem	Departments with CCTV [n=116]	Departments with VTR [n=156]
Image quality (unclear, poor resolution, streaks)	6	5
Batteries/power supplies	2	4
Heads (need for replacement)	*	3
Illumination requirement (adverse effects of low light condition)	5	2
Viewing range/need remote control scan/need more equipment (problems with automobile pan and tilt)	5	*
Camera breakdown/durability	2	2
Portability (need current conversion, damage in transit)	4	5
Interchangeability of components/systems	2	5
Maintenance—cost/time/parts (delays in getting parts, repairs)	7	4
Breakdown/reliability (unspecified)	6	8
Training of personnel	3	4
Lack of standards for purchasing	1	1
Other	11	9
No problem/few problems/normal wear and tear/new equipment	35	44
Unknown: serviced by vendor	*	1
No answer	28	20

[1] Percentages, except "no problem," "no answer," "few problems," "new equipment," "unknown," and "normal wear and tear," may represent double counting since multiple answers were allowed.

*Problem/statement not mentioned for this system.

"Other" problems (mentioned by one or two departments each) cited for CCTV were:
° Breakdown of monitors
° Breakdown of nonmetal controls
° Images "burn" into the camera or monitor tube
° Tape-related problems (e.g., no uniform tape formats between agencies, tape distortions due to heat and storage)
° Heat generated by camera
° Equipment is target due to fixed location
° Vidicon tubes (problem unspecified)
° Lights on camera are blinding
° Manpower requirements for equipment
° High cost of electronic splicing equipment
° Overall general poor quality

"Other" problems cited for VTR were:
° Tape-related problems (e.g., tapes not long enough; manpower requirements for developing training tapes; quality control for EIAJ Type 1 standard brings production problems)
° Present system incomplete
° Reel does not turn
° Fading out
° Stretched drive belt
° Narrow lens capability

° Vehicle mounting brackets
° Breakdown of nonmetal controls
° Constant change of equipment makes present set-up outdated

21. Will your department be *likely to buy* **(a) a closed circuit TV system requiring daylight or artificial light, and/or (b) a video tape recorder in the next 5 years?**

(a) Closed circuit TV system

Yes
No

(b) Video tape recorder

Yes
No

More than half of the responding 50 largest cities (67%), states (58%), and cities (50+) (54%), said they would buy a closed circuit television system within the next 5 years[6]; and more than one-quarter of the cities (10-49) (33%) and counties (25%) said they would buy CCTV in the near future; but only small percentages of the cities (1-9) (13%) and townships (12%) said they would soon buy CCTV. Approximately the same percentages of departments in each of these department types said they would buy a video tape recorder in the next 5 years.

Most of the 50 largest cities which said they would buy either CCTV or VTR in the near future already had CCTV or VTR in their departments. Slightly larger percentages of the states which said they would buy these systems already had CCTV or VTR. About half of the cities (50+) which were going to buy these systems already had CCTV or VTR in their departments. But in the smaller department types, higher percentages of the departments which said they would buy CCTV or VTR did not already have those systems. About three-quarters or more of the responding townships and cities (1-9), and counties neither had nor would be buying CCTV or VTR. (See table 21.)

[6] Data collected in the summer of 1972.

TABLE 21. *Percentages of departments in each department type which will buy CCTV or VTR in the next 5 years*[1]

Department type	Will buy: CCTV	VTR	Have now/ will buy: CCTV	VTR	Don't have now/will buy: CCTV	VTR
50 largest	67	74	51	67	16	7
State	58	68	32	49	26	19
City (50+)	54	54	21	27	33	27
City (10-49)	33	32	11	7	21	25
County	25	27	5	10	19	17
City (1-9)	13	14	2	1	11	13
Township	12	20	0	4	12	16
All departments	37	39	16	20	21	19

[1] Data collected in the summer of 1972.

2.2.6. Cameras

> **22. What kinds of *cameras*, if any, are now used by your department? (Mark X by Each Item That Applies)**
>
> **None (If you checked " None" skip to Question 24)**
>
> **Kinds of Cameras**
> **Movie Camera**
> **Still Cameras**
> **35 mm Single-lens Reflex**
> **35 mm Range-finder**
> **4 in x 5 in Format**
> **Roll Film Camera with automatic flashbulb advancer and exposure control**
> **Camera which uses special film for rapid automatic processing of pictures**
> **Other (specify)**

Ninety percent of the responding departments had at least one of the cameras listed in Question 22.[7] All of the responding state and 50 largest city departments and 99 percent of the city (50+) departments had at least one camera. Only in townships (84%) and cities (1-9) (69%) did fewer than 90 percent of the departments have at least one of the cameras listed. (See table 22-1.)

Of the departments which had at least one camera, the most common was a camera which uses special film for rapid automatic processing of pictures. More than two-thirds of the departments with cameras, in every department type (100% of 50 largest cities), had at least one camera of this kind.

The second most frequently represented camera was a 4 in x 5 in format camera. More than 90 percent of the two largest city department types had a camera of this kind.

In every case, higher percentages of the 50 largest city departments had each kind of camera than any other department type. Every camera listed was represented in at least half of these largest city departments. In cities (1-9), in contrast, only three of the cameras listed were represented in more than 10 percent of the responding departments with cameras. (See table 22-2.)

Twenty percent of the departments with cameras (mainly in 50 largest city, city (50+), and state department types) reported having some camera other than those listed

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[7] All questions about cameras deal only with presence or absence of cameras in departments, not with numbers of cameras represented.

TABLE 22-1. *Percentages of departments in each department type which had at least one camera*

Department type	Percent having at least one camera
50 largest	100
State	100
City (50+)	99
City (10-49)	93
County	91
Township	84
City (1-9)	69
All departments	90

NOTE: All questions about cameras deal only with presence or absence of cameras in departments, not with numbers of cameras represented.

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TABLE 22-2. *Of the departments in each department type with at least one camera, percentages having specified kind of camera*

Camera type	Department type							
	All departments [n=403]	50 largest [n=45]	City (50+) [n=80]	City (10-49) [n=83]	County [n=70]	Township [n=21]	State [n=47]	City (1-9) [n=57]
Camera with special film for rapid automatic processing	81	100	86	83	80	76	70	68
4 in x 5 in format	62	98	94	57	39	48	66	26
Roll film (automatic flash advancer/ automatic exposure)	48	76	45	43	43	33	66	37
35 mm single-lens reflex	47	98	71	33	24	24	72	7
Movie camera	35	91	54	13	14	5	70	5
35 mm range-finder	21	51	29	14	11	10	34	4
Other	20	51	30	8	11	0	28	7

in the questionnaire. Since several of these other cameras were mentioned by as many as 15 departments, it is quite likely that more departments would have checked them if they had been listed as categories in Question 22. These other types of cameras were:
° fingerprint camera
° "professional" camera[8]
° 2-1/4 or 120 roll film camera (unspecified)[9]
° Twin-lens reflex camera
° Mug camera
° Subminiature camera
° Copy camera
° Time elapsed surveillance camera
° Binocular cameras

23. What problems, if any, has your department noticed with the cameras you marked in Question 22?
23.A. Problems with movie cameras
23.B. Problems with 35 mm Single-lens Reflex Camera
23.C. Problems with 35 mm Range-Finder Camera
24.D. Problems with 4 in x 5 in Format Camera
23.E. Problems with Roll Film Camera with automatic flashbulb advance and exposure control
23.F. Problems with camera which uses special film for rapid automatic processing of pictures
23.G. Problems with other camera (Specify camera type)
Type:
Problem:

Most of the users of each of these camera types either left the question blank, said "no problems," mentioned normal wear and tear, or said the camera was new and had

[8] Term is taken from *Your Guide to Photography: A Practical Handbook* by Helen Finn Bruce. (New York: Barnes & Noble Books, 1965). It refers to types of cameras larger than 35 mm. In this report, only large cameras (larger than 35 mm) coded according to size rather than function appear in this category (e.g., 2-1/4 in x 2-1/4 in single lens reflex, 2-1/4 in x 3-1/4 in cameras, 2-1/4 in x 2-3/4 in cameras, view cameras).

About 15 respondents specified this type of camera, so it was made a separate category. These answers could refer to either a single-lens or twin-lens reflex camera, but it is probable that most respondents were referring to a twin-lens reflex camera.

no problems yet. Between about one-fourth and one-third of the users of each of these types of cameras listed a specific problem. (See table 23.)

TABLE 23. *Of the departments which had each specified camera, percentages which said "no problems," gave no answer, or cited at least one problem with that type of camera*

| Type of camera | Percent of departments which gave | | |
	Specified problem	"No problems"	No answer
Roll film camera with automatic flash advancer and exposure control [n=195]	32	46	22
Camera with special film for rapid automatic processing [n=327]	31	47	22
4 in x 5 in format [n=249]	28	48	24
35 mm range-finder [n=86]	24	53	23
35 mm single-lens reflex [n=188]	24	55	21
Movie [n=142]	23	60	17

[1] Answers such as "few problems" or "normal wear and tear" were counted as "no problems."

2.2.6.1. Problems with Movie Cameras

About three-quarters of the 142 responding departments with movie cameras either said they had no problems or normal wear and tear, or gave no answer about problems with movie cameras. None of the specific problem categories was mentioned by more than 8 percent of the departments which had movie cameras. (Codes were developed from narrative responses.) (See table 23A.)

"Other" problems with movie cameras included:
° Weight (heaviness) of the camera
° Lack of sound for film
° Windup motor should be replaced with an automatic one
° Difficulty threading film with 16 mm camera (especially when speed is necessary)
° Occasional disengagement of film magazine from sprockets when filming (which means that camera must be opened to reset the magazine)
° Synchronization of shutter and speeds
° Through-the-lens viewing is better than through viewfinder.

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TABLE 23A. *Of the 142 departments having movie cameras,*
percentages[1] citing each problem

Problem with movie camera	Percent of departments [n=142]
Training of personnel in use	8
Film purchasing and processing (e.g., cost of film and/or processing/delay in processing)	5
Lenses/lens mounts (e.g., limited lens capability; automatic zoom lens better to have than turret lens)	4
Limited application/replacement needed	4
Power supply	3
Breakdown/reliability (area unspecified)	2
Maintenance: cost/time/parts (e.g., no local repair service)	1
Other	4
No problems/normal wear and tear	60
No answer	17

[1] Percentages, except "no problems," "no answer," and "normal wear and tear,"
may represent double counting since multiple answers were allowed.

2.2.6.2. Problems with Still Cameras

Just as for movie cameras, the majority of users of each type of still camera did not cite a problem with those cameras. The departments' narrative answers were used to develop problem categories. An attempt was made to develop categories which could be used for all five types of still cameras so that comparisons could be made. It was found, however, that a common set of categories could be developed for only four of the five camera types—the problem statements for cameras with special film for rapid automatic processing of pictures were qualitatively different from the others.

As with movie cameras, none of the problem categories was very frequently mentioned. For the two 35 mm cameras, the most frequently mentioned (8-9% of those with each camera) was training of personnel. Two problem categories having to do with the flash unit were most frequently mentioned (6 and 8%) by departments having roll film cameras with automatic flashbulb advancer and exposure control. About 10 percent of those using the 4 in x 5 in format camera discussed its size and weight. (See table 23B/C/D/E.)

A few other problems were mentioned for these still cameras (none was given for the 35 mm range-finder):

35 mm single-lens reflex
° Camera cannot be used manually (all automatically operated)
° Hard to keep operational with some plastic parts

4 in x 5 in format
° No attachments for fingerprinting, mug shots
° Expensive
° Too slow
° Poor flash unit
° Minor wiring problems
° Adverse effects of storage in case (causes tracks to malfunction, damage to shutter cable)
° Screws become loose due to transporting in vehicles

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Problem	35 mm single-lens reflex [n=188]	35 mm range-finder [n=86]	4 in x 5 in format [n=249]	Roll film camera: automatic flashbulb advancer, exposure control [n=195]
Film purchasing and processing	2	0	3	3
Lens/lens mounts	2	0	1	3
Mirror	2	0	0	0
Range-finder/closeups	0	5	3	1
Light meter	2	1	0	1
Shutter	1	3	3	3
Film advancer	3	2	0	3
Power of flash unit/ illumination requirement	1	0	0	6
Flash unit synchronization/ reliability of unit, bulbs	3	3	2	8
Batteries/power supply	0	0	0	2
Size and weight	0	0	10	0
Maintenance: cost/time/ parts/cleaning	1	0	1	1
Breakdown/reliability (area unspecified)	0	2	2	3
Enlargement of pictures/ negative size, grain	4	1	0	4
Training personnel/complex equipment/need frequent use	9	9	8	4
Limited application/ replacement needed	0	2	2	4
Other	1	0	4	2
No problems/normal wear and tear/new equipment/few problems	55	53	48	46
No answer	21	23	24	22

[1] Percentages, except for "no answer," "no problems," "few problems," "normal wear and tear," and "new equipment" may represent double counting since multiple answers were allowed.

Roll film camera: automatic flashbulb advancer and exposure control
° Problems with flash unit (difficulty unspecified)
° Cases not dustproof enough
° Summer heat causes film damage

As with the other cameras discussed so far, the camera which uses special film for rapid automatic processing of pictures caused problems for few of the responding departments. Only 31 percent of the departments having this kind of camera mentioned a specific problem. The most frequently mentioned problems had to do with the quality of pictures produced, environmental effects on film storage or processing, and problems with reproducing pictures. None of these was mentioned by as many as 10 percent of the departments which had this kind of camera, however. (See table 23F.)

TABLE 23F. *Of the 327 departments having a camera with special film for rapid automatic processing of pictures, percentages mentioning each problem*

Problem	Percent of departments with this camera [n=327]
Quality of reproduction: detail/contrast/consistency	7
Film: cost/quality	6
Lack of negatives/enlargement, copy problems	6
Environmental effects on film storage, processing	5
Flash unit: power/reliability	3
Rollers	2
Maintenance: cost/time/parts/cleaning	2
Expense (reason unspecified)	2
Training of personnel	2
Limited application	2
Breakdown/reliability (area unspecified)	1
Shutter	1
Other	3
No problems/normal wear and tear/new equipment	47
No answer	23

"Other" problems mentioned included:
° Application of protective coating to black-and-white film
° Problem with film (unspecified)
° Poor quality
° Disposal at crime scene of debris from developed film
° No closeups
° Too slow
° Settings get moved
° People take more photos than necessary because of intermediate finished product

2.2.6.3. Future Purchase of Cameras

24. Which of the following types of cameras, if any, will your department *be likely to buy* within the next 5 years?

None. We will probably not buy any cameras in the next 5 years.

Movie camera

Still Cameras
35 mm Single-lens Reflex
35 mm Range-finder
4 in x 5 in Format
Roll Film Camera with automatic flashbulb advancer and exposure control
Camera which uses special film for rapid automatic processing of pictures
Other (specify)

About half or more of the responding departments in every department type said they would be likely to buy at least one camera in the next 5 years. State (87%) and 50 largest city (80%) departments most often said they would buy cameras; counties (49%) said so least often. (See table 24-1.)

TABLE 24-1. *Percentages of departments in each department type which said they would buy a camera in the next 5 years*

Department type	Percent of departments which will buy cameras
State [n=47]	87
50 largest [n=45]	80
City (50+) [n=81]	69
City (10-49) [n=89]	64
Township [n=25]	56
City (1-9) [n=83]	54
County [n=77]	49
All departments	64

For 4 of the 6 types of cameras listed, 1 department type, the 50 largest cities, consistently showed the highest or second-highest percentage of potential buyers: 35 mm single-lens reflex, camera with special film for rapid automatic processing, movie camera, roll film camera with automatic flash advancer and exposure control, and the 4 in x 5 in format. There are two additional points of interest regarding the camera which uses special film for rapid automatic processing. First, more of the cities (1-9) than any other department type said they would buy this type of camera. Secondly, it was given greater emphasis (in terms of purchasing) by cities (1-9) than any other kind of camera within any other department type. There were no great differences among the department types in the percentages of departments which will buy 35 mm range-finder cameras. (See table 24-2.)

