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THE UNIVERSITY OF ALBUQUERQUE

CENTER FOR LAW ENFORCEMENT, CORRECTIONS AND SOCIAL SERVICES

PROPERTY CRIME REDUCTION PROGRAM

SPECIAL OPERATIONS SECTION
ALBUQUERQUE POLICE DEPARTMENT
ALBUQUERQUE, NEW MEXICO

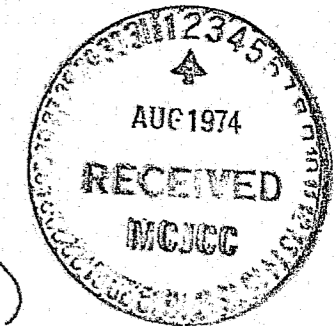
JULY, 1974

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METROPOLITAN CRIMINAL JUSTICE
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FINAL EVALUATION

PROPERTY CRIME REDUCTION PROGRAM

SPECIAL OPERATIONS SECTION
ALBUQUERQUE-POLICE DEPARTMENT
ALBUQUERQUE, NEW MEXICO

SUBMITTED BY:

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JULY, 1974

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ABSTRACT

This study represents an evaluation of a two phase Albuquerque Property Crime Reduction Program.

The high incidence of property crime, particularly residential and commercial burglary, in the Albuquerque area suggested that with a Special Operations Section capable of data collection, of analysis authorized for deployment (independent of the general operations of the police department) and of changing its modes of deployment, property crime in specific "high rate" areas of the city could be reduced.

The methodology used to analyze the project involves the application of before-after and control-experimental comparative designs. Appropriate measures of association and test of significance along with percent comparisons are used to assess the viability of nine hypotheses.

The findings show that the SOS project was successful in affecting crime rates for the entire city of Albuquerque and for given experimental areas. The greatest success is found in the lowering of residential burglary and armed robbery.

In conclusion, the findings support a claim for success in lowering, or in some cases leveling, the rising property crime trend.

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PROJECT DESCRIPTION

This report includes an analysis of a two phase project conceived by Pilot Cities, Albuquerque, New Mexico and the Albuquerque Police Department. The high incidence of property crime, particularly residential and commercial burglary, in the metropolitan area of Albuquerque suggested that with a Special Operations Section capable of data collection, of analysis authorized for deployment (independent of the general operations of the police department) and of changing its modes of deployment, property crime in specific "high rate" areas of the city could be reduced.

The project, then, as originally conceived was an attempt to bring the property crime trend under control. The major features of the project were to establish planning, patrol and investigative units to engage in coordinated efforts to reduce the incidence of property crime.

The primary objective of the Special Operations Section (SOS) was to test three main hypotheses: 1) a highly flexible tactical unit concentrating on property crime will contribute to a reduction in property crime; 2) such a special unit, supported by a crime analysis and planning capability which provides factual problem definition and specific tactical mission design, will be more successful in apprehending property crime offenders than standard field operations; 3) the use of different operational modes will contribute to property crime and/or arrest rates.

Operational Missions (Appendix F-1)

The stated operational missions of the SOS teams were as follows:

1. Preventive Patrol: Accomplished by saturation patrol, in marked vehicles and in uniform, of designated high-crime areas.
2. Apprehensive Patrol: Accomplished by unmarked patrol, either in a vehicle, bicycle, on foot, or any other means, including mobile and stationary surveillance of high-crime areas and potential crime targets.
3. Surveillances: Accomplished by maintaining surveillances on known criminals and on locations of criminal activity.

4. Investigations: Accomplished by handling case investigations, interrogations, interviews, and searches in support of Investigations Section when additional assistance is required in special instances.
5. Civil Disorders: Being a highly mobile force, the anti-crime team is a first line of defense in a riot or civil disturbance situation.

Planned assignment and deployment of Tactical Unit personnel are described by the Albuquerque Police Department as follows:

Assignment and Deployment:

Squads of the Anti-Crime Teams were deployed on information supplied by the Analysis Unit, and on requests from other section commanders. The Special Operations Section commander assigned missions primarily utilizing information from the Analysis Unit concerning high crime areas, potential crime targets, crime frequency as to day-of-the-week or time-of-day, criminal methods-of-operations, and suspect information. All assignments and requests for assistance from the Anti-Crime Teams were cleared through the Special Operations Section commander.

Because of the flexibility of the Anti-Crime Team, personnel assigned to it worked fluctuating hours and were expected to be available for immediate response should an emergency or immediate situation arise. Personnel were assigned and deployed according to the immediate needs of the department.

Personnel were normally assigned as a team; however, officers were pulled from the team and assigned separately, in pairs, or in other arrangements for special problems or needs. Assignments were in uniform, plain clothes, marked vehicle, unmarked vehicle, on foot, on a bicycle, or in any other manner necessary or deemed effective.

The Anti-Crime Team did not, normally, respond to routine calls for service. It did, however, provide cover units on serious calls or on any call where a Field Services Unit required assistance of an immediate nature. Elements of the unit were permitted to accomplish their missions as much as possible, and were re-assigned or given a call only when necessary.

The assignment and deployment concepts recognized four primary requirements:

1. Flexibility in operations
2. Full cooperation with line units
3. Documentation of activity
4. Use of the analysis unit in mission planning

Legal Support

The legal support element of the Property Crime Reduction Program was intended to assist in the preparation of property crime cases which are more successfully prosecutable. The original plan was to retain two attorneys to provide department-wide training in current legal requirements for case preparation and prosecution. However some difficulty arose in staffing these positions. As a result, only one attorney was retained. In addition, the first attorney did not stay after an initial period of orientation and participation in some cadet training. A period of time elapsed between his resignation and the hiring of another attorney. Near the end of the project, this attorney resigned and was not replaced.

HISTORICAL PERSPECTIVE

The research evaluation team was first contacted in April, 1973 to attend meetings with police administration and Pilot Cities staff in order to determine the amount of control necessary for effective research and the amount of control permissible within the police organization. After a series of meetings at this level, the evaluators met with designated project heads, the Deputy Chief in charge of Operations and Pilot Cities staff to determine data collection needs, format, and geographic areas for both experimental and control groups. The evaluators were asked to draft the specific sets of hypotheses to be tested and to elaborate the research design.

Some funding delays and equipment purchase delays required a research time frame of July, 1973 through June, 1974 rather than the original period.

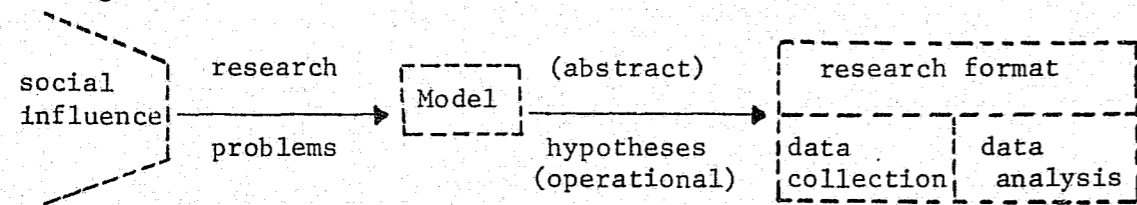
Events taking place during the research period that may have had an undetermined effect on the project include changes in Pilot Cities staff (both in project design and technical assistance to the Police Department),

change in the Chief of Police, change in Deputy Chief of Police in both operations and services, use of units outside the primary assignment and deployment concepts (see Appendix F-2), some newspaper publicity using the name of the Special Operations Section, some shift in personnel within SOS including the legal advisor and most recently project director. This last change occurred after phase one of the project and can therefore have had no effect in the evaluation of phase one.

Within the confines of the project there is no discernable way of measuring the effects of any of these events. With the possible exception of the legal advisor, the evaluators could not detect subjectively any major impact on the project goals. These events are merely pointed out as part of the historical perspective in the evaluation effort. However, one effect can be noted. The changes and vacancies in the position of legal advisor negated the possible collection of data regarding the tracing of SOS generated cases from arrest to disposition. Since this was the responsibility of the legal advisor, the analysis unit was unable to provide the evaluators with this data.

EVALUATION DESIGN AND RATIONALE

At the project's conception the evaluators sought to narrow the research interest into a form amenable to investigation so that testable and working hypotheses could be abstracted. Hypotheses, the necessary steps in the design of explanatory research, were derived from preconceptions inherent in the conception of the project and the scientific discipline. These internal preconceptions not only guide the research but they suggest the kind of data to be collected and, to some extent, the meaning to be attached to these data as indicated below.¹



¹Dennis P. Forcese and Stephen Richer, "The Social Derivation of a Research Project," Social Research Methods (Englewood Cliffs, N.J.: Prentice-Hall, 1973).

The emphasis of this project is upon the application of knowledge and methods toward the amelioration of crime problems. The same scientific methodology that has been successful in discovering knowledge is being brought more and more to bear upon the utilization of that knowledge in what is increasingly being defined as "action research."

One of the dangers involved in the ever increasing emphasis on intervention programs and action oriented projects is that we become involved in action for action's sake. In an attempt to evaluate the purposes and effectiveness of action programs, methods are being developed to obtain objective and valid measures of what such programs are accomplishing. This is the concept that the evaluators of the present project have understood Pilot Cities to have taken in the last year. Evaluation represents a measurement of effectiveness in reaching some predetermined goal. Key elements in evaluation efforts, therefore, are an objective or goal, a planned program, and a method for determining that the objective is attained as a result of the program. The emphasis upon the study of change is clearly seen in the four questions posed by Herzog for "a satisfactory evaluation of effort": 1) what kind of change is desired? 2) by what means is change to be brought about? 3) what is the evidence that the changes observed are due to the means employed? and 4) what is the meaning of the changes found? Unless one can visualize an objective involving change from some less desirable to some more desirable state, an activity or program designed to produce this change, and criteria by which one can judge that change has taken or is taking place, one cannot formulate the necessary evaluative hypothesis, viz., "activities A, B, and C will achieve objectives X, Y and Z."²

The logical requirements of an evaluative study are derived from the model of the laboratory experiment. Before a project begins, two equivalent groups are selected at random or by matching from a target population. A "before" measurement is made to determine the base line from which change is to be evaluated. One of the groups (the experimental)

²The Organization, Management, and Tactics of Social Research, Richard O'Toole, ed. (Cambridge, Mass.: Schenkman, 1971), p. 99.

is exposed to the program or activity being evaluated while the other (the control) is either not exposed or is exposed to some alternative program. At the conclusion of the evaluation, an "after" measure is made which is compared to the "before" measure (d vs d^1) for both experimental and control groups.

| | Before | After | |
|--------------|---------|---------|-----------------------|
| Experimental | X_1 | X_2 | $d = X_2 - X_1$ |
| Control | X_1^1 | X_2^1 | $d^1 = X_2^1 - X_1^1$ |

While the logic of this design is good, it can rarely be put into practice outside the laboratory. In field research, various adaptations of this design are used: the case study, the survey design, and the panel or prospective study design.

Since the last of these three comes closest to satisfying the methodological requirements of the experimental model and offers perhaps the most acceptable compromise for evaluative research, we have chosen it as the overall design for the present project.

While it lacks the requirement of a random assignment of experimental and control groups before exposure, such matching was done by equating exposed and non-exposed groups on various relevant characteristics.

"Before" measures were made of an unexposed target population. The project was initiated and "after" measures of the desired effect were made to compare changes that have taken place. In addition, comparable geographic areas were kept in controlled or experimental states and different modes were introduced into experimental areas.

Nine hypotheses were framed to be tested in evaluating the project. The first five related to phase one; the remaining four concern phase two (see List of Hypotheses).

Control Efforts

The project analysts assigned to the project (one civilian and one commissioned police officer), after studying data collected in districts relating to the types of crimes identified in the project, selected sixteen districts comparable in incidents of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft. While ideal districts by way of priority comparisons in crime were identified by the project analysts, secondary areas in terms of comparison were chosen for geographical reasons (contiguous areas were considered preferable by the commander of the units). These districts also had high property crime rates in both experimental and control areas (see Appendix F-3). Eight of these districts were designated as control areas and eight as experimental.

Data being collected and processed was not used by routine operations and patrol.

Data Collection

During the project period, daily activity reports were completed by each officer and summarized by the team sergeant. The activity reports were designed to support data collection requirements (see Appendix F-4 "An Explanation of SOS Daily Activity Log").

In addition, the Crime Analysis Unit regularly collected data as listed below. These data elements were meant to be representative of unit effectiveness.

In each case where data was collected, it was carefully related to the Squad, its operational mode, and to the distinct tactical mode being utilized during a given time period.

1. Increase/decrease of crime for reporting areas impacted by SOS operations during the period it worked an area.
2. Increase/decrease of crime for reporting areas during periods when SOS not active in these areas.
3. Number of arrests in areas impacted by SOS.

4. Key reason for arrests in areas impacted by SOS, i.e. type of crime:

- a. on-sight arrest
- b. on-sight assist
- c. dispatched arrest
- d. dispatched assist

Activities

After the designation of control and experimental areas was made, time frames and modes were established and assignments given to ACT units³ to concentrate on different types of crimes. The two types of crime most often designated as "crimes of concentration" were residential burglary and armed robbery. In the first phase of the project, residential burglary was most often designated. In the latter part of the project, both armed robbery and residential burglary were most often designated (see Appendix F-5).

Two ACT were deployed in a fixed geographic area and time frame during the first phase of the project. Initially their mission was determined by an analysis data report with additional information being provided by field services, criminal investigations and criminal intelligence. They employed various patrol tactics to accomplish the specific assignments. These included the use of marked units, unmarked units, various surveillance methods and bicycle patrol. Prevention patrol was carried out by area saturation in either marked or unmarked patrol vehicles.

Coding and Training

Since a number of coding and recording problems began to occur in connection with the activity logs and since the evaluators at the onset had expressed a concern for consistency, the Analysis Unit of SOS conducted several training sessions throughout the project to assure consistent recording and "clean" data (see Appendix F-4).

Problems

In action oriented research, problems connected with operations and individual habits and methods are always bound to arise. To the extent

³ACT refers to unit designation as Anti-Crime Team.

that these can be foreseen, an attempt was made either to initiate control for research purposes, i.e. to establish geographical limitations, or to keep the data pure by taking into consideration the percentage of error involved in classification. The percentage of error involved in misclassifying the district in which property crime took place is difficult to assess. However, the analysis unit performed an analysis for a three month period (October, November, December, 1973) with armed robbery (see Appendix F-6). An average error of 27.7% was discovered. Such an error in classification could have some effect upon the results. In an analysis of the deviation shown in Appendix F-6, the error seems to be somewhat random and thus the impact should not be over-estimated.

Another problem that was foreseen was the habit of police officers to "jump" radio calls. While we have no way of actually ascertaining the influence of this activity, an attempt was made to keep it at a minimum by constantly emphasizing in meetings with the ACT the damaging effect that this may have on the analysis of the project.

An additional problem that the evaluators suspect influenced the results somewhat was caused by a behavioral tendency. There seems to be a tendency for the ACT to have been very enthusiastic and action oriented at the beginning of the project and more lethargic toward the end of phase one--because of a feeling that no crime was occurring anymore in the experimental areas. We shall point to this tendency later in the analysis section.

ANALYSIS OF DATA

In the first section of the analysis a careful consideration of the impact made by the SOS unit during their first four months of operation was made. An attempt has been made to keep the various time frames somewhat separate in order to more clearly assess the impact of the different modes implemented by the SOS unit.

During the first four months of operations the SOS program was designed to test the influence of a "saturation" mode on the property crime rate in eight experimental districts. The "saturation" mode used during this period was innovative in the sense that it allowed a consideration of a number of important empirical questions concerning the effectiveness of some traditional police techniques along with techniques which were developed as part of the SOS program.

In determining the effectiveness of the different techniques used by the SOS unit a number of research questions should be considered. Tied to each of these questions is a hypothesis which will be analyzed.

