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Authors

McCormack, Robert J., Jr

Moen, James L.

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SAN FRANCISCO'S MISSION POLICE DISTRICT:
A STUDY OF RESOURCE ALLOCATION

by
Robert J. McCormack, Jr.
James L. Moen

(Office of Law Enforcement Assistance Fellows)
School of Criminology
University of California
Berkeley, California 94720

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PREFACE

The accompanying study is the product of the fortuitous convergence of two separate, supported research endeavors. Since 1967, the undersigned have been involved in a N.A.S.A.-supported effort to apply technology to the contemporary problems of urban public order. This interest and support by N.A.S.A. made it possible to develop a working relationship with a number of separate urban policing systems in the nation. After a thorough analysis of the data obtained from these studies, the undersigned researchers developed a research program which would analyze the utilization data of the police system in an attempt to determine the reliability of the data which was presently being used. It has been recognized for some time that one of the most serious problems involved in the improvement of police operations has been the inadequacy of the existing data base. We recognize that significant changes in the data base are not going to be made in the near future in most municipalities. For example, despite its obvious inadequacies, no serious effort will be undertaken to eliminate or to radically revise the Uniform Crime Reporting system. The present study by McCormack and Moen attempted to determine what could be done if one tried to upgrade the quality of the existing data base through the analysis of uncoded data and the utilization of secondary data to test the reliability of the information. Recognizing that one might have to upgrade the existing data system by providing redundancies in the system, McCormack and Moen suggest the

utilization of two recording systems. We recognize this is a rather expensive way of improving the data base, but it is felt that the alternatives of completely redesigning the data base are both economically and organizationally infeasible at the present time. Our discussion with officers in various cities pointed up an additional problem; these discussions indicated that many of the variations which appear to be occurring were merely a function of bad reporting, or of problems such as full-capacity communication channel tie-ups. In other words, there can be a variety of reasons for variations within the data system. The present study attempted to isolate these variations and to determine (1) the frequency with which variations of a given duration occur, and (2) to determine whether a system could still be designed which would take the errors into account as a recognized source of variation.

Two career police officers, McCormack and Moen, who were enrolled as Office of Law Enforcement Assistance Fellows at the School of Criminology, agreed to undertake this portion of the research. The N.A.S.A. research staff welcomed the opportunity to assist and give support to these two individuals, for they had a unique understanding of the police system which was developed through their own years of experience in police work. This experience and background would permit them to participate in an existing police system and to analyze both the accuracy and the reliability of the data set which was being presently collected. This does not suggest either a criticism of the police system, nor that non-policemen are unable to evaluate the police system. Rather, it means simply that knowledgeable policemen can best evaluate the input data for its accuracy, since the objectives

and goals used when police collect information are going to have an effect upon the types of information which are received and the ways in which it is entered into the system. Experienced police officers who have lived with the system, so to speak, and who identify with police objectives and goals will be in a better position to determine whether or not there are, in fact, aberrations in the information-gathering system -- at least as these aberrations are judged by police standards. In other words, this study attempts to determine whether police information is invalid by its own standards.

This is the first study of its type which actually attempts to determine the utilization of policing time for a large number of activities, and which explicitly breaks out the so-called non-criminal activities of police officers into recognizable entities rather than grouping them simply as miscellaneous non-criminal. We feel that the information gathered from this study relating to the utilization of policemen, specifically relating to the types of activities performed, coupled with the information which measures the error in accumulating the data and measures the reliability, should allow improved planning and decision-making. Certainly, this should be true at least in the Mission District of the San Francisco Police Department.

Hopefully, similar studies will be undertaken by the Department itself and by other departments to determine better what their personnel are doing and thereby improve the quality of their work, and assist in the determination of the types of activities to be performed and the time to be spent on these activities.

It is obvious that all police agencies have various constraints on their resources. Unless these agencies gather information of the

type analyzed by McCormack and Moen and are able to analyze what it is costing to perform certain activities, their administrators cannot determine whether they wish to increase or decrease the quantity of a given type of activity which their personnel are presently performing. Without reliable information of the type analyzed in this study, police administrators will have no rational means for determining the alternative ways in which a police officer's time should be utilized.

Richard D. Hoffman
Assistant Research
Systems Analyst,
Center for Planning and
Development Research

Gordon E. Misner
Acting Associate Professor,
School of Criminology
and
Visiting Associate
Research Criminologist,
Center for Planning and
Development Research

UNIVERSITY OF CALIFORNIA
Berkeley, California 94720

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The authors wish to express their gratitude to Dr. Gordon E. Misner, the Graduate Fellows' advisor at the School of Criminology, for his assistance and guidance during the duration of the project, and to Professor Richard B. Hoffman, Visiting Research Systems Analyst at the Center for Planning and Development Research of the University of California, for his invaluable assistance in the analysis of the project's data.

This project could not have been possible without the wholehearted support which the researchers received from the San Francisco Police Department. It was conducted in an atmosphere of complete cooperation and freedom, and not once in its entire duration were attempts made to influence the study's progress or conclusions. The researchers would particularly thank Director Ford Long of the San Francisco Police Department Planning and

Research Bureau and his assistant, Michael Seybold, for their initial suggestions, which eventually gave this project its direction.

Finally, we would like to acknowledge the help and assistance of the officers of the Mission District of the San Francisco Police Department, particularly its Commanding Officer, Captain Phillip Kiely, who so graciously and patiently responded to our inquiries despite his full and busy schedule.

This is by no means a full and complete list of the individuals whose help and encouragement was so vital to the conclusion of this project. Advice and suggestions were solicited from many professors, students, and research specialists regarding the structuring of a suitable methodology; a critique of the project by other O.L.E.A. Fellows provided helpful insights gleaned from their own previous experiences; and assistance of the clerical staffs of the School of Criminology and the Center for Planning and Development Research in typing the final draft was almost beyond the call of duty. The authors would like to take this opportunity to thank them all.

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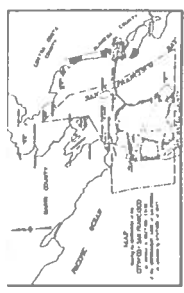
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PLAN
OF THE
CITY AND COUNTY OF
SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
CLIFFORD J. GEERTZ
CITY ENGINEER
1959



CHAPTER I

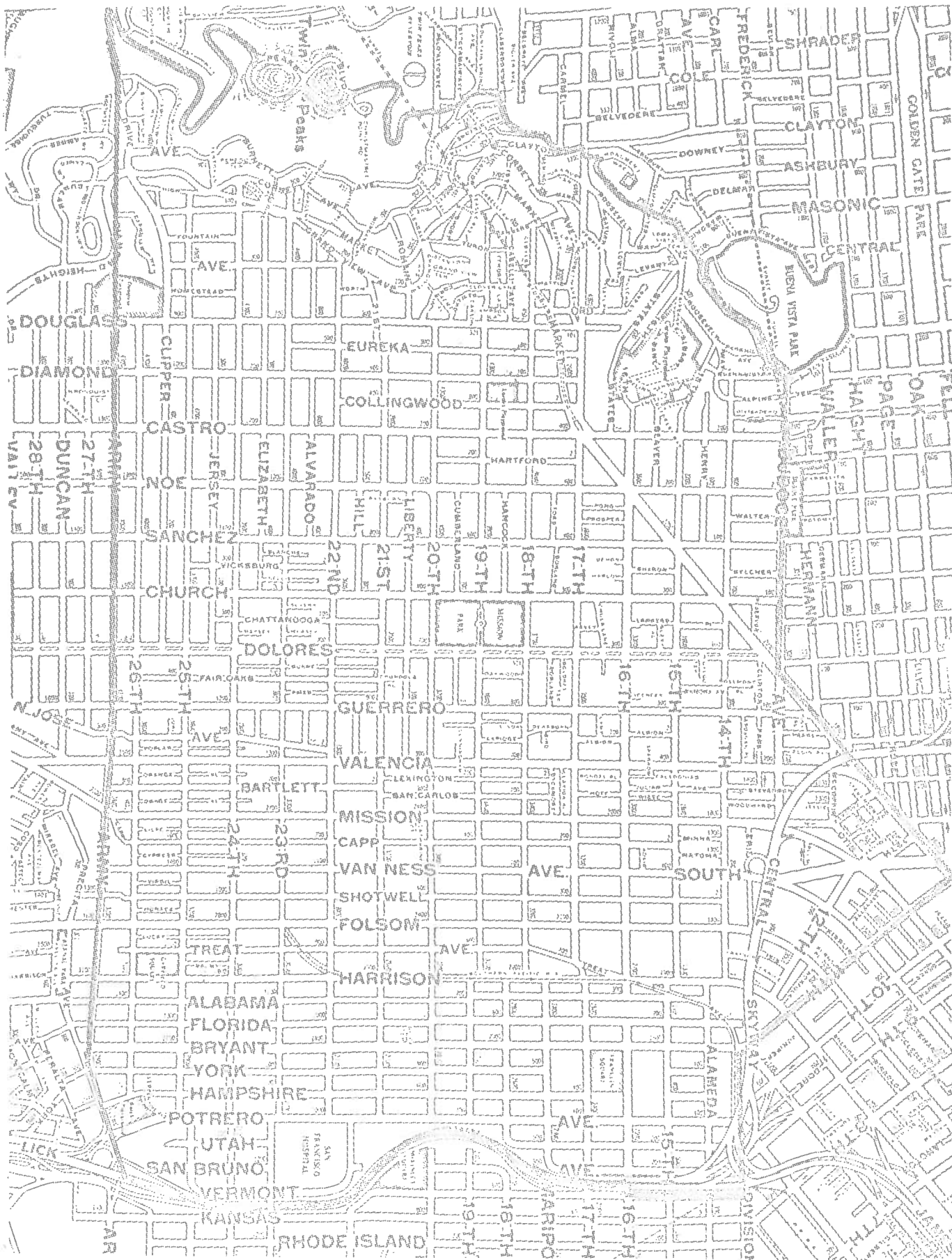
THE COMPOSITION OF THE MISSION DISTRICT

The Mission District in San Francisco is one of the nine subdivisions of the San Francisco Police Department (see Illus. #1). It is bordered by Army Street to the South, the Lick Expressway to the East; Buena Vista, Upper Terrace and Twin Peaks Blvd. on the West. The northern boundary meanders along Duboce Ave. in the north-western corner east to Market St., north along Market St. to 11th St., south on 11th St. to Division St., and east on Division St. to the Lick Expressway (see Illus. #2).

Within the confines of the District, several separate and distinct neighborhoods have emerged, each with its own cultural heritage, value systems and its own special needs and demands for police service.

MISSION STREET

Before discussing the characteristics of these several neighborhoods, it might be well to discuss for a moment the thoroughfare which is the lifeblood of the District, namely Mission St. This was at one time the main thoroughfare of the city and led to the sheltered walls of the famous Mission Dolores founded by Spanish missionaries in 1776. In 1850, in order to handle the increased traffic along the street to and from the Mission, an organization called the Mission Planks Road Company built a plank toll road along the Mission trail from Third St. to 16th St. and opened up "South of Market St." as a suburban living area for the pioneer city. "The Annals of San Francisco" a year or so later commented that "this plank road has proved of the greatest



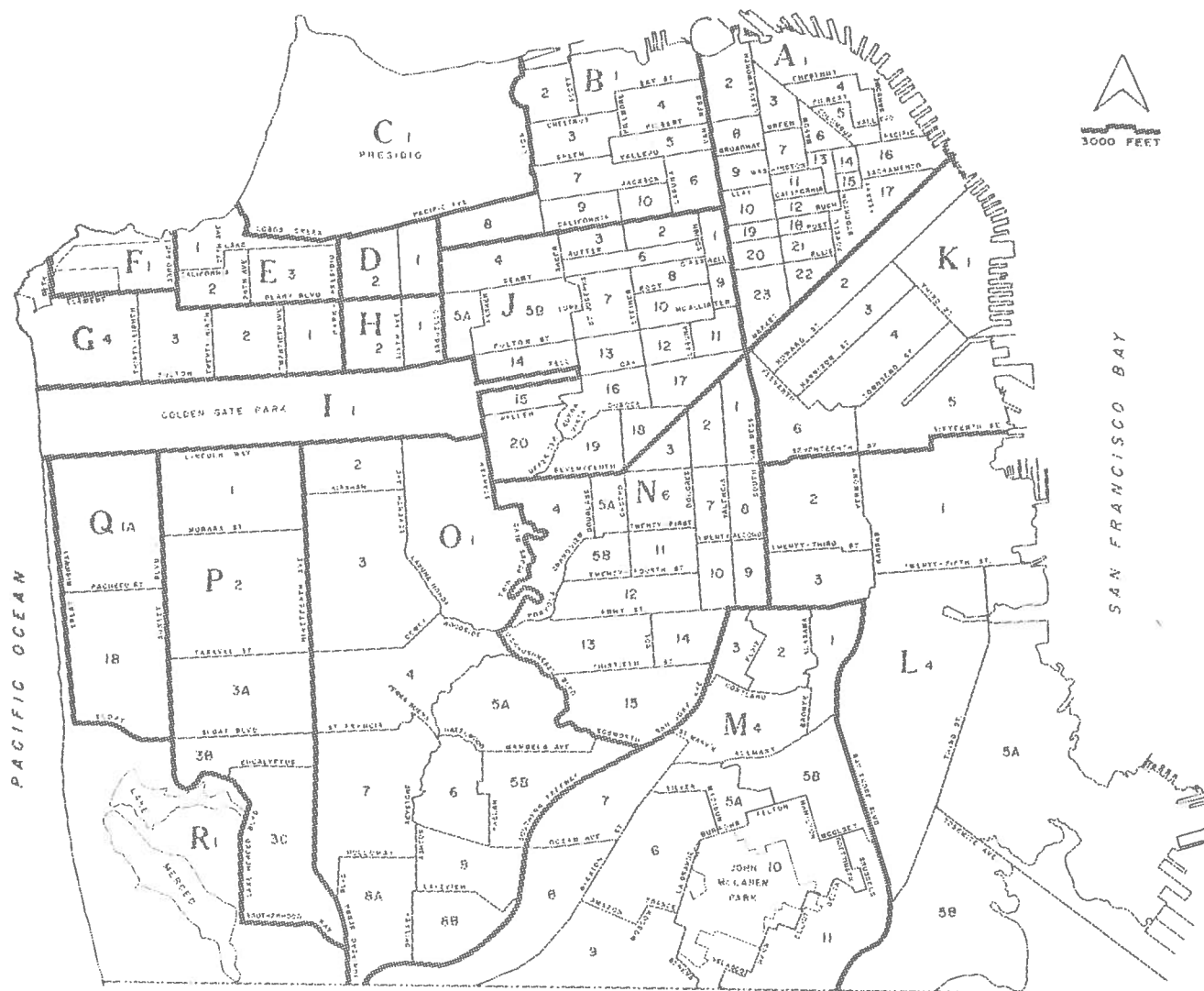
service to San Francisco, and the property through which it passes has increased immensely in value for building purposes. Formerly that property was at times nearly inaccessible, and on all occasions very difficult and troublesome to reach."¹

That was over one hundred years ago, and since then Mission St. has always been "South of Market's" big street. Mission Street and the surrounding area reached its pinnacle at the turn of the century, only to be destroyed by the great earthquake and fire in 1906. The Street never recovered its former status, and in fact has been in a steady state of decline as the business area of the city shifted north and east along Market Street.

Today Mission Street is a conglomeration of banks, department stores, markets, clothiers, restaurants and bars and is known to the residents as the "Miracle Mile." Business in the area is brisk despite the disruption caused by construction of a subway for the Bay Area Rapid Transit Corporation (BART). Pedestrian traffic during the day is composed primarily of shoppers, local working people and children on their way to and from school. As dusk approaches, however, the character of the street traffic changes as the bars and girlie shows in the vicinity of Mission and 16th Streets become the center of the night's activities. Mission Street and the surrounding area is the focal point of a dominant part of the demands for police service from the Mission Station and the leading area in the district for robberies, assaults, burglaries and drunks.

¹James Benet, A Guide to San Francisco and the Bay Region (New York: Random House), p. 212.

GOLDEN GATE



1960 CENSUS TRACTS

EAST OF MISSION STREET

Over eighty percent of San Francisco's Spanish-speaking population of 33,000 live in the area east of Mission St. between East 14th St. and Army Street. This, historically, was a Spanish community which clustered around Mission Dolores; however, about 100 years ago waves of migrating "yankees" overwhelmed, and to a large extent drove away, the Spanish-speaking residents of the area. In recent times Spanish-speaking peoples, primarily from South and Central America, Puerto Rico and Mexico have re-established their community in the "Mission." Many of these new San Franciscans are hampered by language and custom barriers, are lacking in education and are generally in the lowest economic strata of the city. According to the 1960 census figures, many of the families living in this area are subsisting on less than \$4,000 per year. The city's average per 100 families earning less than \$4,000 per year is 21. In census tract designated as N1 in Illustration #3, the number of families per 100 in this wage classification is 41 and over, the highest category used by the Census Bureau.² The city average per 100 population for adults with less than 9 years of education is 31. In census tracts L2, K6, N8 the number of adults per 100 population in this category is 50 to 59.³ In the category designated by the Census Bureau as "STRUCTURES DETERIORATING AND WITHOUT ADEQUATE PLUMBING PLUS DILAPIDATED STRUCTURES PER 100 STRUCTURES IN THE CENSUS TRACT, 1960," the city average is 5.1 structures. Census tracts K6 and L2 have "25.0 and over" per 100 structures and N8 is indicated as having 13.0

²San Francisco Department of City Planning, San Francisco Community Renewal Program, San Francisco Fact Book (Arthur D. Little, Inc.), p. 41.