Other types of cameras mentioned were the same as those other cameras already represented in departments. (See Question 22.)

TABLE 24-2. *Of the departments in each department type that will be buying cameras, percentages[1] which will be buying specified type of cameras*

Type of camera	Department type						
	50 largest [n=36]	State [n=41]	City (50+) [n=56]	City (10-49) [n=57]	Township [n=14]	County [n=38]	City (1-9) [n=45]
35 mm single-lens reflex	75	56	52	33	29	26	16
Camera with special film for rapid automatic processing	53	41	32	33	21	39	60
Movie	39	34	36	28	50	13	11
Roll film camera with automatic flash advancer and exposure control	42	44	20	16	21	29	24
4 in x 5 in format	44	29	21	30	21	18	11
35 mm range-finder	14	17	12	12	7	11	9
Other	39	22	21	9	7	13	2

[1] Percentages add to more than 100 percent since multiple answers were allowed.

2.2.7. Standards for Other Security Devices

25. Mark X by each item below that needs *performance standards* **(Mark X by " None" if standards are not needed for any of the items)**

None
General purpose locks (padlocks, door locks)
Special purpose locks for detention centers
Penetration-resistant glass (For example: bulletproof glass, laminated glass, etc.
Security screens and grills

Departments in the two largest city department types, 50 largest and cities (50+), were most likely to say at least one of the devices listed in Question 25 needed performance standards. Sixty-nine percent of the responding departments in these city department types selected at least one security device for performance standards, whereas only 42 percent of the cities (1-9) and 51 percent of the states did. (See table 25-1.)

In every department type, slightly higher percentages of departments said either penetration-resistant glass or security screens and grills (or both) needed performance standards than selected general purpose locks or special purpose locks for detention centers. More than half of the 50 largest cities (56%) and cities (50+) (51%) and nearly half of the cities (10-49) (47%) said that performance standards were needed for penetration-resistant glass. More than 40 percent of the departments in every department type except states and cities (1-9) said that there should be performance standards for security screens and grills.

The percentage differences among these four security items were not great. In every department type, except states and townships, each of these security devices was said to need performance standards by about one-quarter to one-half of the responding departments. (See table 25-2.)

TABLE 25-1. *Percentages of departments in each department type saying at least one of the other security devices listed in question 25 needed performance standards*

Department type	Percent marking at least one item	Percent saying "none"	Percent giving no answer
50 largest	69	20	11
City (50+)	69	25	6
City (10-49)	66	33	1
County	62	38	0
Township	60	40	0
State	51	45	4
City (1-9)	42	54	4

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TABLE 25-2. *Percentages of departments in each department type which said performance standards were needed for specified security devices*

Department type	Penetration-resistant glass	Security screens and grill	General purpose locks	Special purpose locks	None or no answer
50 largest	56	44	44	40	31
City (50+)	51	47	44	35	31
City (10-49)	47	48	30	30	34
Township	44	52	36	8	40
State	43	21	21	15	49
County	35	44	31	31	38
City (1-9)	19	31	24	23	58

2.2.8. Other Comments

26. Please tell us anything else you would like to say about the equipment in this questionnaire:

26.A. "Direct-to-Police" Alarm Displays

26.B. Night Vision Equipment

26.C. Closed Circuit TV System Which Needs Daylight or Artificial Illumination

26.D. Cameras

26.E. Other Security Devices

26.F. Other

2.2.8.1. Comments About "Direct-to-Police" Alarm Displays

The comments supplied concerning "direct-to-police" alarm displays were often general reactions (both positive and negative) to the use of such systems in police departments. Other comments were elaborations on departmental policies concerning subscribers, and some were comments suggesting design changes or standardization to improve the usefulness of such systems. Some examples are presented below. Each department's comments were recorded verbatim and are available, without identifying data, for research purposes.

Would be restricted for financial institutions or government facilities, but the banks normally do not trigger alarms until the suspect has left premises which is very ineffective.

Very good—should be on all stores.

Far too many false alarms from malfunctions. Manpower expended for nothing.

Most alarms (false) set off by human error and not mechanical failure.

Displays should be miniaturized alarms, self-sustaining (battery) during power failure, U.L. approved, and standard universal displays.

Interferes with normal duties of dispatcher. Too much time consumed attempting to locate alarm company operators and owners to reset alarms after hours.

Key shut-off should be designed so that door cannot be unlocked without turning alarm off. Would reduce false alarms.

We have found this to be a good security device.

2.2.8.2   Comments About Night Vision Equipment

The focus of comments about night vision equipment was centered on the expense of such devices. Other comments were concerned with the advantages and disadvantages of such equipment. Some examples are given below.

Would be of definite use—cost prohibitive.

It is too expensive. Most of it is too bulky to work well in police functions.

Very beneficial piece of equipment during times of public disturbance—night surveillance purposes.

Cost is prohibitive.

Should be able to identify and read license plates at 100 yards with picture taking capability.

I think this would cut burglaries down 80%.

Not enough of this equipment available at a price smaller departments can afford to purchase.

Need portable power supply for recording with low light level TV cameras as portable units.

Need this equipment at times but unable to get funds to provide it.

2.2.8.3. Comments About Closed Circuit TV System Which Needs Daylight or Artificial Illumination

Many of the comments about closed circuit TV mentioned needed improvements in this equipment, but several departments also discussed their own individual need for CCTV. Some examples are presented below:

We have had considerable problems with portable video units, continually breaking down.

A must for detention cells.

An essential part of all modern progressive police functions. Should be engineered into smaller units for easier use.

Keeps prisoners awake at night, bulbs burn out.

The quality of clarity should be improved.

Very expensive.

Resolution on these devices should be improved.

Improvement of lighting usually necessary.

Need cassette system standards and increased automation on cameras for "idiot-proofing."

Expensive, high maintenance, not too reliable.

2.2.8.4. Comments About Cameras

The comments about cameras which were supplied for this question generally resembled the camera comments which were supplied in section 2.2.6 of this report. Most of these comments had to do with difficulties in operating cameras or with suggestions to improve the performance of cameras for police work. Examples are presented below.

Development of technically sound, nonbreakable and easily used automatic camera.

Problem is not so great with the cameras themselves, but rather the proper use. Coordination of flash attachment and damage thereto is a maintenance problem.

We need a camera of durable construction—simple to operate—flash range minimum 25 ft—with view finder that would permit operator to maintain stance to afford maximum vision of area and personal safety.

Most of the problems with cameras can be traced to improper use by operator.

Some type program should be formed to give "every" small department training in use of all types of cameras. For instance, a mobile training van that would be in every city once a year to update training.

A definite need for a reliable, easy to operate camera which has a built-in flash; three lens settings; closeup, medium distance, distance setting; and about three speed settings.

2.2.8.5. Comments About Other Security Devices

Comments about other security devices were few and varied. Several were about the high cost of all security equipment, and several called for standardization of specific devices or equipment. Examples are presented below.

Glass in police vehicles should be resistant to thrown objects at the very least.

Standards should be set by law on all security devices used on public housing such as locks, screens, glass, outside lighting, and doors.

High cost prohibits small departments from obtaining.

Definite need for rigid standards concerning laminated glass.

Vehicle screens very important in dual purpose vehicles, but some too expensive, cumbersome, and interfere with visibility and air circulation.

APPENDIX A

DETAILED QUESTIONNAIRE: ALARM DISPLAYS,
                           SECURITY EQUIPMENT, AND
                           SURVEILLANCE EQUIPMENT

POLICE EQUIPMENT SURVEY

NOTE: This questionnaire is included in this document as a supplement to the discussion in the text. It has no other
      intended use.

INTRODUCTION: Police departments often monitor the displays on which alarms from local businesses are received. Several different manufacturers make alarm systems, and their alarm displays operate differently. Security and surveillance equipment are also needed by the police themselves to help carry out their work. In order to make it easier for law enforcement groups to offer services, and to select and buy equipment to meet their own needs, the Law Enforcement Standards Laboratory will write PERFORMANCE standards for such equipment.

PURPOSE OF THIS QUESTIONNAIRE: This "detailed" questionnaire gives you, the user, a chance to tell us about the alarm displays, security, and surveillance devices you are now using, the problems you find in using such equipment, and the items or services you will probably deal with in the future. Your answers will be used to determine what kinds of testing need to be done, and what sorts of problems must be solved. We must find out what YOUR needs are.

GENERAL INSTRUCTIONS:

1. Fill in the questionnaire completely. Even if you do not have all the information you need "at your fingertips", please make your best effort to supply every answer AS ACCURATELY AS POSSIBLE.

2. Answer all questions for YOUR OWN DEPARTMENT. Do not attempt to supply information that might exist in some other department.

3. The results of this questionnaire will be compiled by computer. It is very important that you follow directions and answer every question legibly and in the boxes and spaces provided.

4. No individual department will be identified in the report of this survey; the results will be published in tabulated form.

5. Additional instructions for filling in your answers appear after some questions. Follow the directions given.

6. Please PRINT all answers or comments CLEARLY.

7. When this questionnaire has been completely filled in; place it, with the other questionnaires sent to your department, in the stamped, addressed envelope supplied. Return all of them to:
   Technology Building, A-110
   National Bureau of Standards
   Washington, D.C. 20234

8. If you have any questions, write to the above address or call collect:
   E. Bunten or P. Klaus
   Phone: 301-921-3558

9. Remember that it is only by getting YOUR answers to these questions that it will be possible to begin solving the problems that police have with alarm displays, security, and surveillance equipment.

1. Does your department now have ONE OR MORE displays for "direct-to-police" burglar or robbery alarms from banks, savings and loans, or other businesses?

(10)***   _____ Yes   _____ No

IF "YES" CONTINUE WITH QUESTIONS 2 THROUGH 9.	IF "NO" SKIP TO QUESTION 9.

2. Which MANUFACTURERS made the "direct-to-police" alarm displays that you have in your department?

MANUFACTURERS

_____

_____

_____

_____

_____

(11-12)   _____

3. About how many ALARMS (both real and false) are USUALLY received by your department in a MONTH?

	NUMBER OF ALARMS (REAL AND FALSE) EVERY MONTH	ALL ALARMS THAT COME FROM:
(13-16)	_____	Displays in department
(17-20)	_____	McCulloh Receiving System (gives printed message to indicate alarm)
(21-24)	_____	Central Stations who pass alarm on to police by phone
(25-28)	_____	Automatic Dialer which gives taped emergency message
(29-32)	_____	Other (Specify) _____
(33-36)	_____	Total

*** Numbers in parentheses are for computer use only.

4. For this average number of alarms per MONTH, about how many of them are FALSE ALARMS?

	FALSE ALARMS EVERY MONTH	FALSE ALARMS THAT COME FROM:
(37-40)	_____	Displays in department
(41-44)	_____	McCulloh Receiving System (gives printed message to indicate alarm)
(45-48)	_____	Central Stations who pass alarm on to police by phone
(49-52)	_____	Automatic Dialer which gives taped emergency message
(53-56)	_____	Other (Specify) _____
(57-60)	_____	Total

5. About how many DIRECT-TO-POLICE tie-ins does each kind of SUBSCRIBER have on your department's alarm displays

	NUMBER	TYPE OF SUBSCRIBER
(61-65)	_____	Financial Institutions (banks, savings and loans, etc.)
(66-70)	_____	Jewelry Stores
(71-75)	_____	Small Businesses (OTHER than jewelry stores)
(76-80)	_____	Large Businesses (OTHER than jewelry stores)
(10-14)	_____	Schools
(15-19)	_____	Residences
(20-24)	_____	Other (Specify) _____
	_____	Other (Specify) _____

6. Does your department now LIMIT, or may have to limit in the future, the NUMBER of subscribers you can accept for "direct-to-police" tie-ins?

(25)   _____ Yes   _____ No

IF "NO" SKIP TO QUESTION 8

A-4

7. (IF "YES" TO QUESTION 6) We must limit the number of subscribers for "direct-to-police" tie-ins for the following reason(s): (MARK X BY EACH ITEM THAT APPLIES)

(26-32)_____ Limited Space for Panels

_____ Limited Personnel for Monitoring Panels

_____ Too Many False Alarms

_____ Each Alarm System May Need Its Own Kind of Display

_____ Inadequate Servicing by Alarm Companies

_____ Possible Competition with Central Stations

_____ Other (Specify) _____

_____

_____ Other (Specify) _____ .

_____

8. What problems have you had, if any, with the DISPLAYS THEMSELVES? (MARK X BY EACH ITEM THAT APPLIES)

33-39)_____ We Have No Problems with Our Displays

_____ Displays Are Too Large

_____ Too Many Different Types of Alarm Signals (lights, buzzers, bells, etc.)

_____ No Way to Tell When an Alarm System is On or Off

_____ Department Cannot Test Alarm System Automatically

_____ Frequent Component Failures (lights on displays, for example)

_____ Other (Specify) _____

_____ Other (Specify) _____

_____ Other (Specify) _____

A-5

9. Will your department be likely to provide a service of "direct-to-police" tie-ins within the next 5 years?

(40)_____Yes   _____No

PART II.A.   NIGHT VISION EQUIPMENT

10. Do you use night vision equipment in your department?

(41)_____Yes   _____No

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                                  ┌──────────────────────┐
                                  │ IF "NO", SKIP TO      │
                                  │ QUESTION 14.          │
                                  └──────────────────────┘
```

11. (IF "YES" TO QUESTION 10) Mark X by each of the following kinds of night vision equipment that you use in your department.

(42-46) _____Night Vision Scopes SUITABLE FOR RIFLES (can also be hand-held when needed)

_____Hand-held Passive Image Intensifier (Nightscope) NOT SUITABLE FOR RIFLE MOUNTING

_____Hand-held Infrared Device which is NOT SUITABLE FOR RIFLE MOUNTING

_____Low-Light Level (Closed Circuit) TV (operates under night-time conditions WITHOUT artificial light)

_____Other (Specify)_____

_____Other (Specify)_____

12. Does your department have any problems with ANY of these night vision devices?

(47) _____Yes   _____No

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                                  ┌──────────────────────┐
                                  │ IF "NO" SKIP          │
                                  │ TO QUESTION 14        │
                                  └──────────────────────┘
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13. (IF "YES" TO QUESTION 12) Mark X for EACH PROBLEM you have had for
    EACH KIND OF EQUIPMENT:

PROBLEM   KIND OF EQUIPMENT

	Night Vision Scope Suitable for Rifle and Hand Use	Hand-held Nightscope Not Suitable For Rifle	Hand-held Infrared Device Not Suitable For Rifle	Low-Light Level TV
Poor image quality (resolution)	(48)	(49)	(50)	(51)
Difficult to choose the appropriate lens	(52)	(53)	(54)	(55)
Regular camera lenses cannot be used with night vision devices	(56)	(57)	(58)	(59)
Device is too delicate for normal use	(60)	(61)	(62)	(63)
Poor reliability (failures with tubes, power supplies, etc.)	(64)	(65)	(66)	(67)
Other Problem (Specify) _____ _____	(68)	(69)	(70)	(71)
Other Problem (Specify) _____ _____				

14. What night vision devices, if any, will your department BE LIKELY TO BUY in the next 5 years? (MARK X BY EACH ITEM THAT APPLIES)

(72-77)

_____ We will probably NOT BUY any night vision devices in that time.

_____ Night Vision Scope SUITABLE AS RIFLE AND HAND SCOPE

_____ Hand-Held Passive Image Intensifier (Nightscope) NOT suitable for rifle mounting

_____ Hand-held Infrared Device NOT suitable for rifle mounting

_____ Low-Light Level (Closed Circuit) TV (operates under night-time conditions WITHOUT artificial light)

_____ Other (Specify) _____

_____ Other (Specify) _____

PART II.B. CLOSED CIRCUIT TELEVISION (CCTV)

15. Does your department use closed circuit TV which REQUIRES DAYLIGHT OR ARTIFICIAL ILLUMINATION?

(78)   _____ Yes   _____ No

> IF "NO" SKIP
> TO QUESTION 18

16. (IF "YES" TO QUESTION 15) In which of the following ways do you use closed circuit TV in your department? (MARK X BY EACH ITEM THAT APPLIES)

(10-16)   _____ Checking on prisoners

_____ Police line-ups

_____ Surveillance within Department's buildings (other than prisoners and line-ups)

_____ Watching activity during civil disturbances

_____ Surveillance of "high crime" districts

_____ Training

_____ Other (Specify) _____

_____ Other (Specify) _____

A-8

17. Tell us about any PROBLEMS that your department has with this CLOSED CIRCUIT TV SYSTEM.

(17)

_____

_____

_____

_____

_____

_____

18. Does your department have a video tape recorder?

(18)   _____ Yes   _____ No

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                                                        IF "NO" SKIP
                                                        TO QUESTION 21.
```

19. (IF "YES" TO QUESTION 18)   How does your department use the video tape recorder?