In addition, mention should be made of the criteria to be used as evidence that some change has come about as a result of the SOS activity. The research design developed around this project was framed so that as many alternative hypotheses are eliminated as possible. However, the type of action research with which the SOS program is associated makes the elimination of all alternative hypotheses impossible. Even so, the research design is a relatively strong one. Problems related to the design have been mentioned earlier. What is of major concern here is the consideration of magnitude of change. The question becomes "What percentage decrease in property crime should be taken as an indication of significant decrease?" The statistical techniques used in the analysis are demanding ones: they are too demanding to allow even fairly large change to be taken as significant. Such techniques are used, however, as part of standard practice in research and to make it possible to compare the data in this report with other data which might be generated in other research attempts.

Action research lends itself to more pragmatic criteria in assessing the success or failure of projects. With the continued rise in property crime an argument could be made that the simple leveling off of rising trends is a sign of significant success. According to the Uniform Crime Reports for 1972 there has been a 53% increase in crimes against property from 1967 to 1972.¹ This trend has been an almost consistent upward spiral since 1967. The data for property crime in Albuquerque reflects much the same trend. If, then, this consistent upward spiral can be reversed or even leveled off a claim for success can surely be made.

Another consideration which might shed some light on the question of significant change has to do with percentage decreases and the number of actual crimes they represent. From July 1972 through June 1973 (one year) there were 12,486 property crimes reported in Albuquerque. A mere one percent decrease in property crime over such a one year period would represent 125 fewer property crimes. Likewise during the same period there were 5117 residential burglaries. In this case a one percent decrease would mean 51 fewer homes burglarized over a year's time.

A decrease of one percent in overall property crime would have various effects which might surely be considered significant. The average loss for property crime is roughly \$320.00. A decrease of one percent in Albuquerque, therefore, would represent \$40,000.00 which was not lost to criminals. Exactly how much time is spent with each property crime varies widely, but if two hours were spent in the investigation, report writing, filing the report, etc. with no time spent in apprehension, a total of 250 man-hours could be saved for each one percent decrease.

Another criterion of considerable importance which seems impossible to measure is the feeling of security which citizens would or would not have depending upon crime rates. Any exact statements as to the relationship between lowering crime rates and personal security would have to rest upon empirical research yet to be done. However, the knowledge that crime rates are beginning to be lowered surely has an important impact

¹Uniform Crime Reports for the United States, 1972, issued by the Director of the Federal Bureau of Investigation.

upon the feeling of security held by the populace.

With these considerations in mind, an analysis of the hypotheses used to test the effectiveness of the SOS program follows. (The hypotheses dealt with in this section relate to the first four months of the SOS operation.)

HYPOTHESIS 1

The property crime rate for the city of Albuquerque will be significantly lower for the first four months in which the SOS program was in operation than for the same four month period of 1972.

The first hypothesis deals with the effect of the SOS program on property crime city-wide. In considering the impact of a relatively small number of police units upon the total property crime rate of Albuquerque there are any number of rival hypotheses which might be used to explain any increase or decrease in the crime rate. With these cautions in mind, however, there is some evidence that the SOS units did have some effect upon city-wide crime. Table 1 shows the number of property crimes on a bi-monthly basis for July through October 1972 and 1973. Figure 1 gives the same information in graph form.

As can be seen in Table 1 there was an increase of 267 property crimes for the four month period of 1973 when compared to the same four month period of 1972. This increase represents an increase of 5.8%. Such an increase, however, is more reflective of Albuquerque's population growth than it is of any significant increase in the crime rate. The increase in the number of property crimes is surely not the best possible sign that Albuquerque has overcome its crime problem; however the increase of 267 property crimes does represent more of a leveling off of the crime rate than a continuation of the upward spiraling crime trend. In 1972 the population of Albuquerque was estimated at 268,735 and for 1973 at 282,170.² With a total of 4559 property crimes in the four months of

²Population data received from Planning Office, City of Albuquerque.

TABLE 1

Property Crimes in Albuquerque July-October 1972 and 1973^a

| YEAR | Bi-Monthly Periods | | | | | | | | TOTAL |
|----------------|--------------------|------------|----------|-----------|-----------|------------|----------|-----------|-------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 1973 | 592 | 660 | 589 | 668 | 526 | 555 | 568 | 668 | 4826 |
| 1972 | 655 | 645 | 628 | 567 | 515 | 543 | 497 | 509 | 4559 |
| D ^b | -63 | +15 | -39 | +101 | +11 | +12 | +71 | +159 | +267 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bThe deviation when subtracting the 1972 figure from that of 1973.

TABLE 2

Property Crimes in Experimental Districts July-October 1972 and 1973^a

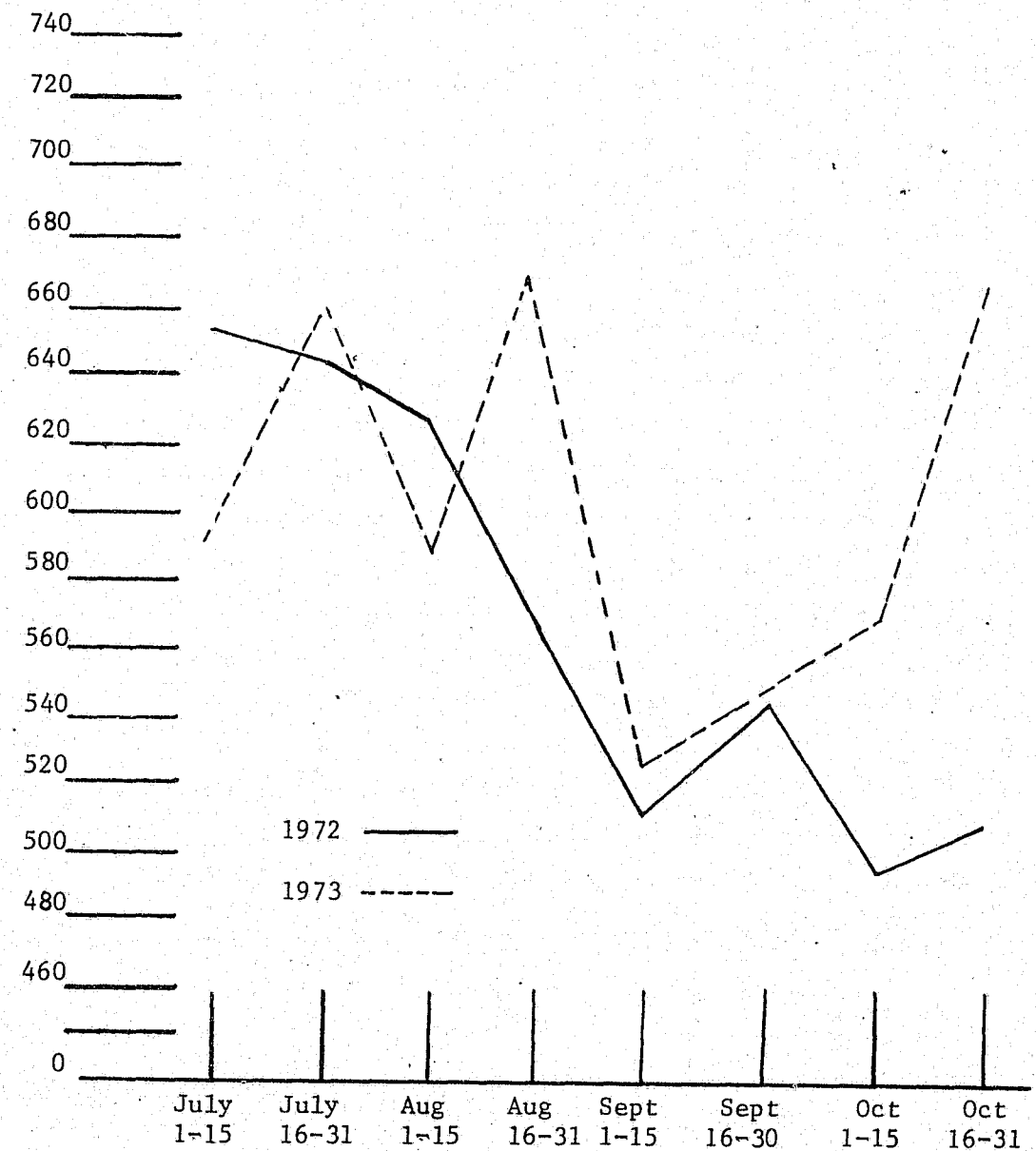
| YEAR | Bi-Monthly Periods | | | | | | | | TOTAL |
|----------------|--------------------|------------|----------|-----------|-----------|------------|----------|-----------|-------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 1973 | 217 | 260 | 221 | 283 | 225 | 215 | 232 | 283 | 1936 |
| 1972 | 272 | 260 | 247 | 227 | 217 | 232 | 203 | 187 | 1845 |
| D ^b | -55 | 0 | -26 | +56 | +8 | -17 | +29 | +96 | +91 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bThe deviation when subtracting the 1972 figure from that of 1973.

FIGURE 1

Property Crimes in Albuquerque July-October 1972 and 1973^a



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

concern in 1972 there were 17.0 property crimes per 100 population. For the same four months of 1973 there were 17.1 property crimes per 1000 population. A leveling off is evident when this rate is compared to the property crime figures found in the Uniform Crime Reports. According to these Reports, the total property crime rate for 1972 in Albuquerque was 5124.9 per 100,000 population. One third of this figure, representing a rate for a four-month period, would be 1708 per 100,000. In 1973, during the first four months of the project, there were 1710 property crimes per 100,000 population. We can therefore see a tendency for the property crime rate to level off.

It is important to note that certain types of crime were brought below the expected level during the first four project months. On the basis of a 5% increase, 2072 residential burglaries would be expected to occur from July through October of 1973. The actual number of such burglaries was, however, 2027--45 fewer than would be expected. In the case of armed robberies, 257 would be expected. The data indicates, however, that there were only 210 such crimes. Auto theft showed the greatest decrease in actual crimes compared to projected figures. 848 auto thefts would be expected; 683 were actually reported. Increases in the number of reported crimes over the number expected came in the area of commercial burglary and auto burglary. There were 70 more commercial burglaries and 223 more auto burglaries than would be expected. The number of strong arm robberies remained constant for the two periods.

Earlier we made the statement that there is some evidence that the SOS units did have some effect upon the city-wide property crime rate. This evidence can be found in a comparison of the deviation figures for Table 1 and Table 2. In comparing the deviation figures, 87% of the decrease in property crime for the first half of July is accounted for by the districts worked by the SOS units. The increase shown in the second half of July is not due to any increase in the areas in which the SOS units worked. During the first half of August, 67% of the decrease can be attributed to the SOS districts, that is the districts worked by the SOS units. The last half of August shows that the SOS districts did contribute more than their expected number to the crime rate. Here 55%

of the increase can be tied to the experimental districts. The slight increase in the first half of September is again accounted for mostly by the SOS districts. But the increase here is so small that it does not contribute much to a negative interpretation. During the second half of September the city showed an increase of 12 property crimes, the SOS districts had 17 fewer crimes for this same period. This reversal is significant since during 1972 the SOS districts accounted for about 40% of all property crime. Thus an increase city-wide and a decrease for the highest crime areas does indicate an important impact by the SOS units. The increase of 29 for the first half of October in the control districts represents about 40% of the overall increase for that period. The last half of October shows a very large increase. The experimental districts account for almost 62% of the overall increase. This increase in the SOS districts should not be taken simply as a refutation of the impact of the SOS concept as it is perhaps an indication of a change in SOS operation. Some evidence indicates that there may have been less enthusiasm by the individuals who made up the SOS units during this time period. At this time a change in mode was being considered because of the feeling on the part of the officers working the district that "there is nothing out there." It was felt that property crime had been contained to the desired degree in the experimental districts and it was time to try new techniques outside the specified experimental areas. The evidence shows however that, as a matter of fact, there was "something out there." The data and what was felt to be the case lends support to the idea that individuals see and feel what they expect to see and feel and that they behave on that basis. In the case of the SOS districts in the last half of October the feeling that "nothing was out there" seemed to have produced a less vigilant operation than was evident earlier in the project.

In sum, the data shows that the total number of property crimes during the period July through October 1973 was not lower than the total for the same months of 1972. However, in terms of the number of property crimes per capita the data show a definite leveling off tendency. Lastly the argument can be made that a relatively small number of patrol units (as were involved in the SOS operation) can have an important impact upon

the property crime rate of the entire city;

HYPOTHESIS 2

The property crime rate for the experimental districts during the first four months of the project will be significantly lower than the property crime during the same four months of 1972, while the property crime for the control districts will remain constant for the same time periods of 1972 and 1973.

Tables 3 and 4 give the raw data upon which the tables and graphs to follow are based. As can be seen in the table totals, there were 1845 property crimes in the experimental districts during the period July through October 1972 and 1336 property crimes during the same period of 1973. In the control districts there were 1332 such crimes in the same four month period of 1972 and 1407 for the same time span of 1973. In both the control and experimental areas there was an increase in the number of property crimes--91 more in the experimental areas and 86 more in the control areas. However, the absolute increase shown for the control districts contributes significantly more to the total crime rate than does the increase found in the experimental districts. As was indicated earlier, a 5% increase should be expected due to population growth. Since the experimental areas taken as a whole accounted for about 40% of all property crime during July through October of 1972, a 5% increase should lead one to expect an increase of 91.2 property crimes for those areas during the same four months of 1973. The increase of 91 property crimes, since it represents no per capita increase, gives evidence for the leveling off tendency mentioned above. This leveling off is of importance here because the trend is now found in the districts with some of the highest property crime rates in the city. In making the same analysis as above for the control districts, with an expected increase of 5% one would expect 66.1 more property crimes in these districts taken together in 1973 than in 1972. The data, however, shows an increase of 86 property crimes for the time span with which we are dealing. The increase noted in the control districts is 3.6% higher than should be expected due to population growth. Table 5 gives the same information in

TABLE 3
Property Crimes in Given Experimental and Control Districts
July-October 1972^a

| Experi- mental Districts | Bi-Monthly Periods | | | | | | | | Total |
|--------------------------------|--------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|-------------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 101 | 42 | 32 | 42 | 34 | 43 | 38 | 42 | 25 | 298 |
| 103 | 28 | 25 | 23 | 32 | 25 | 25 | 21 | 21 | 200 |
| 301 | 54 | 59 | 52 | 43 | 50 | 36 | 35 | 36 | 365 |
| 303 | 43 | 39 | 35 | 26 | 31 | 32 | 27 | 22 | 255 |
| 306 | 22 | 16 | 24 | 27 | 13 | 33 | 7 | 19 | 151 |
| 307 | 38 | 43 | 36 | 43 | 31 | 36 | 39 | 37 | 303 |
| 404 | 19 | 16 | 10 | 13 | 12 | 18 | 15 | 15 | 118 |
| 407 | 26 | 30 | 25 | 19 | 12 | 14 | 17 | 12 | 155 |
| Total | 272 | 260 | 247 | 227 | 217 | 232 | 203 | 187 | 1845 |
| Control Districts | | | | | | | | | |
| 106 | 25 | 19 | 10 | 19 | 16 | 19 | 17 | 24 | 149 |
| 205 | 22 | 16 | 11 | 11 | 21 | 14 | 13 | 19 | 116 |
| 304 | 33 | 30 | 31 | 29 | 25 | 16 | 26 | 28 | 218 |
| 403 | 27 | 31 | 25 | 24 | 27 | 18 | 16 | 17 | 185 |
| 305 | 28 | 30 | 47 | 27 | 20 | 35 | 19 | 25 | 231 |
| 408 | 29 | 23 | 35 | 25 | 13 | 18 | 30 | 25 | 198 |
| 402 | 21 | 12 | 7 | 25 | 12 | 9 | 19 | 10 | 115 |
| 405 | 13 | 8 | 21 | 16 | 7 | 15 | 16 | 13 | 109 |
| Total | 198 | 169 | 187 | 176 | 141 | 144 | 156 | 161 | 1332 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