³Ibid., 35.

to 24.9 structures per 100 in this condition.⁴

The San Francisco Department of City Planning in their report on a housing inventory in the city indicate that

public programs aimed at increasing the supply of low- and moderate-income housing have not had sufficient impact in view of the considerable need for these units. In an earlier report it was noted that only 331 units of 221(d)3 (moderate-income housing) and 1,277 units of public housing have been built since 1960. Over the past year, no new 221(d)3 or public housing units were completed in San Francisco, although there are about 400 such units currently under construction. Even including the units which will be finished this year, total construction of moderate- and low-income housing amounts to less than 2,000 units. This figure represents little more than four per cent of the need projected on the basis of the 45,000 households living in substandard housing in 1960.⁵

This report indicates that the housing situation in San Francisco generally, and particularly in the Mission District, is not likely to improve in the foreseeable future. In fact, the present overcrowded and dilapidated condition of the units will worsen. These housing conditions have already forced portions of the large juvenile population (approximately one-third of the total population of this area is under 18 years of age) into the streets and this will require adjustments in the patrol policy of the Mission Station, if the police are to be responsive to the social needs of the residents.

SIXTEENTH STREET

Sixteenth Street from Guerrero to South Van Ness comprises another neighborhood which, while overlapping the Latin American colony

⁴Ibid., 101.

⁵San Francisco Department of City Planning, Changes in the San Francisco Housing Inventory, 1967 (March, 1968), p. 31

previously discussed, has a character all its own. The business area of 16th St. is composed of run-down taverns, girlie shows and third-rate hotels. Their clientele are the many vagrants and alcoholics who inhabit the area, along with a small colony of American Indians and Samoans. The American Indian Center of San Francisco, located at 16th and Capp, is the focal point of Indian social activity and sponsors weekly dances and entertainment. Housing in the area for the most part is run-down, with the exception of one square block of Public Housing located between Valencia and Guerrero and 14th and 15th Streets. The most serious police problem in the area is handling the numerous drunks who frequent the bars and hotels. The drunk-related incidents, such as assaults, "rolls" and aided cases consume an inordinate proportion of patrol time, which the district can ill afford to expend.

TWENTY-FOURTH STREET

Twenty-fourth Street from Guerrero St. west to Grand View is known as "Noe Valley" and is the home of the large Irish-American population of the city. There is, in addition, a concentration of people of German extraction located in the neighborhood of 24th Street and Guerrero. The housing in the area is composed mostly of single-family dwellings with a sprinkling of multi-unit apartments housing between 5 to 19 families. The dwellings are for the most part older buildings in a good state of repair. According to the 1960 census, most of the families fall well below the city average of 21 per 100 with yearly incomes under \$4,000.⁶ Most of the police problems in the area are related to incidents involving young adults and juveniles engaged in auto thefts, assaults and

⁶San Francisco Fact Book, p. 41.

burglaries.

EUREKA VALLEY

The north-western quadrant of the district is called Eureka Valley and extends as far west as the summit of Twin Peaks. The neighborhood is primarily residential and very cosmopolitan, reflecting a cross-section of almost all the nationality groups indigenous to San Francisco, and a high portion of first-generation foreign-born. The main shopping and commercial area is located on Castro St. between 19th St. and Market. Housing consists mainly of multi-dwelling units, flats and private homes, with no public housing accommodations. The Department of City Planning notes that almost three-quarters of the city-wide construction of housing units in 1967 occurred in just four districts, of which the Twin Peaks area is one.⁷ There has been a tremendous increase of single, white-collar and professional, males and females renting the units recently constructed. These units are primarily studio and 1- or 2-bedroom apartments. Rentals are high and vary directly with their proximity to the summit of Twin Peaks.

The researchers felt the Mission District to be unique for this study because of the diversity one finds within its confines. The economics, and housing and education levels in the area cover the full spectrum of possibilities. The residents, including many foreign-born Chinese, Italians, Russians, and Spanish-speaking persons, and a smattering of Negroes in the area north of 14th St., give the district the aura of the "melting pot." Cultural differences account for the uniqueness

⁷Changes in the San Francisco Housing Inventory, 1967, p. 27.

of group life styles and present an interesting and challenging assignment for the men of the Mission Station. Responsiveness in the face of such wide diversity is the standard against which success in their task should be gauged.

CHAPTER II

MISSION STATION

The Mission District Station House is located on Valencia St. between 23rd and 24th Streets and its complement of 119 officers and men are responsible for handling the calls for police service which emanate from the residents of the area. The district is commanded by a Captain of Police, upon whom the initial responsibility for local police conditions rests. Assigned to assist him are 4 lieutenants, 17 sergeants and 97 patrolmen.

DEPLOYMENT OF PERSONNEL

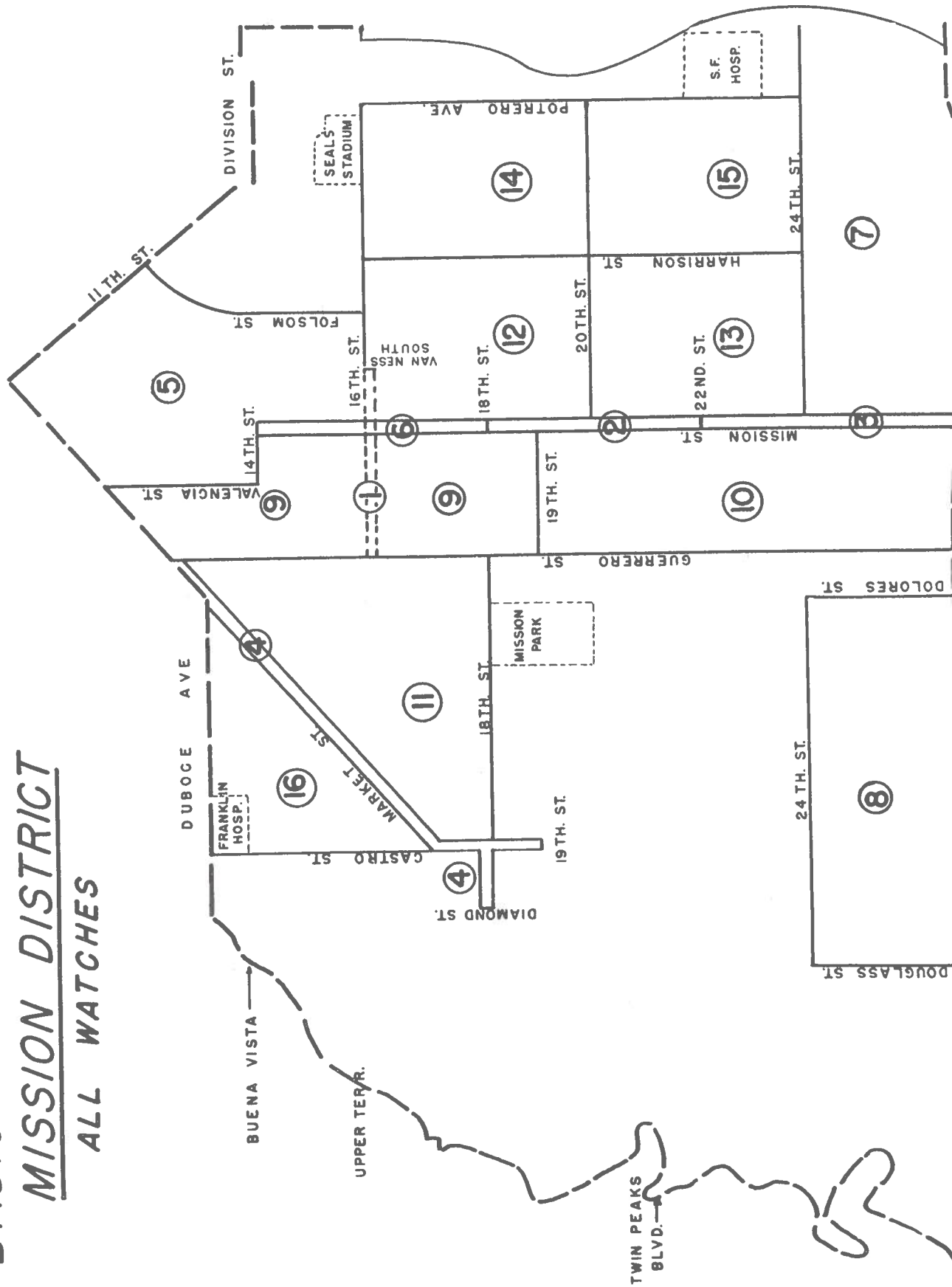
The personnel are assigned to tours of duty on three watches. The first watch, 8 A.M. to 4 P.M., is composed of senior patrolmen who do not rotate shifts. The remaining two tours, from 4 P.M. to 12 midnight, and 12 midnight to 8 A.M., are covered by patrolmen having less service time and they change shifts weekly. The only variation to this basic work schedule is that an hour before the watch changes indicated above, one-half of the radio sector cars are relieved and replaced by men on the next watch. These men making the early reliefs, therefore, work tours of duty as follows: 7 A.M. to 3 P.M., 3 P.M. to 11 P.M., and 11 P.M. to 7 A.M. The reasoning behind this staggered relief is to minimize the possibility of having a serious need for police service delayed as a result of having all sector cars out of service during a shift change.

The basic deployment of personnel, i.e. patrol sector boundaries and foot patrol posts, has not changed in at least 10 years, despite

BASIC PATROL PLAN

MISSION DISTRICT

ALL WATCHES



the shifting population trends and the concomitant changes in the types of services the police of the Mission District are required to perform. The District is composed of five sectors (see Illus. #4). The boundaries which define the extremities of these sectors are 20th St., which runs east and west through the heart of the District, and Folsom and Church Streets, which run north and south. A radio-equipped patrol car is assigned to each of the above sectors and they are designated as Mission 1, Mission 2, etc. In addition, there is a sixth car, similarly equipped, which is not specifically assigned and which assists whenever necessary to relieve the work load of the five assigned sector cars. On the day shift (8 A.M. to 4 P.M.) and the swing shift (4 P.M. to 12 P.M.) a one-man traffic vehicle (Mission 301) is assigned to assist the patrol force in handling minor parking violations, and to expedite the removal of abandoned vehicles with which the district is plagued. There is, in addition, a patrol wagon manned by two men. By Department Order, this wagon must be in service on all tours.

The supervising sergeant patrols the entire Mission District in a radio-equipped patrol car and his function is to supervise and assist the personnel assigned to vehicles whenever the need arises. Further supervision is provided for foot patrolmen by the remaining sergeants assigned to the watch. They are assigned on foot to areas covered by foot patrolmen. These foot sergeants are also responsible for inspections of the licensed premises in the district.

MANPOWER DEPLOYMENT -- SEPTEMBER 1966

Table 1 indicates the distribution of personnel in the district by each hour of the day for the month of September, 1966 and represents

only members of the district actually engaged in patrol duties. The reason for the use of data pertaining to this particular month and year will be explained later in Chapter V.

Tours of duty in the San Francisco Police Department are statistically recorded as starting with the 8 A.M. tour followed by the 4 P.M. to 12 P.M. and 12 P.M. to 8 A.M. tours. The variances which occur during a patrol tour, i.e., 1600 hours to 2300 hours on September 4th indicates one less man completing the tour on patrol than began it, may be accounted for by assignments such as guarding an injured prisoner at San Francisco General Hospital, clerical duty, etc. which would remove him from patrol. Other variances which occur at 1100, 1800 and 0300 hours indicate the times when patrol personnel take their meal breaks. When the totals at the bottom of the page are averaged per tour, the figures indicate that for the month of September, 1966, 535 men were assigned on patrol for the 8 A.M. to 4 P.M. tour; 611 for the 4 P.M. to 12 P.M. tour; and 580 for the 12 P.M. to 8 A.M. tour. An analysis of this deployment will be made later in the study, when it will be compared with crime statistics and calls for police services by hour of the day.

Quite coincidental to this study is the fact that on the 27th of September, 1966, an incident, described as a riot, occurred in another district of the city. On the 12 P.M. to 8 A.M. tour in the Mission District on September 28, no cars were available for patrol and the district was covered by three patrolmen on foot. This incident dramatically illustrates what the researchers feel is a serious impediment to proper manpower deployment in the San Francisco Police Department, namely, an insufficient number of patrol vehicles. This conclusion will be

TABLE 1
SEPTEMBER 1966

PERSONNEL ASSIGNED TO MISSION DISTRICT
BY HOUR AND BY DAY

DAY OF WEEK	DAY OF WEEK	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700
Th.	1	15	15	15	15	15	15	15	15	13	13	8	13	13	13	13	13	13	20	20	20	20	20	20	20
Fri.	2	15	15	15	15	15	15	15	15	17	17	12	16	17	17	17	17	17	18	18	18	18	18	18	18
Sat.	3	10	10	10	10	10	10	10	10	16	16	11	16	16	16	16	16	16	20	20	20	20	20	20	20
Sun.	4	11	11	11	11	11	11	11	11	20	20	13	20	20	19	19	19	19	13	13	7	13	13	13	13
Mon.	5	15	15	15	15	15	15	15	15	20	20	20	20	20	20	20	20	20	19	19	15	19	19	19	19
Tue.	6	21	21	23	23	23	23	23	23	22	22	22	22	22	22	22	22	22	20	20	14	20	20	20	20
Wed.	7	23	23	23	23	21	22	21	21	20	20	20	21	21	21	21	21	21	15	15	11	15	15	15	15
Th.	8	24	24	24	24	24	24	24	24	24	20	17	20	20	20	20	20	20	18	18	14	18	18	18	18
Fri.	9	24	24	24	24	24	24	24	24	21	21	21	21	21	21	21	21	21	15	15	10	15	15	15	15
Sat.	10	20	20	20	20	20	20	20	20	23	23	23	23	23	23	23	23	23	15	15	9	15	15	15	15
SUB-TOTAL:		158	158	160	160	158	159	158	158	192	192	167	193	193	192	192	192	192	173	173	138	173	173	173	173
Sun.	11	15	15	15	15	15	15	15	15	16	16	11	16	16	16	16	16	16	16	16	11	16	16	16	16
Mon.	12	22	22	22	22	22	22	22	22	22	22	17	22	22	22	22	22	22	22	22	22	22	22	22	22
Tue.	13	22	22	21	21	21	21	21	21	20	20	16	20	20	20	20	20	20	20	20	20	20	20	20	20
Wed.	14	17	17	17	17	17	17	17	17	17	17	14	17	19	19	19	19	19	21	21	21	21	21	21	21
Th.	15	20	20	20	20	20	20	20	20	23	23	19	22	23	23	23	23	23	23	23	23	23	23	23	23
Fri.	16	18	20	19	14	18	19	17	20	17	17	13	16	16	16	16	16	17	19	19	19	19	19	19	19
Sat.	17	14	14	14	14	14	14	14	14	19	19	15	15	19	19	19	19	19	20	20	14	20	20	20	20
Sun.	18	12	12	12	12	12	12	12	12	22	22	22	22	22	22	22	22	22	18	18	12	18	18	18	18
Mon.	19	18	18	18	18	18	18	18	18	23	23	23	23	23	23	23	23	23	19	19	12	19	19	19	19
Tue.	20	17	17	18	18	18	18	18	18	21	21	21	16	16	16	16	16	16	19	19	15	19	19	19	19
SUB-TOTAL:		175	177	176	171	175	176	174	177	200	200	171	189	195	195	195	196	196	197	197	169	197	197	197	197
Wed.	21	17	17	17	17	17	17	18	18	21	21	21	21	21	20	20	20	20	21	21	15	21	21	21	21
Th.	22	15	17	19	12	18	20	18	19	20	20	20	20	20	20	20	20	20	22	22	17	22	22	22	22
Fri.	23	18	21	20	16	15	20	19	21	23	23	23	21	23	23	21	23	21	17	17	11	17	17	17	17
Sat.	24	16	16	16	16	16	16	16	16	20	20	13	18	20	20	18	20	18	18	18	13	18	18	18	18
Sun.	25	15	15	15	15	14	14	14	14	17	17	13	15	17	17	17	17	17	19	19	14	19	19	19	19
Mon.	26	22	22	22	22	22	22	22	22	22	22	16	22	22	22	22	22	22	21	21	21	21	21	21	21
Tue.	27	20	20	21	21	21	21	21	21	21	21	17	18	21	22	22	22	22	3	3	3	3	3	3	3
Wed.	28	22	22	22	22	22	22	22	22	31	31	31	31	32	32	32	32	32	33	33	33	33	32	32	32
Th.	29	26	26	26	26	26	26	26	26	24	24	23	24	26	26	26	26	26	34	34	34	34	33	33	33
Fri.	30	27	27	27	27	27	27	27	27	32	32	29	31	35	34	34	34	36	34	34	34	34	34	34	34
SUB-TOTAL:		198	203	202	194	198	205	203	205	231	231	206	221	237	238	232	238	238	222	222	195	221	220	220	220
GRAND TOTAL:		531	538	538	525	531	540	535	540	623	623	544	603	625	626	619	626	626	592	592	502	591	590	590	590

further substantiated in Chapter 7, where the matter of manpower available for assignment is discussed.

Personnel records dating back to 1957 indicate that the overall strength of the district has been increased during that period by 1 lieutenant, 2 sergeants and 8 patrolmen.⁸ There have also been two major procedural changes in patrol coverage in that time, the first in 1963, when the department assigned an additional radio car to each district in order that a sergeant might perform motorized supervision of the sectors; the second and most recent change was the assignment of personnel in civilian clothes to special crime prevention duties to reduce the number of home and business burglaries. Both procedures have apparently proven successful.⁹

⁸Annual Report, Police Department, 1957, p. 7 indicates that at that time the district personnel included 1 captain, 3 lieutenants, 15 sergeants and 89 patrolmen.