    (MARK X BY EACH ITEM THAT APPLIES)

(19-24)   _____ With closed circuit TV

           _____ Police line-ups

           _____ Recording traffic violations

           _____ Collecting evidence at scene of crime (OTHER than traffic violations)

           _____ Training

           _____ Other (Specify) _____

           _____ Other (Specify) _____

A-9

20. What PROBLEMS, if any, has your department had with the video tape recorder?

(25)

_____

_____

_____

_____

_____

_____

_____

_____

21. Will your department be LIKELY TO BUY (a) a closed circuit TV system requiring daylight or artificial light, and/or (b) a video tape recorder IN THE NEXT 5 YEARS?

(a) Closed circuit TV system

(26)   _____ Yes   _____ No

(b) Video tape recorder

(27)   _____ Yes   _____ No

PART III. CAMERAS

22. What kinds of CAMERAS, if any, are now used by your
    department? (MARK X BY EACH ITEM THAT APPLIES)

(28-35)   _____ NONE (IF YOU CHECKED "NONE", SKIP TO QUESTION 24)

                        KINDS OF CAMERAS

        _____ Movie Camera

                        Still Cameras

        _____ 35 mm Single-lens Reflex

        _____ 35 mm Range-finder

        _____ 4" x 5" Format (For example: Speed Graphic)

        _____ Roll Film Camera with automatic flashbulb
               advancer and exposure control (For example:
               Instamatic)

        _____ Camera which uses special film for rapid
               automatic processing of pictures (For example:
               Polaroid)

        _____ Other (Specify) _____

23. What problems, if any, has your department noticed with
    the cameras you marked in Question 22?

(36)   23.A. Problems with movie cameras: _____

        _____

        _____

        _____

        _____

        _____

        _____

A-11

(37)   23.B.   Problems with 35 mm Single-lens Reflex Camera _____

_____

_____

_____

(38)   23.C.   Problems with 35 mm Range-Finder Camera _____

_____

_____

_____

(39)   23.D.   Problems with 4" x 5" Format Camera (like Speed Graphic) _____

_____

_____

_____

(40)   23.E.   Problems with Roll Film Camera with automatic flashbulb
advancer and exposure control (like Instamatic) _____

_____

_____

_____

(41)   23.F.   Problems with camera which uses special film for rapid
automatic processing of pictures (like Polaroid) _____

_____

_____

_____

23.G. Problems with OTHER CAMERA (Specify camera type)

   Type: _____

   Problem: _____

       _____

24. Which of the following types of cameras, if any, will your
department BE LIKELY TO BUY within the next 5 years?

 _____ NONE. We will probably not buy any cameras in the next
5 years.

   _____ Movie camera

Still Cameras

   _____ 35 mm Single-lens Reflex

   _____ 35 mm Range-finder

   _____ 4" x 5" Format (For example: Speed Graphic)

   _____ Roll Film Camera with automatic flashbulb advancer and
exposure control (For example: Instamatic)

   _____ Camera which uses special film for rapid automatic
processing of pictures (For example: Polaroid)

   _____ Other (Specify) _____

       _____

PART IV: OTHER SECURITY DEVICES

25. Mark X by each item below that needs PERFORMANCE STANDARDS. (Mark
X by "NONE" if standards are not needed for any of the items.)

 _____ None

   _____ General purpose locks (padlocks, door locks)

   _____ Special purpose locks for detention centers

   _____ Penetration-resistant glass (For example: bullet-proof glass,
laminated glass, etc.)

   _____ Security screens and grills

26. Please tell us anything else you would like to say about the equipment in this questionnaire:

    26.A. "Direct-to-Police" Alarm Displays:_____

        _____

        _____

        _____

    26.B. Night Vision Equipment:_____

        _____

        _____

        _____

    26.C. Closed Circuit TV System which needs Daylight or Artificial Illumination:_____

        _____

        _____

        _____

    26.D. Cameras:_____

        _____

        _____

        _____

    26.E. Other Security Devices:_____

        _____

        _____

        _____

    26.F. Other:_____

        _____

        _____

        _____

IDENTIFYING INFORMATION: (All identifying information will be kept confidential)

Name of Department: _____

Address: _____

Name of person who answered this questionnaire:

_____
Name

Title: _____ Rank: _____

No. of years experience in law enforcement: _____

Telephone Number: _____

Others who helped: 1. _____
Name

Title: _____ Rank: _____

No. of years experience in law enforcement: _____

Telephone Number: _____

2. _____
Name

Title: _____ Rank: _____

No. of years experience in law enforcement: _____

Telephone Number: _____

APPENDIX B
Data Tables

B.1. Advice to the Reader

(a)   The data presented in the following tables resulted from the responses of a stratified random sample (see sec. 1.2) of police departments in response to a specific set of questions (see app. A). These data do not, in any way, reflect objective testing of any of the equipment by the National Bureau of Standards. The reader is cautioned to become familiar with the questionnaire and to evaluate the data in terms of the exact questions asked.

(b)   Tables have been numbered after the question number (e.g., the tables for Question 6A would be numbered 6A-1, 6A-2, etc.). The data are usually presented by number of respondents and nearest whole percentage. Because of the statistical limitations imposed by the sample sizes used in this study, the reader is cautioned to be wary of assigning importance to percentage differences of less than 5 percent when percentages are based on all respondents, and to percentage differences of less than 10 percent when percentages are based on one of the subsample groups (e.g., a particular department type or region). No statistical tests of significance are reported.

(c)   These tables are based on the responding departments from the specific sample selected for this questionnaire. This sample was not proportional to the total population of police departments, and although it is possible to do so, the data in these tables have not been weighted to allow direct extrapolation to the total population.

(d)   In order to extrapolate to the total population from the respondent data presented in this report, use the following procedure: For each department type, multiply the percentage of respondents of a particular department type giving the answer of interest (see B.2 Data Tables, app. B) by the total number of departments of that department type in the population (see table 1.2-2, sec. 1.2); add those seven subtotals; and divide the total by the total number of police departments in the population (table 1.2-2). The quotient of this division will be an estimate of the percentage of all U.S. police departments that would choose the answer of interest.

B.2. Data Tables

Table i-1. RANK OF PERSON WHO FILLED IN QUESTIONNAIRE

RESPONSE

	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
CHIEF	144	32	0	0	2	3	61	73	42	47	23	28	1	2	15	60
CAPTAIN	64	14	16	34	1	1	2	2	13	15	21	26	8	18	3	12
COLONEL	3	1	3	6	0	0	0	0	0	0	0	0	0	0	0	0
ACTING CHIEF	4	1	0	0	0	0	1	1	1	1	0	0	0	0	2	8
ASSISTANT CHIEF	16	4	1	2	0	0	1	1	8	9	4	5	2	4	0	0
MAJOR	6	1	3	6	0	0	0	0	0	0	2	2	1	2	0	0
LIEUTENANT	43	10	9	19	4	5	1	1	6	7	14	17	9	20	0	0
DEPUTY SHERIFF	27	6	0	0	24	31	1	1	0	0	1	1	1	2	0	0
INSPECTOR	2	0	1	2	0	0	1	1	0	0	1	1	1	2	0	0
SHERIFF	30	7	0	0	30	39	0	0	0	0	0	0	0	0	0	0
SERGEANT	47	11	6	13	5	6	4	5	14	16	7	9	9	20	2	8
PATROLMAN	15	3	0	0	0	0	2	2	3	3	2	2	6	13	2	8
OTHER TITLE	32	7	6	13	3	4	10	12	2	2	7	9	3	7	1	4
UNDERSHERIFF	7	2	0	0	7	9	0	0	0	0	0	0	0	0	0	0
SPECIALIST	7	2	2	4	1	1	0	0	0	0	0	0	4	9	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table i-2. YEARS OF EXPERIENCE OF PERSON WHO FILLED IN QUESTIONNAIRE

RESPONSE

	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
2 OR LESS	12	3	0	0	5	6	6	7	1	1	0	0	0	0	0	0
3 - 5 YEARS	33	7	0	0	11	14	13	16	2	2	2	2	4	9	1	4
6 - 10 YEARS	68	15	1	2	18	23	11	13	20	22	8	10	4	9	6	24
11 - 15 YEARS	82	18	5	11	16	21	15	18	16	18	16	20	7	16	7	28
16 - 20 YEARS	105	23	14	30	11	14	17	20	24	27	21	26	13	29	5	20
21 - 25 YEARS	73	16	14	30	7	9	8	10	12	13	16	20	12	27	4	16
26 - 30 YEARS	29	6	6	13	3	4	4	5	7	8	6	7	2	4	1	4
31 OR MORE	32	7	4	9	5	6	6	7	6	7	8	10	2	4	1	4
NO ANSWER	13	3	3	6	1	1	3	4	1	1	4	5	1	2	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 1.   1.   DOES YOUR DEPARTMENT NOW HAVE ONE OR MORE DISPLAYS FOR "DIRECT-TO-POLICE" BURGLAR OR ROBBERY ALARMS FROM BANKS, SAVINGS AND LOANS, OR OTHER BUSINESSES?

| | ALL DEPARTMENT TYPES | | DEPARTMENT TYPE | | | | | | | | | | | | | |
| RESPONSE | | | STATE | | COUNTY | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | FIFTY LARGEST CITIES | | TOWNSHIP | |
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
YES	298	67	11	23	39	51	43	52	85	96	75	93	29	64	16	64
NO: NO MEANS FOR RECEIVING ALARMS	128	29	35	74	32	42	36	43	4	4	3	4	11	24	7	28
NO: ONLY RECEIVE ALARMS BY MEANS OTHER THAN DISPLAYS	17	4	0	0	5	6	3	4	0	0	3	4	4	9	2	8
NO ANSWER	4	1	1	2	1	1	1	1	0	0	0	0	1	2	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 2-1.   NUMBER OF MANUFACTURERS FOR DISPLAYS PER DEPARTMENT TYPE.   (TAKEN FROM QUESTION 2.   (IF "YES" TO QUESTION 1) WHICH MANUFACTURERS MADE THE "DIRECT-TO-POLICE" ALARM DISPLAYS THAT YOU HAVE IN YOUR DEPARTMENT?)

| | ALL DEPARTMENT TYPES | | DEPARTMENT TYPE | | | | | | | | | | | | | |
| RESPONSE | | | STATE | | COUNTY | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | FIFTY LARGEST CITIES | | TOWNSHIP | |
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1 MANUFACTURER	120	40	5	45	17	44	24	56	32	38	24	32	14	48	4	25
2 - 3 MANUFACTURERS	109	37	0	0	17	44	17	40	38	45	21	28	9	31	7	44
4 - 5 MANUFACTURERS	44	15	3	27	2	5	1	2	8	9	21	23	5	17	4	25
6 OR MORE MANUFACTURERS	12	4	2	18	0	0	0	0	5	6	5	7	0	0	0	0
UNKNOWN	6	2	1	9	1	3	1	2	0	0	2	3	0	0	1	6
NO ANSWER	7	2	0	0	2	5	0	0	2	2	2	3	1	3	0	0
TOTALS	298	100	11	100	39	100	43	100	85	100	75	100	29	100	16	100

B-3

Table 2-2.

2. (IF "YES" TO QUESTION 1) WHICH MANUFACTURERS MADE THE "DIRECT-TO-POLICE" ALARM DISPLAYS THAT YOU HAVE IN YOUR DEPARTMENT?

DEPARTMENT TYPE

DISPLAY MANUFACTURER	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
A	140	47	5	45	10	26	16	37	50	59	44	59	5	17	10	63
B	77	26	6	55	7	18	4	9	24	28	26	35	4	14	6	38
C	121	41	5	45	15	38	15	37	31	36	33	44	16	55	5	31
D	34	11	3	27	6	15	7	16	6	7	12	16	0	0	0	0
E	86	29	5	45	12	31	5	12	20	24	26	35	14	48	4	25
MISCELLANEOUS*	130	44	4	36	11	28	17	40	42	49	34	45	13	45	9	56

*120 listings for manufacturers were categorized as "Miscellaneous"; each listing was named by 3%, or fewer, of all departments with displays (n=298). Data cited here represent those departments naming at least one "Miscellaneous" manufacturer.

Table 3. NUMBER OF DEPARTMENTS PER MEANS OF RECEIVING ALARMS. (TAKEN FROM Q. 3. (IF DEPT. RECEIVES ALARMS*))

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
DISPLAYS	275	95	7	100	39	88	42	93	83	100	70	96	20	87	15	88
MCCULLOH RECEIVING SYSTEM WITH PRINTED MESSAGE	8	3	0	0	0	0	1	2	3	4	1	1	1	4	2	12
CENTRAL STATIONS	92	32	1	14	5	12	5	11	17	20	36	49	18	78	10	59
AUTOMATIC DIALER	119	41	3	43	19	44	13	29	27	33	32	44	14	61	11	65
OTHER MEANS OF RECEIVING	23	8	0	0	1	2	2	4	4	5	10	14	5	22	1	6
TOTALS	517	179	11	157	63	146	63	139	134	162	149	204	58	252	39	230

* THE TABLE IS BASED ON ALL DEPARTMENTS WHO SPECIFIED THEIR MEANS OF RECEIVING ALARMS.
(THEREFORE, DEPARTMENTS WITH MEANS OF RECEIVING OTHER THAN DISPLAYS ARE INCLUDED, WHERE APPLICABLE.)

Table 3/4-1.   RECORD-KEEPING FOR ALARM DATA.   (TAKEN FROM QUESTIONS 3, 4.   (IF DEPT. RECEIVES ALARMS*) Q. 3.
ABOUT HOW MANY ALARMS (BOTH REAL AND FALSE) ARE USUALLY RECEIVED BY YOUR DEPARTMENT IN A
MONTH? Q. 4.   FOR THIS AVERAGE NUMBER OF ALARMS PER MONTH, ABOUT HOW MANY OF THEM ARE FALSE
ALARMS?)