TABLE 4
Property Crimes in Given Experimental and Control Districts
July-October 1973^a

| Experi- mental Districts | Bi-Monthly Periods | | | | | | | | Total |
|--------------------------------|--------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|-------------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 101 | 49 | 52 | 29 | 51 | 39 | 45 | 35 | 45 | 345 |
| 103 | 30 | 33 | 36 | 28 | 21 | 21 | 28 | 37 | 234 |
| 301 | 41 | 53 | 35 | 49 | 40 | 33 | 46 | 44 | 341 |
| 303 | 29 | 32 | 25 | 33 | 27 | 36 | 31 | 25 | 238 |
| 306 | 11 | 7 | 12 | 20 | 24 | 23 | 8 | 25 | 130 |
| 307 | 34 | 44 | 45 | 54 | 35 | 23 | 47 | 60 | 342 |
| 404 | 11 | 23 | 23 | 25 | 23 | 16 | 11 | 21 | 153 |
| 407 | 12 | 16 | 16 | 23 | 16 | 18 | 26 | 26 | 153 |
| Total | 217 | 260 | 221 | 283 | 225 | 215 | 232 | 283 | 1936 |
| Control Districts | | | | | | | | | |
| 106 | 23 | 17 | 19 | 17 | 14 | 28 | 17 | 21 | 156 |
| 205 | 20 | 20 | 17 | 14 | 15 | 21 | 18 | 19 | 144 |
| 304 | 26 | 20 | 30 | 35 | 28 | 34 | 30 | 37 | 240 |
| 403 | 27 | 32 | 24 | 27 | 24 | 26 | 28 | 27 | 215 |
| 305 | 19 | 34 | 14 | 20 | 24 | 21 | 25 | 35 | 192 |
| 408 | 27 | 20 | 22 | 26 | 18 | 24 | 4 | 25 | 266 |
| 402 | 24 | 36 | 28 | 18 | 19 | 11 | 22 | 12 | 170 |
| 405 | 12 | 19 | 20 | 20 | 10 | 15 | 12 | 16 | 124 |
| Total | 178 | 198 | 174 | 177 | 152 | 180 | 156 | 192 | 1407 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

TABLE 5
Property Crime Totals in Given Experimental and Control Districts
July-October 1972 and 1973^a

| Year | Experimental Districts | | | | | | | | Total |
|----------------------|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 101 | 103 | 301 | 303 | 306 | 307 | 404 | 407 | |
| 1973 | 345 | 234 | 341 | 238 | 130 | 342 | 153 | 153 | 1936 |
| 1972 | 298 | 200 | 365 | 255 | 151 | 303 | 118 | 155 | 1845 |
| D^b | +45 | +34 | -24 | -17 | -21 | +39 | +35 | -02 | +91 |
| Year | Control Districts | | | | | | | | Total |
| | 106 | 205 | 304 | 403 | 305 | 408 | 402 | 405 | |
| 1973 | 156 | 144 | 240 | 215 | 192 | 166 | 170 | 124 | 1407 |
| 1972 | 149 | 116 | 218 | 185 | 231 | 198 | 115 | 109 | 1332 |
| D^b | +07 | +28 | +22 | +30 | -39 | -32 | +55 | +15 | +86 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bThe deviation when subtracting the 1972 figure from that of 1973.

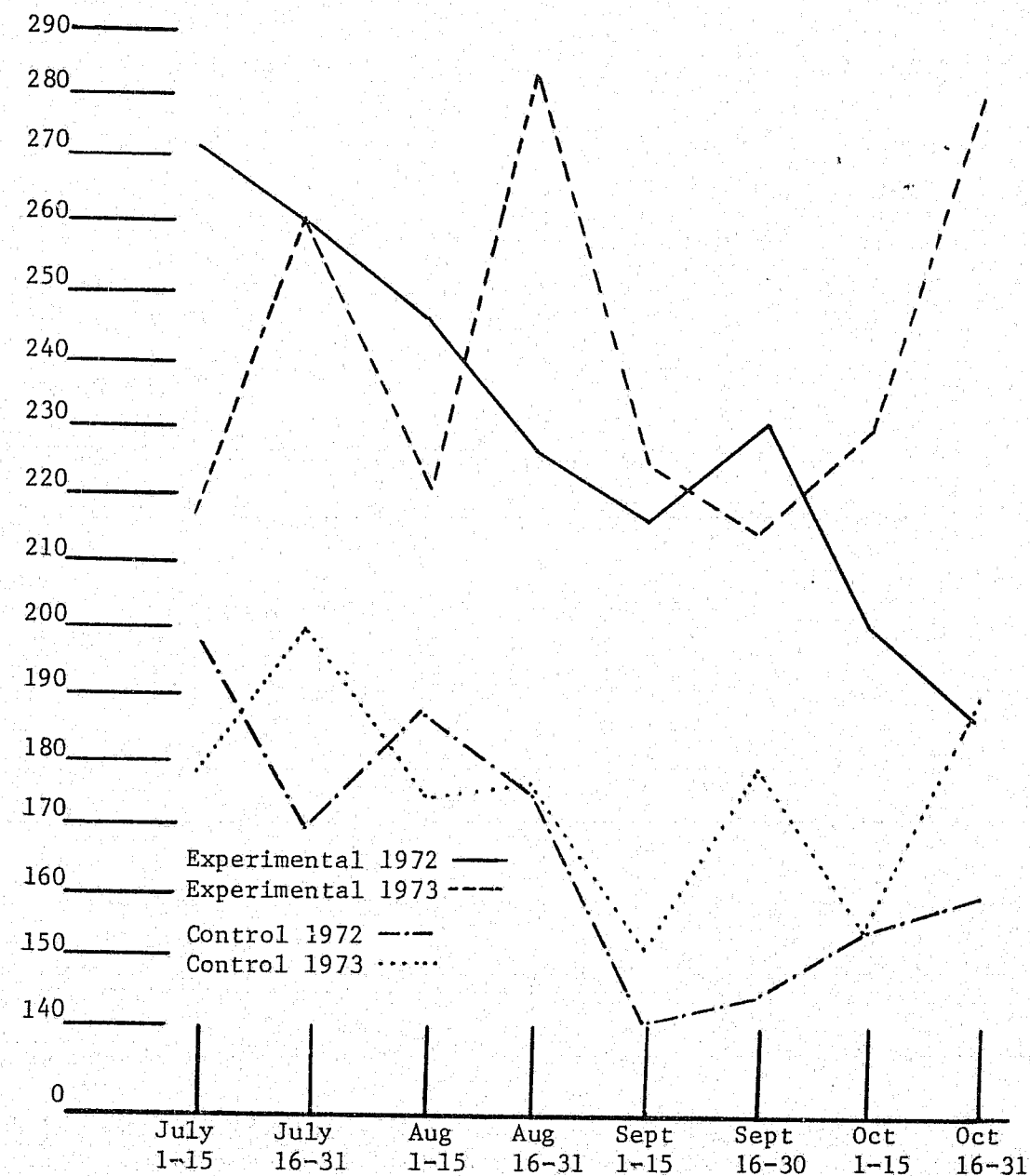
a format which makes the comparisons easier to note. As can be seen from Table 5 there were four districts worked by the SOS unit which had fewer property crimes in 1973 than in 1972. For the control districts only two had fewer crimes in 1973 than in 1972.

Figure 2 gives a graphic representation of the data contained in Tables 3 and 4. It is important to note the similarity between the curve for the experimental districts in 1973 in Figure 2 and the curve for total property crime city-wide for 1973 shown in Figure 1. There are two different explanations for this similarity. First, it is possible to claim that since the curve for the experimental districts is not significantly different from the curve representing the city as a whole the SOS unit had no effect. This explanation, however, loses most of its appeal when it is noted that the experimental districts account for better than 43% of all property crime in Albuquerque. The second interpretation, and one which makes more sense, is that the similarity is due to a combination of seasonal variation in crime and the fact that the experimental districts have a very great impact upon city property crime figures. Since there is such a close relationship between the two curves it is important to look at exactly what is happening in the smaller units which make up the total picture.

Tables 6 and 7 give the percentage of total property crime in Albuquerque which can be accounted for by a given district during a given bi-monthly interval. The percentage data in these tables is used to construct the following tables.

Table 8 gives the percentage totals contained in Tables 6 and 7. As can be seen from this table the average percentage for the experimental and control areas for 1972 and 1973, July through October, are almost identical. For the experimental areas, the average percent of property crime which occurred in those districts was 40.53% in 1972 and 39.96% in 1973. The control areas show the same kind of similarity in averages with 29.25% in 1972 and 29.19% in 1973. The analysis of variance run on a comparison of the experimental areas 1972-1973 in Table 8 showed no

FIGURE 2
Property Crimes in Experimental and Control Districts
July-October 1972 and 1973^a



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

TABLE 6

Percent Property Crime Accounted for by Given Experimental and Control Districts July-October 1972^a

| Experi- mental Districts | Bi-Monthly Periods | | | | | | | | Mean |
|--------------------------------|--------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 101 | 6.4 | 5.0 | 6.7 | 6.0 | 8.3 | 7.0 | 8.5 | 4.9 | 6.6 |
| 103 | 4.3 | 3.9 | 3.7 | 5.6 | 4.9 | 4.6 | 4.2 | 4.1 | 4.4 |
| 301 | 8.2 | 9.1 | 8.3 | 7.6 | 9.7 | 6.6 | 7.0 | 7.1 | 8.0 |
| 303 | 6.6 | 6.0 | 5.6 | 4.6 | 6.0 | 5.9 | 5.4 | 4.3 | 5.6 |
| 306 | 3.4 | 2.5 | 3.8 | 3.0 | 2.5 | 6.1 | 1.4 | 3.7 | 3.3 |
| 307 | 6.7 | 6.7 | 5.7 | 7.6 | 6.0 | 6.6 | 7.8 | 7.3 | 6.8 |
| 404 | 2.9 | 2.5 | 1.6 | 2.3 | 2.3 | 3.3 | 3.0 | 2.9 | 2.6 |
| 407 | 4.0 | 4.6 | 4.0 | 3.3 | 2.3 | 2.6 | 3.4 | 2.3 | 3.3 |
| Total | 42.5 | 40.3 | 39.4 | 40.0 | 42.0 | 42.7 | 40.7 | 36.6 | |
| Control Districts | | | | | | | | | |
| 106 | 3.8 | 2.9 | 1.6 | 3.4 | 3.1 | 3.5 | 3.4 | 4.7 | 3.3 |
| 205 | 3.4 | 2.5 | 1.8 | 1.9 | 4.1 | 2.6 | 2.6 | 3.7 | 2.8 |
| 304 | 5.0 | 4.6 | 4.9 | 5.1 | 4.8 | 2.9 | 5.2 | 5.5 | 4.8 |
| 403 | 4.1 | 4.8 | 4.0 | 4.2 | 5.2 | 3.3 | 3.2 | 3.3 | 4.0 |
| 305 | 4.3 | 4.6 | 7.5 | 4.8 | 3.9 | 6.4 | 3.8 | 4.9 | 5.0 |
| 408 | 4.4 | 3.6 | 5.6 | 4.4 | 2.5 | 3.3 | 6.0 | 4.9 | 4.3 |
| 402 | 3.2 | 1.9 | 1.1 | 4.4 | 2.3 | 1.6 | 3.8 | 2.0 | 2.5 |
| 405 | 2.0 | 1.2 | 3.3 | 2.8 | 1.4 | 2.8 | 3.2 | 2.6 | 2.4 |
| Total | 30.2 | 26.1 | 29.8 | 31.0 | 27.4 | 26.5 | 31.4 | 31.6 | |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

TABLE 7

Percent Property Crime Accounted for by Given Experimental and Control Districts July-October 1973^a

| Experi- mental Districts | Bi-Monthly Periods | | | | | | | | Mean |
|--------------------------------|--------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 101 | 8.3 | 7.9 | 4.9 | 7.6 | 7.4 | 8.1 | 6.2 | 6.7 | 7.1 |
| 103 | 5.1 | 5.0 | 6.1 | 4.2 | 4.0 | 3.8 | 4.9 | 5.5 | 4.8 |
| 301 | 6.9 | 8.0 | 5.9 | 7.3 | 7.6 | 5.9 | 8.1 | 6.6 | 7.0 |
| 303 | 4.9 | 4.8 | 4.2 | 4.9 | 5.1 | 6.5 | 5.4 | 3.7 | 4.9 |
| 306 | 1.8 | 1.1 | 2.0 | 3.0 | 4.6 | 4.1 | 1.4 | 3.7 | 2.7 |
| 307 | 5.7 | 6.7 | 7.6 | 8.1 | 6.6 | 4.1 | 8.3 | 9.0 | 7.0 |
| 404 | 1.8 | 3.5 | 3.9 | 3.7 | 4.4 | 2.9 | 1.9 | 3.1 | 3.2 |
| 407 | 2.0 | 2.4 | 2.7 | 3.4 | 3.0 | 3.2 | 4.6 | 3.9 | 3.2 |
| Total | 36.5 | 39.4 | 37.3 | 42.2 | 42.7 | 38.6 | 40.8 | 42.2 | |
| Control Districts | | | | | | | | | |
| 106 | 3.9 | 2.5 | 3.2 | 2.5 | 2.7 | 5.0 | 3.0 | 3.1 | 3.2 |
| 205 | 3.4 | 3.0 | 2.9 | 2.1 | 2.8 | 3.8 | 3.2 | 2.8 | 3.0 |
| 304 | 4.4 | 3.0 | 5.1 | 5.2 | 5.3 | 6.1 | 5.3 | 5.5 | 5.0 |
| 403 | 4.6 | 4.8 | 4.1 | 4.0 | 4.6 | 4.7 | 4.9 | 4.0 | 4.5 |
| 305 | 3.2 | 5.2 | 2.4 | 3.0 | 4.6 | 3.8 | 4.4 | 5.2 | 4.0 |
| 408 | 4.6 | 3.0 | 3.7 | 3.9 | 3.4 | 4.3 | 0.7 | 3.7 | 3.4 |
| 402 | 4.1 | 5.4 | 4.8 | 2.7 | 3.6 | 2.0 | 3.9 | 1.8 | 3.5 |
| 405 | 2.0 | 2.9 | 3.4 | 3.0 | 1.9 | 2.7 | 2.1 | 2.4 | 2.6 |
| Total | 30.0 | 30.0 | 29.4 | 26.5 | 28.9 | 32.4 | 27.5 | 28.7 | |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

TABLE 8

Percent Property Crime Totals for Experimental and Control Districts
July-October 1972 and 1973^a

| Districts | Bi-Monthly Periods 1973 | | | | | | | | Mean |
|-------------------|-------------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|-------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| Experi- mental | 36.5 | 39.4 | 37.3 | 42.2 | 42.7 | 38.6 | 40.8 | 42.2 | 39.96 |
| Control | 30.0 | 30.0 | 29.5 | 26.5 | 28.9 | 32.4 | 27.5 | 28.7 | 29.19 |
| Districts | Bi-Monthly Periods 1972 | | | | | | | | Mean |
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| Experi- mental | 42.5 | 40.3 | 39.4 | 40.0 | 42.0 | 42.7 | 40.7 | 36.6 | 40.53 |
| Control | 30.2 | 26.1 | 29.8 | 31.0 | 27.4 | 26.5 | 31.4 | 31.6 | 29.25 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

significant difference between the two sets of data. Table 9 contains the results of the analysis of variance.

Table 10 shows the percent of overall property crime which is accounted for by the various control and experimental districts for three different time frames. This table, along with the analysis of variance run on part of the table (figures for July through October 1972 and 1973), shows very little by way of change due to the SOS project. Table 11 gives the results of the analysis of variance test.