⁹The addition of a motorized patrol supervisor has reduced the number of situations in which the Watch Commander must respond to the scene of an unusual occurrence, and provides the patrolmen with "on-the-spot" guidance in handling these situations. The increased effectiveness of the second change is indicated by a reduction of 110 burglaries this year as compared with the rate for the similar period last year. Coincidental to this decrease in burglaries in the Mission District was an increase in this crime in each of the other eight districts, as follows: Central District was + 132 burglaries during the period from June 1, 1967 to June 1, 1968; Southern was + 163, Potrero + 97, Northern + 226, Park + 4, Richmond + 78, Ingleside + 107, and Taraval + 65. San Francisco Police Department, Police-Community Relations, News and Views (San Francisco: June, 1968), p. 12.

CHAPTER III

PRESENT DATA-GATHERING PROCEDURES IN THE SAN FRANCISCO POLICE DEPARTMENT

THE INITIAL REPORT

The 1966 crime statistics indicate that the Mission District ranks third in the city in the number of Part I and Part II crimes committed within its confines (see Table 2). These statistics are taken from the "initial reports" prepared after a crime is reported. According to the San Francisco Police Department's manual titled "Report Writing Procedure," an initial report is to be prepared "for each incident or criminal offense known to the police that falls within one or more of the following categories, particularly where: the act complained of is a felony." The manual goes on to list the following categories of offenses which are to be reported:

1. Abortion
2. Alleged fraud cases involving checks
3. Information report (Incidents which appear to be planned, attempted or committed are reported according to the appropriate offense.)
4. Information refers to commercialized vice
5. In all instances where arrest is made (with exceptions)¹⁰
6. All cases wherein property is reported stolen (with exceptions)

¹⁰For a listing of the specific exceptions to the categories listed, see the San Francisco Police Department manual, "Report Writing Procedure," p. 22.

TABLE 2

ACCUMULATIVE OFFENSES -- 1966 -- BY DISTRICT OF OCCURRENCE

TYPE OF OFFENSE	A	B	C	D	E	F	G	H	I	TOTALS	
										1966	1965
Murder, Non-Negl. Manslaughter	5	8	5	4	9	13	3	6	2	55	64
Manslaughter	16	10	6	8	11	5	10	11	9	86	84
Rape	33	21	39	32	71	52	16	35	14	313	272
Robbery	578	334	246	238	607	296	134	193	86	2,712	2,157
Aggravated Assault	321	233	263	286	473	220	47	169	50	2,062	1,857
Burglary	2,176	695	1,264	1,615	1,688	1,641	752	1,337	610	11,778	11,594
Grand Theft	697	340	162	207	499	199	118	118	86	2,426	1,814
Petty Theft	4,836	3,035	1,647	2,281	3,913	2,210	1,663	1,300	1,528	22,413	19,937
Auto Theft	1,515	858	1,196	1,346	1,249	1,099	433	908	504	9,108	8,156
Total Part I	10,177	5,534	4,828	6,017	8,520	5,735	3,176	4,077	2,889	50,953	45,935
Other Assaults	615	289	530	583	521	434	181	404	192	3,749	3,326
Forgery-Checks	336	139	58	110	186	79	62	78	71	1,119	815
Embezzlement	184	228	42	83	132	81	40	55	34	879	792
Rec. Stolen Property	82	195	21	41	125	28	9	13	3	517	446
Weapons	80	54	45	41	101	51	8	32	7	419	489
Sex Offenses	148	59	99	167	99	140	133	96	131	1,072	1,268
Offenses Against Fam. & Child.	36	167	52	58	90	45	12	34	12	506	565
Malicious Mischief	821	298	933	982	678	675	472	942	683	6,484	6,811
All Others	1,450	828	1,043	1,384	1,585	1,130	547	911	704	9,582	8,881
Total Part II	3,752	2,257	2,823	3,449	3,517	2,663	1,464	2,565	1,837	24,327	23,393
GRAND TOTAL OFFENSES	13,929	7,791	7,651	9,466	12,037	8,398	4,640	6,642	4,726	75,280	69,328

COMPANY OR STATION DESIGNATIONS

Co. A -- Central	Co. E -- Northern
Co. B -- Southern	Co. F -- Park
Co. C -- Potrero	Co. G -- Richmond
Co. D -- Mission	Co. H -- Ingleside

7. All cases wherein motor vehicles are reported stolen
8. Impounded vehicles
9. Repossessed vehicles
10. Lost property
11. Property for identification
12. Non-traffic citations
13. Missing persons
14. Aided cases
15. Deaths
16. Attempted suicides
17. Mentally ill

For purposes of more accurately pinpointing the location of the above incidents, the San Francisco Police Department has divided the city into statistical plots, several of which are incorporated within each of the city's census tracts (see Illus. #5).¹¹ This facilitates the compiling of information relative to both the crime patterning and the social conditions within each of the census tracts and will, as the department becomes better equipped with electronic data-processing equipment, be extremely helpful in anticipating the probability of repetition of these activities in a particular area.

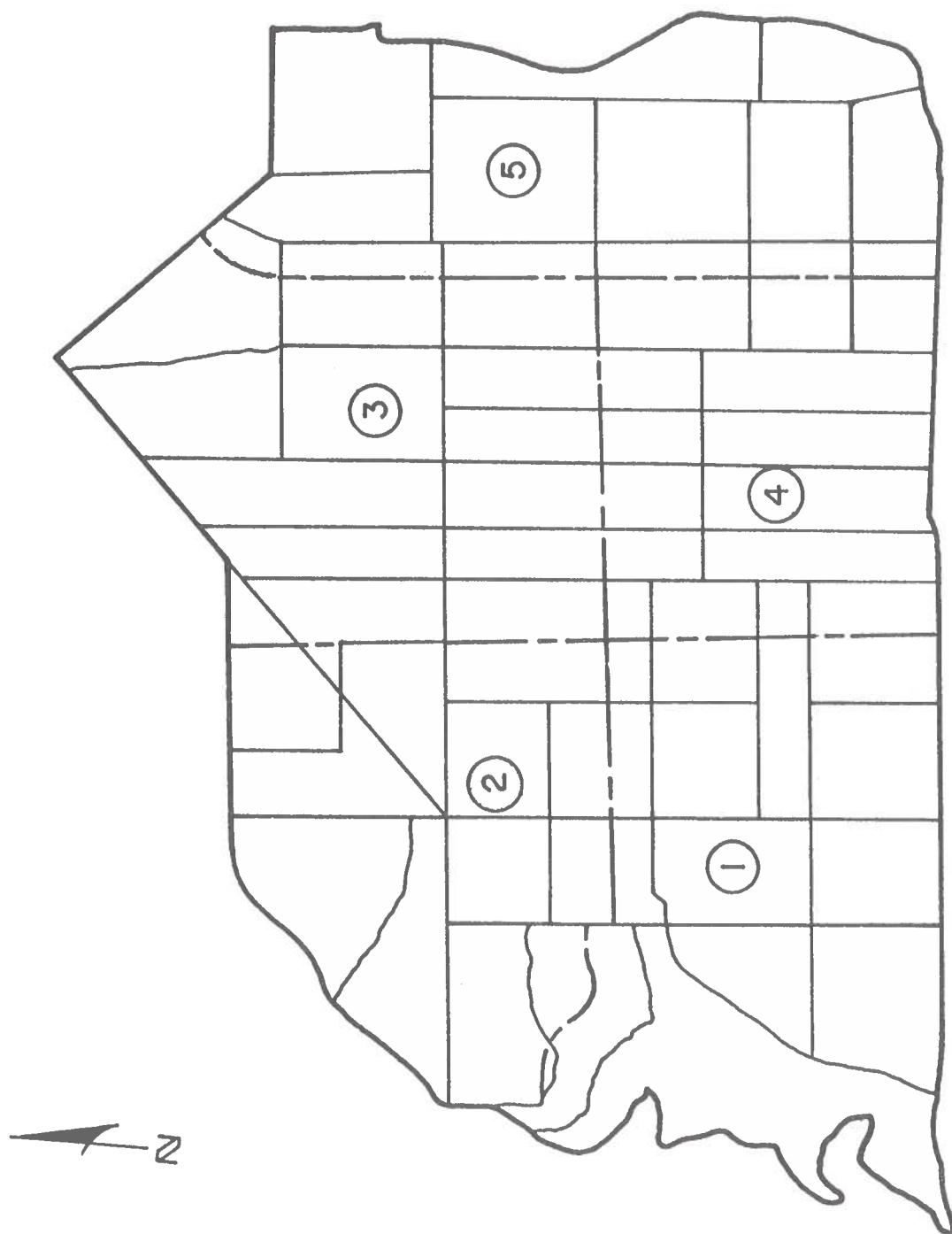
THE POLICE MISSION AND ITS RELATIONSHIP TO DATA-GATHERING

It is too early to speculate as to the effect these data-gathering procedures will have on the overall allocation of manpower within the

¹¹It should be pointed out that while the statistical plots are incorporated within the census tracts with no overlapping, the District sector boundaries cut across both statistical plots and census tracts, making correlation of data relative to the three impossible.

ILLUSTRATION #5

OVERLAPPING of SECTORS and STATISTICAL PLOTS



Circled Numbers =
Patrol Car Sectors

districts; however, the present procedure does give rise to certain anxieties on the part of the authors relative to the adequacy of deploying manpower on the basis of crime statistics alone.

R. Dean Smith, after listing factors which affect the general efficiency of the patrol division, i.e., soundness of the organization, discipline, equipment, communications, training, and general morale of the department, says that of equal importance is the distribution of available manpower.¹² He asks the question: "Given a clear statement of the need for police attention in a jurisdiction and given a number of police officers to fill that need, what is the most efficient allocation of the available patrol personnel to the need?"¹³ In effect, what he is saying is that the manpower within a jurisdiction should be assigned on the basis of need and the subdivisions so organized that within each of them approximately the same amount of time may be utilized in preventive patrol. Smith goes on to say that ". . . in the case of police manpower distribution, the requirement takes the form of criminal activity and the supplies are the police officers available for assignment to the areas where this activity occurs."¹⁴

It seems to the authors that the second of Smith's quotations contains an assumption which, if not critically evaluated, could be detrimental to the overall procedure of manpower deployment.

¹²R. Dean Smith, Computer Applications in Police Manpower (International Association of Chiefs of Police: February, 1961), p. 2.

¹³Ibid., 2.

¹⁴Ibid., 9.

In that statement Smith assumes that, given reliable data concerning the incidence of "criminal activity" in a jurisdiction, one has by definition "given a clear statement of the need for police attention." In effect, he defines the mission of the police as one of crime control and obviates consideration of the calls for police service which are of a non-criminal nature and which, according to Professor Gordon E. Misner, comprise 80% to 85% of an officer's involvements and activities.¹⁵ Professors Misner and Hoffman, in their paper on police resource allocation,¹⁶ point out that the same basic assumption was adopted by the President's Commission which prepared the Task Force Report: The Police. Misner and Hoffman point out the dichotomy in the report when they comment:

. . . in reading the Task Force Report: The Police, one gains the impression that crime itself is the significant variable in the distribution in allocation of police field forces. This seems to be the inescapable conclusion if one reads only Chapter 2 which deals with police organization, management and operations. If one reads other sections of the Report, one sees very clearly that the contemporary urban police mission is much broader than the "crime control" function.¹⁷

It would seem, therefore, that without detailed information on all police services performed, no clear picture of the need for police service can be obtained. It was an object of this survey, then, to determine what, if any, data was being gathered on the miscellaneous services being performed by the patrolmen in the Mission District and to evaluate

¹⁵Gordon E. Misner, "The Urban Police Mission," Issues in Criminology, 3 (Summer, 1967), 38.

¹⁶Gordon E. Misner and Richard B. Hoffman, Police Resource Allocation, Working Paper #73 (Berkeley, California: Center for Planning and Development Research, University of California).

¹⁷Ibid., 12.

its usefulness in a program of more equal allocation of the department's manpower resources.

COMPLAINT INVESTIGATION REPORT

The most logical data-gathering instrument for the purpose of our study was felt to be a department form designated as a "Complaint Investigation Report" (see Illus. #6a). According to the San Francisco Police Department's manual on report writing procedure, "This form shall be used, but not limited thereto, to record the receipt of each complaint, service request, or item of information that warrants a police dispatch, report, or assignment." This seems to the authors to be all inclusive and, therefore, an ideal instrument from which to gather the information which was being sought.

PROCEDURE FOR RECEIVING COMPLAINTS

It would seem appropriate at this time briefly to discuss the method utilized to receive complaints in the San Francisco Police Department and the procedures involved in dispatching officers and recording the various calls for police service. A citizen of San Francisco requiring the services of the police most often phones the Hall of Justice. These calls are received on the fourth floor of the Hall of Justice by operators who connect the party with the proper communications dispatcher. The Communications Unit has at its disposal five radio frequencies, two of which are used to dispatch radio patrol cars to locations where they are needed. The dispatcher, while listening to the phone conversation on a head set, stamps a dispatch sheet recording the time of the call (see Illus. #6b) and enters the pertinent information required. He then calls the patrol car in whose sector the need for service originated and assigns the call

ILLUSTRATION 6a

LAB 6 DISTRICT		SAN FRANCISCO POLICE DEPARTMENT		DISTRICT COMPLAINT NO	
		RADIO COMPLAINT INVESTIGATION REPORT			
CAR NO.	WATCH 1 ☐ 2 ☐ 3 ☐	THIS REPORT MADE	DAY	DATE	19
NATURE OF COMPLAINT				DAY, DATE AND TIME RECEIVED	
				DAY, DATE, TIME COMPLETED	
LOCATION				OFFENSE REPORT MADE? YES ☐ NO ☐	
ACTION TAKEN					

PRINCIPALS INVOLVED			
OFFICERS MAKING THIS REPORT		APPROVED BY.	
SIGNATURE 1	STAR	PLATOON COMMANDER	
SIGNATURE 2	STAR		

ILLUSTRATION 6b

ID	TIME RECEIVED		TIME DISP./SERVICED		TIME RETURNED		CODE STATUS	
30							2	3
32	NAME		NATURE OF COMP.				4	33
CWB								
30	TO:	BY	MESSAGE			LINE #		
32								
901								
VEH. CK.	FROM:/SOURCE	BY	LOCATION / 10-20			CODE-10		
30								
32								
SERVICE	YEAR	MAKE	MODEL	NAME / LIC. NO.				
	RACE	SEX	D.O.B.	ADDRESS				

NAME - RACE - SEX - AGE - HT. - WT. - HAIR - EYES - COMPL. - MARKS - DRESS - PECULIARITIES

SUSP. #1	SUSP. #2
WEAPON?	WEAPON?

AUTO: MODEL - MAKE - BODY - COLOR - LICENSE NO. - STATE - YEAR - OTHER MARKS

DIRECTION OF ESCAPE	REMARKS/DISPOSITION

to the designated car, if available. The dispatch sheet is then placed in a holder within reach of the communications dispatcher. On notification by the patrol car that the assignment has been completed, the slip is again stamped, indicating the time of completion. These sheets are tallied at the end of each 24-hour period in order to obtain an aggregate account of the number of assignments dispatched through the Communications Unit. The sheets are then filed in the Communications Unit for a period of approximately two months, at which time they are removed and filed in the department's record room. Simultaneously with the receipt of the radio message by the patrol car, the message is received over a monitor at the District Station, where a patrolman assigned to station duty records the information transmitted in a log book. The time of call, the type of call, the location and the names and car number of the patrolmen assigned to respond are recorded. The call back to the Communications Unit upon completion of the assignment is likewise monitored and the time of completion entered into the log. The patrolman assigned to station duty then prepares a Complaint Investigation Report which is signed by the patrolmen who were assigned to the activity when they report the disposition of each assignment to the Station House at the end of their tour of duty. The Complaint Investigation Reports are examined by the watch commander for completeness and accuracy, tallied to determine an aggregate account of the number of assignments handled by each sector in the district during the 24-hour period and sent to the record room in the Hall of Justice to be filed.

CHAPTER IV

PRESENT METHOD OF MANPOWER DEPLOYMENT

It became clear even at an early stage of the survey that, while data was being recorded relative to miscellaneous services performed by the patrol force, this information, when collected, was not being used. The Communications Unit was functioning as the command and control unit strictly within a reactive frame of reference. There was little evidence of any proactive strategy aside from obvious assignments such as teenage dances or traffic details. The researchers became curious as to the rationale behind the day-to-day deployment in view of the obvious lack of analyzed data, and decided to question the watch commanders in the Mission District in order to shed some light on the subject. Each of the four watch commanders in the Mission Station was asked the following questions:

1. (a) Given 11 men to assign on patrol, how would you assign them?
(b) Would this vary by the day of the week or by any particular tour?
2. (a) Given 18 men to assign on patrol, how would you assign them?
(b) Would this vary by the day of the week or by any particular tour?
3. List in the order of priority the foot posts in the district.

The answers to these questions are indicated in Tables 3, 4 and 5.