	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
RESPONSE	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
DEPTS. WITH DATA SEPARATED BY MEANS OF RECEIVING	291	92	7	64	43	98	45	98	83	98	73	94	23	70	17	94
DEPTS. WITH SUM ONLY/NO BREAKDOWN FOR MEANS	8	3	1	9	0	0	0	0	1	1	0	0	5	15	1	6
DEPTS. WITH UNKNOWN NUMBER OF ALARMS	12	4	3	27	1	2	1	2	0	0	4	5	3	9	0	0
NO ANSWER	4	1	0	0	0	0	0	0	1	1	1	1	2	6	0	0
TOTALS	315	100	11	100	44	100	46	100	85	100	78	100	33	100	18	100

DEPARTMENT TYPE

* THE TABLE IS BASED ON ALL DEPARTMENTS WHO INDICATED THAT THEY RECEIVE ANY TYPE OF ALARM.
(THEREFORE, DEPARTMENTS WITH MEANS OF RECEIVING OTHER THAN DISPLAYS ARE INCLUDED, WHERE
APPLICABLE.)

B-5

Table 3/4-2. DESCRIPTIVE STATISTICS ABOUT TOTAL (BOTH REAL AND FALSE) AND FALSE ALARMS PER MONTH (TAKEN FROM QUESTIONS 3, 4.)

A) DISPLAYS IN DEPARTMENT

RESPONSE	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*	**
MEAN	37.4	34.5	118.7	115.7	8.4	6.0	12.3	11.2	23.7	22.3	57.1	53.3	119.7	106.8	18.3	16.7
MINIMUM	0	0	2	2	0	0	0	0	0	0	2	2	2	2	1	1
MAXIMUM	750	735	350	344	100	35	113	113	195	194	250	245	750	735	45	40
MEDIAN	15	15	35	30	4	4	5	5	15	15	38	35	68	65	17	15

Table 3/4-3. DESCRIPTIVE STATISTICS ABOUT TOTAL (BOTH REAL AND FALSE) AND FALSE ALARMS PER MONTH (TAKEN FROM QUESTIONS 3, 4. (IF DEPARTMENT RECEIVES ALARMS***))

B) CENTRAL STATIONS

RESPONSE	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*	**
MEAN	190.8	174.0	5.0	4.0	4.4	4.0	7.6	7.0	9.9	7.9	41.9	33.8	872.8	812.3	9.8	5.3
MINIMUM	0	0	5	4	1	1	1	1	1	0	1	0	20	10	2	2
MAXIMUM	6000	5700	5	4	12	10	15	15	30	20	200	147	6000	5700	45	12
MEDIAN	15	11	5	4	2	2	9	6	10	6	25	21	238	170	5	5

*   REPRESENTS TOTAL ALARMS (BOTH REAL AND FALSE).

**   REPRESENTS FALSE ALARMS.

***   THE TABLE IS BASED ON ALL DEPARTMENTS WHO INDICATED THAT THEY RECEIVE ALARMS BY THIS MEANS.

      (THEREFORE, EVEN DEPARTMENTS WITHOUT DISPLAYS ARE INCLUDED, WHEN APPLICABLE.)

Table 3/4-4. DESCRIPTIVE STATISTICS ABOUT TOTAL (BOTH REAL AND FALSE) AND FALSE ALARMS PER MONTH (TAKEN FROM QUESTIONS 3, 4. (IF DEPARTMENT RECEIVES ALARMS***))

C) AUTOMATIC DIALER

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*	**
MEAN	96.6	92.9	35.7	33.3	8.5	6.8	5.0	4.4	4.3	3.5	23.7	19.5	731.8	714.9	4.2	3.6
MINIMUM	0	0	7	5	0	0	0	0	1	1	0	0	10	6	1	0
MAXIMUM	8700	8550	90	86	59	50	12	10	20	11	90	90	8700	8550	10	9
MEDIAN	5	5	10	9	2	2	4	4	3	2	17	10	150	144	3	3

Table 3/4-5. DESCRIPTIVE STATISTICS ABOUT TOTAL (BOTH REAL AND FALSE) AND FALSE ALARMS PER MONTH (TAKEN FROM QUESTIONS 3, 4. (IF DEPARTMENT RECEIVES ALARMS***))

D) OTHER MEANS OF RECEIVING ALARMS

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*	**
MEAN	198.5	187.3	.0	.0	3.0	3.0	1.5	1.5	33.7	33.0	21.3	16.8	840.2	798.6	10.0	8.0
MINIMUM	1	1	0	0	3	3	1	1	1	1	5	3	50	49	10	8
MAXIMUM	1793	1703	0	0	3	3	2	2	100	99	60	60	1793	1703	10	8
MEDIAN	20	12	0	0	3	3	2	2	17	16	20	11	700	650	10	8

* REPRESENTS TOTAL ALARMS (BOTH REAL AND FALSE).
** REPRESENTS FALSE ALARMS.
*** THE TABLE IS BASED ON ALL DEPARTMENTS WHO INDICATED THAT THEY RECEIVE ALARMS BY THIS MEANS. (THEREFORE, EVEN DEPARTMENTS WITHOUT DISPLAYS ARE INCLUDED, WHEN APPLICABLE.)

Table 3/4-6.   DESCRIPTIVE STATISTICS ABOUT TOTAL (BOTH REAL AND FALSE) AND FALSE ALARMS PER MONTH (TAKEN FROM QUESTIONS 3,4.   (IF DEPARTMENT RECEIVES ALARMS***))

E) ALARMS ACROSS ALL MEANS OF RECEIVING

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*	**
MEAN	167.6	155.0	134.7	130.9	11.8	8.8	13.9	12.6	28.6	26.5	88.9	78.6	1373.9	1284.9	31.1	22.7
MINIMUM	0	0	2	2	0	0	0	0	0	0	2	2	35	4	2	2
MAXIMUM	16200	15690	350	344	125	67	118	118	200	195	385	370	16200	15690	95	65
MEDIAN	22	20	120	116	5	4	5	5	20	18	64	60	520	439	26	23

*   REPRESENTS TOTAL ALARMS (BOTH REAL AND FALSE).
**   REPRESENTS FALSE ALARMS.
*** THE TABLE IS BASED ON ALL DEPARTMENTS WHO INDICATED THAT THEY RECEIVE ANY TYPE OF ALARM. (THEREFORE, DEPARTMENTS WITH MEANS OF RECEIVING OTHER THAN DISPLAYS ARE INCLUDED, WHERE APPLICABLE.)

Table 3/4-7. PERCENTAGE OF FALSE ALARMS PER MONTH. (TAKEN FROM QUESTIONS 3, 4. (IF DEPT. RECEIVES ALARMS*))

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	FALSE / TOTAL	%	FALSE / TOTAL	%	FALSE / TOTAL	%	FALSE / TOTAL	%	FALSE / TOTAL	%	FALSE / TOTAL	%	FALSE / TOTAL	%	FALSE / TOTAL	%
DISPLAYS IN DEPARTMENT	9474 / 10297	92	810 / 831	97	227 / 320	71	470 / 515	91	1852 / 1964	94	3729 / 3997	93	2136 / 2395	89	250 / 275	91
CENTRAL STATIONS	16085 / 17550	92	4 / 5	80	20 / 22	91	35 / 38	92	135 / 168	80	1217 / 1509	81	14621 / 15710	93	53 / 98	54
AUTOMATIC DIALER	11052 / 11499	96	100 / 107	93	129 / 161	80	57 / 65	88	94 / 116	81	623 / 759	82	10009 / 10245	98	40 / 46	87
OTHER MEANS OF RECEIVING**	4359 / 4663	93	0 / 0	0	3 / 3	100	5 / 6	83	143 / 148	97	168 / 225	75	3997 / 4236	94	43 / 45	96
SUM ONLY/NO BREAKDOWN FOR MEANS OF RECEIVING	5374 / 6117	88	133 / 135	99	0 / 0	0	0 / 0	0	4 / 4	100	0 / 0	0	5215 / 5883	89	22 / 95	23
TOTAL	46344 / 50126	92	1047 / 1078	97	379 / 506	75	567 / 624	91	2228 / 2400	93	5737 / 6490	88	35973 / 38469	94	408 / 559	73

* THE TABLE IS BASED ON ALL DEPARTMENTS WHICH PROVIDED NUMERICAL INFORMATION ABOUT TOTAL AND FALSE ALARMS FOR THE VARIOUS MEANS OF RECEIVING. (THEREFORE, DEPARTMENTS WITH MEANS OF RECEIVING OTHER THAN DISPLAYS ARE INCLUDED, WHERE APPLICABLE.)

** PRINTING RECEIVING SYSTEM DATA WERE COMBINED WITH "OTHER" DATA BECAUSE ONLY 8 DEPARTMENTS REPORTED HAVING THIS SYSTEM.

Table 5-1.   NUMBER OF DEPARTMENTS PER KIND OF SUBSCRIBER.   (TAKEN FROM QUESTION 5.   (IF "YES" TO QUESTION 1)   (NUMBER OF DEPARTMENTS)
ABOUT HOW MANY "DIRECT-TO-POLICE" TIE-INS DOES EACH KIND OF SUBSCRIBER HAVE ON YOUR DEPARTMENT'S ALARM DISPLAYS?)

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
FINANCIAL INSTITUTIONS	271	91	8	73	36	92	40	93	79	93	69	92	26	90	13	81
JEWELRY STORES	130	44	2	18	2	5	15	35	49	58	57	76	3	10	2	12
SMALL BUSINESSES (OTHER THAN JEWELRY STORES)	184	62	3	27	12	31	23	53.	64	75	62	83	5	17	15	94
LARGE BUSINESSES (OTHER THAN JEWELRY STORES)	155	52	4	36	8	21	15	35	52	61	60	80	8	28	8	50
SCHOOLS	54	18	3	27	1	3	6	14	18	21	17	23	2	7	7	44
RESIDENCES	88	30	1	9	8	21	6	14	26	31	33	44	3	10	11	69
OTHER	99	33	2	18	7	18	7	16	30	35	29	39	17	59	7	44
UNKNOWN NO. OF SUBSCRIBERS	5	2	3	27	0	0	0	0	0	0	2	3	0	0	0	0
NO ANSWER	7	2	0	0	0	0	1	2	2	2	3	4	1	3	0	0
TOTALS	993	334	26	235	74	191	113	262	320	376	332	444	65	224	63	394

Table 5-2.   OF ALL SUBSCRIBERS REPORTED, PERCENTAGES OF EACH TYPE.   (NUMBER OF SUBSCRIBERS)

DEPARTMENT TYPE

RESPONSE	STATE		COUNTY		CITY 1-9		City 10-49		City 50+		50 LARGEST		TOWNSHIP	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
FINANCIAL INSTITUTIONS [n-3460]	256	51	112	51	104	23	348	22	1014	21	1555	68	71	16
JEWELRY STORES [n-416]	28	5	3	1	35	7	84	5	251	5	13	1	2	*
SMALL BUSINESSES** [n=3136]	114	21	31	14	182	38	653	41	1680	34	289	13	187	43
LARGE BUSINESSES** [n=1615]	104	19	12	5	100	21	218	14	942	19	189	8	50	12
SCHOOLS [n=344]	27	5	6	3	15	3	56	3	143	3	71	3	26	6
RESIDENCES [n=1082]	4	1	41	19	18	4	156	10	776	16	7	*	80	18
OTHER [n=405]	9	2	14	6	23	5	87	5	96	2	160	7	16	4
UNKNOWN [n=10,358]	542	100	219	99	477	101	1606	100	4902	100	2284	100	432	99

* Percentage is less than 1%.
** Other than Jewelry Stores.

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Table 5-3. DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS. (TAKEN FROM QUESTION 5.)

A) FINANCIAL INSTITUTIONS

RESPONSE	ALL DEPARTMENT TYPES	DEPARTMENT TYPE						
		STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	12.7	32.0	3.1	2.6	4.4	14.7	59.8	5.5
MINIMUM	1	1	1	1	1	1	1	1
MAXIMUM	205	52	19	7	10	80	205	18
MEDIAN	5	40	2	2	4	11	52	4

Table 5-4. DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS. (TAKEN FROM QUESTION 5.)

B) JEWELRY STORES

RESPONSE	ALL DEPARTMENT TYPES	DEPARTMENT TYPE						
		STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	3.2	14.0	1.5	2.3	1.7	4.4	4.3	1.0
MINIMUM	1	3	1	1	1	1	3	1
MAXIMUM	50	25	2	8	5	50	6	1
MEDIAN	2	14	2	1	1	3	4	1

Table 5-5. DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS. (TAKEN FROM QUESTION 5.)

C) SMALL BUSINESSES (OTHER THAN JEWELRY STORES)

RESPONSE	ALL DEPARTMENT TYPES	DEPARTMENT TYPE						
		STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	17.0	38.0	2.6	7.9	10.2	27.1	57.8	12.5
MINIMUM	1	2	1	1	1	1	3	2
MAXIMUM	300	100	12	28	35	300	218	50
MEDIAN	8	12	2	4	7	17	22	7

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Table 5-6.   DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS.   (TAKEN FROM QUESTION 5.)

D) LARGE BUSINESSES (OTHER THAN JEWELRY STORES)

RESPONSE

				DEPARTMENT TYPE				
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	10.4	26.0	1.5	6.7	4.2	15.7	23.6	6.3
MINIMUM	1	4	1	1	1	1	1	2
MAXIMUM	100	60	3	52	28	100	90	12
MEDIAN	5	20	1	2	2	10	17	6

Table 5-7.   DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS.   (TAKEN FROM QUESTION 5.)

E) SCHOOLS

RESPONSE

				DEPARTMENT TYPE				
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	6.4	9.0	6.0	2.5	3.1	8.4	35.5	3.6
MINIMUM	1	1	6	1	1	1	22	1
MAXIMUM	60	16	6	9	12	60	49	5
MEDIAN	3	10	6	1	2	3	36	4

Table 5-8.   DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS.   (TAKEN FROM QUESTION 5.)

F) RESIDENCES

RESPONSE

				DEPARTMENT TYPE				
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	12.3	4.0	5.1	3.0	6.0	23.5	2.3	7.3
MINIMUM	1	4	1	1	1	1	2	1
MAXIMUM	290	4	18	7	47	290	3	48
MEDIAN	3	4	3	3	4	4	2	3

Table 5-9. DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS. (TAKEN FROM QUESTION 5.)

G) OTHER TYPES OF SUBSCRIBERS

RESPONSE	ALL DEPARTMENT TYPES	DEPARTMENT TYPE						
		STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	4.1	4.5	1.9	3.3	2.9	3.3	9.4	2.3
MINIMUM	1	4	1	1	1	1	1	1
MAXIMUM	27	5	5	16	21	11	27	6
MEDIAN	2	5	1	1	2	2	5	2

Table 5-10. DESCRIPTIVE STATISTICS FOR KINDS OF SUBSCRIBERS TO DEPARTMENT'S ALARM DISPLAYS. (TAKEN FROM QUESTION 5.)

H) ALL SUBSCRIBERS

RESPONSE	ALL DEPARTMENT TYPES	DEPARTMENT TYPE						
		STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
MEAN	36.5	67.7	5.6	11.3	19.3	70.0	81.5	27.0
MINIMUM	1	1	1	1	1	7	1	2
MAXIMUM	481	253	30	127	64	470	481	125
MEDIAN	17	40	3	4	12	49	64	18

Table 6. 6. (IF "YES" TO QUESTION 1) DOES YOUR DEPARTMENT NOW LIMIT, OR MAY HAVE TO LIMIT IN THE FUTURE, THE NUMBER OF SUBSCRIBERS YOU CAN ACCEPT FOR "DIRECT-TO-POLICE" TIE-INS?