Since the overall percentage shows so little change, it is helpful to look at the individual frequencies to see if there might be some change within the various districts which is not reflected in total figures. In order to assess the amount of stability or change in two sets of data, we have determined the stability or change in the rank order of the elements for two different time periods. Table 12 indicates how the control and experimental districts ranked in percent of crime relative to each other for the periods July through October 1972 and 1973. The Rho^2 of .76 indicates a high level of agreement between the two ranks; however, .76 is indicative of some variation in the ranks. In Tables 13 and 14 the control and experimental districts are partialled out so that a comparison can be made. This was done in order to determine where the change in rank order took place. The comparison of Tables 13 and 14 shows that in five of the experimental districts there was a lowering of relative rank and in the control districts there were four districts which showed a decrease in relative rank. The totals for the deviation of each set of data indicate that the experimental areas taken as a whole decreased in relative ranks from 1972 to 1973, while the control areas taken together increased in relative ranks over the same period.

When one looks at cell frequencies rather than at the marginal frequencies, some light can be shed upon changes which took place in specific districts which are not reflected in the marginal frequencies. Table 15 gives the deviations in the percent of property crime for each district on a bi-monthly basis. What is of interest here is the number of cell frequencies which are reflective of a decrease in the percent of

TABLE 9

Results of Analysis of Variance Test
for Comparison of Experimental Districts 1972 and 1973
as Presented in Table 8

| Source of Variation | SS | df | MS | F |
|---------------------|-------|----|------|-------------------|
| Between Groups | 1.56 | 1 | 1.56 | .308 ^a |
| Error | 70.88 | 14 | 5.06 | |

^aF of .308 with given degrees of freedom not significant at the .05 level.

TABLE 10

Average Percent Property Crime Accounted for by Given Experimental
and Control Districts during Given Time Frames.^a

| Experi- mental Districts | Time Frame | | |
|--------------------------------|------------------|----------------------|----------------------|
| | July-May 1972 | July-October 1972 | July-October 1973 |
| 101 | 6.7 | 6.6 | 7.1 |
| 103 | 4.9 | 4.4 | 4.8 |
| 301 | 6.8 | 8.0 | 7.0 |
| 303 | 4.8 | 5.6 | 4.9 |
| 306 | 3.0 | 3.3 | 2.7 |
| 307 | 7.0 | 6.8 | 7.0 |
| 404 | 3.4 | 2.6 | 3.2 |
| 407 | 3.2 | 3.3 | 3.2 |
| Total | 39.8 | 40.6 | 39.9 |
| Control Districts | | | |
| 106 | 3.5 | 3.3 | 3.2 |
| 205 | 2.9 | 2.8 | 3.0 |
| 304 | 4.4 | 4.8 | 5.0 |
| 403 | 4.2 | 4.0 | 4.5 |
| 305 | 4.2 | 5.0 | 4.0 |
| 408 | 3.7 | 4.3 | 3.4 |
| 402 | 3.2 | 2.5 | 3.5 |
| 405 | 2.9 | 2.4 | 2.6 |
| Total | 29.0 | 29.1 | 29.2 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

TABLE 11

Results of Analysis of Variance Test
for Comparison of Experimental Districts July-October 1972 and 1973
as Presented in Table 10

| Source of Variation | SS | df | MS | F |
|---------------------|-------|----|------|--------------------|
| Between Groups | .031 | 1 | .031 | .0084 ^a |
| Error | 51.26 | 14 | 3.66 | |

^aF of .0084 with given degrees of freedom not significant at the .05 level.

TABLE 12

Experimental and Control Districts Ranked by Average
Percent Property Crime July-October 1972 and 1973^{a, b}

| District | Rank July- October 1972 | Rank July- October 1973 |
|----------|----------------------------|----------------------------|
| 301 | 1 | 2.5 |
| 307 | 2 | 2.5 |
| 101 | 3 | 1 |
| 303 | 4 | 5 |
| 305 | 5 | 8 |
| 304 | 6 | 4 |
| 103 | 7 | 6 |
| 408 | 8 | 10 |
| 403 | 9 | 7 |
| 106 | 10 | 12 |
| 407 | 11 | 12 |
| 306 | 12 | 15 |
| 205 | 13 | 14 |
| 404 | 14 | 12 |
| 402 | 15 | 9 |
| 405 | 16 | 16 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bRho² = .76.

TABLE 13

Partial Table Showing the Experimental Districts
as Ranked in Table 12 with Deviation Figures

| Districts | Rank July- October 1972 | Rank July- October 1973 | Deviation |
|-----------|----------------------------|----------------------------|-----------|
| 101 | 3 | 1 | 2.0 |
| 103 | 7 | 6 | 1.0 |
| 301 | 1 | 2.5 | -1.5 |
| 303 | 4 | 5 | -1.0 |
| 306 | 11 | 15 | -4.0 |
| 307 | 2 | 2.5 | -0.5 |
| 404 | 14 | 12 | 2.0 |
| 407 | 11 | 12 | -1.0 |
| Total | | | -3.0 |

TABLE 14

Partial Table Showing the Control Districts
as Ranked in Table 12 with Deviation Figures

| Districts | Rank July- October 1972 | Rank July- October 1973 | Deviation |
|-----------|----------------------------|----------------------------|-----------|
| 106 | 11 | 12 | -1.0 |
| 205 | 13 | 14 | -1.0 |
| 304 | 6 | 4 | 2.0 |
| 403 | 9 | 7 | 2.0 |
| 305 | 5 | 8 | -3.0 |
| 408 | 8 | 10 | -2.0 |
| 402 | 15 | 9 | 6.0 |
| 405 | 16 | 16 | 0.0 |
| Total | | | +3.0 |

property crime for a given district during a certain bi-monthly period. Each cell frequency represents an increase or a decrease in the percent of total property crime when comparing 1972 data with 1973 data. Each negative number in Table 15 indicates that the percent of property crime in the given district for the specified period of time was lower in 1973 than it was in 1972. Each positive number indicates that the 1972 percent was lower than that in 1973. Table 16 indicates the number of cells which reflect an increase or a decrease in percent of total property crime for the control and the experimental districts. The lambda of .095 indicates that we can predict the dependent variable (i.e., an increase or decrease) on the basis of knowledge of the independent variable (i.e., control or experimental district) with about 10% more accuracy than could be predicted by chance. Such an increase in predictability should be considered very tentative evidence of the success of the SOS operations. With the marginals as close as they are, however, it is somewhat encouraging to see the association measure reflect some improved predictability in the hypothesized direction.

Table 17 shows the data as reflected in Table 16, except that Table 17 includes only the first three months of the SOS operation. This analysis was made because there is some evidence that the SOS units were more actively filling the roles specified in the project proposal during the first three months than they were during the fourth month. The results of this analysis (shown in Table 17) indicate more success during the first three months than for the entire four month period. The lambda of .166 indicates that predictability of increase or decrease in percent property crime in an area can be improved by almost 17% with the knowledge of whether or not the area is a control or experimental area.

In summary, then, we have indicated that there is evidence that there is a leveling off of the property crime rate per capita. This leveling off can be said to be partially due to the impact of the SOS units on the basis of the fact that districts worked by the SOS units show a definite leveling off tendency whereas the control districts do not show such a trend. In terms of the percent of property crime found in

TABLE 15
Deviation in Percentage Figures for Property Crime Accounted for by Given Experimental and Control Districts When Comparing July-October 1972 with July-October 1973.^{a, b}

| Experi- mental Districts | Bi-Monthly Deviations | | | | | | | |
|--------------------------------|-----------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 |
| 101 | 1.9 | 2.9 | -1.8 | 1.6 | -0.9 | 1.1 | -2.3 | 1.8 |
| 103 | 0.8 | 1.1 | 2.4 | -1.4 | -0.9 | -0.8 | 0.7 | 1.4 |
| 301 | -1.3 | -1.1 | -2.4 | -0.3 | -2.1 | -0.7 | 1.1 | -0.5 |
| 303 | -1.7 | -1.2 | -1.4 | 0.3 | -0.9 | 0.6 | 0 | -0.6 |
| 306 | -1.6 | -1.4 | -1.8 | 0 | 2.1 | -2.0 | 0 | 0 |
| 307 | -1.0 | 0 | 1.9 | 0.5 | 0.6 | -2.5 | 0.5 | 1.7 |
| 404 | -1.1 | 1.0 | 2.3 | 1.4 | 2.1 | -0.4 | -1.1 | 0.2 |
| 407 | -2.0 | -2.2 | -1.3 | 0.1 | 0.7 | 0.6 | 1.2 | 1.6 |
| Total | -6.0 | -0.9 | -2.1 | 2.2 | 0.7 | -4.1 | 0.1 | 5.6 |
| Control Districts | | | | | | | | |
| 106 | 0.1 | -0.4 | 1.6 | -0.9 | -0.4 | 1.5 | -0.4 | -1.6 |
| 205 | 0 | 0.5 | 1.1 | 0.2 | -1.3 | 1.2 | 0.6 | -0.9 |
| 304 | -0.6 | -1.6 | 0.2 | 0.1 | 0.5 | 3.2 | 0.1 | 0 |
| 403 | 0.5 | 0 | 0.1 | -0.2 | -0.6 | 1.4 | 1.7 | 0.7 |
| 305 | -1.1 | 0.6 | -5.1 | -1.8 | 0.7 | -2.6 | 0.6 | 0.3 |
| 408 | 0.2 | -0.6 | -1.9 | -0.5 | 0.9 | 1.0 | -5.9 | -1.2 |
| 402 | 0.9 | 3.5 | 3.7 | -1.7 | 1.3 | 0.4 | 0.1 | -0.2 |
| 405 | 0 | 1.7 | 0.1 | 0.2 | 0.5 | -0.1 | -1.1 | -0.2 |
| Total | 0 | 3.7 | -0.2 | -5.0 | 1.6 | 6.0 | -4.3 | -3.1 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bDeviations are computed by subtracting the 1972 percentage for a given district and time frame from the 1973 percentage for the same district and similar time frame. Table 15 is based on data found in Tables 6 and 7.

TABLE 16

Number of Bi-Monthly Periods for Experimental and Control Districts in Which There Was an Increase or a Decrease^a in Percent Property Crime^b When Comparing the 1972 Periods with 1973 Periods^{c, d}

| Districts | Bi-Monthly Periods | |
|--------------|---|---|
| | Decrease in Percent Property Crime ^b | Increase in Percent Property Crime ^b |
| Experimental | 35 (27) ^e | 29 (23) |
| Control | 28 (22) | 36 (28) |

^aThe figures for the "decrease" category contain those periods in which the percent property crime remained the same for the two periods.

^bReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^cThis table is constructed from the data in Table 15. The negative numbers indicate a decrease, a 0 in a cell represents no change, and a positive number indicates an increase.

^dLambda = .095.

^eThe numbers in parentheses are percents.

TABLE 17

Number of Bi-Monthly Periods for Experimental and Control Districts in Which There was an Increase or a Decrease^a in Percent Property Crime^b When Comparing the July-September 1972 Periods with the July-September 1973 Periods^{c, d}

| Districts | Bi-Monthly Periods | |
|--------------|---|---|
| | Decrease in Percent Property Crime ^b | Increase in Percent Property Crime ^b |
| Experimental | 28 (29) ^e | 20 (21) |
| Control | 20 (21) | 28 (29) |

^aThe figures for the "decrease" category contain those periods in which the percent property crime remained the same for the two periods.

^bReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^cThis table is constructed from the data in Table 15. The negative numbers indicate a decrease, a 0 in a cell represents no change, and a positive number indicates an increase.

^dLambda = .166.

^eThe numbers in parentheses are percents.

the control and experimental districts we see very little change from 1972 to 1973. There is, however, evidence that more experimental districts showed a decrease in percent property crime from 1972 to 1973 than control districts when bi-monthly periods are analyzed. The leveling off tendency is even more impressive for the experimental areas when one considers that the actual time spent in the districts for the four month period was in no case more than a total of 42 eight-hour days. As we have indicated earlier, the experimental districts were worked with two modes followed by an unworked time span. The amount of effort and money spent on the SOS project seems to have been more than justified by the results obtained thus far.

HYPOTHESIS 3

The specific property crimes concentrated on in the experimental districts during the first four months of the project will be significantly lower in number than the number of like crimes in the same districts during the same four month period of 1972, while the number of these specific types of property crime will remain constant in the control areas for the same time span of 1972 and 1973.

This hypothesis allows a better test of the project than did the previous two hypotheses. Both hypothesis one and two are tested with data which reflects more general statistics than the SOS units were specifically expected to be able to account for. In the first instance, the overall property crime rate for Albuquerque is used as a basis for testing the effectiveness of the SOS program. In the second instance the data includes some property crime which was not emphasized by the SOS units, i.e., certain property crimes were concentrated upon by the SOS units and other crimes were not given as much priority.

In most cases the two units of SOS had at least two "crimes of concentration" which were to be given top priority during a given time span (see Appendix F-3). One of the specific property crimes which was given a very high priority during the first four months of the project was residential burglary. For about 90% of the time spent in the field by SOS units, residential burglary was one of the designated crimes of concern.

Tables 18 and 19 give the raw data for residential burglary used in the analysis of the third hypothesis. Table 20 shows the total number of residential burglaries for the experimental and control districts July through October 1972 and 1973. As can be seen from this table there was a decrease of 65 residential burglaries in the experimental districts from 1972 to 1973, while there was an increase of 52 such crimes in the control districts from 1972 to 1973. Such a comparison is most encouraging in light of the hypothesis. If one were to predict the number of residential burglaries expected in the months July through October 1973 on the basis of a 5% increase due to population growth over the number of residential burglaries for the same months of 1972, the number would be 883. The actual number, however, was 776, in excess of 100 less than would be expected if the residential burglary rate remained constant for the two years. The lambda of .15 is surely not high enough to allow a claim of complete success, but it does indicate a measure of success which is indicative of a positive trend in the data.

Table 21 presents the data in still another form. In this table the percent of residential burglary which took place in the experimental and control districts for July through October 1972 and 1973 is shown. As is indicated there was a decrease of 5.3% in residential burglary for the experimental districts and an increase of 1.5% in the control districts. A decrease of 5.3% in the most frequent of property crimes is a very significant decrease.

Table 22 shows the bi-monthly percentage of residential burglary which took place in the experimental districts for the four month period of 1972 and 1973. The results of the analysis of variance test are reported in Table 23. As indicated, the analysis of variance test results are significant past the .05 level. We take this as a fairly strong indication that the SOS operation was successful in this specific area which was given the greatest attention by the SOS units.

Another "crime of concentration" which was given emphasis, along with some other crimes, about 50% of the time was armed robbery. In Table 24 the number of armed robberies for the four month period July through

TABLE 18

Residential Burglary in Given Experimental and Control Districts
July-October 1972^a

| Experi- mental Districts | Bi-Monthly Periods | | | | | | | | Total |
|--------------------------------|--------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|------------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 101 | 12 | 9 | 7 | 17 | 14 | 18 | 6 | 4 | 87 |
| 103 | 13 | 13 | 10 | 13 | 11 | 9 | 10 | 4 | 83 |
| 301 | 32 | 37 | 35 | 34 | 25 | 13 | 19 | 20 | 215 |
| 303 | 32 | 23 | 18 | 13 | 15 | 18 | 18 | 9 | 146 |
| 306 | 9 | 7 | 9 | 5 | 7 | 6 | 2 | 3 | 48 |
| 307 | 22 | 25 | 17 | 14 | 16 | 14 | 18 | 11 | 137 |
| 404 | 11 | 10 | 2 | 10 | 7 | 6 | 6 | 9 | 61 |
| 407 | 12 | 13 | 9 | 6 | 5 | 6 | 9 | 4 | 64 |
| Total | 143 | 137 | 107 | 112 | 100 | 90 | 88 | 64 | 841 |
| Control Districts | | | | | | | | | |
| 106 | 7 | 9 | 5 | 4 | 5 | 9 | 7 | 10 | 56 |
| 205 | 10 | 7 | 5 | 5 | 11 | 9 | 6 | 8 | 61 |
| 304 | 16 | 12 | 18 | 12 | 14 | 8 | 9 | 5 | 94 |
| 403 | 9 | 5 | 11 | 16 | 9 | 5 | 6 | 4 | 75 |
| 305 | 14 | 12 | 28 | 11 | 7 | 10 | 7 | 14 | 103 |
| 408 | 14 | 10 | 10 | 14 | 6 | 10 | 8 | 11 | 83 |
| 402 | 9 | 3 | 2 | 10 | 3 | 2 | 6 | 2 | 37 |
| 405 | 7 | 4 | 12 | 6 | 5 | 9 | 11 | 6 | 60 |
| Total | 86 | 72 | 91 | 78 | 60 | 62 | 60 | 60 | 569 |

^aReported crimes of residential burglary.