TABLE 3

GIVEN 11 MEN TO ASSIGN ON PATROL,
HOW WOULD YOU ASSIGN THEM?*

11 Men				
Quest. #1	WC #1	WC #2	WC #3	WC #4
Miss. 1	2	2	2	2
2	1	2	2	2
3	2	2	2	2
4	1	2	2	2
5	2			
6	1			
Wagon	2	2	2	2
Miss. 301				1
PP-2-3		1		
PP-1-6			1	

Mission 1-2-3-4-5-6 indicate sectors 1 through 5 plus the #6 car. Wagon indicates the Mission Patrol Wagon and Mission 301 is the traffic car. Patrol Post #'s are prefaced by "PP". The numbers listed vertically under the heading WC are the number of men each watch commander assigned to a particular unit or post.

(*See footnote, Page 28.)

It should be noted here that there is a standing department order that watch commanders detail two men on each watch to man the district's patrol wagon. This department order attempts to reduce to a minimum the amount of patrol time lost in the routine processing of arrested persons by delegating this responsibility to the patrol wagon team. Thus, when an arrest is made by a patrol unit, a call is made for the district's wagon; information concerning the arrest is given to the patrol wagon team along with custody of the prisoner. The patrol unit then resumes its normal patrol functions and the patrol wagon team processes the prisoner through the arrest procedures and presents him in court at the proper time. The researchers found this procedure to be extremely effective in accomplishing its avowed purpose. Concerning the (b) part of Question #1, three of the watch commanders felt that with such limited patrol coverage, no variations in the deployment would be practical. Watch commander #3 indicated that he would deploy 1 man on foot on Friday and Saturday nights to cover an Indian dance hall at 24th and Mission, with the wagon to back him up.

TABLE 4

GIVEN 18 MEN TO ASSIGN ON PATROL,
HOW WOULD YOU ASSIGN THEM?*

18 Men				
Quest. #2	WC #1	WC #2	WC #3	WC #4
Miss. 1	2	2	2	2
2	2	2	2	2
3	2	2	2	2
4	2	2	2	2
5	2	2	2	2
6	1	2	2	2
7	2			
Wagon	2	2	2	2
301				1
PP	1-6	1-6	1-6	1-6
(1 Man)	2-3	2-3	9	2-3
	5 or 9	9	2-3	7-9
		7 or 4	7	

In part (b) of Question #2, watch commanders #1, 2 and 4 indicated no variation in their assignments by day or tour. Watch commander #3 would assign only 5 cars and a wagon on the 12 P.M. to 8 A.M. tour and assign an extra foot man on posts 1 and 3 (making a total of 6 foot men).

* Eleven men were chosen to set up a forced choice on the part of the watch commanders relative to the utilization of one-man patrol cars. Department policy requires that two men be assigned to the wagon, leaving nine men to be assigned to the five specifically designated sectors.

The choices open to the watch commanders were: (1) four 2-man cars and one 1-man car; (2) four 2-man cars and one traffic vehicle (Mission 301); or (3) four 2-man cars and one foot man.

** Eighteen men were chosen to allow desk officers the opportunity to innovate. After assigning two men each to the usual six patrol cars and two men to the wagon, the watch commanders had four additional men to assign at their discretion.

The question was designed to assess the degree of variation in the individual watch commanders' assignments when additional manpower was available.

BASIC PATROL PLAN

MISSION DISTRICT

ALL WATCHES

ILLUSTRATION 7

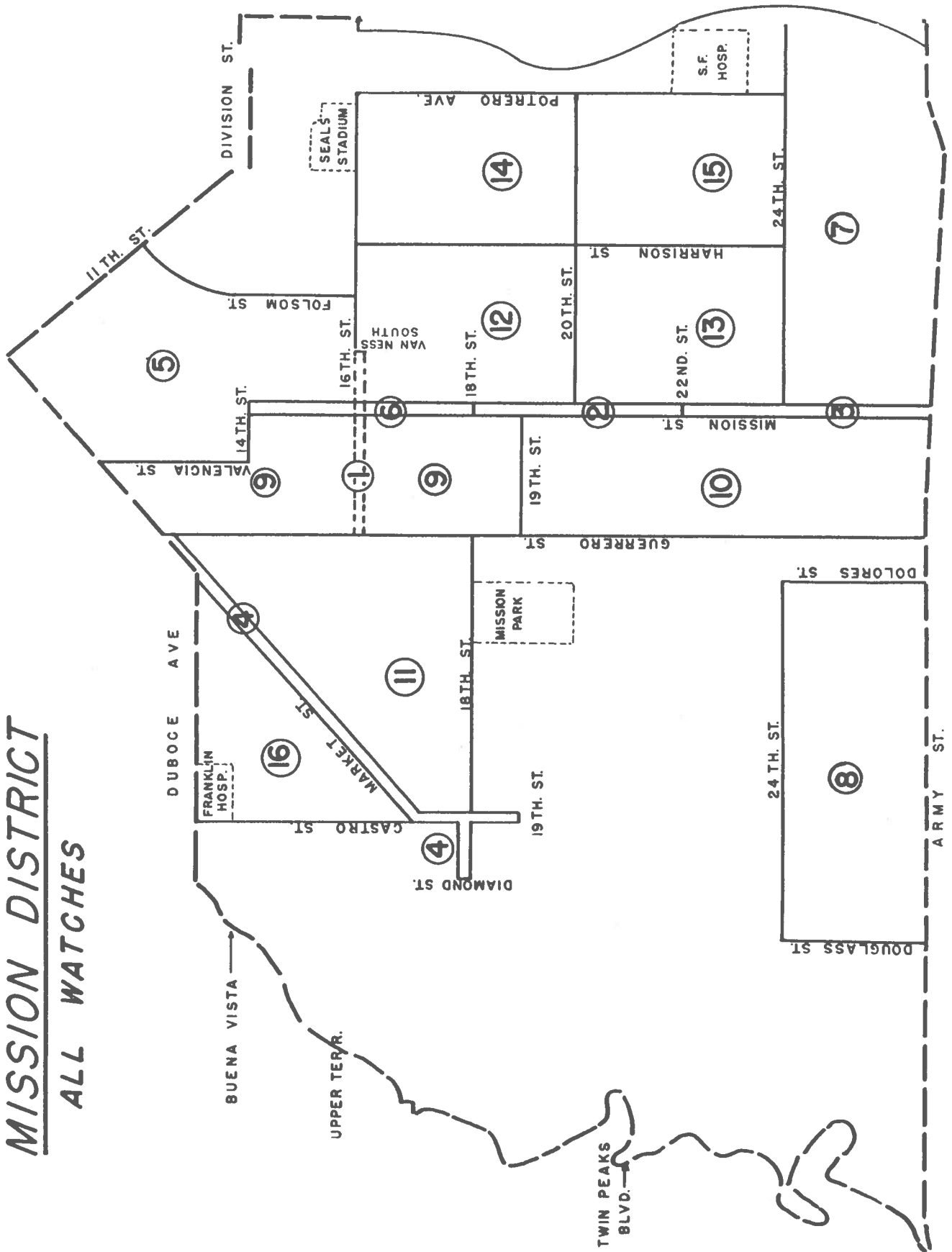


TABLE 5

LIST IN THE ORDER OF PRIORITY THE
FOOT POSTS IN THE DISTRICT.

Quest. #3 PP	WC #1	WC #2	WC #3	WC #4
	1	1	1	1
	6	6	6	6
	2	2	9	2
	3	3	2	3
	4	9	3	9
	5	7	7	7
	7	4	10	4
	9	10	4	
	10	8	5	

Foot posts in the Mission District are numbered in the order of priority of coverage from 1 through 16. This priority was established many years ago and its appropriateness may have been lost over the years. All four watch commanders indicated that posts 1 and 6 (usually covered by 1 man on foot) would receive first priority, 2 and 3 (also covered by 1 man) were chosen second by three watch commanders, while the fourth chose 9. Post 9 was chosen 3rd by two watch commanders, 2 and 3 by one watch commander, and posts 4, 5, 7, or 9 (all considered of equal importance) by the fourth. These choices seemed to indicate that after the initial 2 choices for foot patrol by the watch commander, the remaining assignments were determined primarily by the lieutenants' personal impressions

as to the conditions on each post. Three of the 4 watch commanders listed 9 posts and the fourth only 7. They indicated that the remaining foot posts were not important, and in any event, were never covered.

The responses indicate some variations in the methods of deployment on the part of each of the watch commanders. Three of them were unalterably opposed to one-man patrol in sector cars, while there is no specific department policy against such deployment. The fourth watch commander indicated he would use as many cars as he could obtain, including one-man cars, in order to increase the time for preventive patrol. He implied that in most cases additional cars are not available, however. This watch commander also indicated that he would not specifically assign the #6 or #7 car to a particular area but would prefer them to respond to jobs anywhere in the district. He felt that the unexpectedness of this type of patrol, and the appearance of this car in the various sectors at unscheduled times, was effective in the apprehension of perpetrators.¹⁸ Each of the remaining watch commanders indicated that they would not assign the #6 car to a specific area.

It was interesting to note that with the exception of watch commander #1, who assigned six cars and a wagon in the field manned by 11 men, each of the other watch commanders preferred 4 sectors and the wagon, and each suggested eliminating sector #5 and splitting that sector

¹⁸This philosophy is disputed by Shlomo Angel in his paper, "Discouraging Crime Through City Planning," Working Paper #75 (Berkeley, California: Center for Planning and Development Research, University of California). On Page 10 of that paper Mr. Angel says that "the limited effectiveness of police patrolling with regard to direct interference [in criminal activity] is due to their inherent inability to be more than one place at the same time and therefore direct interference is extremely infrequent. Police patrolling then becomes a deterrent to crime only to the extent that it is expected. Expectation of direct contact with the police is a deterrent."

between sector #3 and sector #4. This was interesting in view of the fact that sectors #3 and #4 are the busiest in the district.

More important than the variations of the individual watch commanders would seem to be the general predictiveness of the assignments. No watch commander, for example, presumed to assign a car specifically to North or South Mission Street, which account for a large percentage of the work load of the district; nor did any suggest modifying the sector boundaries in any way to adjust for the variations in the work loads.

It was apparent then that the assignments were a function of restrictions imposed on the watch commanders by boundaries which no longer may be appropriate and that they were made independent of conditions in the area of assignment. Further, the watch commanders were not encouraged to use initiative in the realignment of these sector boundaries because of the difficulty at the Communications Unit in keeping track of the areas of responsibility of each patrol car if its sector area were changed from tour to tour. These factors were mitigated, in the minds of the lieutenants, by the awareness that on most tours the sector cars were responding to one call after another irrespective of their assigned areas, and that with the exception of the 12 P.M. to 8 A.M. tour there was little time for preventive patrol in any event.

An additional factor affecting the deployment was the lack of a definite policy statement regarding the use of one-man patrol vehicles. This, in effect, was placing the responsibility for such assignments on the watch commanders, who were aware of the lack of training in the techniques of this type of patrol. Both the researchers felt the hesitation on the part of the watch commanders relative to the utilization of one-man patrol cars was well founded. The use of this type of patrol on a

random basis, as an alternative method of expanding patrol coverage when manpower is short, is a dangerous procedure to follow. This type of patrol should not be utilized until provision is made for the necessary intradepartment coordination and training necessary for its implementation.

CHAPTER V

METHODOLOGY USED IN SURVEY

On discovering the existence of what seemed to be a valuable data-gathering instrument, the Complaint Investigation Report, the researchers were anxious to determine its potential for purposes of manpower deployment. This form contained data which were previously indicated as essential if a true picture of the needs of the district were to be ascertained: namely, a recording of all activities engaged in by the officers on patrol, including all miscellaneous services performed. It was anticipated that by extracting sufficient data relative to the time of dispatch, time of completion, type of activity and location of the incident -- by day, tour and sector -- some meaningful statements could be made concerning the mean time per activity, projections relative to the anticipated work load on a particular tour, and suggestions for adjustments in the sector boundaries to equalize the work load.

Since the information contained in the log book is used to prepare the Complaint Investigation Report and since the log books are readily available in the Mission District Station House, it was decided that they should be used to collect the required data.

The week of September 4th through the 10th, 1966 was arbitrarily chosen as a test period in order that the researchers might obtain a feel for the data and arrive at some conclusions concerning anticipated collection problems that would have to be resolved before the final data could be gathered. It was also the intention of the researchers to study the initial data and determine a sample size from which a stratified random sample of tours could be made for closer study.

ILLUSTRATION 8
DATA COLLECTION INSTRUMENT

DATE _____		DAY OF WEEK _____		CAR # _____		
TIME OF CALL	TIME OF COMP.	PLACE OF OCCUR.	TYPE OF INCIDENT	HOW REC.		
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						

A collection instrument was devised for the initial data and every recorded assignment originating in the Mission District for the week mentioned was extracted (see Illus. #8). Information relative to the time of dispatch, time of completion, statistical plot number, type of incident, and elapsed time were recorded.

What seemed to emerge as the data was analyzed was a wide variation in the utilization of the department's available manpower. The researchers felt, however, that this was more a function of inconsistent reporting and recording than an accurate indicator of the District's activity. Therefore, it was decided to check the initial data against the Communication Dispatch Sheets for the same week in order to uncover any discrepancies. The Dispatch Sheets were matched, assignment by assignment, with the data collected from the log book and many additional hours of activity were uncovered. Table 6 depicts the contrast between the data from the log book (left hand columns) and the data after the two documents had been combined (right hand columns). What at first seemed like an under-utilization now appeared as a serious overload. Sector 3, for example, was "out" on assignment for an average of 16 hours per day for the week studied. The averages for the week for the remaining five units were as follows:

Mission 1	12 hrs. 13 min.
Mission 2	12 hrs. 41 min.
Mission 4	13 hrs. 27 min.
Mission 5	12 hrs. 50 min.
Mission 6	7 hrs. 8 min.

TABLE 6
COMPARISON OF DATA

	COMPLAINT INVESTIGATION REPORT						COMBINED DATA COMMUNICATIONS DISPATCH SHEETS AND COMPLAINT INVESTIGATION REPORT					
Tour	Miss. One	Miss. Two	Miss. Three	Miss. Four	Miss. Five	Miss. Six	Miss. One	Miss. Two	Miss. Three	Miss. Four	Miss. Five	Miss. Six
	Sunday, September 4, 1966						Sunday, September 4, 1966					
	Number of Assignments						Number of Assignments					
12-8	3	4	5	6	3	2	6	8	8	8	6	4
8-4	4	4	7	3	4	*	6	7	11	5	8	*
4-12	7	8	12	11	6	7	8	9	13	13	8	11
	Aggregate Elapsed Time on Assigns.						Aggregate Elapsed Time on Assigns.					
12-8	:52	2:38	2:12	3:21	1:19	:30	4:52	5:10	5:09	4:58	2:41	2:18
8-4	2:18	2:40	2:43	4:50	1:57	*	6:39	4:40	5:48	6:38	5:49	*
4-12	2:20	3:07	4:19	5:01	2:34	4:21	4:02	3:54	6:51	6:11	5:05	3:59
Total Active Time Per 24 Hrs.	5:30	8:25	9:14	13:12	5:50		15:33	13:44	17:48	17:47	13:44	
	Monday, September 5, 1966						Monday, September 5, 1966					
	Number of Assignments						Number of Assignments					
12-8	5	6	9	2	4	*	6	6	11	4	8	*
8-4	5	6	4	9	5	*	6	9	8	9	5	*
4-12	5	6	10	9	6	7	8	8	13	13	7	9
	Aggregate Elapsed Time on Assigns.						Aggregate Elapsed Time on Assigns.					
12-8	1:23	1:41	2:49	:32	:57	*	2:47	1:51	4:08	2:09	3:08	*
8-4	2:54	1:24	1:10	4:02	1:47	*	2:48	4:43	4:32	5:45	3:09	*
4-12	2:19	3:33	2:27	3:28	2:26	2:25	5:50	6:00	4:24	5:18	5:42	4:15
Total Active Time Per 24 Hrs.	6:36	6:38	6:26	8:02	5:10		11:25	12:34	13:06	13:12	11:59	

*Car not in service on this tour.

TABLE 6 (continued)

COMPLAINT INVESTIGATION REPORT							COMBINED DATA COMMUNICATIONS DISPATCH SHEETS AND COMPLAINT INVESTIGATION REPORT					
Tour	Miss. One	Miss. Two	Miss. Three	Miss. Four	Miss. Five	Miss. Six	Miss. One	Miss. Two	Miss. Three	Miss. Four	Miss. Five	Miss. Six
Tuesday, September 6, 1966							Tuesday, September 6, 1966					
Number of Assignments							Number of Assignments					
2-8	1	1	3	0	2	1	3	5	5	2	5	5
8-4	6	8	5	9	6	3	9	10	8	10	8	3
4-12	9	8	6	6	7	7	10	10	7	10	8	10
Aggregate Elapsed Time on Assigns.							Aggregate Elapsed Time on Assigns.					
2-8	:15	:45	1:23	0	1:04	:15	:24	1:48	5:02	:48	3:04	3:37
8-4	2:15	2:49	1:55	4:23	2:32	1:19	4:53	5:04	6:37	7:24	6:37	1:44
4-12	2:54	2:55	2:45	1:41	1:52	3:18	4:31	5:14	5:10	3:51	4:29	4:45
Total Active Time per 24 Hrs.	5:24	6:29	6:03	6:04	5:28	4:52	9:48	12:06	16:49	12:03	14:10	10:06
Wednesday, September 7, 1966							Wednesday, September 7, 1966					
Number of Assignments							Number of Assignments					
2-8	4	3	4	4	3	*	6	7	7	5	5	*
8-4	2	5	7	6	3	4	3	6	10	9	5	9
4-12	8	4	7	6	3	7	11	6	9	7	6	8
Aggregate Elapsed Time on Assigns.							Aggregate Elapsed Time on Assigns.					
2-8	1:50	1:04	1:02	1:10	:54	*	3:47	4:41	5:31	1:29	2:39	*
8-4	:45	1:33	2:56	2:32	1:31	1:30	2:57	2:54	6:39	5:07	3:27	5:01
4-12	3:16	2:45	2:06	2:11	2:05	3:09	6:58	4:59	4:59	4:42	5:45	4:01
Total Active Time per 24 Hrs.	5:51	5:22	6:06	5:53	4:30		13:42	12:34	17:09	11:18	11:51	
Thursday, September 8, 1966							Thursday, September 8, 1966					
Number of Assignments							Number of Assignments					
2-8	3	3	1	0	1	*	5	4	4	1	4	*
8-4	6	6	2	7	1	*	7	7	7	7	2	*
4-12	4	5	11	8	4	8	6	9	13	12	8	10
Aggregate Elapsed Time on Assigns.							Aggregate Elapsed Time on Assigns.					
2-8	2:10	:52	:15	0	:45	*	3:43	1:36	1:10	:31	3:23	*
8-4	1:57	1:59	1:01	3:12	:24	*	3:03	4:12	6:46	5:14	:49	*
4-12	:58	2:19	3:41	1:44	1:56	2:44	4:47	4:48	5:31	4:42	6:23	4:49
Total Active Time per 24 Hrs.	5:05	5:10	4:57	4:56	3:05		11:33	10:36	13:27	10:27	10:35	

Car not in service on this tour.