RESPONSE	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
DO/WILL LIMIT	117	39	7	64	7	18	9	21	26	31	42	56	23	79	3	19
DO NOT/WILL NOT LIMIT	178	60	4	36	31	79	33	77	58	68	33	44	6	21	13	81
NO ANSWER	3	1	0	0	1	3	1	2	1	1	0	0	0	0	0	0
TOTALS	298	100	11	100	39	100	43	100	85	100	75	100	29	100	16	100

Table 7. 7. (IF "YES" TO QUESTION 6) WE MUST LIMIT THE NUMBER OF SUBSCRIBERS FOR "DIRECT-TO-POLICE" TIE-INS FOR THE FOLLOWING REASONS. (MARK X BY EACH ITEM THAT APPLIES).

RESPONSE	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LIMITED SPACE FOR PANELS	95	81	4	57	7	100	5	56	23	38	36	86	18	78	2	67
LIMITED PERSONNEL FOR MONITORING PANELS	54	46	2	29	2	29	5	56	8	31	20	48	15	65	2	67
TOO MANY FALSE ALARMS	58	50	3	43	2	29	4	44	14	54	21	50	12	52	2	67
EACH ALARM SYSTEM MAY NEED ITS OWN KIND OF DISPLAY	34	29	1	14	4	57	3	33	4	15	11	26	10	43	1	33
INADEQUATE SERVICING BY ALARM COMPANIES	22	19	1	14	0	0	1	11	6	23	7	17	7	30	0	0
POSSIBLE COMPETITION WITH CENTRAL STATIONS	19	16	0	0	2	29	1	11	0	0	8	19	8	35	0	0
OTHER REASONS	20	17	2	29	1	14	0	0	5	19	2	5	10	43	0	0
TOTALS	302	258	13	186	18	258	19	211	60	230	105	251	80	346	7	234

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Table 8. 8. (IF "YES" TO QUESTION 1) WHAT PROBLEMS HAVE YOU HAD, IF ANY, WITH THE DISPLAYS THEMSELVES? (MARK X BY EACH ITEM THAT APPLIES)

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
NO PROBLEMS	105	35	2	18	19	49	28	65	25	29	13	17	13	45	5	31
DISPLAYS ARE TOO LARGE	56	19	3	27	2	5	5	12	18	21	19	25	5	17	4	25
TOO MANY DIFFERENT TYPES OF ALARM SIGNALS	100	34	4	36	8	21	6	14	32	38	33	44	12	41	5	31
NO WAY TO TELL WHEN AN ALARM SYSTEM IS ON OR OFF	26	9	2	18	0	0	1	2	9	11	6	8	6	21	2	12
DEPARTMENT CANT TEST ALARM SYSTEM AUTOMATICALLY	93	31	3	27	3	8	9	21	29	34	35	47	10	34	4	25
FREQUENT COMPONENT FAILURES	71	24	4	36	6	15	3	7	18	21	25	33	10	34	5	31
OTHER	55	18	2	18	8	21	6	14	15	18	16	21	5	17	3	19
NO ANSWER	4	1	1	9	1	3	0	0	0	0	1	1	0	0	1	6
TOTALS	510	171	21	189	47	122	58	135	146	172	148	196	61	209	29	180

DEPARTMENT TYPE

Table 9. FIVE-YEAR OUTLOOK FOR "DIRECT-TO-POLICE" TIE-IN SERVICE BY DEPARTMENTS. (TAKEN FROM QUESTIONS 1,9. Q.1. DOES YOUR DEPARTMENT NOW HAVE ONE OR MORE DISPLAYS FOR "DIRECT-TO-POLICE" BURGLAR ALARMS FROM BANKS, SAVINGS AND LOANS, OR OTHER BUSINESSES? Q.9. WILL YOUR DEPARTMENT BE LIKELY TO PROVIDE A SERVICE OF "DIRECT-TO-POLICE" TIE-INS WITHIN THE NEXT 5 YEARS?)

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
WILL HAVE IN FUTURE:																
HAVE NOW	187	42	6	13	24	31	29	35	56	63	48	59	14	31	10	40
DONT HAVE NOW/NO MEANS OF RECEIVING ALARMS	29	6	3	6	5	6	14	17	1	1	1	1	2	4	3	12
DONT HAVE NOW/RECEIVE ALARMS BY OTHER MEANS	5	1	0	0	1	1	1	1	0	0	1	1	1	2	1	4
NO ANSWER ABOUT PRESENT STATUS	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
WILL NOT HAVE IN FUTURE:																
HAVE NOW	77	17	4	9	13	17	9	11	18	20	18	22	13	29	2	8
DONT HAVE NOW/NO MEANS OF RECEIVING ALARMS	91	20	31	66	23	30	19	23	3	3	2	2	9	20	4	16
DONT HAVE NOW/RECEIVE ALARMS BY OTHER MEANS	10	2	0	0	4	5	1	1	0	0	1	1	3	7	1	4
NO ANSWER ABOUT PRESENT STATUS	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0
UNKNOWN ABOUT FUTURE:																
HAVE NOW	7	2	0	0	0	0	0	0	2	2	3	4	2	4	0	0
DONT HAVE NOW/NO MEANS OF RECEIVING ALARMS	2	0	1	2	0	0	1	1	0	0	0	0	0	0	0	0
DONT HAVE NOW/RECEIVE ALARMS BY OTHER MEANS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NO ANSWER ABOUT PRESENT STATUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NO ANSWER ABOUT FUTURE:																
HAVE NOW	27	6	1	2	2	3	5	6	9	10	6	7	0	0	4	16
DONT HAVE NOW/NO MEANS OF RECEIVING ALARMS	6	1	0	0	4	5	2	2	0	0	0	0	0	0	0	0
DONT HAVE NOW/RECEIVE ALARMS BY OTHER MEANS	2	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
NO ANSWER ABOUT PRESENT STATUS	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Have In Future		Will Not Have In Future		Unknown About Future		No Answer About Future	
	#	%	#	%	#	%	#	%
State (n=47)	9	19	36	77	1	2	1	2
County (n=77)	30	38	41	53	0	0	6	8
City 1-9 (n=83)	45	54	29	35	1	1	8	9
City 10-49 (n=89)	57	64	21	23	2	2	9	10
City 50+ (n=81)	50	61	21	25	3	4	7	8
50 largest cities (n=45)	17	37	25	56	2	4	1	2
Township (n=25)	14	56	7	28	0	0	4	16
TOTAL (n=447)	222	49	180	39	9	2	36	7

Table 10. 10. DO YOU USE NIGHT VISION EQUIPMENT IN YOUR DEPARTMENT?

RESPONSE

	ALL DEPARTMENT TYPES		DEPARTMENT TYPE STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
DO USE	52	12	14	30	4	5	0	0	1	1	11	14	22	49	0	0
DO NOT USE	393	88	32	68	72	94	83	100	88	99	70	86	23	51	25	100
NO ANSWER	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 11. 11. (IF "YES" TO QUESTION 10) MARK X BY EACH OF THE FOLLOWING KINDS OF NIGHT VISION EQUIPMENT THAT YOU USE IN YOUR DEPARTMENT.

RESPONSE

	ALL DEPARTMENT TYPES		DEPARTMENT TYPE STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1	14	27	3	21	0	0	0	0	0	0	4	36	7	32	0	0
2	31	60	9	64	2	50	0	0	0	0	5	45	15	68	0	0
3	15	29	4	29	1	25	0	0	1	100	3	27	6	27	0	0
4	14	27	4	29	1	25	0	0	0	0	3	27	6	27	0	0
5	2	4	2	14	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	76	147	22	157	4	100	0	0	1	100	15	135	34	154	0	0

KEY:

1: NIGHT VISION SCOPES SUITABLE FOR RIFLES (CAN ALSO BE HAND-HELD WHEN NEEDED)
2: HAND-HELD PASSIVE IMAGE INTENSIFIER (NIGHTSCOPE) NOT SUITABLE FOR RIFLE MOUNTING
3: HAND-HELD INFRARED DEVICE WHICH IS NOT SUITABLE FOR RIFLE MOUNTING
4: LOW-LIGHT LEVEL (CLOSED CIRCUIT) TV
5: OTHER

* PERCENTAGES ARE BASED ON THOSE DEPARTMENTS WHICH HAD AT LEAST ONE TYPE OF NIGHT VISION EQUIPMENT.

Table 12. 12. DOES YOUR DEPARTMENT HAVE ANY PROBLEMS WITH ANY OF THESE NIGHT VISION DEVICES?

RESPONSE

DEPARTMENT TYPE

	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
YES	15	29	3	21	1	25	0	0	0	0	4	36	7	32	0	0
NO	36	69	11	79	3	75	0	0	1	100	7	64	14	64	0	0
UNKNOWN/EVALUATION BEING CONDUCTED	1	2	0	0	0	0	0	0	0	0	0	0	1	5	0	0
TOTALS	52	100	14	100	4	100	0	0	1	100	11	100	22	101	0	0

Table 12/13. PROBLEMS WITH NIGHT VISION DEVICES. (Q. 12. (IF "YES" TO QUESTION 10) DOES YOUR DEPARTMENT HAVE ANY PROBLEMS WITH ANY OF THESE NIGHT VISION DEVICES? Q. 13. (IF "YES" TO QUESTION 12) MARK X FOR EACH PROBLEM YOU HAVE HAD FOR EACH KIND OF EQUIPMENT.)

PROBLEMS OF ALL DEPARTMENT TYPES

	1		2		3		4	
	#	%	#	%	#	%	#	%
POOR IMAGE QUALITY	2	14	4	13	1	7	1	7
DIFFICULT TO CHOOSE THE APPROPRIATE LENS	0	0	2	6	0	0	1	7
REGULAR LENSES CANT BE USED WITH NIGHT VISION DEVICES	2	14	4	13	0	0	1	7
DEVICE IS TOO DELICATE FOR NORMAL USE	0	0	0	0	0	0	1	7
POOR RELIABILITY	0	0	1	3	0	0	1	7
OTHER	2	14	6	19	3	20	3	21
NO PROBLEMS	10	71	20	65	12	80	11	79
UNKNOWN/EVALUATION BEING CONDUCTED	1	7	1	3	0	0	0	0
NUMBER OF DEPARTMENTS WITH EQUIPMENT	14		31		15		14	

KEY:

1: NIGHT VISION SCOPE SUITABLE FOR RIFLE AND HAND USE
2: HAND-HELD NIGHTSCOPE NOT SUITABLE FOR RIFLE
3: HAND-HELD INFRARED DEVICE NOT SUITABLE FOR RIFLE
4: LOW-LIGHT LEVEL TV

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Table 14-1. PREDICTIONS FOR PURCHASING NIGHT VISION DEVICES WITHIN THE NEXT FIVE YEARS. (TAKEN FROM QUESTION 14. WHAT NIGHT VISION DEVICES, IF ANY, WILL YOUR DEPARTMENT BE LIKELY TO BUY IN THE NEXT 5 YEARS?)

	DEPARTMENT TYPE															
RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
WILL PROBABLY BUY	176	39	30	64	19	25	13	16	33	37	45	56	33	73	3	12
WILL PROBABLY NOT BUY ANY	256	57	17	36	57	74	65	78	53	60	32	40	11	24	21	84
UNKNOWN	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
NO ANSWER	14	3	0	0	1	1	5	6	3	3	3	4	1	2	1	4
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 14-2. WHAT NIGHT VISION DEVICES, IF ANY, WILL YOUR DEPARTMENT BE LIKELY TO BUY IN THE NEXT 5 YEARS? (MARK X BY EACH ITEM THAT APPLIES)

	DEPARTMENT TYPE															
RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1	84	48	20	67	7	37	10	77	14	42	21	47	10	30	2	67
2	67	38	11	37	6	32	4	31	11	33	17	38	16	48	2	67
3	39	22	3	10	2	11	4	31	13	39	10	22	5	15	2	67
4	89	51	17	57	7	37	4	31	10	30	28	62	22	67	1	33
5	7	4	2	7	1	5	0	0	1	3	2	4	1	3	0	0
TOTALS	286	163	53	178	23	122	22	170	49	147	78	173	54	163	7	234

KEY:

1: NIGHT VISION SCOPE SUITABLE AS RIFLE AND HAND SCOPE
2: HAND-HELD PASSIVE IMAGE INTENSIFIER (NIGHTSCOPE) NOT SUITABLE FOR RIFLE MOUNTING
3: HAND-HELD INFRARED DEVICE NOT SUITABLE FOR RIFLE MOUNTING
4: LOW-LIGHT LEVEL (CLOSED CIRCUIT) TV
5: OTHER

* PERCENTAGES ARE BASED ON THOSE DEPARTMENTS WHICH WILL PROBABLY BUY AT LEAST ONE TYPE OF NIGHT VISION EQUIPMENT WITHIN THE NEXT FIVE YEARS.

Table 14/11/10-1.   COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED NIGHT VISION DEVICES.   (TAKEN FROM QUESTIONS 10, 11, 14.)

A) NIGHT VISION SCOPE SUITABLE AS RIFLE AND HAND SCOPE

RESPONSE	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	5	1	2	4	0	0	0	0	0	0	1	1	2	4	0	0
USE NOW/WILL NOT BUY MORE IN FUTURE	8	2	1	2	0	0	0	0	0	0	3	4	4	9	0	0
USE NOW/NO ANSWER ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	78	17	17	36	7	9	10	12	14	16	20	25	8	18	2	8
DO NOT USE NOW/WILL NOT BUY IN FUTURE	339	76	26	55	68	88	68	82	72	81	53	65	30	67	22	88
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	13	3	0	0	1	1	5	6	3	3	3	4	0	0	1	4
NO ANSWER ABOUT PRESENT/WILL BUY IN FUTURE	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0
NO ANSWER ABOUT PRESENT/WILL NOT BUY IN FUTURE	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy		Will Not Buy		Unknown About Future Purchase		No Answer About Future Purchase	
	#	%	#	%	#	%	#	%
State (n=47)	20	42	27	57	0	0	0	0
County (n=77)	7	9	69	89	0	0	1	1
City 1-9 (n=83)	10	12	68	82	0	0	5	6
City 10-49 (n=89)	14	16	72	81	0	0	3	3
City 50+ (n=81)	21	26	56	69	1	1	3	4
50 largest cities (n=45)	10	22	34	76	0	0	1	2
Township (n=25)	2	8	22	88	0	0	1	4
TOTAL (n=447)	84	18	348	78	1	0	14	3

Table 14/11/10-2.   COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED NIGHT VISION DEVICES. (TAKEN FROM QUESTIONS 10, 11, 14.)

B)   HAND-HELD PASSIVE IMAGE INTENSIFIER (NIGHTSCOPE) NOT SUITABLE FOR RIFLE MOUNTING

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES NO.	%	STATE NO.	%	COUNTY NO.	%	CITY (1-9 OFFICERS) NO.	%	CITY (10-49 OFFICERS) NO.	%	CITY (50 OR MORE OFFICERS) NO.	%	FIFTY LARGEST CITIES NO.	%	TOWNSHIP NO.	%
USE NOW/WILL BUY MORE MORE IN FUTURE	10	2	6	13	1	1	0	0	0	0	0	0	3	7	0	0
USE NOW/WILL NOT BUY FUTURE	21	5	3	6	1	1	0	0	0	0	5	6	12	27	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	57	13	5	11	5	6	4	5	11	12	17	21	13	29	2	8
DO NOT USE NOW/WILL NOT BUY IN FUTURE	342	77	32	68	68	88	74	89	75	84	55	68	16	36	22	88
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	14	3	0	0	1	1	5	6	3	3	3	4	1	2	1	4
NO ANSWER ABOUT PRESENT/ WILL NOT BUY IN FUTURE	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy #	%	Will Not Buy #	%	Unknown About Future Purchase #	%	No Answer About Future Purchase #	%
State (n=47)	11	24	36	76	0	0	0	0
County (n=77)	6	7	70	90	0	0	1	1
City 1-9 (n=83)	4	5	74	89	0	0	5	6
City 10-49 (n=89)	11	12	75	84	0	0	3	3
City 50+ (n=81)	17	21	60	74	1	1	3	4
50 largest cities (n=45)	16	36	28	63	0	0	1	2
Township (n=25)	2	8	22	88	0	0	1	4
TOTAL (n=447)	67	15	365	82	1	0	14	3

Table 14/11/10-3. COMPARISON FOR FUTURE PURCHASES WITH PRESENTLY-USED NIGHT VISION DEVICES. (TAKEN FROM QUESTIONS 10, 11, 14.)