TABLE 19

Residential Burglary in Given Experimental and Control Districts
July-October 1973^a

| Experi- mental Districts | Bi-Monthly Periods | | | | | | | | Total |
|--------------------------------|--------------------|---------------|-------------|--------------|--------------|---------------|-------------|--------------|------------|
| | July 1-15 | July 16-31 | Aug 1-15 | Aug 16-31 | Sept 1-15 | Sept 16-30 | Oct 1-15 | Oct 16-31 | |
| 101 | 14 | 14 | 11 | 14 | 8 | 15 | 9 | 7 | 92 |
| 103 | 14 | 20 | 14 | 11 | 10 | 12 | 15 | 15 | 111 |
| 301 | 19 | 26 | 16 | 19 | 15 | 17 | 27 | 14 | 153 |
| 303 | 14 | 9 | 14 | 16 | 12 | 20 | 17 | 9 | 111 |
| 306 | 4 | 4 | 4 | 5 | 7 | 6 | 4 | 7 | 41 |
| 307 | 12 | 20 | 17 | 18 | 11 | 8 | 21 | 39 | 146 |
| 404 | 4 | 11 | 11 | 13 | 8 | 10 | 4 | 10 | 71 |
| 407 | 5 | 5 | 8 | 9 | 5 | 5 | 8 | 6 | 51 |
| Total | 86 | 109 | 95 | 105 | 76 | 93 | 105 | 107 | 776 |
| Control Districts | | | | | | | | | |
| 106 | 6 | 4 | 6 | 3 | 4 | 15 | 8 | 7 | 53 |
| 205 | 11 | 9 | 7 | 10 | 3 | 9 | 8 | 6 | 63 |
| 304 | 11 | 6 | 16 | 19 | 15 | 19 | 14 | 14 | 114 |
| 403 | 8 | 9 | 10 | 7 | 12 | 9 | 12 | 12 | 79 |
| 305 | 8 | 13 | 2 | 6 | 10 | 9 | 15 | 16 | 79 |
| 408 | 15 | 9 | 12 | 13 | 10 | 15 | 2 | 10 | 86 |
| 402 | 10 | 18 | 16 | 10 | 5 | 5 | 13 | 3 | 80 |
| 405 | 7 | 13 | 12 | 7 | 4 | 11 | 7 | 6 | 67 |
| Total | 76 | 81 | 81 | 75 | 63 | 92 | 79 | 74 | 621 |

^aReported crimes of residential burglary.

TABLE 20

Residential Burglary for July-October 1972 and 1973
by Experimental and Control Districts^{a, b}

| Districts | Year | |
|--------------|------|------|
| | 1972 | 1973 |
| Experimental | 841 | 776 |
| Control | 569 | 621 |

^aReported crimes of residential burglary.

^bLambda = .150

TABLE 21

Percent of Residential Burglary Accounted for by
Experimental and Control Districts July-October 1972 and 1973^a

| Districts | Year | | Deviation |
|--------------|------|------|-----------|
| | 1973 | 1972 | |
| Experimental | 38.3 | 43.6 | -5.3 |
| Control | 30.7 | 29.2 | +1.5 |

^aReported crimes of residential burglary.

TABLE 22

Percent of Residential Burglary Accounted for by Experimental Districts for Bi-Monthly Periods July-October 1972 and 1973^a

| Bi-Monthly Periods | Year | |
|--------------------|-----------------|------|
| | 1972 | 1973 |
| July 1-15 | 44 ^b | 35 |
| July 16-31 | 44 | 41 |
| August 1-15 | 38 | 37 |
| August 16-31 | 44 | 38 |
| September 1-15 | 46 | 38 |
| September 16-30 | 42 | 35 |
| October 1-15 | 46 | 39 |
| October 16-31 | 36 | 42 |

^aReported crimes of residential burglary.

^bRounded to nearest whole number.

TABLE 23

Results of Analysis of Variance Test for Comparison of Experimental Districts 1972 and 1973 as Presented in Table 22

| Source of Variation | SS | df | MS | F |
|---------------------|--------|----|-------|-------------------|
| Between Groups | 76.56 | 1 | 76.56 | 7.72 ^a |
| Error | 138.88 | 14 | 9.92 | |

^aF of 7.72 with given degrees of freedom significant past the .05 level.

TABLE 24

Number of Bi-Monthly Periods for Experimental Districts July-October 1973
Which Rank High and Low in Percent Property Crime by Mode Used^{a, b}

| Rank | Mode | | |
|------|--------|----------|------------------------|
| | Marked | Unmarked | Un-worked ^c |
| High | 5 | 9 | 22 |
| Low | 13 | 9 | 14 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bLambda = .222.

^cNote that there are as many periods "un-worked" as there are "marked" and "unmarked" combined.

October 1972 and 1973 in experimental and control districts is given. As can be seen, there was a decrease in the number of armed robberies in both the experimental and control areas. While a decrease is encouraging, such small decreases with a similar decrease in both the experimental and control areas do not allow much credit to be given the SOS program for causing the decrease.

In summary, the data on residential burglary seems to indicate fairly strongly that the SOS program was successful in lowering the number of residential burglaries. Since this specific type of property crime accounts for such a large percent of all property crime, the significant reduction in the number of such crimes has important ramifications for the overall property crime trend in Albuquerque.

HYPOTHESIS 4

The property crime rate will be significantly different for the given districts as modes of operation in the specific experimental districts change from marked units to unmarked units and then to non-worked areas.

As was explained earlier, the SOS project was designed to experiment with various modes of operation. There were, during the first four months of the project, two "modes": the marked and the unmarked mode. A third "mode" involved leaving an area with no SOS unit returning at all. The attempt here was to assess the relative effectiveness of the two types of police modes as well as the "residual effect" of the various modes. This "residual effect" was defined as the amount of time the impact of a special unit could be felt after the unit left the area.

Examining every bi-monthly period for each of the experimental districts, we found very little difference in the percent of property crime for each district by mode of operation. The average for all areas which were not worked for a bi-monthly period was 11.03% of all property crime for that district. The average for all areas which were worked in the unmarked mode for the bi-monthly periods was 11.3% of all property crime for the given districts. For the bi-monthly periods which were worked on a marked basis the average was 10.3%. The data indicates very

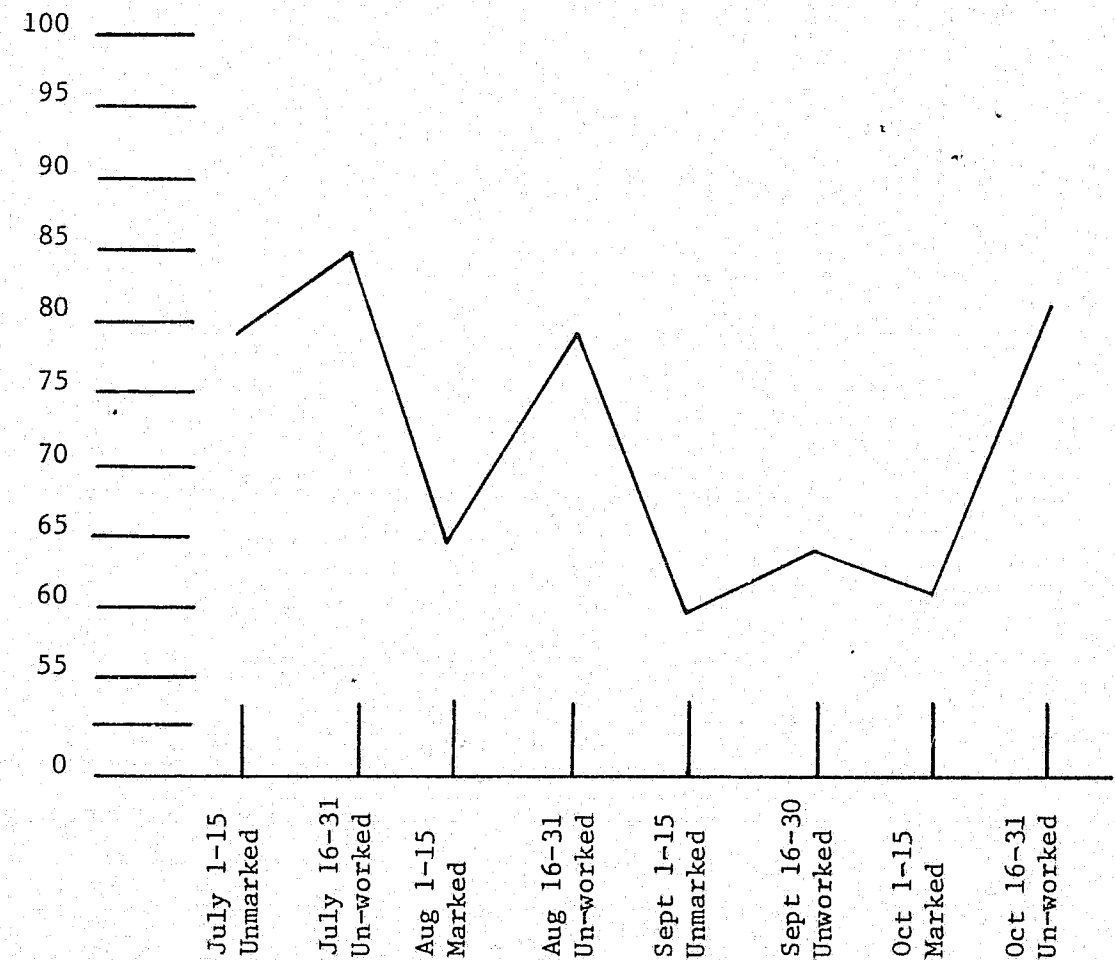
little difference in the type of mode used. It would appear that the overall effect of the project is found in the interaction between the three modes rather than in the effectiveness of any one single mode. The marked mode, however, does seem to show a slightly higher success rate than the other two.

Table 24 presents the data in a different form in order to get at the differences in a case where such differences are small. The table is built upon a forced ranking by percentage for each bi-monthly period. The percent of property crime accounted for by each district for a specific bi-monthly period was determined; then each district for that bi-monthly period was ranked from 1 to 8. A rank of 1-4 was considered high; a rank of 5-8, low. After the ranks were assigned, a determination was made as to what mode operated in the specific district during that bi-monthly period. Table 24 contains the results of the procedure. The lambda of .222 indicates that there is some association between the mode and the rank order. With differences as small as these, however, such results should be considered very cautiously.

In Figures 3, 4, 5, and 6, one can see the effect of the different modes on the property crime trend lines for the first four months of the project. (Note that there are as many un-worked periods as there are marked and unmarked combined.) In comparing trend lines and modes of operation by simply counting the number of peaks on the curves which coincide with the three different modes, we find that seven of the peaks coincide with the un-worked mode, three coincide with the unmarked mode and one with the marked mode. These peaks represent bi-monthly periods which were high in property crime. In looking for the number of times in which the trend lines dip low for each mode we find that five times a low mark on the trend line is found in a period in which the un-worked mode is in operation. Two times the trend line is low for the unmarked mode and five times the trend line is low for the marked mode. In analyzing these trend lines the marked mode seems to be the most effective in stopping property crime, whereas the unmarked and the un-worked modes seem to be very close in their effect.

FIGURE 3

Property Crime^a Trend Line for Experimental Districts 101 and 103 Combined^b with Mode Used for Bi-Monthly Periods

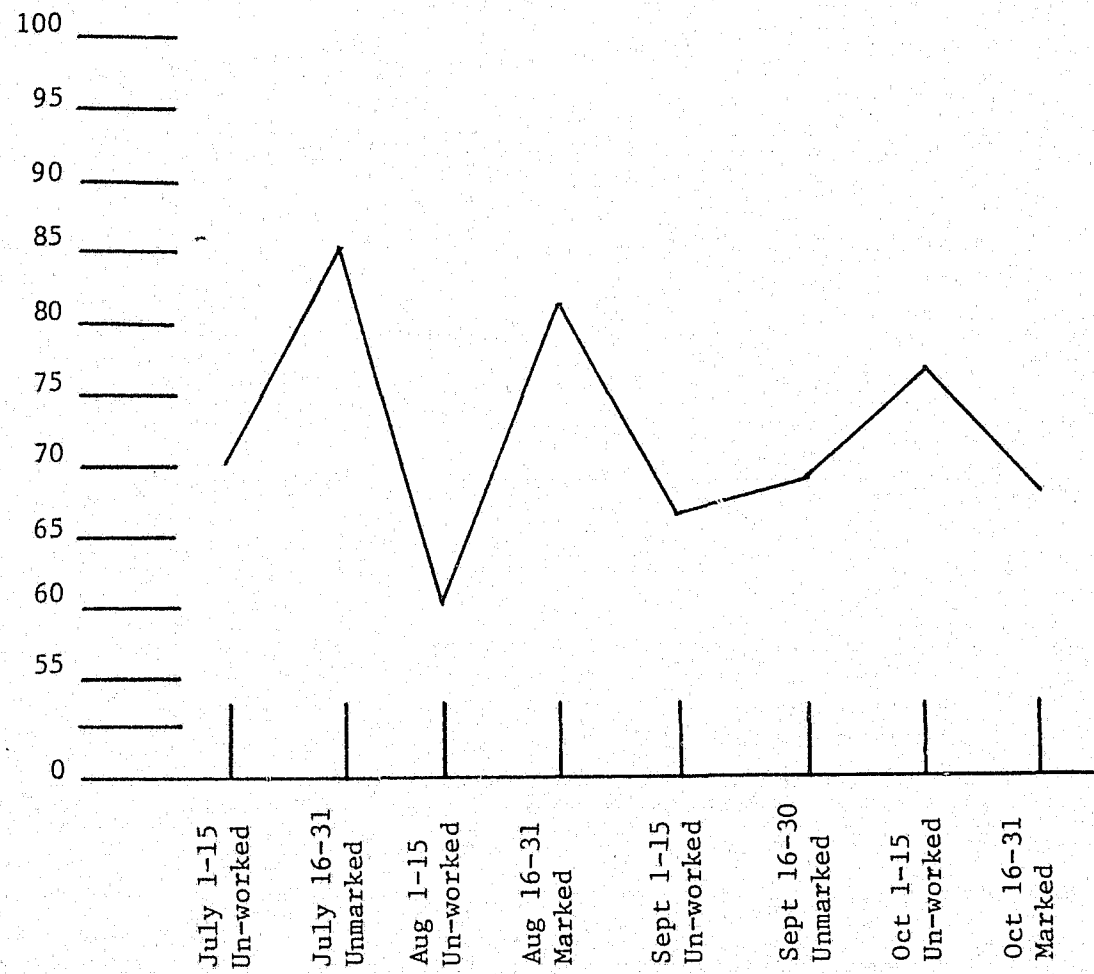


^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary, and auto theft.

^bAreas are combined because they were worked as a single unit.