TABLE 6 (continued)

	COMPLAINT INVESTIGATION REPORT						COMBINED DATA COMMUNICATIONS DISPATCH SHEETS AND COMPLAINT INVESTIGATION REPORT					
Tour	Miss. One	Miss. Two	Miss. Three	Miss. Four	Miss. Five	Miss. Six	Miss. One	Miss. Two	Miss. Three	Miss. Four	Miss. Five	Miss. Six

	Friday, September 9, 1966					
	Number of Assignments					
12-8	5	2	3	2	6	3
8-4	8	6	9	8	5	0
4-12	3	4	6	8	14	4
	Aggregate Elapsed Time on Assigns.					
12-8	1:46	1:17	1:37	:27	2:00	:53
8-4	3:30	3:50	3:28	4:04	1:45	0
4-12	2:13	2:25	2:55	3:45	4:05	2:37
Total Active Time Per 24 Hrs.	7:29	7:32	8:00	8:16	7:50	3:30

	Friday, September 9, 1966					
	Number of Assignments					
7	5	6	4	8	4	
12	8	10	11	9	1	
5	9	9	10	19	9	
	Aggregate Elapsed Time on Assigns.					
1:31	3:14	4:34	1:45	3:08	1:09	
3:36	5:47	5:49	6:42	4:41	:58	
4:13	4:56	6:06	6:15	6:20	4:48	
9:20	13:57	16:29	14:42	14:09	6:55	

	Saturday, September 10, 1966					
	Number of Assignments					
12-8	4	3	9	10	4	3
8-4	9	7	9	7	4	2
4-12	4	5	11	6	9	5
	Aggregate Elapsed Time on Assigns.					
12-8	1:07	1:26	2:53	2:11	1:55	:28
8-4	3:46	2:02	3:49	3:12	1:59	:45
4-12	:56	6:13	3:50	1:42	1:55	2:55
Total Active Time Per 24 Hrs.	5:49	9:41	10:32	7:05	5:49	4:08

	Saturday, September 10, 1966					
	Number of Assignments					
6	6	11	12	6	5	
14	12	12	9	7	4	
8	9	16	9	14	6	
	Aggregate Elapsed Time on Assigns.					
2:44	4:29	4:38	4:13	4:09	2:41	
5:36	3:15	6:26	5:41	4:32	2:32	
4:09	5:30	6:03	4:45	4:42	3:58	
12:29	13:14	17:17	14:39	13:23	9:11	

Car #6, as was indicated earlier, is not assigned to a particular area but patrols the entire district, answering calls to which it is dispatched. This vehicle was not in service during 6 of the 21 tours of duty during the week, either because of the unavailability of the vehicle or because of a shortage of manpower. In any event, when the vehicle was in service, it handled a disproportionately smaller amount of work load than any of the other patrol vehicles.

In total, there were 31,154 minutes of consumed time for the six patrol vehicles during the week studied. This figure, broken down in terms of the three existing tours of duty, is as follows:

12 Mid. to 8 A.M.	7139 minutes	23%
8 A.M. to 4 P.M.	11094 "	35%
4 P.M. to 12 Mid.	12920 "	41%

An analysis in terms of an overlapping tour indicates that the time period from 6 P.M. to 2 A.M. involves 11819 minutes or 38%; and the time period from 7 P.M. to 3 A.M. involves 10819 minutes or 35% of the total minutes of occupied time during the week studied. Table 7 details the calls for police services by the hour and dramatically illustrates the "peak and trough" hours for activities. Contrasting these figures with the personnel statistics for the month of September, shown previously in Chapter II, implies that the allocation of 45 more man days on the 12 Mid. to 8 A.M. tour than on the 8 A.M. to 4 P.M. tour would be difficult to justify.

A further breakdown, in terms of activity by unit for the week, indicates the following totals:

TABLE 7

CALLS FOR POLICE SERVICE BY HOUR

Hour	Sun.	Mon.	Tue.	Wed.	Thurs.	Fri.	Sat.	Totals	Percent of Total for Week
12-1 a.m.	7	12	6	8	3	7	13	56	8.00
1-2 a.m.	2	2	6	4	2	5	6	27	3.86
2-3 a.m.	7	11	2	3	4	7	8	42	6.00
3-4 a.m.	8	4	3	9	2	3	5	34	4.86
4-5 a.m.	3	2	1	0	2	1	3	12	1.71
5-6 a.m.	4	0	1	0	0	1	2	8	1.14
6-7 a.m.	2	1	1	1	2	2	1	10	1.43
7-8 a.m.	2	0	1	1	0	3	3	10	1.43
8-9 a.m.	4	5	8	3	1	8	4	33	4.71
9-10 a.m.	4	2	8	5	3	6	6	34	4.86
10-11 a.m.	2	6	6	2	2	7	6	31	4.43
11-12 a.m.	4	4	6	4	4	9	7	38	5.43
12-1 p.m.	6	4	3	1	2	4	8	28	4.00
1-2 p.m.	5	7	2	9	5	3	8	39	5.57
2-3 p.m.	2	3	7	6	4	7	8	37	5.29
3-4 p.m.	6	2	2	8	5	3	5	31	4.43
4-5 p.m.	5	8	6	7	10	4	12	52	7.43
5-6 p.m.	7	8	9	8	7	10	5	54	7.71
6-7 p.m.	6	7	7	4	4	6	7	41	5.86
7-8 p.m.	9	8	7	3	6	3	6	42	6.00
8-9 p.m.	5	5	7	3	7	12	8	47	6.71
9-10 p.m.	10	4	3	6	6	5	9	43	6.14
10-11 p.m.	8	7	7	6	8	7	5	48	6.86
11-12 p.m.	6	6	3	3	4	8	4	34	4.86
Total:	124	118	112	104	93	132	149	832	
Percent of Total for Week	14.9	14.2	13.5	12.5	11.2	15.9	17.9	100.00	

<u>Car</u>	<u>Minutes</u>	<u>Percent*</u>
Mission 1	5030	16.1
Mission 2	5325	17.0
Mission 3	6725	22.0
Mission 4	5647	18.1
Mission 5	5391	17.3
Mission 6	3036	9.7

With the exception of the #3 and #6 cars, it would appear on the surface that there was a reasonably equitable distribution of the work load in each sector. The researchers decided to do a further analysis, matching the area of responsibility of each vehicle with the car number of the responding unit. It was found that in almost 50% of the cases, a unit from another area answered the call.¹⁹ Therefore, the figures above, while showing the actual amount of work being done by each unit, do not reflect the differences in the work load in each sector. The disparity is depicted in Table 8.

Many of the recorded incidents transmitted by the communications unit were broadcast as occurring at intersections or on avenues between intersecting streets, making an exact determination of their location difficult. As a practical matter, this presented no particular difficulty to the responding patrol units. However, in a significant number of cases these locations were on the borderline of two or more statistical

*Figures rounded to nearest tenth percent.

¹⁹An exact figure for "out of sector response" was prohibited because the sector boundaries divide the statistical plots in many cases. Only those transmissions which clearly indicated an "out of sector" response were used in this analysis, and the results indicated that at least 46% of the calls were in areas other than the assigned area.

plots, making a decision as to their inclusion within a specific plot impossible (see Table 8). The number of recorded incidents with a probability of having occurred in a specific plot (multiple plot incidents) amounted in many cases to over ten percent of those incidents known definitely to have occurred in that plot.²⁰ It was necessary, therefore, to give a weighted value to the multiple plot incidents if they were to be indicated on map in Illustration #9. Lacking any definitive information on which to base a judgment as to the exact plot inclusions on multiple plot incidents, the researchers decided to distribute the number of these incidents proportionately, using a factor of $1/2$ for each double plot incident (i.e., if 15 incidents occurred on the borderline of plots 21 and 22, each plot would be credited with 7.5 incidents); $1/3$ for each triple plot incident; and $1/4$ for each quadruple plot incident (see Table 8A).

²⁰There were 22 incidents definitely recorded as having occurred in plot 22. In addition, there were 15 incidents recorded on the borderline of plots 21 and 22; one on the borderline of plots 9 and 22; and one on the borderline of 8 and 22. Each of these multiple plot incidents had a probability of having occurred in plot 22.

ILLUSTRATION #9 MISSION DISTRICT

DISTRIBUTION of ACTIVITIES by STATISTICAL PLOT

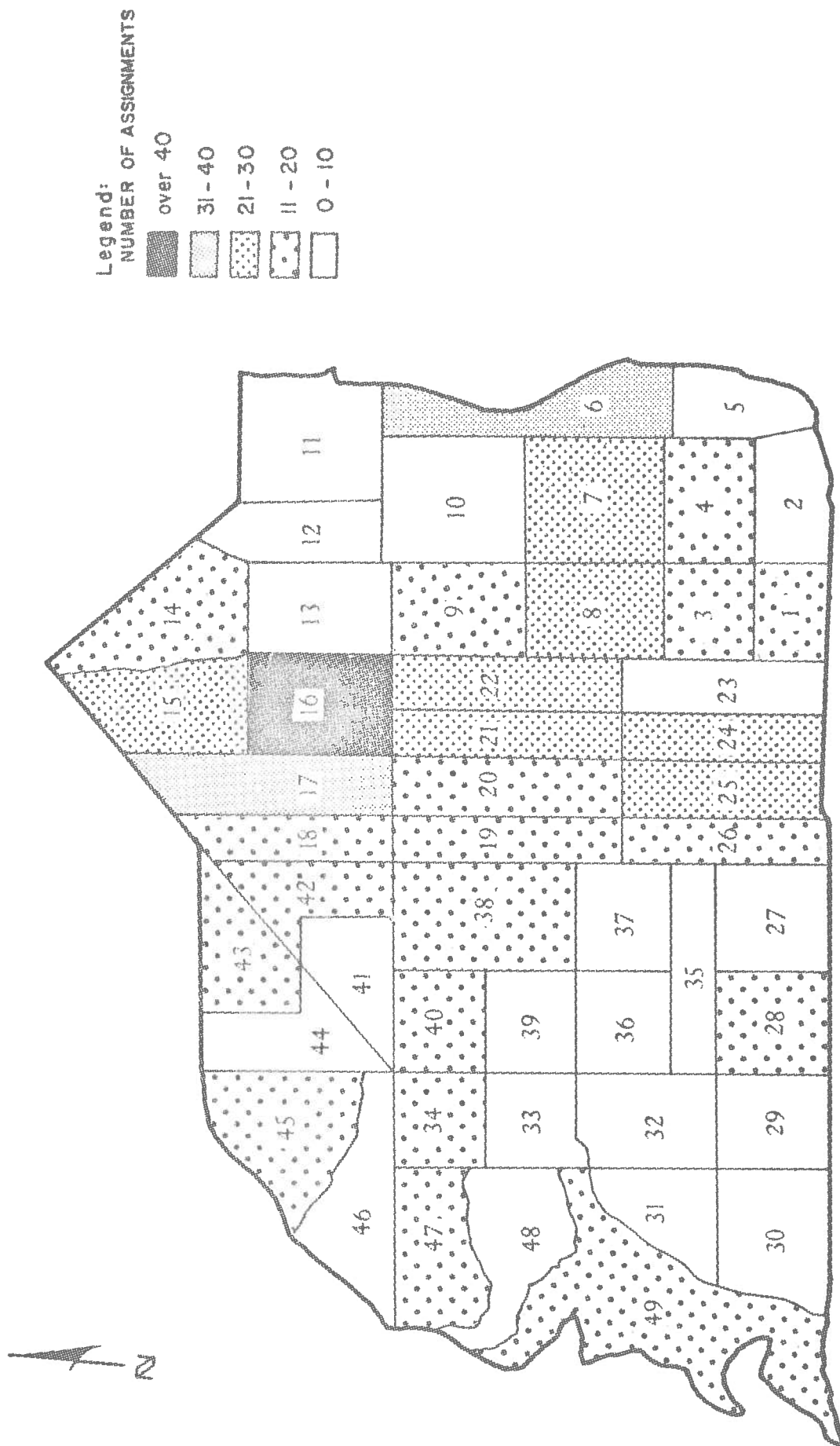


TABLE 8

NUMBER OF ACTIVITIES IN EACH PLOT

SINGLE PLOT INCIDENTS

Plot #	# of Inci.	Plot #	# of Inci.	Plot #	# of Inci.	Plot #	# of Inci.	Plot #	# of Inc
1	12	11	6	21	29	31	1	41	8
2	3	12	3	22	22	32	9	42	12
3	18	13	3	23	10	33	4	43	19
4	19	14	15	24	26	34	11	44	9
5	5	15	22	25	25	35	10	45	16
6	35	16	43	26	11	36	4	46	3
7	21	17	31	27	8	37	4	47	15
8	27	18	14	28	11	38	18	48	4
9	11	19	13	29	4	39	4	49	17
10	4	20	12	30	2	40	11	99*	44

*Out of district calls; not shown on map.

DOUBLE PLOT INCIDENTS

Plot #	# of Inci.	Plot #	# of Inci.	Plot #	# of Inci.	Plot #	# of Inci.	Plot #	# of Inc
1-3	2	9-22	1	18-42	1	25-26	2	42-43	2
3-4	1	12-13	2	19-20	3	27-28	2	42-44	1
3-23	1	13-16	1	19-38	1	27-35	1	44-45	1
4-5	2	14-15	6	20-25	1	28-29	1	46-47	1
4-7	1	15-16	2	21-22	15	28-35	1	48-49	1
6-10	2	15-17	1	22-23	1	31-32	1		
8-9	2	16-17	5	23-24	4	34-40	2		
8-22	2	17-18	5	24-25	4	38-40	1		

TRIPLE PLOT INCIDENTS

Plot #	# of Inci.	Plot #	# of Inci.
1-2-3	2	15-16-17	1
1-3-23	1	16-21-23	1
6-10-11	2	19-26-37	1
8-9-21	1	21-23-24	1
8-9-22	1	44-45-46	1

QUADRUPLE PLOT INCIDENTS

Plot #	# of Inci.	Plot #	# of Inci.
2-3-4-5	2	21-22-23-24	3
9-13-16-22	1	28-29-32-35	1
13-14-15-16	1	28-29-32-36	1
17-18-19-20	1	29-30-31-32	3
18-19-38-42	1	36-37-38-39	1
20-21-24-25	1		

TABLE 8A

WEIGHTING OF ACTIVITIES, BY PLOT

Plot #	Single Plot Incidents	Double Plot Incidents	Weighted Value (1/2)	Triple Plot Incidents	Weighted Value (1/3)	Quadruple Plot Incidents	Weighted Value (1/4)	Total Weighted Incidents
1	12	2	1	3	1			14
2	3	0	0	2	2/3	2	1/2	4-1/6
3	18	4	2	3	1	2	1/2	21-1/2
4	19	4	2			2	1/2	21-1/2
5	5	2	1			2	1/2	6-1/2
6	35	2	1	2	2/3			36-2/3
7	21	1	1/2					21-1/2
8	27	4	2	2	2/3			29-2/3
9	11	3	1-1/2	2	2/3	1	1/4	13-5/12
10	4	2	1	2	2/3			5-2/3
11	6	0	0	2	2/3			6-2/3
12	3	2	1					4
13	3	3	1-1/2			2	1/2	5
14	15	6	3			1	1/4	18-1/4
15	22	9	4-1/2	1	1/3	1	1/4	27-1/12
16	43	8	4	2	2/3	2	1/2	48-1/6
17	31	11	5-1/2	1	1/3	1	1/4	37-1/12
18	14	6	3			2	1/2	17-1/2
19	13	4	2	1	1/3	2	1/2	15-5/6
20	12	4	2			2	1/2	14-1/2
21	29	15	7-1/2	3	1	4	1	38-1/2
22	22	19	8-1/2	1	1/3	4	1	31-5/6
23	10	6	3	3	1	3	3/4	14-3/4
24	26	8	4	1	1/3	4	1	31-1/3
25	25	7	3-1/2			1	1/4	28-3/4
26	11	2	1	1	1/3			12-1/3
27	8	3	1-1/2					9-1/2
28	11	4	2			2	1/2	13-1/2
29	4	1	1/2			5	1-1/4	5-3/4
30	2	0	0			3	3/4	2-3/4
31	1	1	1/2			3	3/4	2-1/4
32	9	1	1/2			5	1-1/4	10-3/4
33	4	0	0					4
34	11	2	1					12
35	10	2	1			1	1/4	11-1/4
36	4	0	0			2	1/2	4-1/2
37	4	0	0	1	1/3	1	1/4	4-7/12
38	18	2	1			2	1/2	19-1/2
39	4	0	0			1	1/4	4-1/4
40	11	3	1-1/2					12-1/2
41	8	0	0					8
42	12	4	2			1	1/4	14-1/4
43	19	2	1					20
44	9	2	1	1	1/3			10-1/3
45	16	1	1/2	1	1/3			16-5/6
46	3	1	1/2	1	1/3			3-5/6
47	15	1	1/2					15-1/2
48	4	1	1/2					4-1/2
49	17	1	1/2					17-1/2
99*	44							

*Out of district calls; not shown on map.