C) HAND-HELD INFRARED DEVICE NOT SUITABLE FOR RIFLE MOUNTING

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	4	1	1	2	1	1	0	0	0	0	1	1	1	2	0	0
USE NOW/WILL NOT BUY MORE IN FUTURE	11	2	3	6	0	0	0	0	1	1	2	2	5	11	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	35	8	2	4	1	1	4	5	13	15	9	11	4	9	2	8
DO NOT USE NOW/WILL NOT BUY IN FUTURE	380	85	40	85	73	95	74	89	72	81	65	80	34	76	22	88
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	14	3	0	0	1	1	5	6	3	3	3	4	1	2	1	4
NO ANSWER ABOUT PRESENT/ WILL NOT BUY IN FUTURE	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy		Will Not Buy		Unknown About Future Purchase		No Answer About Future Purchase	
	#	%	#	%	#	%	#	%
State (n=47)	3	6	44	93	0	0	0	0
County (n=77)	2	2	74	96	0	0	1	1
City 1-9 (n=83)	4	5	74	89	0	0	5	6
City 10-49 (n=89)	13	15	73	82	0	0	3	3
City 50+ (n=81)	10	12	67	82	1	1	3	4
50 largest cities (n=45)	5	11	39	87	0	0	1	2
Township (n=25)	2	8	22	88	0	0	1	4
TOTAL (n=447)	39	9	393	87	1	0	14	3

Table 14/11/10-4.   COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED NIGHT VISION DEVICES.   (TAKEN FROM QUESTIONS 10, 11, 14.)

D)   LOW-LIGHT LEVEL (CLOSED CIRCUIT) TV

RESPONSE	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	9	2	3	6	0	0	0	0	0	0	2	2	4	9	0	0
USE NOW/WILL NOT BUY MORE IN FUTURE	5	1	1	2	1	1	0	0	0	0	1	1	2	4	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	80	18	14	30	7	9	4	5	10	11	26	32	18	40	1	4
DO NOT USE NOW/WILL NOT BUY IN FUTURE	336	75	28	60	67	87	74	89	76	85	48	59	20	44	23	92
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	14	3	0	0	1	1	5	6	3	3	3	4	1	2	1	4
NO ANSWER ABOUT PRESENT/WILL NOT BUY IN FUTURE	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy		Will Not Buy		Unknown About Future Purchase		No Answer About Future Purchase	
	#	%	#	%	#	%	#	%
State (n=47)	17	36	30	64	0	0	0	0
County (n=77)	7	9	69	89	0	0	1	1
City 1-9 (n=83)	4	5	74	89	0	0	5	6
City 10-49 (n=89)	10	11	76	85	0	0	3	3
City 50+ (n=81)	28	34	49	60	1	1	3	4
50 largest cities (n=45)	22	49	22	48	0	0	1	2
Township (n=25)	1	4	23	92	0	0	1	4
TOTAL (n=447)	89	20	343	76	1	0	14	3

Table 15.   15.   DOES YOUR DEPARTMENT USE CLOSED CIRCUIT TV WHICH REQUIRES DAYLIGHT OR ARTIFICIAL ILLUMINATION?

RESPONSE

| | ALL DEPARTMENT TYPES | | STATE | | COUNTY | | DEPARTMENT TYPE | | | | | | FIFTY LARGEST CITIES | | TOWNSHIP | |
| | | | | | | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | | | | |
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE CCTV	116	26	21	45	9	12	5	6	18	20	30	37	32	71	1	4
DO NOT USE CCTV	329	74	26	55	67	87	78	94	70	79	51	63	13	29	24	96
NO ANSWER	2	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 16.   16.   (IF "YES" TO QUESTION 15) IN WHICH OF THE FOLLOWING WAYS DO YOU USE CLOSED CIRCUIT TV IN YOUR DEPARTMENT? (MARK X BY EACH ITEM THAT APPLIES)

RESPONSE

| | ALL DEPARTMENT TYPES | | STATE | | COUNTY | | DEPARTMENT TYPE | | | | | | FIFTY LARGEST CITIES | | TOWNSHIP | |
| | | | | | | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | | | | |
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
CHECKING ON PRISONERS	43	37	1	5	5	56	3	60	7	39	12	40	14	44	1	100
POLICE LINE-UPS	21	18	3	14	1	11	3	60	3	17	5	17	6	19	0	0
OTHER SURVEILLANCE WITHIN DEPARTMENTS BUILDINGS	43	37	10	48	4	44	1	20	4	22	12	40	12	37	0	0
WATCHING ACTIVITIES DURING CIVIL DISTURBANCES	43	37	9	43	3	33	2	40	3	17	8	27	18	56	0	0
SURVEILLANCE OF HIGH CRIME DISTRICTS	10	9	3	14	0	0	0	0	2	11	1	3	4	12	0	0
TRAINING	79	68	17	81	6	67	3	60	10	56	19	63	24	75	0	0
OTHER	37	32	6	29	3	33	3	60	6	33	11	37	8	25	0	0
TOTALS	276	238	49	234	22	244	15	300	35	195	68	227	86	268	1	100

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Table 17.

17. (IF "YES" TO QUESTION 15) TELL US ABOUT ANY PROBLEMS THAT YOUR DEPARTMENT HAS WITH THIS CLOSED CIRCUIT TV SYSTEM.

RESPONSE	ALL DEPARTMENT TYPES NO.	%	STATE NO.	%	COUNTY NO.	%	CITY (1-9 OFFICERS) NO.	%	CITY (10-49 OFFICERS) NO.	%	CITY (50 OR MORE OFFICERS) NO.	%	FIFTY LARGEST CITIES NO.	%	TOWNSHIP NO.	%
IMAGE QUALITY	7	6	2	10	0	0	1	20	3	17	0	0	1	3	0	0
ILLUMINATION REQUIREMENT	6	5	0	0	1	11	1	20	0	0	2	7	2	6	0	0
VIEWING RANGE/REMOTE CONTRL																
SCAN/NEED MORE EQUIPMENT	6	5	3	14	1	11	0	0	0	0	0	0	2	6	0	0
PORTABILITY	5	4	2	10	0	0	0	0	0	0	1	3	2	6	0	0
INTERCHANGEABILITY OF COMPONENTS/SYSTEMS	2	2	0	0	0	0	0	0	0	0	0	0	2	6	0	0
MAINTENANCE: COST/ TIME/PARTS	8	7	1	5	0	0	0	0	1	6	2	7	4	12	0	0
BREAKDOWN/RELIABILITY	7	6	0	0	2	22	0	0	1	6	3	10	1	3	0	0
(AREA UNSPECIFIED)	4	3	1	5	0	0	0	0	1	6	1	3	1	3	0	0
TRAING OF PERSONNEL																
OTHER	13	11	3	14	0	0	1	20	2	11	3	10	3	9	1	100
NORMAL WEAR AND TEAR	3	3	1	5	0	0	0	0	0	0	1	3	1	3	0	0
FEW PROBLEMS	3	3	0	0	0	0	1	20	0	0	1	3	1	3	0	0
NEW EQUIPMENT: NO PROBLEMS																
SO FAR/UNABLE TO EVALUATE	4	3	1	5	0	0	0	0	2	11	1	3	0	0	0	0
BATTERIES	2	2	1	5	0	0	0	0	0	0	1	3	0	0	0	0
CAMERA: BREAKDOWN/ DURABILITY	2	2	1	5	0	0	0	0	0	0	0	0	1	3	0	0
LACK OF STANDARDS FOR PURCHASING	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	100
NO PROBLEMS	30	26	5	24	1	11	1	20	5	28	11	37	7	22	0	0
NO ANSWER	32	28	4	19	6	67	1	20	5	28	7	23	9	28	0	0
TOTALS	135	117	25	121	11	122	6	120	20	113	34	112	37	113	2	200

DEPARTMENT TYPE

Table 18.   18.   DOES YOUR DEPARTMENT HAVE A VIDEO TAPE RECORDER?

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
DO HAVE VTR	156	35	32	68	13	17	7	8	20	22	43	53	40	89	1	4
DO NOT HAVE VTR	291	65	15	32	64	83	76	92	69	78	38	47	5	11	24	96
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Tab13 18/15.   COMPARISON OF STATUS OF CLOSED CIRCUIT TV SYSTEMS AND VIDEO TAPE RECORDERS IN DEPARTMENTS. (TAKEN FROM QUESTIONS 15, 18)

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE CCTV/HAVE VTR	101	23	19	40	5	6	4	5	13	15	28	35	32	71	0	0
USE CCTV/DO NOT HAVE VTR	15	3	2	4	4	5	1	1	5	6	2	2	0	0	1	4
DO NOT USE CCTV/HAVE VTR	53	12	13	28	7	9	3	4	6	7	15	19	8	18	1	4
DO NOT USE CCTV/DO NOT HAVE VTR	276	62	13	28	60	78	75	90	64	72	36	44	5	11	23	92
NO ANSWER ABOUT CCTV/ HAVE VTR	2	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 19.

19. (IF "YES" TO QUESTION 18) HOW DOES YOUR DEPARTMENT USE THE VIDEO TAPE RECORDER? (MARK X BY EACH ITEM THAT APPLIES)

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
WITH CCTV	74	47	17	53	4	31	4	57	9	45	22	51	18	45	0	0
POLICE LINE-UPS	30	19	3	9	2	15	1	14	5	25	11	26	8	20	0	0
RECORDING TRAFFIC VIOLATIONS	42	27	9	28	1	8	3	43	7	35	13	30	8	20	1	100
COLLECTING EVIDENCE AT SCENE OF CRIME	76	49	12	37	7	54	3	43	16	80	21	49	16	40	1	100
TRAINING	134	86	30	94	9	69	4	57	13	65	39	91	38	95	1	100
OTHER	67	43	12	37	6	46	2	29	9	45	17	40	20	50	1	100
TOTALS	423	271	83	258	29	223	17	243	59	295	123	287	108	270	4	400

DEPARTMENT TYPE

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Table 20. 20. (IF "YES" TO QUESTION 18) WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT HAD WITH THE VIDEO TAPE RECORDER?

| RESPONSE | ALL DEPARTMENT TYPES | | DEPARTMENT TYPE | | | | | | | | | | | | |
| | | | STATE | | COUNTY | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | FIFTY LARGEST CITIES | | TOWNSHIP | |
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
IMAGE QUALITY	8	5	1	3	0	0	0	0	1	5	2	5	3	7	1	100
HEADS	5	3	1	3	0	0	0	0	0	0	1	2	3	7	0	0
BATTERIES/POWER SUPPLY	7	4	2	6	0	0	0	0	2	10	2	5	1	2	0	0
ILLUMINATION REQUIREMENT	3	2	0	0	0	0	0	0	0	0	1	2	2	5	0	0
PORTABILITY	8	5	3	9	0	0	0	0	0	0	3	7	2	5	0	0
INTERCHANGEABILITY OF COMPONENTS/SYSTEMS	8	5	3	9	0	0	0	0	0	0	3	7	2	5	0	0
MAINTENANCE: COST/ TIME/PARTS	7	4	2	6	0	0	0	0	0	0	3	7	2	5	0	0
BREAKDOWN/RELIABILITY (AREA UNSPECIFIED)	12	8	2	6	1	8	0	0	1	5	3	7	5	12	0	0
TRAINING OF PERSONNEL	7	4	1	3	0	0	0	0	1	5	3	7	2	5	0	0
OTHER	14	9	6	19	0	0	0	0	1	5	3	7	3	7	1	100
NORMAL WEAR AND TEAR	3	2	2	6	0	0	0	0	0	0	0	0	1	2	0	0
FEW PROBLEMS	3	2	2	6	0	0	0	0	0	0	1	2	0	0	0	0
NEW EQUIPMENT: NO PROBLEMS SO FAR/UNABLE TO EVALUATE	5	3	1	3	1	8	1	14	0	0	1	2	1	2	0	0
UNKNOWN: SERVICED BY VENDOR	1	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0
CAMERA: BREAKDOWN/ DURABILITY	3	2	0	0	1	8	0	0	0	0	0	0	2	5	0	0
LACK OF STANDARDS FOR PURCHASING	1	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
NO PROBLEMS	58	37	8	25	6	46	4	57	9	45	20	47	11	27	0	0
NO ANSWER	31	20	5	16	4	31	2	29	5	25	6	14	9	22	0	0
TOTALS	184	117	39	120	13	101	7	100	20	100	53	123	50	120	2	200

Table 21/15. 21. WILL YOUR DEPARTMENT BE LIKELY TO BUY (A) A CLOSED CIRCUIT TV SYSTEM REQUIRING DAYLIGHT OR ARTIFICIAL LIGHT, AND/OR (B) A VIDEO TAPE RECORDER IN THE NEXT 5 YEARS?

A) CLOSED CIRCUIT TV SYSTEM

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	71	16	15	32	4	5	2	2	10	11	17	21	23	51	0	0
USE NOW/WILL NOT BUY MORE IN FUTURE	34	8	5	11	4	5	2	2	6	7	11	14	6	13	0	0
USE NOW/UNKNOWN ABOUT FUTURE	2	0	0	0	0	0	0	0	1	1	0	0	1	2	0	0
USE NOW/NO ANSWER ABOUT FUTURE	9	2	1	2	1	1	1	1	1	1	2	2	2	4	1	4
DO NOT USE NOW/WILL BUY IN FUTURE	92	21	12	26	15	19	9	11	19	21	27	33	7	16	3	12
DO NOT USE NOW/WILL NOT BUY IN FUTURE	221	49	13	28	48	62	67	81	49	55	21	26	3	7	20	80
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	6	1	1	2	2	3	0	0	0	0	2	2	1	2	0	0
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	10	2	0	0	2	3	2	2	2	2	1	1	2	4	1	4
NO ANSWER ABOUT PRESENT/ WILL BUY IN FUTURE	2	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy		Will Not Buy		Unknown About Future Purchase		No Answer About Future Purchase	
	#	%	#	%	#	%	#	%
State (n=47)	27	58	18	39	1	2	1	2
County (n=77)	20	25	52	67	2	3	3	4
City 1-9 (n=83)	11	13	69	83	0	0	3	3
City 10-49 (n=89)	30	33	55	62	1	1	3	3
City 50+ (n=81)	44	54	32	40	2	2	3	3
50 largest cities (n=45)	30	67	9	20	2	4	4	8
Township (n=25)	3	12	20	80	0	0	2	8
TOTAL (n=447)	165	37	255	57	8	1	19	4

Table 21/18.

21. WILL YOUR DEPARTMENT BE LIKELY TO BUY (A) A CLOSED CIRCUIT TV SYSTEM REQUIRING DAYLIGHT OR ARTIFICIAL LIGHT, AND/OR (B) A VIDEO TAPE RECORDER IN THE NEXT 5 YEARS?