FIGURE 4

Property Crime^a Trend Line for Experimental Districts 301 and 303 Combined^b with Mode Used for Bi-Monthly Periods

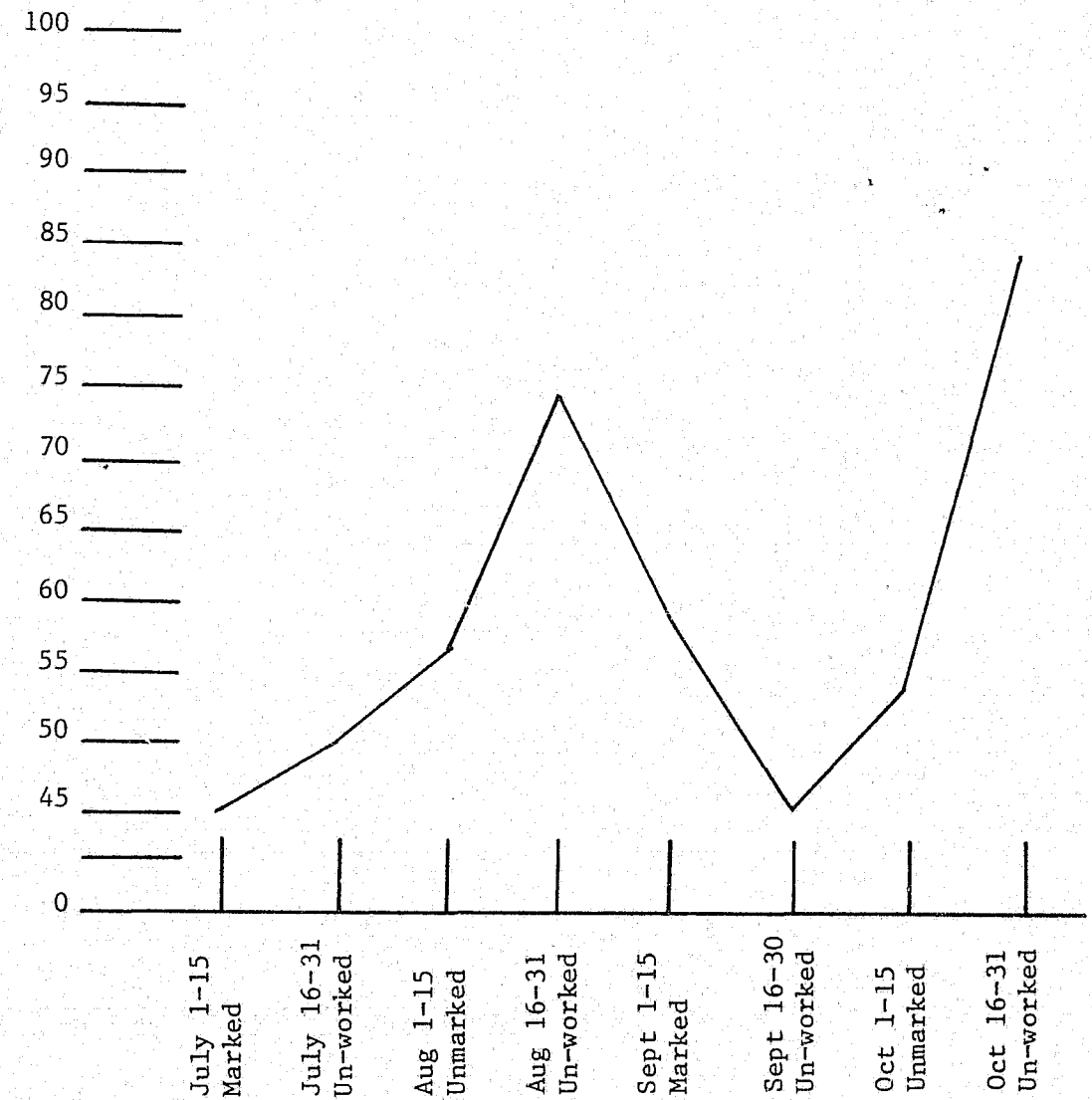


^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bAreas are combined because they were worked as a single unit.

FIGURE 5

Property Crime^a Trend Line for Experimental Districts 306 and 307 Combined^b with Mode Used for Bi-Monthly Periods

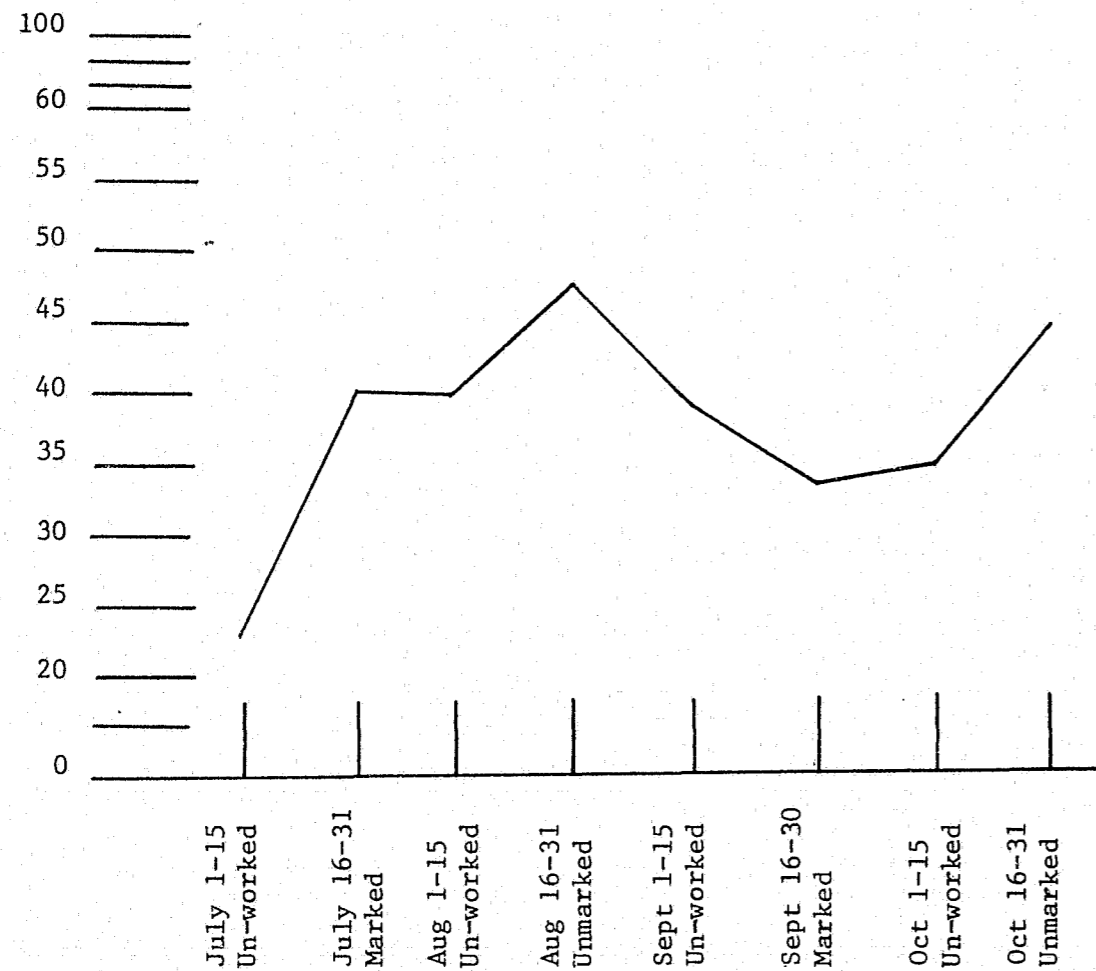


^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bAreas are combined because they were worked as a single unit.

FIGURE 6

Property Crime^a Trend Line for Experimental Districts
404 and 407 Combined^b with Mode Used for Bi-Monthly Periods



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bAreas are combined because they were worked as a single unit.

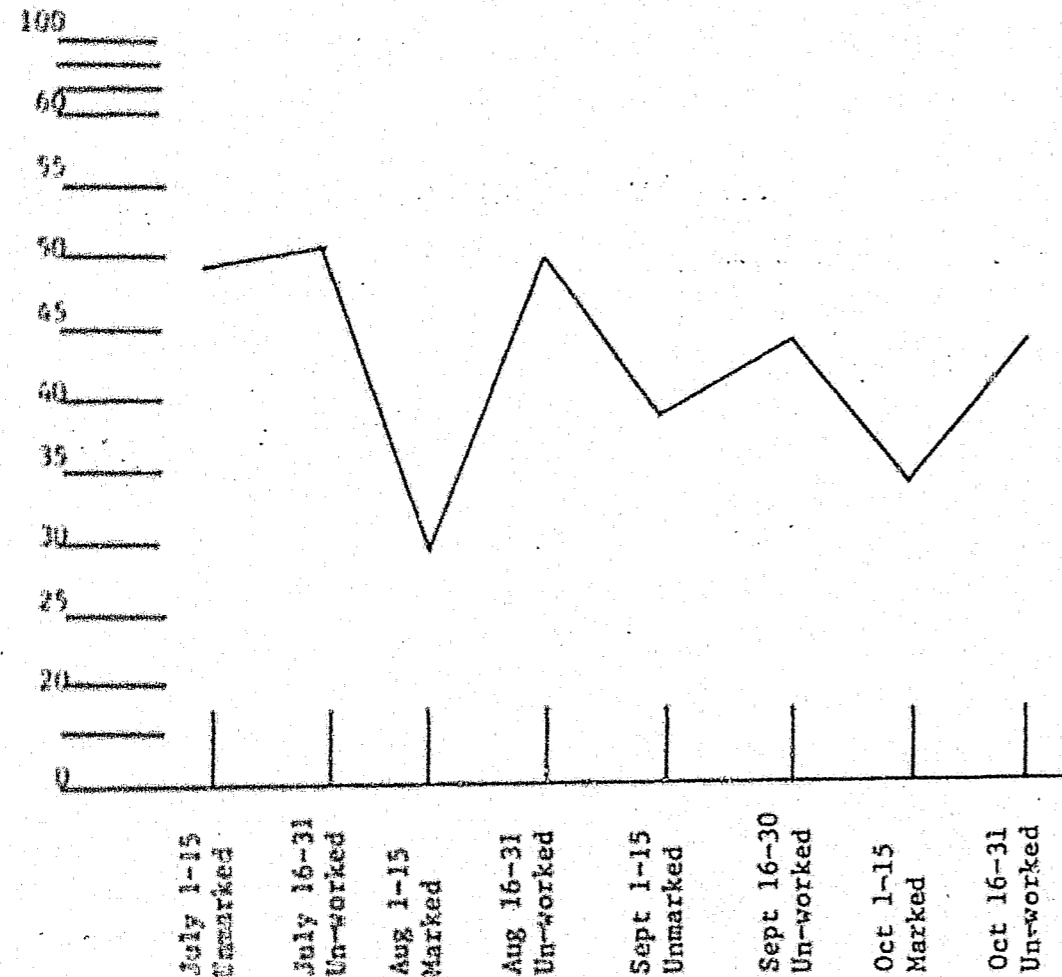
The trend lines found in the graphs above also indicate that the "residual effect" expected did not seem to materialize. In order for the trend lines to give some evidence of "residual effect" there should be some flattening out of the curves as the units moved from one mode to another. The curves, however, give no such indication. It is possible that there is actually some "residual effect" if one assumes the use of bi-monthly periods to be too large a time span to effectively discern the effect. The idea of analyzing data for a "residual effect" may be very fruitful. If there is some lasting effect after a special unit is out of an area and if that lasting effect can be defined in terms of the time span involved, much effort could be saved by taking advantage of it.

Before moving from the consideration of the effect of the various modes upon property crime, it is important to look at one special case which presents some interesting information. In Figure 7 the trend line for District 101 is presented. As can be seen, the trend line indicates that the movement in and out of the area by the SOS units coincides with the movement up and down of the number of property crimes. The interesting aspects of this data relate to the nature of the SOS project during the first four months. This may be viewed as an attempt to saturate an area with police in order to control the property crime. In district 101 the saturation seems to have worked. One possible explanation for the success of the SOS units in moving the rate down when they moved into the area is that district 101 is geographically a small area and easily saturated. The larger districts do not show the same kind of trend. The concept of saturation seems, therefore, to work, but larger areas are not as effectively saturated.

In summary, some confusion in the data exists as to whether or not the various modes have a greater or lesser effect upon the property crime rate. In terms of the percent of property crime which took place in the experimental districts while the different modes were in operation, there seems to be only a slight difference which favors the marked mode. When analyzing the property crime trend lines for the various districts it seems that the marked mode is clearly superior. The "residual effect"

FIGURE 7

Property Crime^a Trend Line for Experimental District
101 with Mode Used for Bi-Monthly Periods



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

cannot be found to be of any importance in the time spans allocated; however, it may be that the data should be analyzed in time units smaller than bi-monthly. The data for the smallest experimental district shows some interesting trends which may suggest the saturation concept is more valid than the data generally indicates.

HYPOTHESIS 5

The arrest rate for property crime in experimental areas in which unmarked SOS units operate will be significantly higher than the arrest rate in experimental areas in which marked SOS units operate.

This hypothesis is designed to measure the effectiveness of the two modes, marked and unmarked, in terms of the number of arrests made for property crimes. While it was anticipated that the marked mode would have a more preventative role, the unmarked mode was seen as being more likely to yield a greater number of actual arrests.

Table 25 presents the raw arrest data derived from the daily activity logs July through October 1973. Of the 419 total arrests made, 216 or 51.5% were made by units using the unmarked mode and 203 or 48.4% were made by the marked units. These total figures, however, include the number of arrests for all crime, not just property crime. The category which best reflects property crime arrests is the "felony" category. The misdemeanor arrests are heavily weighted with traffic violations and other minor non-property crime violations. The three categories, "felony narcotics," "misdemeanor narcotics" and "misdemeanor warrants," include no property crime violations. The "felony warrants" category does include some property crime arrests. Table 26 sets out the felony arrests for marked and unmarked units on a bi-monthly basis. The totals for the two modes show that the unmarked units made many more felony arrests than were made by the marked units. The 71 felony arrests for unmarked units yields an average of 8.9 felony arrests per bi-monthly period. For the marked units, an overall 37 felony arrests yields an average of 4.6 felony arrests per bi-monthly period. Such a large difference between the two modes would seem to be very significant and indicate strong evidence in

TABLE 25
Number of Arrests for All Crimes by Bi-Monthly Periods
by ACT Units

| Bi-Monthly Periods | ACT Units | Arrests | | | | | | | |
|-----------------------|--------------|---------|-------------|---------------------|--------------------------|--------------------|-------------------------|--------------------|-------------------------|
| | | Felony | Misdemeanor | Felony Narcotics | Misdemeanor Narcotics | Felony Warrants | Misdemeanor Warrants | Felony Warrants | Misdemeanor Warrants |
| July 1-15 | I | 12 | 16 | 3 | 0 | 0 | 0 | 0 | 6 |
| | II | 10 | 7 | 0 | 1 | 0 | 0 | 0 | 5 |
| July 16-31 | I | 4 | 7 | 0 | 4 | 0 | 0 | 0 | 3 |
| | II | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| Aug 1-15 | I | 1 | 5 | 2 | 6 | 1 | 1 | 1 | 4 |
| | II | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |
| Aug 16-31 | I | 9 | 10 | 0 | 12 | 3 | 0 | 0 | 0 |
| | II | 8 | 7 | 0 | 1 | 0 | 0 | 1 | 1 |
| Sept 1-15 | I | 4 | 18 | 1 | 5 | 0 | 0 | 0 | 5 |
| | II | 4 | 9 | 4 | 0 | 2 | 2 | 3 | 3 |
| Sept 16-30 | I | 7 | 4 | 0 | 2 | 0 | 0 | 0 | 5 |
| | II | 19 | 9 | 0 | 0 | 3 | 3 | 8 | 8 |
| Oct 1-15 | I | 0 | 11 | 0 | 16 | 0 | 0 | 0 | 4 |
| | II | 6 | 17 | 1 | 7 | 0 | 0 | 14 | 14 |
| Oct 16-31 | I | 16 | 20 | 0 | 4 | 0 | 0 | 0 | 0 |
| | II | 0 | 15 | 4 | 2 | 2 | 2 | 5 | 5 |
| Total | | 108 | 159 | 16 | 61 | 11 | 11 | 64 | 64 |