TYPES OF CALLS FOR POLICE SERVICE

Five categories of activities were selected for a breakdown of the "types of calls for police services" (see Table 9). Drunks, missing persons, and traffic-related incidents were excluded from Part II offenses because of the essentially non-criminal nature of these activities. Almost one hundred percent of the missing persons, for example, involved calls from worried parents whose children had failed to return home at the prescribed hour or from relatives of senile ladies and gentlemen who were lost in the area. A separate section for traffic offenses was created and ambiguities in the data created problems. In Table 9 the researchers list the number of citations as six, but feel that many additional activities of this type are to be found in the category of "other auto." Only when the Complaint Investigation Report or the Communication Dispatch Sheet specifically indicated that a citation had been issued was it listed. Also included in the category "other auto" were towed vehicles, abandoned autos, and calls to correct blocked driveway conditions.

A classification called "Crime-Related" was created and includes prowler runs, investigations and I.D. (identification) checks. Many of the incidents that went to make up this category were actually non-criminal. However, it was extremely difficult to distinguish between a legitimate call for help and those incidents involving a noisy drunk coming home late. This was further complicated by the fact that even in the latter cases, the officers responding had to assume that they were responding to a crime-in-progress, and for this reason the incidents are classified as crime-related. "Investigations" involved situations such as open doors or windows, alarms ringing, and suspicious men

in an area which were not broadcast specifically as prowler runs. It also includes some instances in which crime reports were taken but where the data relative to the particular type of crime were too obscure to be classified as Part I or Part II crimes.

The final section, "Miscellaneous Services," involves incidents which, in the opinion of the researchers, were service functions or operational requirements of the department, directed ultimately towards the maintenance of the peace or the proper functioning of the agency. Some will argue that drunks, family disputes, and aided cases should not come within the spectrum of "police activities" and should be the responsibility of other social agencies. The merits of this argument will not be considered at this point. In any case, the researchers felt that these activities should legitimately be classified as non-criminal in character.

Two further categories under "Miscellaneous Police Services" should be explained. The first, "Unknown Out of Service," was reserved for those calls which the Communications Unit broadcast as "Interview a Complainant" with no further clarification given in either the log book or on the Communication Dispatch Sheet. The researchers feel that most of these calls involved landlord-tenant disputes, unpaid meal checks and other incidents of a civil nature for which no specific department radio transmission code has been devised (see Illus. #10). The Department refrains from long, involved descriptions of the nature of a call in order to conserve broadcast time, and most of the above calls are sent out simply as "909" (Interview a Complainant).

The final explanation involves the category "Miscellaneous." This includes all calls broadcast as "909" which were either "unfounded" or

TABLE 9

TYPES OF CALLS FOR POLICE SERVICE

	<u>Number of Incidents</u>	<u>Number of Minutes of Elapsed Time</u>	<u>Average Time per Incident (In Minutes)</u>
<u>PART I</u>			
Homicide	0		
Rape	0		
Robbery	3	116	39
Aggravated Assault	4	201	50
Burglary	12	479	40
Larceny			
(Includes all larcenies)	34	1191	35
Auto Theft	22	977	44
Total Time		2964 min.	9.5%*
<u>PART II</u>			
Assault	7	299	43
Vice	2	123	64
Sex Offenses	6	231	39
Offenses Against			
Family and Children	1	92	92
Driving While Intoxicated	0	0	0
Malicious Mischief	19	898	47
Total Time		1643 min.	5.3%
<u>CRIME-RELATED</u>			
Prowler	15	281	19
Investigations	46	1132	52
I.D. Checks	13	75	6
Total Time		1488 min.	4.9%
<u>TRAFFIC</u>			
Citations	6	156	26
Motor Vehicle Accident	5	261	52
License Checks	18	74	4
Other Auto	81	2397	29
Total Time		2888 min.	9.4%

(continued on following page)

*Percentages based on total of 31,154 minutes of consumed time.

TABLE 9 (continued)

	<u>Number of Incidents</u>	<u>Number of Minutes of Elapsed Time</u>	<u>Average Time per Incident (In Minutes)</u>
<u>MISCELLANEOUS POLICE SERVICES</u>			
Drunks	66	1810	27
Missing Persons	22	900	41
Aided Cases	16	865	54
Attempted Suicide	8	696	87
Disputes	90	2465	27
Noise Complaints	23	620	26
Disorderly Juveniles	49	1263	26
D.O.A.	2	177	88
Station Orders	20	902	45
Continued Assignments	3	131	44
Meals	101	4435	44
Service Department Vehicles	11	422	38
Unknown Out of Service	78	2631	34
Meet an Officer	17	327	19
Fire	4	102	25
False Alarm	7	131	19
Meal Reliefs	15	1223	81
Miscellaneous	104	3071	29
Total Time		22,171 min.	70.9%*

*Percentages based on total of 31,154 minutes of consumed time.

ILLUSTRATION 10

10 CODE

10-1	Receiving Poorly	410	Requested Assistance Responding
10-2	Receiving Well	415	Noisy Party, Radio, Dog, etc.
10-4	OK/Message Received	417	Man Ringing Doorbells (Begging)
10-7	Out of Service	418	Fist Fight or Family Fight
10-7M	Out of Service, Meals	419	Serious Disturbance (Felony)
10-8	In Service	420	Juvenile Disturbance
10-9	Repeat Last Message	459	Burglary
10-13	Advise Conditions at Scene	518	Auto Accident (Property Damage)
10-20	Report Your Location	519	Auto Accident (Personal Injury)
10-22	Cancel Your Last Assignment	520	Accident (No Auto)
10-23	Standby (For a Few Moments)	527	Bonfire
10-29	File Check for Wanted	528	Fire
	(Person or Auto) ID, CWB & VEH.	529	Explosion
10-30	Person/Auto Is Wanted/Stolen	586	Traffic Congestion
10-31	Person Has Record, Not Wanted	587	Tag Improperly Parked Auto
	at This Time	596	Abandoned Auto
10-32	Person/Auto Is Clear	600	Roadblock
	at This Time	602	Man Breaking In
10-96	Leaving Vehicle To Investigate	603	Prowler
	Suspicious Auto or Situation.	800	Alleged Insane Person
	If Not Heard From in 5 Minutes	801	Person Attempting Suicide
	Send Another Unit To Cover.	802	Coroner's Case
10-97	Arrived At Scene	805	Juvenile Complaint (Minor)
10-98	Continuing On Present Assign-	811	Drunk Case
	ment To Another Location.	819	Drunk Rolling
	(Give Destination)	851	Stolen Auto
102	Drunk Driver	852	Tampering With Auto
211	Robbery (Holdup)	901	Call Your Station/Or As Specified
212	Strongarm	902	Return To Your Station
213	Pursesnatch	903	Close Signal Box
217	Shooting	904	Meet An Officer
219	Cutting	909	Interview A Citizen
221	Man With A Gun	911	Broken Window
288	Crimes Against Children	912	Person Dumping Rubbish
311	Indecent Exposure	913	Complaint Unknown
400	Evacuation, Mobilization	914	Person Down
404	Riot	916	Investigate Suspicious Men In Auto
405	Citizen Holding Prisoner	917	Investigate Suspicious Men
406	OFFICER NEEDS ASSISTANCE	918	Person Screaming For Help
407	Officer Needs Wagon, Send	1000	Plane Crash
408	Officer Needs Ambulance, Send	2000	Prison Break
409	Officer Needs Tow, Send	3000	Blockade (For Specified Area)

where the complaint was "gone on arrival" when the unit responded to the scene. The researchers felt this category to be extremely interesting and worthy of further research at some future time. As is indicated, there were 104 incidents involving an average time of 29 minutes and an aggregate time of 3071 minutes. It struck the researchers as unusual that of the 932 dispatches, 104 of these, or over 11% of the calls, would be either "unfounded" or "gone on arrival." The fact that on the average each of these incidents involved 29 minutes of elapsed time seemed further to test the credibility of these recorded dispositions. In explanation, the researchers felt that in many of these incidents the patrolmen were, in fact, confronting complainants and that this was an area in which the individual officer was exercising a large amount of discretion. The implications of the "unfounded" or "gone on arrival" dispositions in some cases seemed to the researchers to be functions of actions in which the situation was adjudicated, but where the method of adjudication circumscribed department policy and, therefore, the actual disposition could not be broadcast. Many of these circumscriptions, certainly, involved obviating the necessity of preparing additional department reports; others, because of a pressing backlog of calls, were possibly handled summarily.²¹ Further speculation as to the actions of

²¹The above explanation is based primarily upon conclusions reached on the basis of the researchers' experiences in their own agencies; however, it is felt that these experiences could be generalized to apply to many police agencies, including the San Francisco Police Department. In many instances an agency's attempt to prescribe procedures for every eventuality -- in effect, to control the use of police discretion -- results in department procedures which are at odds with the practical solution of some police encounters. The officer-initiated "shortcuts" in these cases should not be viewed negatively, since in a number of situations they are the most reasonable solution to an extremely difficult problem. It is important, however, that the department know in what areas this discretion is being used and weigh the benefits to the agency against the risks inherent in sanctioning a wide use of such discretion.

officers in these low-visibility situations is precluded due to a lack of any firm data, but it is felt that this is an area which deserves further research.

While the five major classifications above may open up discussion as to the appropriateness of the inclusion within them of certain of the sub-categories, the researchers feel that for the most part they have substantiated their selections. Even if the reader disagrees with these selections, however, this illustration indicates the necessity for collecting and analyzing this type of data.

VARIATIONS BETWEEN COMMUNICATION DISPATCH SHEETS AND COMPLAINT INVESTIGATION REPORTS

In many ways what was more revealing than the uncovered activities referred to earlier in this chapter, was the wide variation in the dispatch time and the time of completion when the Communication Dispatch Sheet and the Complaint Investigation Report were compared. In total, there were 932 recorded police dispatches recorded for the six patrol vehicles of the Mission District during the week studied. Table 10 shows a frequency distribution of 489 of these incidents for which there were records on the time dispatch and time of return on both documents. It was apparent that the procedures used in recording the time of dispatch were superior to the procedures for recording the time of return. In 109 of the 489 cases, the dispatch times were identical on both documents. The remaining 380 cases had significant variations of from minus four minutes to plus seven minutes when the recorded time on the Complaint Investigation Report was compared with the times recorded on the Communications Dispatch Sheet.

TABLE 10

MINUS MINUTES														TIME OF DISPATCH														PLUS MINUTES													
*14	13	12	11	10	9	8	7	6	5	4	3	2	1	000	1	2	3	4	5	6	7	8	9	10	11	12	13	14													
#01	01	02	01	01	02	00	04	02	05	15	06	15	38	109	122	49	38	22	37	21	14	03	03	04	05	04	01	04													
28	27	26	25	24	23	22	21	20	19	18	17	16	15		15	16	17	18	19	20	21	22	23	24	25	26	27	28													
00	01	00	00	00	00	00	00	02	00	00	00	01	01		05	01	01	01	01	01	01	00	00	01	02	01	00	01													
								117	51	46	44	32	31		35	47	52	57	59	79																					
								01	01	01	01	01	01		01	01	01	01	02	01																					

[illegible]

The base time in this illustration is that of the Communication Dispatch Sheets. The plus or minus figures indicate variances from the time found on the Initial Report documents.

***Minutes**
#Number of Incidents

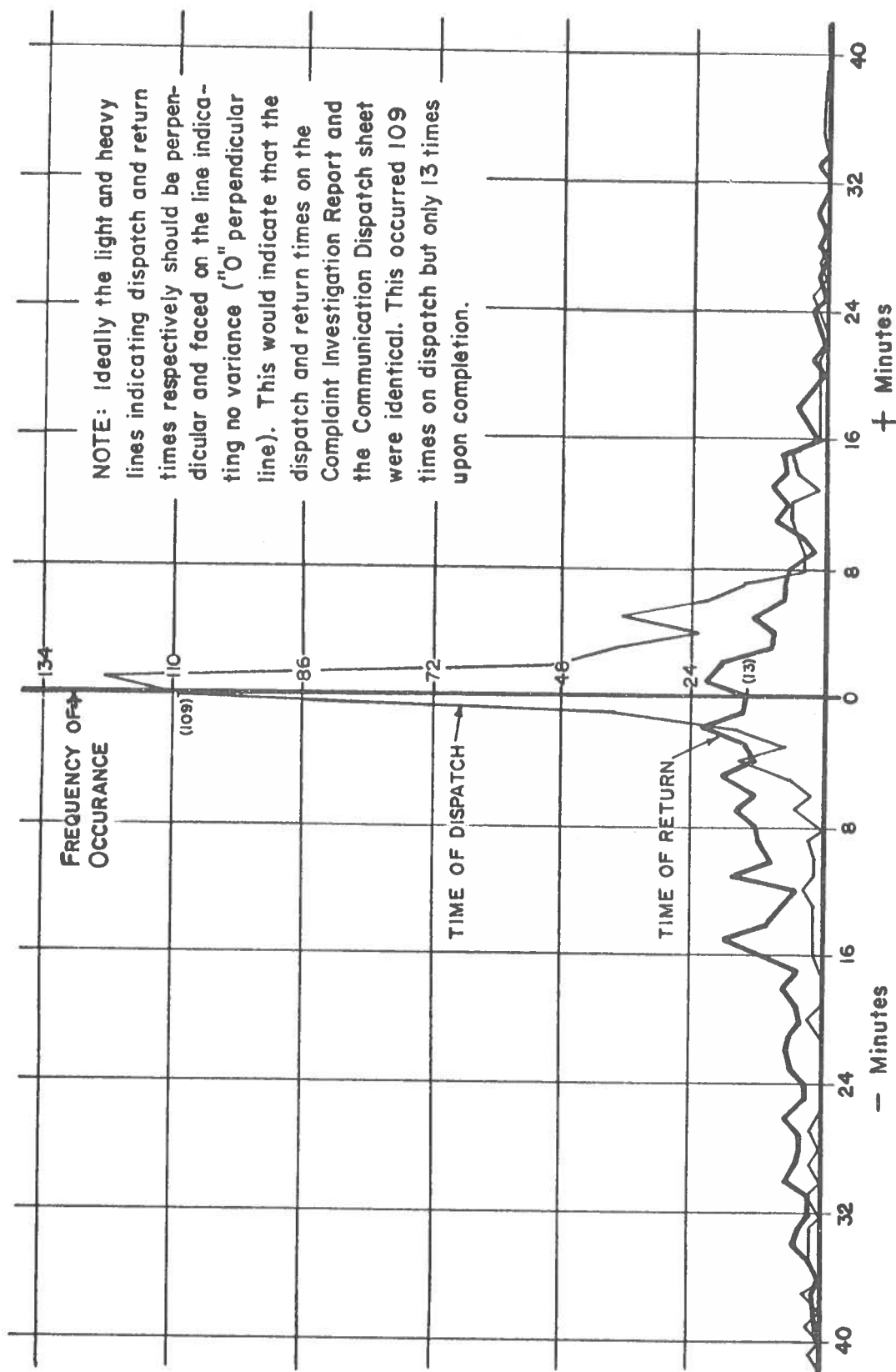
The distribution of the time of return had a very wide range; only 13 recordings were identical, and the range of the significant variations appeared between minus sixteen minutes and plus thirteen minutes. Illustration #11 shows this variation graphically.

During the course of data gathering, the researchers spent a considerable amount of time in the Mission District Station becoming familiar with the day-to-day procedures of its operations. Observations made during this period should have prepared the researchers for the striking variations which analysis of the data indicated. Considering these observations in retrospect, it was felt that one or a combination of several possibilities accounted for the discrepancies uncovered.

- (1) There is no explicit departmental policy regarding the method of reporting the completion of an assignment, i.e., in cases involving the preparation of an "initial report," an officer might call back into service to the Communications Unit first and then make the report. The reverse might also be true.
- (2) The patrolman assigned to station duty, because of the variety of tasks he is required to perform (answer the phone, interview complainants entering the station house, etc.), could not possibly monitor all calls to the district. It was also apparent from observations that little effort was made to record the completion time of the various assignments and reliance was placed on the recorded notes of the assigned officer.
- (3) The assigned officer did not always take notes on the minor miscellaneous services performed, consequently the

ILLUSTRATION # 11

VARIATIONS IN "DISPATCH" and "RETURN" TIMES



elapsed time involved in these incidents was often approximated and recorded by the assigned officers at the end of their tour when they signed the Complaint Investigation Report.