B) VIDEO TAPE RECORDER

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
HAVE NOW/WILL BUY MORE IN FUTURE	91	20	23	49	8	10	1	1	6	7	22	27	30	67	1	4
HAVE NOW/WILL NOT BUY MORE IN FUTURE	46	10	7	15	4	5	4	5	9	10	18	22	4	9	0	0
HAVE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
HAVE NOW/NO ANSWER ABOUT FUTURE	18	4	2	4	1	1	2	2	5	6	3	4	5	11	0	0
DO NOT HAVE NOW/WILL BUY IN FUTURE	84	19	9	19	13	17	11	13	22	25	22	27	3	7	4	16
DO NOT HAVE NOW/WILL NOT BUY IN FUTURE	186	42	5	11	44	57	62	75	40	45	14	17	2	4	19	76
DO NOT HAVE NOW/UNKNOWN ABOUT FUTURE	5	1	0	0	2	3	0	0	2	2	1	1	0	0	0	0
DO NOT HAVE NOW/NO ANSWER ABOUT FUTURE	16	4	1	2	5	6	3	4	5	6	1	1	0	0	1	4
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy #	%	Will Not Buy #	%	Unknown About Future Purchase #	%	No Answer About Future Purchase #	%
State (n=47)	32	68	12	26	0	0	3	6
County (n=77)	21	27	48	62	2	3	6	7
City 1-9 (n=83)	12	14	66	80	0	0	5	6
City 10-49 (n=89)	28	32	49	55	2	2	10	12
City 50+ (n=81)	44	54	32	39	1	1	4	5
50 largest cities (n=45)	33	74	6	13	1	2	5	11
Township (n=25)	5	20	19	76	0	0	1	4
TOTAL (n=447)	175	39	232	52	6	1	34	8

Tabl 22-1.   INDICATION OF CAMERA USAGE. (TAKEN FROM QUESTION 22. WHAT KINDS OF CAMERAS, IF ANY, ARE NOW USED BY YOUR DEPARTMENT?)

| | ALL DEPARTMENT TYPES | | DEPARTMENT TYPE | | | | | | | | | | | | |
| | | | STATE | | COUNTY | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | FIFTY LARGEST CITIES | | TOWNSHIP | |
RESPONSE	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE CAMERAS	403	90	47	100	70	91	57	69	83	93	80	99	45	100	21	84
DO NOT USE CAMERAS	43	10	0	0	7	9	25	30	6	7	1	1	0	0	4	16
NO ANSWER	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	63	100	89	100	81	100	45	100	25	100

Table 22-2.   22. WHAT KINDS OF CAMERAS, IF ANY, ARE NOW USED BY YOUR DEPARTMENT? (MARK X BY EACH ITEM THAT APPLIES)

| | ALL DEPARTMENT TYPES | | DEPARTMENT TYPE | | | | | | | | | | | | |
| | | | STATE | | COUNTY | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | FIFTY LARGEST CITIES | | TOWNSHIP | |
RESPONSE	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1	142	35	33	70	10	14	3	5	11	13	43	54	41	91	1	5
2	188	47	34	72	17	24	4	7	27	33	57	71	44	98	5	24
3	86	21	16	34	8	11	2	4	12	14	23	29	23	51	2	10
4	249	62	31	66	27	39	15	26	47	57	75	94	44	98	10	48
5	195	48	31	66	30	43	21	37	36	43	36	45	34	76	7	33
6	327	81	33	70	56	80	39	68	69	83	69	86	45	100	16	76
7	79	20	13	28	8	11	4	7	7	8	24	30	23	51	0	0
TOTALS	1266	314	191	406	156	222	88	154	209	251	327	409	254	565	41	196

KEY:
1: MOVIE CAMERA
2: 35 MM SINGLE-LENS REFLEX
3: 35 MM RANGE-FINDER
4: 4" x 5" FORMAT
5: ROLL FILM CAMERA WITH AUTOMATIC FLASHBULB ADVANCER AND EXPOSURE CONTROL
6: CAMERA WHICH USES SPECIAL FILM FOR RAPID AUTOMATIC PROCESSING OF PICTURES
7: OTHER

* PERCENTAGES ARE BASED ON THOSE DEPARTMENTS WHICH HAD AT LEAST ONE TYPE OF CAMERA.

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Table 23-1.   23.   WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?

A) MOVIE CAMERAS

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
FILM PURCHASING AND PROCESSING	7	5	1	3	0	0	0	0	1	9	1	2	4	10	0	0
LENSES/LENS MOUNTS	6	4	1	3	0	0	0	0	1	9	1	2	3	7	0	0
POWER SUPPLY	4	3	1	3	0	0	0	0	0	0	0	0	3	7	0	0
MAINTENANCE: COST/ TIME/PARTS	1	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
BREAKDOWN/RELIABILITY (AREA UNSPECIFIED)	3	2	1	3	0	0	0	0	0	0	0	0	2	5	0	0
TRAINING OF PERSONNEL	11	8	4	12	1	10	0	0	0	0	2	5	3	7	0	0
LIMITED APPLICATION/ REPLACEMENT NEEDED	5	4	0	0	1	10	0	0	1	9	1	2	3	7	0	0
OTHER	6	4	1	3	0	0	0	0	0	0	2	5	3	7	0	0
NORMAL WEAR AND TEAR	5	4	1	3	0	0	0	0	0	0	1	2	3	7	0	0
NO PROBLEMS	80	56	20	61	7	70	2	67	5	45	26	60	20	49	0	0
NO ANSWER	24	17	5	15	2	20	1	33	3	27	9	21	3	7	1	100
TOTALS	152	108	35	106	11	110	3	100	11	99	44	101	47	113	1	100

DEPARTMENT TYPE

Table 23-2. 23. WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?

B) 35 MM SINGLE-LENS REFLEX

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
FILM PURCHASING AND PROCESSING	4	2	1	3	1	6	1	25	1	4	0	0	0	0	0	0
LENSES/LENS MOUNTS	4	2	0	0	0	0	0	0	0	0	1	2	3	7	0	0
MIRROR	3	2	1	3	0	0	0	0	0	0	0	0	2	5	0	0
LIGHT METER	4	2	1	3	1	6	0	0	0	0	1	2	1	2	0	0
SHUTTER	2	1	0	0	0	0	0	0	0	0	0	0	2	5	0	0
FILM ADVANCER	5	3	2	6	0	0	0	0	0	0	2	4	1	2	0	0
POWER OF FLASH UNIT/ ILLUMINATION REQUIREMENT	2	1	1	3	0	0	0	0	0	0	1	2	0	0	0	0
FLASH UNIT SYNCHRONIZATION/ RELIABILITY OF UNIT,BULBS	6	3	1	3	0	0	0	0	0	0	3	5	2	5	0	0
MAINTENANCE: COST/ TIME/PARTS/CLEANING	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0
ENLARGEMENT OF PICTURES/ NEGATIVE SIZE,GRAIN	7	4	1	3	0	0	1	25	1	4	1	2	3	7	0	0
TRAINING PERSONNEL/COMPLEX EQUIP/NEED FREQUENT USE	16	9	6	18	3	18	0	0	3	11	1	2	3	7	0	0
OTHER	2	1	1	3	0	0	0	0	1	4	0	0	0	0	0	0
NORMAL WEAR AND TEAR	2	1	1	3	0	0	0	0	0	0	1	2	0	0	0	0
NEW EQUIPMENT: NO PROBLEMS SO FAR/UNABLE TO EVALUATE	2	1	0	0	0	0	0	0	1	4	1	2	0	0	0	0
NO PROBLEMS	100	53	16	47	6	35	3	75	12	44	32	56	27	61	4	80
NO ANSWER	40	21	6	18	6	35	0	0	8	30	15	26	4	9	1	20
TOTALS	200	107	39	116	17	100	5	125	27	101	59	105	48	110	5	100

DEPARTMENT TYPE

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Table 23-3.   23.   WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?

C)   35 MM RANGE-FINDER

| RESPONSE | ALL DEPARTMENT TYPES | | DEPARTMENT TYPE | | | | | | | | | | | | | |
| | | | STATE | | COUNTY | | CITY (1-9 OFFICERS) | | CITY (10-49 OFFICERS) | | CITY (50 OR MORE OFFICERS) | | FIFTY LARGEST CITIES | | TOWNSHIP | |
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
RANGE FINDER/CLOSE UPS	4	5	1	6	0	0	0	0	0	0	2	9	1	4	0	0
LIGHT METER	1	1	0	0	0	0	0	0	0	0	0	0	1	4	0	0
SHUTTER	3	3	1	6	0	0	0	0	0	0	1	4	1	4	0	0
FILM ADVANCER	2	2	0	0	0	0	1	50	0	0	0	0	1	4	0	0
FLASH UNIT SYNCHRONIZATION/ RELIABILITY OF UNIT,BULBS	3	3	1	6	0	0	1	50	0	0	0	0	1	4	0	0
BREAKDOWN/RELIABILITY (AREA UNSPECIFIED)	2	2	0	0	0	0	1	50	0	0	0	0	1	4	0	0
ENLARGEMENT OF PICTURES/ NEGATIVE SIZE,GRAIN	1	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0
TRAINING PERSONNEL/COMPLEX EQUIP/NEED FREQUENT USE	8	9	1	6	3	37	1	50	3	25	0	0	0	0	0	0
LIMITED APPLICATION/ REPLACEMENT NEEDED	2	2	0	0	0	0	0	0	1	8	1	4	0	0	0	0
NO PROBLEMS	46	53	7	44	4	50	0	0	5	42	13	57	15	65	2	100
NO ANSWER	20	23	6	37	1	12	0	0	3	25	7	30	3	13	0	0
TOTALS	92	104	17	105	8	99	4	200	13	108	24	104	24	102	2	100

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Table 23-4.　　23. WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?

D) 4" x 5" FORMAT

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
FILM PURCHASING AND PROCESSING	7	3	0	0	0	0	1	7	1	2	2	3	3	7	0	0
LENSES/LENS MOUNTS	2	1	0	0	0	0	0	0	1	2	0	0	1	2	0	0
RANGE FINDER/CLOSE UPS	8	3	1	3	0	0	0	0	1	2	6	8	0	0	0	0
LIGHT METER	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
SHUTTER	7	3	1	3	0	0	0	0	0	0	5	7	1	2	0	0
FILM ADVANCER	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
FLASH UNIT SYNCHRONIZATION/ RELIABILITY OF UNIT, BULBS	5	2	1	3	0	0	0	7	0	0	2	3	2	5	0	0
SIZE AND WEIGHT	26	10	4	13	1	4	1	7	7	15	8	11	5	11	0	0
MAINTENANCE: COST/ TIME/PARTS/CLEANING	3	1	1	3	1	4	0	0	1	2	0	0	0	0	0	0
BREAKDOWN/RELIABILITY (AREA UNSPECIFIED)	5	2	0	0	1	4	0	0	1	2	2	3	1	2	0	0
TRAINING PERSONNEL/COMPLEX EQUIP/NEED FREQUENT USE	19	8	2	6	2	7	1	7	7	15	3	4	3	7	1	10
LIMITED APPLICATION/ REPLACEMENT NEEDED	5	2	0	0	0	0	0	0	0	0	3	4	1	2	1	10
OTHER	9	4	0	0	1	4	1	7	1	2	2	3	4	9	0	0
NORMAL WEAR AND TEAR	4	2	2	6	0	0	0	0	0	0	0	0	2	5	0	0
FEW PROBLEMS	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
NO PROBLEMS	114	46	13	42	14	52	6	40	17	36	39	52	19	43	6	60
NO ANSWER	59	24	6	19	8	30	6	40	14	30	16	21	6	14	3	30
TOTALS	276	111	33	104	28	105	16	108	51	108	89	120	48	109	11	110

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Table 23-5.

23. WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?

E) ROLL FILM CAMERA WITH AUTOMATIC FLASHBULB ADVANCER AND EXPOSURE CONTROL

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
FILM PURCHASING AND PROCESSING	6	3	0	0	2	7	0	0	2	6	1	3	0	0	1	14
LENSES/LENS MOUNTS	5	3	0	0	0	0	0	0	1	3	3	8	1	3	0	0
RANGE FINDER/CLOSE UPS	1	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0
LIGHT METER	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0
SHUTTER	5	3	3	10	0	0	0	0	0	0	2	6	0	0	0	0
FILM ADVANCER	6	3	4	13	0	0	0	0	1	3	1	3	0	0	0	0
POWER OF FLASH UNIT/ ILLUMINATION REQUIREMENT	12	6	1	3	1	3	0	0	3	8	4	11	3	9	0	0
FLASH UNIT SYNCHRONIZATION/ RELIABILITY OF UNIT,BULBS	16	8	5	16	1	3	0	0	1	3	3	8	5	15	1	14
BATTERIES/POWER SUPPLY	4	2	1	3	0	0	0	0	0	0	2	6	0	0	1	14
MAINTENANCE: COST/ TIME/PARTS/CLEANING	2	1	1	3	0	0	0	0	0	0	1	3	0	0	0	0
BREAKDOWN/RELIABILITY (AREA UNSPECIFIED)	6	3	1	3	0	0	0	0	0	0	1	3	0	0	0	0
ENLARGEMENT OF PICTURES/ NEGATIVE SIZE,GRAIN	8	4	0	0	2	7	0	0	1	3	2	6	4	12	0	0
TRAINING PERSONNEL/COMPLEX EQUIP/NEED FREQUENT USE	7	4	2	6	0	0	0	0	3	8	0	0	2	6	1	14
LIMITED APPLICATION/ REPLACEMENT NEEDED	8	4	0	0	1	3	0	0	4	11	2	6	2	6	0	0
OTHER	4	2	0	0	0	0	0	0	1	3	0	0	1	3	0	0
NORMAL WEAR AND TEAR	1	1	1	3	0	0	2	10	0	0	0	0	1	3	0	0
FEW PROBLEMS	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0
NO PROBLEMS	86	44	12	39	15	50	9	43	16	44	14	39	16	47	4	57
NO ANSWER	43	22	6	19	9	30	10	48	8	22	7	19	3	9	0	0
TOTALS	222	116	39	124	31	103	21	101	42	117	43	121	38	113	8	113

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Table 23-6. 23. WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?
F) CAMERA WHICH USES SPECIAL FILM FOR RAPID AUTOMATIC PROCESSING OF PICTURES

RESPONSE	ALL DEPARTMENT TYPES		DEPARTMENT TYPE STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
FILM: COST/QUALITY	18	6	1	3	2	4	2	5	3	4	4	6	5	11	1	6
ENVIRONMENTAL EFFECTS ON FILM STORAGE/PROCESSING	16	5	0	0	5	9	3	8	2	3	3	4	2	4	1	6
QUALITY OF REPRODUCTION: DETAIL/CONTRST/CONSISTNCY	22	7	1	3	4	7	1	3	5	7	3	4	7	16	1	6
SHUTTER	3	1	0	0	0	0	0	0	1	1	1	1	1	2	0	0
FLASH UNIT: POWER/RELIABILITY	9	3	2	6	1	2	1	3	2	3	1	1	2	4	0	0
ROLLERS	6	2	1	3	2	4	0	0	1	1	2	3	0	0	0	0
LACK OF NEGATIVES/ ENLARGEMENT/COPY PROBLEMS	18	6	2	6	2	4	4	10	5	7	3	4	1	2	1	6
EXPENSE(REASON UNSPECIFIED)	6	2	0	0	2	4	1	3	2	3	1	1	0	0	0	0
TRAINING OF PERSONNEL	5	2	2	6	0	0	0	0	1	1	0	0	2	4	0	0
LIMITED APPLICATION	8	2	1	3	1	2	3	8	2	3	1	1	0	0	0	0
OTHER	11	3	1	3	1	2	0	0	4	6	2	3	3	7	0	0
NORMAL WEAR AND TEAR	3	1	2	6	0	0	0	0	0	0	0	0	1	2	0	0
NEW EQUIPMENT: NO PROBLEMS SO FAR	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
MAINTENANCE: COST/TIME/ PARTS/CLEANING	6	2	1	3	1	2	0	0	0	0	3	4	0	0	1	6
BREAKDOWN/RELIABILITY (AREA UNSPECIFIED)	4	1	0	0	1	2	0	0	0	0	2	3	1	2	0	0
NO PROBLEMS	149	46	14	42	25	45	15	38	31	45	32	46	22	49	10	62
NO ANSWER	72	22	6	18	12	21	12	31	18	26	18	26	5	11	1	6
TOTALS	357	111	35	105	59	108	42	109	77	110	76	107	52	114	16	98

Table 23-7.