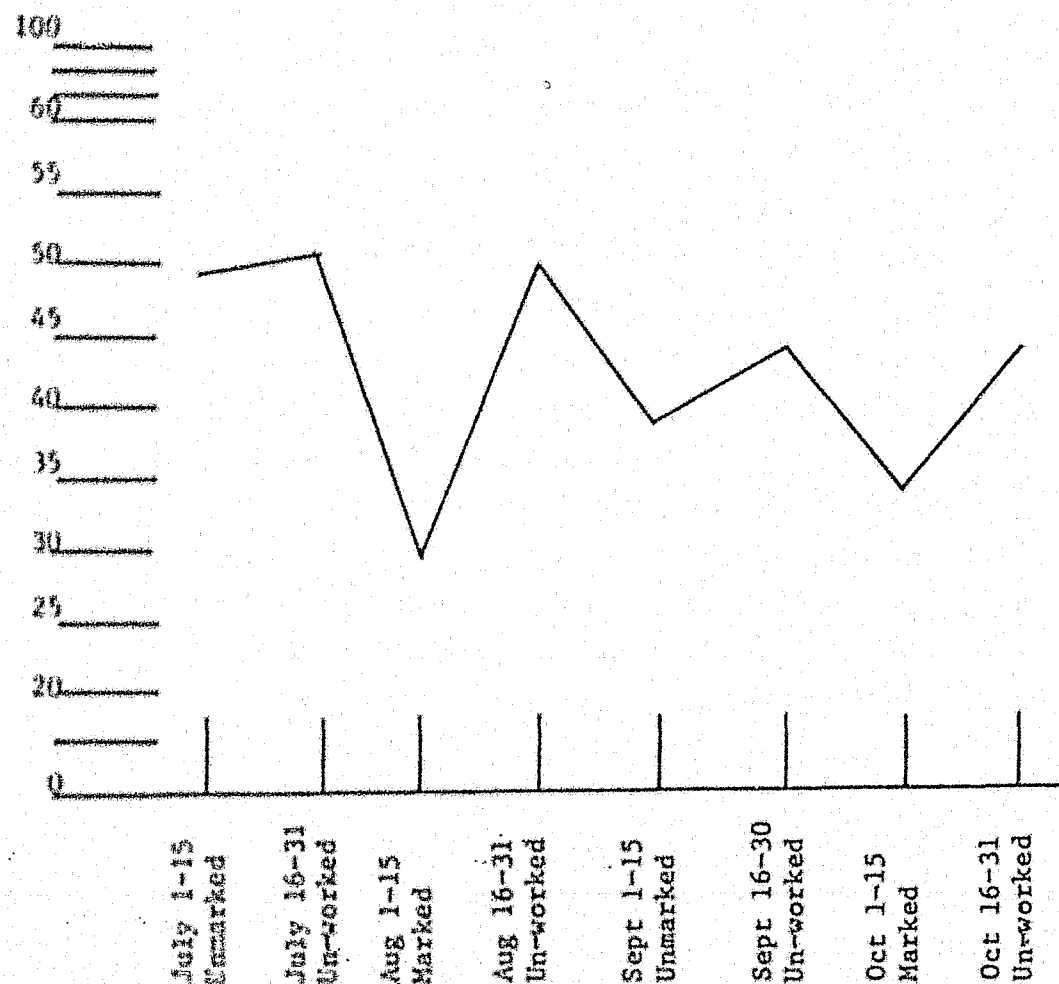
TABLE 26

Number of Felony Arrests for Marked and
Unmarked Units by Bi-Monthly Periods

| Bi-Monthly Periods | Mode Used | |
|-----------------------|-----------|--------|
| | Unmarked | Marked |
| July 1-15 | 12 | 10 |
| July 16-31 | 4 | 0 |
| Aug 1-15 | 8 | 1 |
| Aug 16-31 | 8 | 9 |
| Sept 1-15 | 4 | 4 |
| Sept 16-30 | 19 | 7 |
| Oct 1-15 | 0 | 6 |
| Oct 16-31 | 16 | 0 |
| Total | 71 | 37 |

FIGURE 7

Property Crime^a Trend Line for Experimental District 101 with Mode Used for Bi-Monthly Periods



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

cannot be found to be of any importance in the time spans allocated; however, it may be that the data should be analyzed in time units smaller than bi-monthly. The data for the smallest experimental district shows some interesting trends which may suggest the saturation concept is more valid than the data generally indicates.

HYPOTHESIS 5

The arrest rate for property crime in experimental areas in which unmarked SOS units operate will be significantly higher than the arrest rate in experimental areas in which marked SOS units operate.

This hypothesis is designed to measure the effectiveness of the two modes, marked and unmarked, in terms of the number of arrests made for property crimes. While it was anticipated that the marked mode would have a more preventative role, the unmarked mode was seen as being more likely to yield a greater number of actual arrests.

Table 25 presents the raw arrest data derived from the daily activity logs July through October 1973. Of the 419 total arrests made, 216 or 51.5% were made by units using the unmarked mode and 203 or 48.4% were made by the marked units. These total figures, however, include the number of arrests for all crime, not just property crime. The category which best reflects property crime arrests is the "felony" category. The misdemeanor arrests are heavily weighted with traffic violations and other minor non-property crime violations. The three categories, "felony narcotics," "misdemeanor narcotics" and "misdemeanor warrants," include no property crime violations. The "felony warrants" category does include some property crime arrests. Table 26 sets out the felony arrests for marked and unmarked units on a bi-monthly basis. The totals for the two modes show that the unmarked units made many more felony arrests than were made by the marked units. The 71 felony arrests for unmarked units yields an average of 8.9 felony arrests per bi-monthly period. For the marked units, an overall 37 felony arrests yields an average of 4.6 felony arrests per bi-monthly period. Such a large difference between the two modes would seem to be very significant and indicate strong evidence in

favor of the hypothesis. The analysis of variance test, however, did not indicate a significant difference at the .05 level (see Table 27). The reason that the analysis of variance test did not reflect a more positive significant difference is that the variation within the two columns of data in Table 26 is so wide.

Table 28 presents the number of felony arrests for property crime only. The totals for this table show that 91 of the 108 felony arrests made by SOS units were for property crime. The 62 felony arrests made for property crimes by the unmarked units represents an average of 7.75 arrests per bi-monthly period; the 29 similar arrests made by the marked units yields an average of 3.62 arrests per bi-monthly period. On the basis of these averages it would seem that a strong case could be made for the significantly higher arrest rate of the unmarked units. Table 29 indicates that such a strong claim would be unwarranted on the basis of the results of the analysis of variance test. The reason that the results are not significant past the .05 level is again because of the great variation within the arrest rates for the unmarked and marked units. The large difference between the two sets of arrest data leads to a claim that the unmarked units were clearly more effective in making property crime arrests; however, such a claim should be made cautiously in light of the analysis of variance results.

A second consideration related to the arrest rate is dealt with in Table 30. This table shows the number of felony arrests made by the SOS units by type of crime. Several of the column totals are of special interest. For the crime of residential burglary, the table indicates that there were only 10 felony arrests in the experimental districts. However, the greatest reduction in property crime for the experimental districts was found in the residential burglary category. The effectiveness of the SOS units, as indicated by this data, is found in the preventative action rather than in action geared toward "getting the criminal off the street."

In Table 31 the type of arrest for the felony property crimes indicated in Table 30 is analyzed. A high proportion of "on-sight" arrests

TABLE 27

Results of Analysis of Variance Test for the Comparison of Marked and Unmarked Units Concerning Felony Arrests as Presented in Table 26^a

| Source of Variation | SS | df | MS | F |
|---------------------|--------|----|-------|------|
| Between Groups | 72.25 | 1 | 72.25 | 2.34 |
| Error | 432.75 | 14 | 30.91 | |

^aF of 2.34 for given degrees of freedom is not significant past the .05 level.

TABLE 28

Number of Felony Arrests for Property Crime for
Marked and Unmarked Units by Bi-Monthly Periods

| Bi-Monthly Periods | Mode Used | |
|-----------------------|-----------|--------|
| | Unmarked | Marked |
| July 1-15 | 8 | 3 |
| July 16-31 | 3 | 0 |
| Aug 1-15 | 8 | 1 |
| Aug 16-31 | 5 | 8 |
| Sept 1-15 | 4 | 4 |
| Sept 16-30 | 18 | 7 |
| Oct 1-15 | 0 | 6 |
| Oct 16-31 | 16 | 0 |
| Total | 62 | 29 |

TABLE 29

Results of Analysis of Variance Test for the Comparison of
Marked and Unmarked Units Concerning Property Crime Felony Arrests
as Presented in Table 28^a

| Source of Variation | SS | df | MS | F |
|---------------------|--------|----|-------|------|
| Between Groups | 68.06 | 1 | 68.06 | 2.74 |
| Error | 347.74 | 14 | 24.81 | |

^aF of 2.74 for given degrees of freedom is not significant past the .05 level.

TABLE 30
Number of Felony Arrests for Given Property Crimes
by Bi-Monthly Periods for ACT Units

| Bi-Monthly Periods | ACT Units | Type of Property Crime | | | | | | | | | | Total |
|-----------------------|--------------|--------------------------|------------------|-------------------------|------------------------|------------------|---------------|--------------------|----------|---|---|-------|
| | | Strong Arm Robbery | Armed Robbery | Residential Burglary | Commercial Burglary | Auto Burglary | Auto Theft | Stolen Property | Recovery | | | |
| July 1-15 | I | 5 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 9 |
| July 16-31 | II | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 26 |
| Aug 1-15 | I | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Aug 16-31 | II | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| Sept 1-15 | I | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Sept 16-30 | II | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 26 |
| Oct 1-15 | I | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 9 |
| Oct 16-31 | II | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| Total | | 9 | 26 | 10 | 10 | 23 | 5 | 8 | | | | |

TABLE 31
Number of Felony Arrests for Property Crime
Made On-Sight or Dispatched by Mode Used^a

| Mode Used | Arrests | |
|-----------|------------------------|------------|
| | On-Sight | Dispatched |
| Marked | 13 (44.8) ^b | 16 (55.2) |
| Unmarked | 42 (67.7) | 20 (32.2) |

^aLambda = .08.

^bNumbers in parentheses are percents.

would indicate that the units are in the right place at the right time. Table 31 shows that 67.7 percent of the felony property crime arrests made by the unmarked units were made "on-sight," while 44.8 percent of like arrests were made by the marked units. This data supports the contention that the unmarked units are "in the right place at the right time" and that they do not operate as well in a preventative role. The marked units seem to be more preventative since less crime takes place while they are close enough to make "on-sight" arrests. The lambda of .08 indicates only a slight increase in the prediction ability.

In summary, the data indicates that there is a higher arrest rate related to the unmarked units than there is to marked units. The difference between the arrest rates, however, was not found to be significant past the .05 level. The arrest data also indicates that the preventative role may be the most effective in lowering the property crime rate.

The second section of the analysis offers a consideration of four hypotheses developed to test the effectiveness of combining flexible police units with a highly sophisticated analysis unit. The flexibility of the units is found in the various modes used to combat property crime. As can be seen in a description of the different modes (see Appendix F-1) each one approached the property crime problem in a unique manner. In the last six months of the project, December 1973 through May 1974, the SOS units were assigned to use a specific mode in a given area. The assignments were made on the basis of data made available by the analysis unit. It was thought that with the use of certain projective techniques and continuous analysis of crime statistics an analysis unit would be able to change the role of police action from one of reaction to crime after it happens, to a role which would include a strong offensive character.

The analysis of the last six months of the project moves from the more general hypotheses to the specific. The sixth hypothesis considers the effect of the SOS operation on the property crime rates (reported property crime) of the entire city. This hypothesis is used to assess the general

impact of the project. The seventh and eighth hypotheses deal with the effectiveness of the specific modes in lowering all property crime for given areas and in lowering specific types of property crime in given areas. The ninth hypothesis is designed to allow a consideration of the effectiveness of the various general approaches in terms of arrests for property crimes. Because of the nature of the data and because of the differences in the various modes, it is easier to analyze some of the hypotheses with certain techniques which become impossible to use in analyzing other hypotheses. For these reasons, we have taken some license in moving from one type of analytic model to another.

HYPOTHESIS 6

The property crime rate for the City of Albuquerque will be significantly lower for a four month period in 1974 during which the second phase of the SOS operation was in progress than for the same four month period in 1973.

The sixth hypothesis deals with the overall effectiveness of the second phase of the SOS program. During the four month period chosen for comparison all of the modes were applied by the SOS units. Table 32 and Figure 8 show the number of property crimes reported for each bi-monthly period from January 1 through April 31 of 1973 and 1974. The deviation figures in Table 32 clearly show a consistent pattern: a lower total number of property crimes in almost every bi-monthly period. The total deviation of -312 indicates that there were 312 fewer property crimes reported from January through April 1974 than there were for the same four months of 1973. The lowering of property crimes by 312 represents an 8.2% decrease in total property crime for the first four months of 1974. Figure 9 gives a comparison of the first four months of the SOS operation with the four month period mentioned above. As was stated in the first part of the analysis section, during the first four months of the project the SOS unit contributed to a general leveling off of property crime rates. During the period July through October there was an overall increase of about 5% in the number of property crimes. This increase was interpreted as an indication of a leveling off tendency because the population increase would lead one to expect a 5% increase in the number of property crimes.

TABLE 32

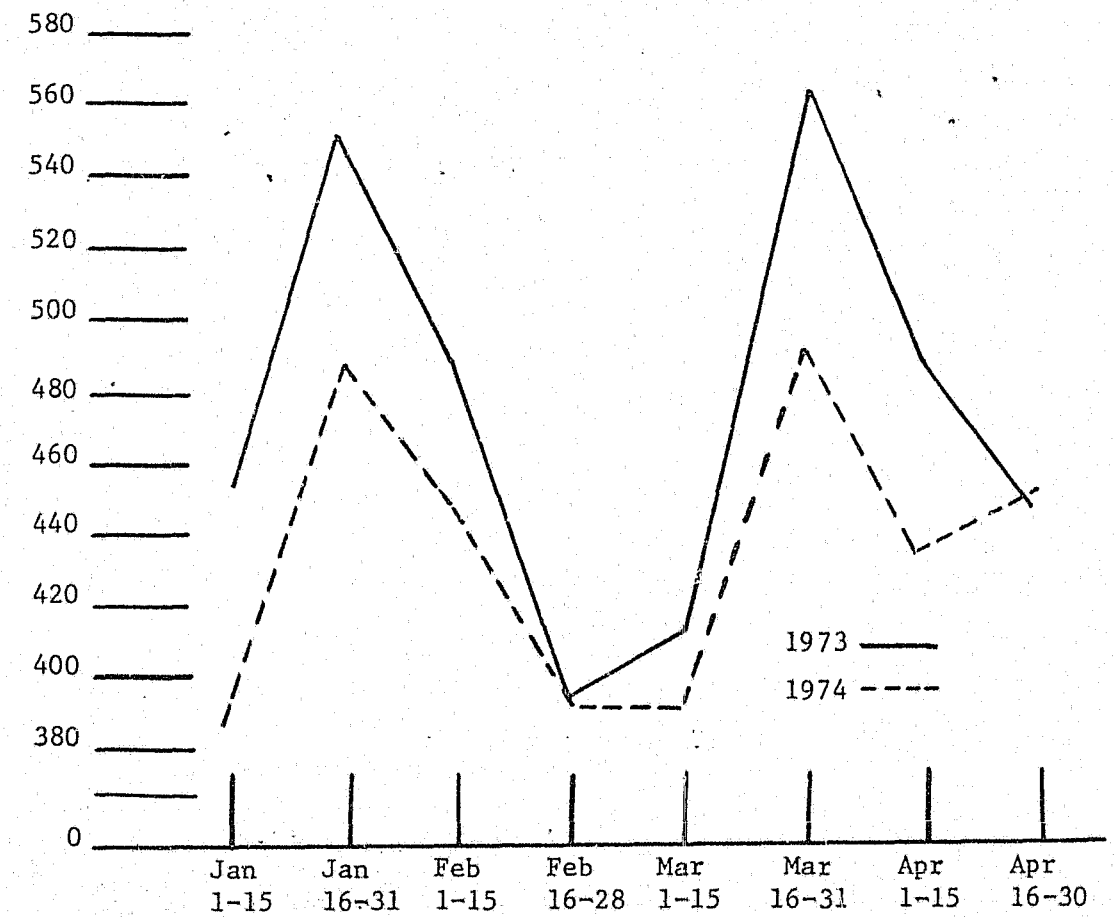
Property Crimes in Albuquerque
January-April 1973 and 1974^a

| Bi-Monthly Periods | Year | | Deviation |
|--------------------|-------------|-------------|-------------|
| | 1973 | 1974 | |
| Jan 1-15 | 457 | 383 | -74 |
| Jan 16-31 | 551 | 489 | -62 |
| Feb 1-15 | 487 | 452 | -35 |
| Feb 16-28 | 394 | 393 | -01 |
| Mar 1-15 | 415 | 392 | -23 |
| Mar 16-31 | 562 | 493 | -69 |
| Apr 1-15 | 487 | 437 | -50 |
| Apr 16-30 | 449 | 451 | +02 |
| Total | 3802 | 3490 | -312 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