Each of these possibilities was borne out as a result of a sampling of patrolmen assigned to the district. The patrolmen were asked the following questions:

1. List, in consecutive time sequence, the activities which you would be engaged in if given an assignment relative to a malicious mischief complaint while on patrol in the district.²² In each case, the response, with minor variations, was as follows:

- (a) acknowledge call
- (b) respond to scene
- (c) interview complainant
- (d) record information in notebook
- (e) search area for perpetrators

At this point, the anticipated variations related to the lack of a specific reporting procedure became apparent. Some patrolmen said that under certain conditions, i.e., a very busy tour, they would immediately call back into service and phone in their "initial report" when the opportunity presented itself. Others, however, indicated that in all cases they would phone in their "initial report" first and then notify the Communications Unit that the assignment had been completed. The rationale for the latter reasoning was that the District Station House

²²Malicious mischief was chosen because it necessitates the preparation of an Initial Report and requires a judgment on the part of the individual officer as to when he should phone in this report.

should at all times be aware of activities of patrolmen on the street, and that in addition, this obviated the possibility of ending a particular tour with numerous reports remaining to be completed.

2. The second question was whether or not the officer was aware of any department order which specifically indicated which of the above procedures would be proper. The answer in all cases was no.

3. Third, each officer was asked if he recorded in his notebook all of the assignments to which he responded. The answer again was no; only incidents requiring more substantial reporting than the Complaint Investigation Report were recorded in the notebooks.

4. The fourth and final question sought to explain the variance in the recorded times of dispatch and completion on the Communications Dispatch Sheets and the Complaint Investigation Reports. It asked what the officers thought would account for these discrepancies. The officers indicated that in most cases the time of completion was entered on the Complaint Investigation Report by the reporting officer at the end of his tour; that some of them who did not take notes regarding this time, approximated it from memory. They indicated that over the years, because of the increased volume of activities in the District Station, the patrolman assigned to station duty was usually too busy to monitor each completed assignment. They felt that the time they recorded on the Complaint Investigation Report was close enough to the actual time to be acceptable and that, in any event, the accurate recording of these times was not critical.

As a result of the obvious inaccuracies in the collected data, it was decided that the original goals of the project be abandoned and a new objective substituted. Instead of any definitive statements which

might be contingent on the veracity of the recorded duration of the incident, such as the mean time per activity or the expected work load per tour, the researchers would now attempt to demonstrate the indispensability of accurate incident reporting and analysis in the proper allocation of the department's manpower. The discovery of inaccuracies in the data does, in no way, affect the conclusions and recommendations detailed in Chapter VII of this report, since these conclusions and recommendations are predicated not on the preciseness of the recorded times but rather on the overall implications indicated by the data.

CHAPTER VI

RADIO SPECTRUM CONGESTION

Before presenting the conclusions and recommendations of the study, the researchers feel it is necessary to direct their attention to a problem which seriously interferes with present patrol allocation, and also acts to inhibit the collection of the necessary data referred to in the previous chapter.

As was previously indicated in this report, in order to facilitate the collection of data on police services performed, one collection instrument should be used, preferably the Communications Dispatch Sheet. In order for this collection to be complete, the disposition of each assignment must be called in and recorded at the Communications Unit. This additional frequency usage would all but inundate a communications network which is already plagued by radio spectrum congestion.

This problem is not unique to the San Francisco Police Department, for as the Task Force Report: Science and Technology points out,

. . . most large city police departments are faced with a severe radio spectrum congestion problem resulting in radio communication queues of patrol officers trying to reach their dispatcher. This situation will grow worse in the future as more cars and radios are added.²³

At the present time, radio transmissions from all of the districts in the San Francisco Police Department are averaging 2,000 to 2,500 per 24 hours and are rapidly approaching the maximum output as outlined by the Federal Communications Commission.

²³The President's Commission on Law Enforcement and the Administration of Justice, Task Force Report: Science and Technology (Washington, D. C.: Government Printing Office, 1967), p. 22.

As was pointed out earlier in this report, the San Francisco Police Department operates on 5 radio frequencies.

Channel 1 is a patrol channel dispatching vehicles in 5 districts -- Potrero, Park, Richmond, Ingleside, and Taraval.

Channel 2 is a service channel through which identification, traffic and warrant checks are made.

Channel 3 is used exclusively for dispatch of traffic vehicles.

Channel 4 is also a patrol channel dispatching vehicles in 4 districts -- Central, Southern, Mission and Northern, and in addition is used for communication with vehicles of detectives and administrative personnel.

Channel 5 is used to maintain contact with walkie-talkie units in the department.

Each patrol car is equipped to transmit both on an assigned channel, either 1 or 4, and on the service channel. The researchers attempted to determine the number of transmissions on each of these channels and were told these figures were not kept. There are approximately 2,200 messages transmitted per day on all 5 frequencies, with the heaviest volume being on the patrol channels 1 and 4. Table 11 indicates the most recently available data on the distribution of automotive equipment in the Department.

According to present F.C.C. policy, a radio frequency may be used only by the agency licensed for such usage. It has been suggested by the President's Commission that the F.C.C. establish a policy of assigning Public Safety Radio Frequencies only to local governments and that the users be not specifically identified.²⁴ In this way, under-utilized radio frequencies such as those assigned to school buses, highway repair crews, etc., could be utilized by police during periods of peak need.

²⁴Ibid., 133.

TABLE 11

DISTRIBUTION OF AUTOMOTIVE EQUIPMENT -- 1966 ANNUAL REPORT

STATION OR BUREAU	Autos	Patrol Wagons	Trucks	<u>3-Wheel</u> Motorcycles	<u>Solo</u>
Central	10	1	0	1	0
Southern	9	1	0	1	0
Potrero	9	1	0	1	0
Mission	9	1	0	1	0
Northern	9	1	0	1	0
Park	7	1	0	1	0
Richmond	8	0	0	1	0
Ingleside	8	1	0	1	0
Taraval	8	0	0	1	0
Bureau of Inspectors (detectives)	65	0	2	0	0
Headquarters	53	0	5	0	0
Traffic Bureau	36	0	0	70	90
Juvenile Bureau	8	0	0	0	0
Relief Cars	<u>7</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicles	246	9	7	79	90

169

Many of the Public Service Frequencies reach their maximum use during the period from 9 A.M. to 5 P.M., while police needs, relative to transmission time, are greatest during the period from 6 P.M. to 2 A.M. It is obvious then that a municipality may have more than adequate total radio spectrum resources to create a highly efficient radio telephone network and, at the same time, the police may be desperately short of radio frequency resources, themselves.

The Task Force Report suggests that rather than using single channels for transmitting, a police mobile radio network should make greater use of trunk groups of channels. The network should have a number of switchable channels which can be reassigned from one group of users to another.²⁵

In radio communications, a receiver can be designed so that it is turned on upon receipt of a sub audio frequency code; it is possible to communicate with a chosen car or a group of cars equipped to respond to the code. Other cars tuned to the same frequency but responding to a different code can be addressed separately at different times. This coding permits greater flexibility in the use of each frequency.

For instance, in the San Francisco Police Department, if channels 1 and 4 are in use 50% of the time, then users find the channel busy one-half of the time. If these two channels were shared, a user would find both channels busy only about 35% of the time.²⁶ In the San Francisco Police Department, if all channels were grouped together, then users would find 5 channels busy less than 15% of the time. Actually, since channels 2, 3, and 5 are in use for less than 50% of the time, all five channels would be busy very infrequently.

²⁵Ibid., 30.

²⁶Ibid., 60.

This concept of channel sharing can be further expanded to include other under-utilized public service channels previously mentioned. This would in no way affect the confidential nature of police communications, for the Task Force Report points out:

. . . channel sharing does not mean that all users hear all messages. With modern coding techniques each department in a channel sharing arrangement can use the radio frequency channel to address only its own cars without "opening up" the receivers to other using departments.²⁷

Thus, with no increase in the number of radio channels, communication system users can get superior service if they pool their spectrum resources into a multi-channel system. The outstanding example, of course, is the telephone industry which gets good channel loading and provides superior service because of the large number of users who share a common system.²⁸

Each of the above suggestions, however, is of a stop-gap nature and will not eliminate the necessity for allocation of additional frequencies for police mobile radio use. There is a pressing need for quantitative projection of the future needs for police radio spectrums and time is a very important factor.

Spectrum shortage can affect the operations of a police agency in a variety of ways, most importantly in the area of effective manpower deployment. The experience of the City of New York dramatically illustrates this point. Until recently, the N.Y.C. Police Department's Communications Unit operated on 8 simplex radio channels. The borough of the Bronx is patrolled by approximately 225 mobile units, all broadcasting on a single frequency channel. Because of frequency congestion, the Department has placed 500 police cars on the street without radios. These vehicles maintain contact with headquarters by commercial telephone, so that the

²⁷Ibid., 30.

²⁸Ibid., 123.

frequencies may be kept clear to dispatch messages. This situation is now being remedied by the acquisition of under-used forestry frequencies.

The Report of the President's Commission points out that

. . . the approximate rule of thumb for radio channel requirements might be arrived at on the basis of population. Sample statistics taken in the course of the work indicate that on the average, over a 24-hour day, a police patrol vehicle receives about one call per hour. Further, on the basis of annual calls for police service from the public, it appears that it takes a population of about 25,000 to generate the average 1 call per hour for a mobile patrol vehicle (based on data derived from the City of Chicago). Thus, very tentatively, and subject to a more detailed evaluation, it may be said that it takes at least 1 patrol vehicle on the street at all times for each 25,000 of population. Further, studies by the Rand Corporation indicate that a police conversation lasts on the average from 25 to 60 seconds. This checks well with the viewpoint accepted by the F.C.C. that about 30 mobile vehicles make an average load for a single radio channel. Finally, these figures are based on an average loading, but a communication system must be designed for the peak load. Assuming a 5.1 ratio between peak and average loading, the figures would indicate the assignment of 1 police radio channel for mobile patrol purposes on the basis of 30 cars per channel for every 150,000 in population. The needs for supervisory vehicles, detective channels and other special purpose channels would increase this number.²⁹

It is clear by using these figures that the two patrol frequencies used by the San Francisco Police Department to police a city of 700,000 and service approximately 200 patrol, detective, and Headquarter vehicles is already seriously overloaded. While this overloading restricts effective manpower deployment in that it limits the number of radio-equipped vehicles which can be put in service, it also obviates the compilation of accurate data relative to "in service time." Several of the officers interviewed in this survey indicated that they had waited

²⁹Ibid., 32.

10 to 15 minutes in some cases to call back in service upon completion of an assignment. It, therefore, follows that no effective command and control operation can be implemented within the San Francisco Police Department until the problem of radio spectrum congestion is solved.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

Earlier in Chapter V, it was explained that halfway through the project the researchers had to abandon their original methodology. The analysis of the test data indicated a random sample number which was beyond the scope of time and finances allowed the project. The initial methodology was devised assuming that the information on the recording instruments (Comp. Invest. Report and the Communications Dispatch Sheets) was accurate and that the stratified random sample number would be no higher than perhaps 10 for any tour. In other words, ten 12 to 8 A.M. tours on Monday, ten 12 to 8 A.M. tours on Tuesday, etc., or a total of 210 tours. With a stratified random sample of this size, and accurate data, it was felt that some meaningful statements could be made relative to the probable work loads by hours and by tours, the types of activities which could be expected, and the areas in which these activities would take place. Consequently, this attempt had to be abandoned and a less ambitious project substituted. Despite the obvious inaccuracies of the data already collected, the researchers decided to proceed with the analysis of the data and to concentrate on demonstrating the value this type of data has in the proper allocation of its existing manpower. Our aim, then, was to demonstrate the need for the Department to refine its recording procedures so that accurate information could be reported and analyzed. Chapter V, hopefully, illustrates some of the uses to which analysis of the data may be put.

The conclusions and recommendations of the researchers which follow are based in part on their four-month study of the Mission

District and in part on the basis of their years of experience as working police officers in other agencies. They would like to thank the department for its help during the past several months in providing them with access to the records and personnel which were necessary for completion of the project, and for giving them a "free hand" relative to the project's scope and direction. It is hoped that there is something in this paper which in some way may return the favor.

CONCLUSIONS AND RECOMMENDATIONS

The President's Commission Report, The Challenge of Crime in a Free Society, in using the term professional to describe a police agency, uses the term in a particular context. It has reference to the degree of efficiency and uniformity of procedures inherent in a police organization. The researchers have used many of these criteria for the judgments reached in this report. The conclusions are predicated on the assumption that conditions found within the Mission District are indicative of those to be found in the other eight district stations. The recommendations will be dealt with individually and include suggestions in the following areas:

- 1) Command and control of patrol operations
- 2) Effective reporting procedures
- 3) Analysis of data
- 4) Department policy statements in certain areas of patrol procedures
- 5) Patrol supervision
- 6) Use of available manpower
- 7) Mobility restrictions due to unavailability of necessary patrol car units.

COMMAND AND CONTROL

Command and control in most jurisdictions is performed in the Communications Unit, the focal point of almost all calls for police service. In order for command and control to be effective, it must be flexible in order to match police resources efficiently to the public's need; what may be efficient manpower allocation on a Friday night swing shift may not be the same for a Sunday night late tour. The Communications Unit must be able to maintain a fluidity so that adaptations to changing needs will be facilitated. This adaptation is not presently possible within the San Francisco Police Department and is possibly one of the single most important reasons why the Mission District sector boundaries are so rigid and antiquated. It is one reason why Watch Commanders are inhibited from improving the assignments within their jurisdiction, and accounts for some of the disparity in the work loads of the various sectors.

In addition, if effective command and control is to be maintained, the Communications Unit must be aware of the status and location of all units at all times. Here again, as the variations in the Complaint Investigation Reports and the Communications Dispatch Sheets relative to the time the unit reported back in service indicates, the present system leaves much to be desired.

The researchers feel that a complete re-evaluation of the command and control operations of the department is indicated. The President's Commission Report suggests that:

. . . in many jurisdictions the entire police command-and-control function, including many aspects of patrol operations, should be subjected to a basic re-examination, taking full account of the new capabilities offered by computers and communications links. This

review should consider questions of when, where and how to use the patrol force. It should evaluate how police should respond to various types of routine and emergency situations. It should examine by study and by experiment the extent to which preventive patrol deters crime, how forces should be allocated by time and by geography, optimum patrol tactics, appropriate conditions for conspicuousness and for covertness, how to respond to riots, and many other germane questions. The patrol operations will then be able to benefit markedly from computer assistance -- much more than by merely automating existing procedures. . . . Information is the essential element in making such assignment decisions: information about criminal activity, the status of police resources, and the environment and general circumstances in which operations must be conducted. The information must be gathered, organized, and displayed in a timely fashion so that it can be utilized for decision making.³⁰

REPORTING PROCEDURES

It was indicated earlier in Chapter III, that in order to get a true picture of the needs for police services, data must be collected on all activities which consume patrol time. Crime statistics alone are inadequate. The Department at the present time is engaged in a computer sharing program with San Francisco Comptroller's Office in which crime data from the Initial Reports is analyzed. This program should be expanded to include processing and analysis of information contained on the Communications Dispatch Sheets. However, even if data processing in this area were a reality, the quality of the recorded information on this document leaves much to be desired. The old programmers' axiom of "garbage in, garbage out" seems appropriate in this situation. A procedure, with a built-in feed back system to determine the credibility of the information obtained, should be devised.

³⁰Ibid., 23.

As it turns out, the present system of double recording (Complaint Investigation Reports and Communications Dispatch Sheets) could be utilized for this purpose with very little change and would involve the following:

- 1) Gathering the most recent data for a period of possibly 3 months in much the same manner as the researchers have done in this study, i.e., recording all information from Complaint Investigation Reports and matching and adding to this data the information contained in the Communications Dispatch Sheets. Variations similar to those pointed out by the researchers will probably be found.
- 2) A policy statement indicating a definite reporting procedure to be followed by officers upon completion of an assignment. (This should be prefaced by a decision as to whether the time taken for reporting the particular activity is to be included in the mean time per activity.) In addition, for a period of approximately 3 months, a civilian member of the department should be assigned to monitoring the district radio. It should be made clear that the sole responsibility of this individual will be to monitor all calls to, and dispositions from, the field units within the district. These orders should insure more uniformity in the patrolmen's reporting activities and more closely align the Complaint Investigation Report with the recordings on the Communications Dispatch Sheets.
- 3) A subsequent comparison of the Complaint Investigation Reports and the Communications Dispatch Sheets under the new recording system to determine if the desired accuracy has been achieved.

Ideally one collection instrument should be used once its accuracy has been determined; since command and control is implemented in the Communications Unit it should be gathered and analyzed there so that it can be utilized for decision making. This will depend, as was indicated in Chapter VI, on the correction of the radio spectrum congestion problem so that the dispositions of the various assignments may be recorded.

ANALYSIS OF DATA

This criticism is closely tied to the lack of adequate reporting procedures and is ultimately based on the fact that the Department has for years collected information relative to the total services performed by the members of the force but has failed to extract and analyze it. It would seem that the main raison d'être for both the Complaint Investigation Report and the Communications Dispatch Sheets at the present time is to fix responsibility within the Department for the proper handling of a specific assignment, and to aid in the investigation of a citizen's complaint or commendation of the particular officers assigned to a specific incident. All of this information should be key-punched or otherwise prepared for processing and analysis.

CLEAR DEPARTMENT POLICY IN THE AREA OF PATROL PROCEDURES

The researchers' concern in this area revolves primarily around the utilization of one-man patrol vehicles. The hesitancy on the part of the Watch Commander to utilize this type of patrol was discussed earlier in the paper, but the matter deserves repetition. The decision for the utilization of one-man vehicles must be a high level decision

in view of the dangers inherent in unfamiliarity with proper techniques. Proper training and coordination is an essential prerequisite to its utilization (See Appendix I). Such a decision should not turn on the idiosyncrasies of an individual Watch Commander. To leave such policy decisions to chance seriously endangers the lives of the members of the force when this type of patrol is utilized.