23. WHAT PROBLEMS, IF ANY, HAS YOUR DEPARTMENT NOTICED WITH THE CAMERAS YOU MARKED IN QUESTION 22?

G) OTHER TYPES OF CAMERAS

RESPONSE

	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
PROBLEMS CITED	27	34	1	8	4	50	0	0	3	43	10	42	9	39	0	0
NO PROBLEMS	20	25	6	46	1	12	1	25	0	0	6	25	6	26	0	0
NO ANSWER	32	41	6	46	3	37	3	75	4	57	8	33	8	35	0	0
TOTALS	79	100	13	100	8	100	4	100	7	100	24	100	23	100	0	100

Table 24-1. ESTIMATION OF CAMERA PURCHASES WITHIN THE NEXT FIVE YEARS. (TAKEN FROM QUESTION 24. WHICH OF THE FOLLOWING TYPES OF CAMERAS, IF ANY, WILL YOUR DEPARTMENT BE LIKELY TO BUY WITHIN THE NEXT 5 YEARS?)

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
WILL BUY CAMERAS	287	64	41	87	38	49	45	54	57	64	56	69	36	80	14	56
WILL NOT BUY ANY CAMERAS	148	33	6	13	35	45	36	43	31	35	21	26	9	20	10	40
UNKNOWN	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
NO ANSWER	11	2	0	0	4	5	2	2	1	1	4	5	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

Table 24-2. 24. WHICH OF THE FOLLOWING TYPES OF CAMERAS, IF ANY, WILL YOUR DEPARTMENT BE LIKELY TO BUY WITHIN THE NEXT 5 YEARS?

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1	81	28	14	34	5	13	5	11	16	28	20	36	14	39	7	50
2	119	41	23	56	10	26	7	16	19	33	29	52	27	75	4	29
3	35	12	7	17	4	11	4	9	7	12	7	12	5	14	1	7
4	72	25	12	29	7	18	5	11	17	30	12	21	16	44	3	21
5	78	27	18	44	11	29	11	24	9	16	11	20	15	42	3	21
6	118	41	17	41	15	39	27	60	19	33	18	32	19	53	3	21
7	47	16	9	22	5	13	1	2	5	9	12	21	14	39	1	7
TOTALS	550	190	100	243	57	149	60	133	92	161	109	194	110	306	22	156

KEY:
1: MOVIE CAMERA
2: 35 MM SINGLE-LENS REFLEX
3: 35 MM RANGE-FINDER
4: 4" x 5" FORMAT
5: ROLL FILM CAMERA WITH AUTOMATIC FLASHBULB ADVANCER AND EXPOSURE CONTROL
6: CAMERA WHICH USES SPECIAL FILM FOR RAPID AUTOMATIC PROCESSING OF PICTURES
7: OTHER

* PERCENTAGES ARE BASED ON THOSE DEPARTMENTS WHICH WILL PROBABLY BUY AT LEAST ONE TYPE OF CAMERA WITHIN THE NEXT FIVE YEARS.

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Table 24/22-1. COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED CAMERAS. (TAKEN FROM QUESTIONS 22, 24.)
A) MOVIE CAMERA

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	36	8	11	23	1	1	0	0	2	2	8	10	13	29	1	4
USE NOW/WILL NOT BUY MORE IN FUTURE	101	23	22	47	8	10	3	4	8	9	32	40	28	62	0	0
USE NOW/NO ANSWER ABOUT FUTURE	5	1	0	0	1	1	0	0	1	1	3	4	0	0	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	45	10	3	6	4	5	5	6	14	16	12	15	1	2	6	24
DO NOT USE NOW/WILL NOT BUY IN FUTURE	253	57	11	23	60	78	73	88	64	72	25	31	3	7	17	68
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	5	1	0	0	3	4	1	1	0	0	1	1	0	0	0	0
NO ANSWER ABOUT PRESENT OR FUTURE	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	63	100	89	100	81	100	45	100	25	100

SUMMARY

Department Type	Will Buy		Will Not Buy		Unknown About Future Purchase		No Answer About Future Purchase	
	#	%	#	%	#	%	#	%
State (n=47)	14	29	33	70	0	0	0	0
County (n=77)	5	6	68	88	0	0	4	5
City 1-9 (n=83)	5	6	76	92	0	0	2	2
City 10-49 (n=89)	16	18	72	81	0	0	1	1
City 50+ (n=81)	20	25	57	71	0	0	4	5
50 largest cities (n=45)	14	31	31	69	0	0	0	0
Township (n=25)	7	28	17	68	1	4	0	0
TOTAL (n=447)	81	18	354	80	1	0	11	2

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Table 24/22-2.

COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED CAMERAS.   (TAKEN FROM QUESTIONS 22, 24.)

B) 35 MM SINGLE-LENS REFLEX

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	78	17	19	40	5	6	0	0	5	6	22	27	27	60	0	0
USE NOW/WILL NOT BUY MORE IN FUTURE	105	23	15	32	11	14	4	5	22	25	31	38	17	38	5	20
USE NOW/NO ANSWER ABOUT FUTURE	5	1	0	0	1	1	0	0	0	0	4	5	0	0	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	41	9	4	9	5	6	7	8	14	16	7	9	0	0	4	16
DO NOT USE NOW/WILL NOT BUY IN FUTURE	211	47	9	19	52	68	70	84	47	53	17	21	1	2	15	60
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	5	1	0	0	3	4	1	1	1	1	0	0	0	0	0	0
NO ANSWER ABOUT PRESENT OR FUTURE	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

DEPARTMENT TYPE	WILL BUY #	%	WILL NOT BUY #	%	UNKNOWN ABOUT FUTURE PURCHASE #	%	NO ANSWER ABOUT FUTURE PURCHASE #	%
State (n=47)	23	49	24	51	0	0	0	0
County (n=77)	10	12	63	82	0	0	4	5
City 1-9 (n=83)	7	8	74	89	0	0	2	2
City 10-49 (n=89)	19	22	69	78	0	0	1	1
City 50+ (n=81)	29	36	48	59	0	0	4	5
50 Largest cities (n=45)	27	60	18	40	1	4	0	0
Township (n=25)	4	16	20	80	0	0	0	0
TOTAL (n=447)	119	26	316	70	1	0	11	2

Table 24/22-3.
COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED CAMERAS. (TAKEN FROM QUESTIONS 22, 24.)

C) 35 MM RANGE-FINDER

RESPONSE

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE								
							CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	15	3	6	13	0	0	1	1	0	0	3	4	5	11	0	0
USE NOW/WILL NOT BUY MORE IN FUTURE	68	15	10	21	7	9	1	1	12	13	18	22	18	40	2	8
USE NOW/NO ANSWER ABOUT FUTURE	3	1	0	0	1	1	0	0	0	0	2	2	0	0	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	20	4	1	2	4	5	3	4	7	8	4	5	0	0	1	4
DO NOT USE NOW/WILL NOT BUY IN FUTURE	332	74	30	64	62	81	76	92	69	78	52	64	22	49	21	84
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	7	2	0	0	3	4	1	1	1	1	2	2	0	0	0	0
NO ANSWER ABOUT PRESENT OR FUTURE	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

DEPARTMENT Type	WILL BUY #	%	WILL NOT BUY #	%	UNKNOWN ABOUT FUTURE PURCHASE #	%	NO ANSWER ABOUT FUTURE PURCHASE #	%
State (n=47)	7	15	40	85	0	0	0	0
County (n=77)	4	5	69	90	0	0	4	5
City 1-9 (n=83)	4	5	77	93	0	0	2	2
City 10-49 (n=89)	7	8	81	91	0	0	1	1
City 50+ (n=81)	7	9	70	86	0	0	4	4
50 largest cities (n=45)	5	11	40	89	0	0	0	0
Township (n=25)	1	4	23	92	1	4	0	0
TOTAL (n=447)	35	7	400	89	1	0	11	3

Table 24/22-4.
COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED CAMERAS. (TAKEN FROM QUESTIONS 22, 24.)

D) 4" x 5" FORMAT

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	52	12	10	21	3	4	2	2	8	9	12	15	16	36	1	4
USE NOW/WILL NOT BUY MORE IN FUTURE	189	42	21	45	22	29	13	16	38	43	59	73	28	62	8	32
USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
USE NOW/NO ANSWER ABOUT FUTURE	7	2	0	0	2	3	0	0	1	1	4	5	0	0	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	20	4	2	4	4	5	3	4	9	10	0	0	0	0	2	8
DO NOT USE NOW/WILL NOT BUY IN FUTURE	174	39	14	30	44	57	63	76	33	37	6	7	1	2	13	52
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	3	1	0	0	2	3	1	1	0	0	0	0	0	0	0	0
NO ANSWER ABOUT PRESENT OR FUTURE	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

DEPARTMENT TYPE	WILL BUY		WILL NOT BUY		UNKNOWN ABOUT FUTURE PURCHASE		NO ANSWER ABOUT FUTURE PURCHASE	
	#	%	#	%	#	%	#	%
State (n=47)	12	25	35	75	0	0	0	0
County (n=77)	7	9	66	86	0	0	4	6
City 1-9 (n=83)	5	6	76	92	0	0	2	2
City 10-49 (n=89)	17	19	71	80	0	0	1	1
City 50+ (n=81)	12	15	65	80	0	0	4	5
50 largest cities (n=45)	16	36	29	64	0	0	0	0
Township (n=25)	3	12	21	84	1	4	0	0
TOTAL (n=447)	72	16	363	81	1	0	11	3

Table 24/22-5.

COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED CAMERAS. (TAKEN FROM QUESTIONS 22, 24.)

E) ROLL FILM CAMERA WITH AUTOMATIC FLASHBULB ADVANCER AND EXPOSURE CONTROL

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	56	13	17	36	6	8	3	4	8	9	7	9	14	31	1	4
USE NOW/WILL NOT BUY MORE IN FUTURE	131	29	14	30	21	27	17	20	27	30	26	32	20	44	6	24
USE NOW/NO ANSWER ABOUT FUTURE	8	2	0	0	3	4	1	1	1	1	3	4	0	0	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	22	5	1	2	5	6	8	10	1	1	4	5	1	2	2	8
DO NOT USE NOW/WILL NOT BUY IN FUTURE	226	51	15	32	41	53	53	64	52	58	40	49	10	22	15	60
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	2	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
NO ANSWER ABOUT PRESENT OR FUTURE	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

DEPARTMENT TYPE	WILL BUY #	%	WILL NOT BUY #	%	UNKNOWN ABOUT FUTURE PURCHASE #	%	NO ANSWER ABOUT FUTURE PURCHASE #	%
STATE (n=47)	18	38	29	62	0	0	0	0
COUNTY (n=77)	11	14	62	80	0	0	4	5
CITY 1-9 (n=83)	11	14	70	84	0	0	2	2
CITY 10-49 (n=89)	9	10	79	88	0	0	1	1
CITY 50+ (n=81)	11	14	66	81	0	0	4	5
50 largest cities (n=45)	15	33	30	66	0	0	0	0
TOWNSHIP (n=25)	3	12	21	84	1	4	0	0
TOTAL (n=447)	78	18	357	80	1	0	11	2

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Table 24/22-6.

COMPARISON OF FUTURE PURCHASES WITH PRESENTLY-USED CAMERAS. (TAKEN FROM QUESTIONS 22, 24.)

F) CAMERA WHICH USES SPECIAL FILM FOR RAPID AUTOMATIC PROCESSING OF PICTURES

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
USE NOW/WILL BUY MORE IN FUTURE	79	18	13	28	10	13	8	10	15	17	12	15	19	42	2	8
USE NOW/WILL NOT BUY MORE IN FUTURE	240	54	20	43	43	56	30	36	53	60	54	67	26	58	14	56
USE NOW/NO ANSWER ABOUT FUTURE	8	2	0	0	3	4	1	1	1	1	3	4	0	0	0	0
DO NOT USE NOW/WILL BUY IN FUTURE	39	9	4	9	5	6	19	23	4	4	6	7	0	0	1	4
DO NOT USE NOW/WILL NOT BUY IN FUTURE	77	17	10	21	15	19	24	29	16	18	5	6	0	0	7	28
DO NOT USE NOW/UNKNOWN ABOUT FUTURE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
DO NOT USE NOW/NO ANSWER ABOUT FUTURE	2	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
NO ANSWER ABOUT PRESENT OR FUTURE	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTALS	447	100	47	100	77	100	83	100	89	100	81	100	45	100	25	100

SUMMARY

DEPARTMENT TYPE	WILL BUY		WILL NOT BUY		UNKNOWN ABOUT FUTURE PURCHASE		NO ANSWER ABOUT FUTURE PURCHASE	
	#	%	#	%	#	%	#	%
STATE (n=47)	17	37	30	64	0	0	0	0
COUNTY (n=77)	15	19	58	75	0	0	4	5
CITY 1-9 (n=83)	27	33	54	65	0	0	2	2
CITY 10-49 (n=89)	19	21	69	78	0	0	1	1
CITY 50+ (n=81)	18	22	59	73	0	0	4	5
50 largest cities (n=45)	19	42	26	58	0	0	0	0
TOWNSHIP (n=25)	3	12	21	84	1	4	0	0
TOTAL (n=447)	118	27	317	71	1	0	11	2

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Table 25

25. MARK X BY <u>EACH</u> ITEM BELOW THAT NEEDS <u>PERFORMANCE STANDARDS</u>. (MARK X BY "NONE" IF STANDARDS

ARE NOT NEEDED FOR ANY OF THE ITEMS.)

DEPARTMENT TYPE

RESPONSE	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
NONE OF THESE ITEMS NEED STANDARDS	163	36	21	45	29	38	45	54	29	33	20	25	9	20	10	40
GENERAL PURPOSE LOCKS	146	33	10	21	24	31	20	24	27	30	36	44	20	44	9	36
SPECIAL PURPOSE LOCKS FOR DETENTION CENTERS	125	28	7	15	24	31	19	23	27	30	28	35	18	40	2	8
PENETRATION-RESISTANT GLASS	182	41	20	43	27	35	16	19	42	47	41	51	25	56	11	44
SECURITY SCREENS AND GRILLS	184	41	10	21	34	44	26	31	43	48	38	47	20	44	13	52
NO ANSWER	16	4	2	4	0	0	3	4	1	1	5	6	5	11	0	0
TOTALS	816	183	70	149	138	179	129	155	169	189	168	208	97	215	45	180
	(n = 447)		(n = 47)		(n = 77)		(n = 83)		(n = 89)		(n = 81)		(n = 45)		(n = 25)	

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