Another procedure to which the Department should direct its attention is the memorandum books of the individual patrolmen. The researchers feel that the Department should issue these memorandum books in order to standardize them. Notes on small scraps of paper or books from which pages have been torn would be difficult to establish as being official documents for purposes of court testimony. Department orders should be issued specifying the types of incidents and information to be recorded and procedures to insure uniformity and some modicum of neatness. Supervising officers on patrol should be responsible for periodically checking and verifying the entries.

PATROL SUPERVISION

The method of patrol supervision presently being used is relatively new to the San Francisco Police Department. Until five years ago, all first-line supervisors patrolled their district on foot while the patrolmen rode in patrol vehicles. Presently there is one supervisor who patrols the District, alone, in a radio-equipped vehicle and is responsible for the supervision of the patrolmen assigned to radio motor patrol. This procedural change was a positive one, for it reduces, to a degree, the necessity for patrolmen to make important decisions without the consultation of a supervisor. Two questions regarding this

implementation arise as one studies the data gathered in the course of this project:

First, have the attitudes of the patrolman adjusted to the accessibility of a superior officer with whom they can consult, or are they guarding their previous autonomy of action by not involving the supervisor in situations in which he should be involved? Our data indicates that on many tours there were no calls for the sergeant to "meet an officer"; there were seldom more than one or two such calls on any of the tours studied. In those situations in which the sergeant is called, one would expect him to respond in any event, as they involved serious Part I or Part II offenses such as robberies and assaults. There are situations, of course, where the patrol sergeant responds to the scene without the necessity of being dispatched by the Communications Unit in response to a request; however, considering the volume of calls, it would seem that many low visibility situations in which the decision to make an arrest, to deviate from prescribed departmental policy or to refrain from necessary involvement are left to the discretion of the individual officer. We would suggest in this area that a more active policy for supervisors be stressed, and that guidelines for standardizing the exercise of discretion by patrolmen be initiated.

The second question which occurs in this connection is whether the Department has gone far enough in the area of supervision or whether the Department should increase its supervisory capacity by motorizing an additional sergeant? The researchers feel that deploying a sergeant on foot to supervise the foot patrolmen is a wasteful procedure. It limits the mobility of the foot sergeant and thereby reduces his supervisory capacities; it also puts an undue burden on the motorized patrol

sergeant by making him responsible for more subordinates than he can effectively supervise. If both sergeants were motorized and the district divided equitably for purposes of supervision, both foot patrolmen and motorized patrolmen could be more effectively supervised.

USE OF AVAILABLE MANPOWER

There are two axioms in the area of manpower deployment which have not changed since O. W. Wilson's original study of the Wichita Police Department in 1931: 1) manpower should be deployed according to the needs for police services, and 2) it should be deployed equitably, so that the same amount of patrol time in each sector can be devoted to preventive patrol. Earlier in Chapter V, it was indicated that the manpower deployment in the Mission District for the month of September 1966 was as follows: 535 men assigned to the 8 A.M. to 4 P.M. tour, 611 to the 4 P.M. to 12 midnight tour, and 580 to the midnight to 8 A.M. tour. Data collected for the first week of September of that same year indicate that the division of work by tours was 23% on the 12-8 tour, 35% on the 8-4 tour, and 41% on the 4-12 tour. In other words, there were 45 more man days allotted to the 12-8 tour than the 8-4 tour, even though there was 12% less activity on this tour. Further data indicated a dramatic reduction in the calls for police service between 4 A.M. and 8 A.M., and a peak period for these calls during the hours beginning at 4 P.M. and ending at 4 A.M. In order to match manpower with need, the obvious expedient of an overlapping tour seems to be indicated. The hours of assignment, whether from 6 P.M. to 2 A.M. or 7 P.M. to 3 A.M., will require further analysis, but either would result in a more efficient utilization of the force.

The second distribution, within the particular tour, to equalize the work loads in the various sectors is predicated on the nebulous concept of preventive patrol. There is no intention on the part of the present authors to become involved in what may be a philosophical discussion as to the effectiveness of preventive patrol. It is obvious that analyses of experiments such as Operation 25 and Operation 20³¹ in the New York City Police Department are necessary before any factual statements can be made. This distribution would be justified, however, solely on the basis of the morale factor involved. Our data in Chapter V (Table 6), indicates that the Communications Unit directs fewer calls to car #6 possibly because it has no assigned area of responsibility. In another analysis, the researchers matched the location of assignments with the sector car to whom they were given; in almost 50% of the cases, assignments were to cars other than the one assigned to the sector. In other words, in almost half the cases, sectors one through five were answering calls in areas other than their assigned area. It seemed to the researchers that at the very least the sector boundaries should be changed to define an area of responsibility of the #6 car. Actually, a complete re-evaluation of the sector boundaries is strongly indicated. This evaluation should consider both the data displayed in Chapter V and the prospect of restricted mobility which is discussed in the following section.

³¹In both of these operations, patrol saturation techniques were used to determine the effectiveness of patrol and to ascertain the point of diminishing returns relative to the allocation of manpower. The results of Operation 25 (1955) were tainted by dubious data recording procedures, and the results of Operation 20 (1967) are presently being analyzed.

RESTRICTED MOBILITY DUE TO THE UNAVAILABILITY OF RADIO MOTOR PATROL CARS

Data collected in the course of this project indicates that an insufficient number of patrol units are available to handle the calls for police services. During the week studied, the following data relative to patrol availability was discovered:

- (a) On 13 occasions, 6 radio motor patrol cars were simultaneously out of service on assignments for periods lasting from 1 to 30 minutes.
- (b) On 38 occasions, 5 radio motor patrol cars were simultaneously out of service on assignment for periods lasting from 1 to 25 minutes.
- (c) On 40 occasions, 4 radio motor patrol cars were simultaneously out of service on assignment for periods lasting from 1 to 30 minutes.

In view of the overloads indicated above, waiting lines (queues), or holding of calls, becomes standard operating procedure. In terms of the latent functions of these overloads, one would expect patrolmen's individual performance to deteriorate. Attempts to expedite the correction of conditions in order to be available for another call would lead to the utilization of "short cuts" which may subvert the policies of the department. Community relations suffer since the pressures of the moment obviate the patient understanding which in many cases is the sum total of the expectations of the complaining citizen.

While research on this project has not been extensive enough to make a solid recommendation as to the advisability of utilizing one-man patrol car operations, this is an area to which the Department should direct its attentions. The President's Commission Task Force Report:

The Police points out that,

there has been a discernible pattern away from the exclusive use of two-man cars in American cities, and a distinct movement toward the far greater use of one-man patrols. . . . This trend lends support to those police authorities who believe that local police problems can be most immediately met by covering a city with motorized one-man patrol units, rather than by a system of less intensive patrolling caused by an exclusive pattern of two-man units.³²

The Task Force Report goes on to say that,

Almost all cities have long forsaken the practice of having two patrolmen walk a beat together. For the same reasons it seems generally undesirable and unnecessary to have two men in a car. One-man operations permit more intensive patrol of a city with a like number of officers, prevent partners from spending much of their time aimlessly conversing with each other, and contribute to the safety of the individual officers by compelling each officer to give his undivided attention to his duties. One-man cars allow rapid assignment of more vehicles from more directions as another means of combatting crime.

Conditions which justify the use of two-man patrol cars are similar to those which dictate the assignment of two-man teams to patrol duty on foot. Such conditions include those of too many incidents for one man to handle in a physically limited, densely populated area; a high frequency of circumstances in which officers are likely to be assaulted; and the high prospect of raucous misbehavior that can only be prevented by the concerted action of two or more officers. Such decisions must be made locally and, whatever the deployment practice, forces should periodically re-evaluate their one- and two-man districts to be sure of the wisdom of their decisions.³³

As was indicated earlier in this Chapter, the conclusions and recommendations contained in this report were, in part, based on the

³²The President's Commission on Law Enforcement and the Administration of Justice, Task Force Report: The Police (Washington, D. C.: Government Printing Office, 1967), 54.

³³Ibid., 55.

researchers' previous experiences in their own agencies. As a result of these experiences, the authors would like to acknowledge that many of the criticisms made in this report could easily have been directed towards their own departments and others with which they have been associated. The openness and cooperation of the San Francisco Police Department in this present endeavor is a tribute to the farsightedness of its administrators, and it is sincerely hoped that the report will in some small way assist in improving an already fine department.

APPENDIX I

The following appendix is taken from the May 1968 edition of the Spring 3100 magazine of the New York City Police Department. It illustrates some of the recommended safety procedures in the utilization of one-man radio patrol cars.

THE ONE-MAN CAR

Safety Procedures to Follow When Stopping Violators

Ever since New York City police have been using radio motor patrol cars, they have on many occasions been operated by one patrolman: when his partner is on meal, covering a school crossing, or temporarily assigned to other than recorder's duties.

In 1967, the two-year motorization experiment in the 16th Division was concluded and made a permanent feature of patrol. The experiment confirmed a belief that in certain sections of New York City it is more practical to use one-man patrol cars.

Because of the increased use of one-man cars, a special training program is being developed by the Police Academy to emphasize safety factors in how to stop traffic violators.

The following pictures illustrate some of the recommended safety procedures to use in stopping cars suspected of violations. All photos are posed by New York City police officers.

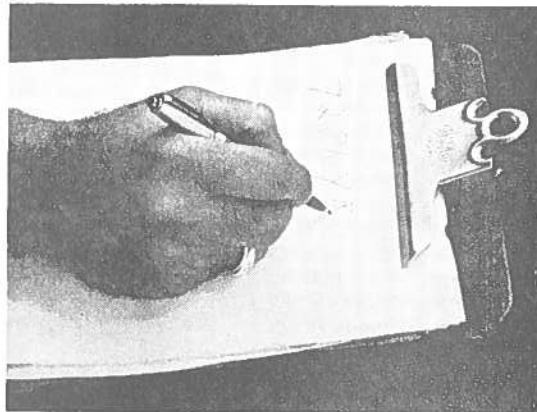
In preparation of this article, the staff of SPRING 3100 wishes to express its gratitude for the guidance and help provided by the members of the Police Academy.

When a traffic violation is observed, the radio car operator approaches the vehicle from a safe distance and pursues from the rear so the motorist can readily identify the police unit through his rear-view mirror. Short blasts on the horn should be sufficient to attract the violator's attention. The siren is used only when the motorist does not recognize the police car or fails to comply with hand signal directing him to the curb. Overtake violator ON THE LEFT, when necessary.



Stop motorist as near to the location of violation which will not create an obstruction to the normal flow of traffic. Ideally, this location should provide sufficient space for both the violator and police vehicles to park at the curb. On parkways direct motorist on to the grass or off at the nearest exit.





Police unit stops about twelve (12) feet BEHIND and two (2) feet to the left of the violator's car providing a left-side "safety area" for the officer to approach the vehicle (indicated by arrow). Before leaving RMP, car's license plate number should be noted, if not already written down, and turret and flashing parking lights turned on to warn oncoming traffic. At night, headlight high beams directed into the car provide better visibility for the officer while reducing visibility for the motorist who would be looking into the glare of the headlights.



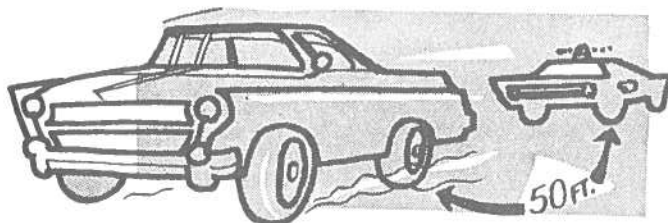
Approach vehicle cautiously and glance into the rear and side windows to detect any suspicious circumstances or quick moves by the occupant. Keep revolver hand free and direct motorist to remain in car if he attempts to step out.



STANDING TO THE REAR OF THE FRONT DOOR on driver's side gives the officer a clear view of the car's interior and requires the driver to turn to talk thus putting him in an awkward position if he intends to take action against the police officer. The officer's position also prevents the motorist from using the car door as a weapon to strike or knock him down. If there are other persons in the rear of the auto, the officer faces the side of the car directly so all are in view.

STOPPING OF SUSPICIOUS CARS OR CARS WANTED ON ALARM

Technique for Two One-Man Cars

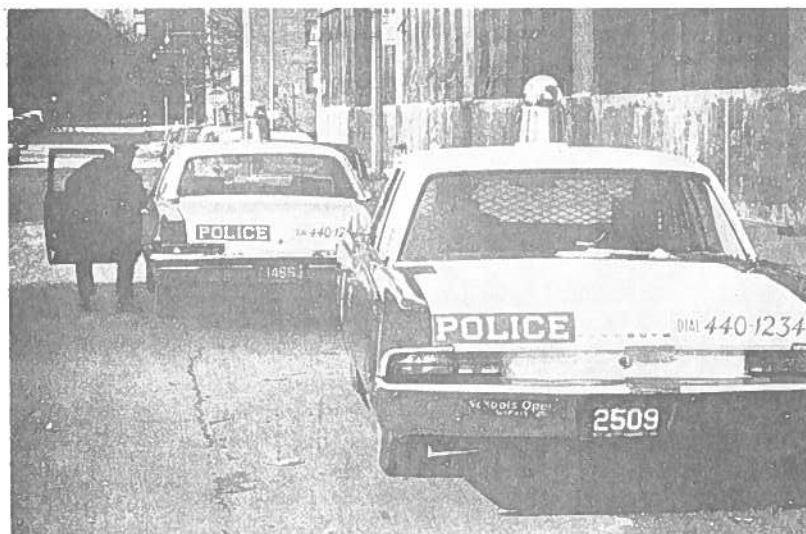


The paramount rule to keep in mind when a suspicious or wanted car is under surveillance is NOT TO STOP THE SUSPICIOUS VEHICLE WITHOUT GETTING THE ASSISTANCE OF ANOTHER POLICE UNIT, unless absolutely necessary. Give radio dispatcher the description of the car and its occupants, the license plate number, and its location and direction of travel; get acknowledgement from the radio dispatcher that the message was received. An estimate of how much space to allow between a pursuing car and the pursued varies with the speed and volume of traffic on the highway. Common sense should prevail, but a pursuing car should seldom approach a speeding car closer than two and a half car lengths, or about 50 feet.



After assisting RMP arrives, use turret light, horn, and siren, if necessary, to attract attention of suspect so he is able to recognize the police vehicle through his rear-view mirror. DO NOT PULL ALONGSIDE WANTED VEHICLE. Direct suspect to park at

empty curb space, avoiding areas over crests of hills and locations exposing large numbers of civilians to possible gun fire or affording suspects a good escape route. Parking behind other parked vehicles or street obstructions is recommended procedure.



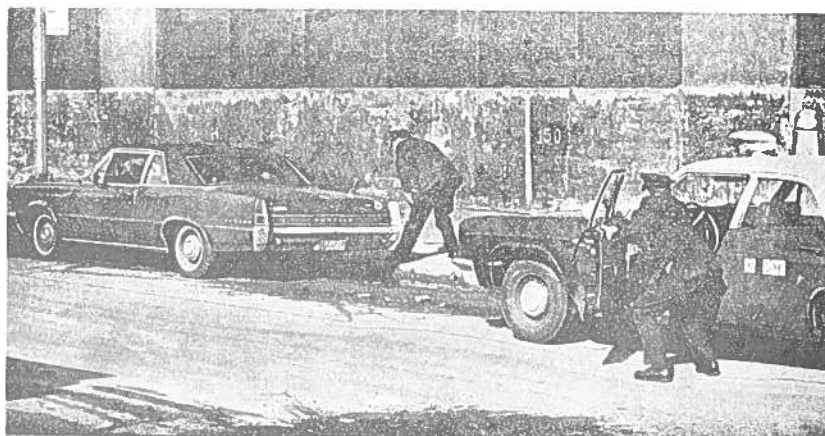
First radio car parks from 2 to 12 feet behind wanted vehicle and extended about 2 feet to the side exposed to traffic. At night this position will allow one of the RMP's headlight high beams to illuminate the wanted car's interior and the other to light alongside the suspect's car. Revolver drawn, first officer takes position behind his car door to afford him cover. Assisting RMP operator should, if possible, line up his radio car so that his headlights will illuminate the area not lighted by the first car. Both cars should have their parking and turret lights turned on. DO NOT ORDER SUSPECTS OUT OF CAR UNTIL ASSISTING RMP IS IN POSITION; the backup man will ensure the first officer's safety.



Location of the exact stop site should be transmitted to Communications Sect. to allow the radio dispatcher to summon additional police units to scene.



First officer orders operator of wanted car to stop vehicle's engine and drop ignition keys to the pavement. Since many automobiles can be operated without keys, listen to the sound of motor and note exhaust pipe to check compliance. Direct all occupants to clasp their hands behind their head with fingers locked in place.



Assisting officer approaches wanted vehicle from the side not covered by the first officer and positions himself aside the back fender. Crouching down, he holds revolver at ready.



After first officer moves up to cover suspects from the other side of the car, assisting officer raps on the rear fender, drawing the attention of the occupants in preparation for directing them out of the car for frisking. SUSPECTS IN FRONT SEAT LEAVE CAR FIRST — see the photograph beneath.





Line up suspects outside the car as they emerge, positioning them a few feet apart. Assisting officer then orders them to the wall for frisking. On parkways or other areas where a wall is not available, line the suspects along the side of the vehicle. The frisking of suspects for dangerous weapons should be completed before search is made of their car.



NOTE

A special edition of SPRING 3100 now in preparation for the combined July/August issue will occupy the entire magazine. Please hold your Want Ads, Looking 'Em Over and Down the Line items until the August deadline dates for September publication.

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