FIGURE 8

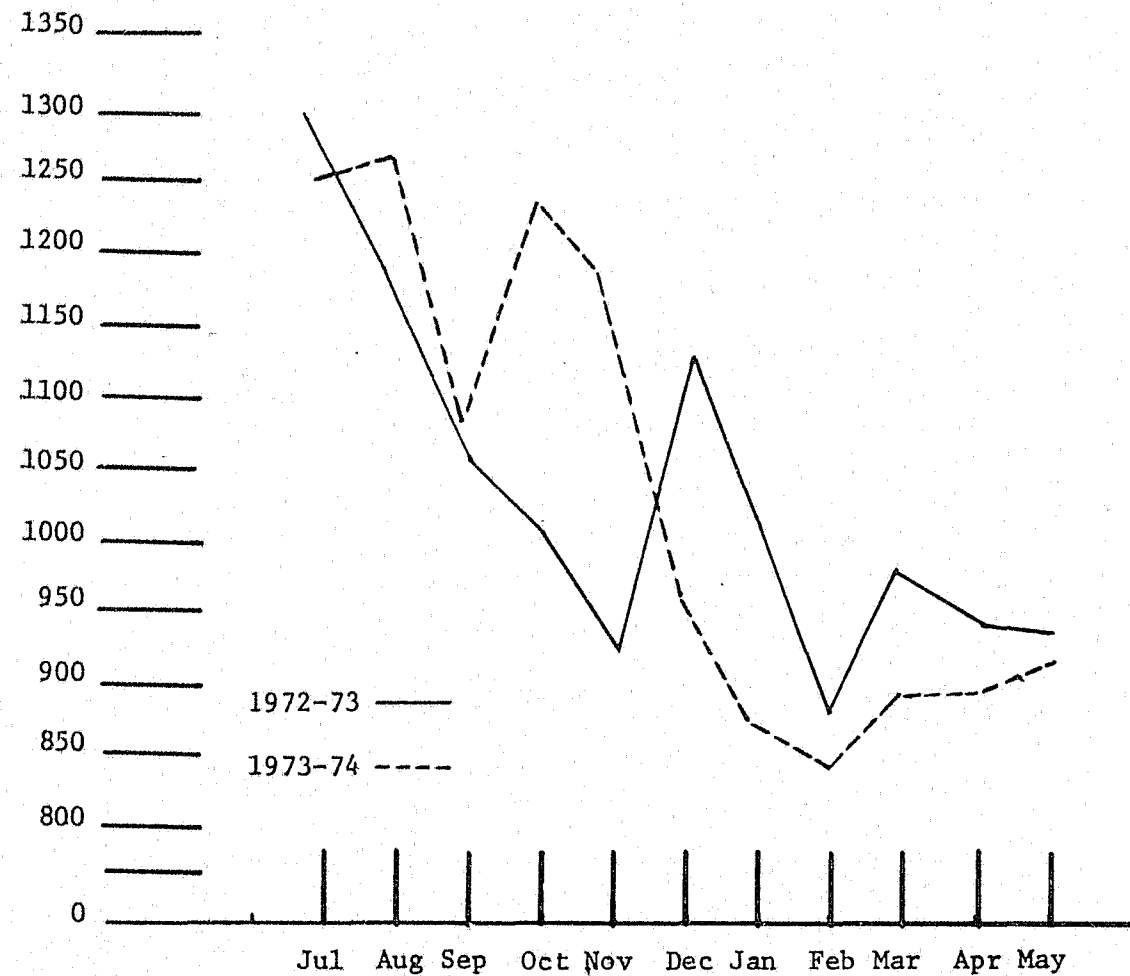
Property Crime Trendlines for City of Albuquerque
January-April, 1973 and 1974^a



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

FIGURE 9

Property Crime Trendlines for City of Albuquerque
July-May 1972-73 and 1973-74^a



^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

In a comparison of the data for the first four months with that of the four months January through April a significantly higher rate of success for the later period is apparent. The decrease of 8.2% represents about a 13% lower property crime rate than should be expected when taking population increase into account.

Table 33 gives the results of the analysis of variance test computed for Table 32. As can be seen, the test indicates that difference between the two sets of data is not significant past the .05 level. The relatively high decrease in the number of property crimes, however, can surely be considered significant in terms of some of the criteria mentioned at the beginning of the analysis section.

In summary, the decrease of 8.2% in overall property crime gives support to the hypothesis that the SOS operation did have a significant effect upon the total number of reported property crimes during the second phase of the SOS project. This decrease also indicates that the second phase of the SOS operation had a different impact upon reported property crimes than did the first phase. It would be difficult to establish that the second phase was more effective than the first because of the likelihood that the success of the second phase might have been due in part to the fact that the first phase laid important foundations.

HYPOTHESIS 7

The property crime rate for total property crime and for specific property crimes of concern will be significantly lower in areas worked by various SOS modes than in the same areas last year or in similar areas not worked.

This hypothesis deals with the impact of specific modes upon both total property crime and the specific type of property crime which is the target of the given mode.

The first mode to be considered is the Preventative/Apprehensive Patrol Mission. This mode of operation, as is indicated in Appendix F-1, is geared to the prevention of residential burglaries in areas determined by the analysis unit to be very high in this type of crime. The mode is also directed at the apprehending of residential burglars.

TABLE 33

Results of Analysis of Variance Test for Comparison of
Number of Property Crimes January-April 1973 and 1974
as Presented in Table 32

| Source of Variation | SS | df | MS | F |
|---------------------|-------|----|------|--------------------|
| Between Groups | 6083 | 1 | 6083 | 2.245 ^a |
| Error | 37928 | 14 | 2709 | |

^aF of 2,245 with given degrees of freedom not significant at the .05 level.

During the second phase of the SOS operation, the Preventative/Apprehensive Patrol Mission was used in districts 301, 303 and 305 during the third watch from February 1 through April 15. This two and one-half month period is more than adequate to assess the impact of the mode. A second time frame was also considered which covers one and one-half months.

Table 34 presents the data on the number of property crimes reported for districts 301, 303 and 305 for the period February 1 through April 15, 1973 and 1974. The table is set up in four parts. Part A gives the total number of property crimes in the three districts on a bi-monthly basis for the two and one-half month period 1973 and 1974. As indicated, the total for the time period given in 1973 was 354 property crimes as compared with 332 for the same period of 1974. These totals show a decrease of 22 reported property crimes or a decrease of 6.4% in the number of reported property crimes. The second part of the table, Part B, gives the total number of reported property crimes during the third watch for the bi-monthly periods given. This section of the table indicates that there was a greater decrease in total property crimes during the third watch (while the SOS units operated in the districts) than for the three watches combined. The lowering of the number of reported property crimes from 141 in 1973 to 116 in 1974 represents a 17.7% decrease in the percent of property crime for the three districts. Parts C and D of Table 34 give data on the specific property crime that the Preventative/Apprehensive Patrol Mission is geared to combat--residential burglary. The decrease in the total number of reported residential burglaries for all three watches shows a difference of 60 residential burglaries. This decrease represents a 34.7% decline in the number of residential burglaries in the three districts from 1973 to 1974. In Part D the number of residential burglaries for the three districts February 1 through April 15, 1973 and 1974 is presented. The lowering of residential burglaries from 78 to 48 represents a 38.5% decline in the number of such crimes.

An analysis of variance test computed for two sections of Table 34 indicates that the differences are not consistent enough to be considered statistically significant at the .05 level. Table 35 shows the results

TABLE 34

Number of Property Crimes in Districts 301, 303 and 305 for Given Watches and Given Bi-Monthly Periods February 1-April 15, 1973 and 1974

| Bi-Monthly Periods | Total Number of Property Crimes ^a | | | | Number of Residential Burglaries ^b | | | |
|--------------------|--|-------------|-------------|-------------|---|-------------|-------------|-------------|
| | A | | B | | C | | D | |
| | All Watches | Third Watch | All Watches | Third Watch | All Watches | Third Watch | All Watches | Third Watch |
| | 1973 | 1974 | 1973 | 1974 | 1973 | 1974 | 1973 | 1974 |
| Feb 1-15 | 61 | 72 | 24 | 27 | 30 | 27 | 16 | 12 |
| Feb 16-28 | 47 | 73 | 16 | 28 | 23 | 20 | 5 | 9 |
| Mar 1-15 | 70 | 64 | 32 | 23 | 31 | 22 | 17 | 12 |
| Mar 16-31 | 97 | 65 | 37 | 17 | 49 | 21 | 22 | 6 |
| Apr 1-15 | 79 | 58 | 32 | 21 | 40 | 23 | 18 | 9 |
| Total | 354 | 332 | 141 | 116 | 173 | 113 | 78 | 48 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bReported residential burglaries.

TABLE 35

Results of Analysis of Variance Test for Comparison of Number of Property Crimes During the Third Watch February 1-April 15, 1973 and 1974 as Presented in Part B of Table 34

| Source of Variation | SS | df | MS | F |
|---------------------|-----|----|----|------------------|
| Between Groups | 62 | 1 | 62 | 1.4 ^a |
| Error | 354 | 8 | 44 | |

^aF of 1.4 with given degrees of freedom not significant at the .05 level.

TABLE 36

Results of Analysis of Variance Test for Comparison of Number of Residential Burglaries During the Third Watch February 1-April 15, 1973 and 1974 as Presented in Part D of Table 34

| Source of Variation | SS | df | MS | F |
|---------------------|-----|----|----|-------------------|
| Between Groups | 89 | 1 | 89 | 3.87 ^a |
| Error | 187 | 8 | 23 | |

^aF of 3.87 with given degrees of freedom not significant at the .05 level.

of the analysis of variance for Section B of Table 34, and Table 36 gives the results for Section D. In both cases there is a large decrease in the number of crimes. However, the variation within the various sets of data is too large to allow even the large total differences to be taken as statistically significant. Such reversals in the crime trend may, however, represent real significance in terms of dealing with the costs of high crime rates.

In order to be able to compare the results shown in Table 34 with similar data, three districts were chosen as control areas. These three districts (103, 307 and 403) were not worked by the SOS units during the time frame being considered. They were chosen as "control" districts because of their similarity in terms of the percent of total and specific property crime to the "experimental" districts 301, 303 and 305.

Table 37 gives the same kind of data for districts 103, 307 and 403 as is given for districts 301, 303 and 305 in Table 34. A comparison of Section A of the two tables shows that there was a greater decrease in total property crime in the "control" areas than in the "experimental" areas. In the other three sections of the two tables the evidence is very strong that the SOS operation had a significant impact upon property crime. During the third watch (while the SOS units were active in the "experimental" districts) there was a 17.7% decrease in total reported property crime and a 2.8% increase in the "control" districts. For total residential burglary (the crime of concern for this mode) there was a decrease of 34.7% in the "experimental" districts and a 7.9% decrease in the "control" districts. In the most important section of the table, Part D, there was a 38.5% decrease in residential burglaries during the third watch in the "experimental" districts and a 1.3% decrease in the "control" districts.

Two analysis of variance tests were computed on specific parts of both tables. Table 38 presents the total number of residential burglaries for the "experimental" and "control" districts February 1 through April 15, 1974. The results of the analysis of variance test were significant past the .05 level. (The F of 12.32 is significant past the .01 level.) This table shows the consistency within the two sets and the difference between

TABLE 37

Number of Property Crimes in Districts 103, 307 and 403
for Given Watches and Given Bi-Monthly Periods
February 1-April 15, 1973 and 1974

| Bi-Monthly Periods | Total Number of Property Crimes ^a | | | | Number of Residential Burglaries ^b | | | |
|-----------------------|---|-------------|-------------|-------------|--|-------------|-------------|-------------|
| | A | | B | | C | | D | |
| | All Watches | Third Watch | All Watches | Third Watch | All Watches | Third Watch | All Watches | Third Watch |
| | 1973 | 1974 | 1973 | 1974 | 1973 | 1974 | 1973 | 1974 |
| Feb 1-15 | 90 | 78 | 40 | 39 | 44 | 34 | 22 | 24 |
| Feb 16-28 | 62 | 69 | 20 | 27 | 27 | 31 | 11 | 16 |
| Mar 1-15 | 62 | 71 | 21 | 25 | 27 | 25 | 14 | 8 |
| Mar 16-31 | 98 | 84 | 28 | 29 | 42 | 33 | 15 | 14 |
| Apr 1-15 | 90 | 59 | 31 | 24 | 23 | 27 | 13 | 12 |
| Total | 402 | 361 | 140 | 144 | 163 | 150 | 75 | 74 |

^aReported crimes of armed robbery, strong arm robbery, residential burglary, commercial burglary, auto burglary and auto theft.

^bReported residential burglaries.

TABLE 38

Number of Residential Burglaries
in Control and Experimental Districts
February 1-April 15, 1974^a

| Bi-Monthly Periods | Residential Burglaries | |
|-----------------------|---------------------------|----------------------|
| | Experimental Districts | Control Districts |
| Feb 1-15 | 27 | 34 |
| Feb 16-28 | 20 | 31 |
| Mar 1-15 | 22 | 25 |
| Mar 16-31 | 21 | 33 |
| Apr 1-15 | 23 | 27 |
| Total | 113 | 150 |

^aReported residential burglaries.

the totals that is needed to prove statistical significance. Given the demanding nature of the analysis of variance technique, the results shown in Table 39 should be taken as strong evidence of the effectiveness of the SOS program. Table 40 presents the number of residential burglaries in the "control" and "experimental" districts for the third watch (February 1 through April 15, 1974). The results of the analysis of variance test are shown in Table 41. Again, the consistency needed to produce a statistically significant difference is lacking. The difference of 26 reported residential burglaries is, however, significant from other than statistical criteria.

The second mode to be considered under Hypothesis 7 is the Surveillance Mission II. This mode, explained in Appendix F-1, involves the close surveillance of establishments which are potentially high risks as targets for armed robbery. The bi-monthly armed robbery data presented in Table 42 indicates only a slight decrease in the number of armed robberies for those areas and watches which were worked by the SOS units. The decrease of eight armed robberies for the total areas and watches worked represents a 27.6% decrease in the number of armed robberies. This data does not give the complete picture of the kind of success which the SOS units have experienced in stopping armed robbery. Given that the data covers an eight hour period, seven days a week, and the SOS units usually worked Surveillance Mission II for only about three and one-half hours, five days a week, the totals may not reflect the effectiveness of the units. Because of the ambiguity of the data, a content analysis was made of the Special Operations Mission Reports. In these reports, the virtual nonexistence of armed robbery in areas and time frames worked by the SOS units under Surveillance Mission II mode is evident. The preventative aspect of Surveillance Mission II, in terms of armed robbery, is strongly supported with the data from the Special Operations Mission Reports.

The third mode considered under the seventh hypothesis is Surveillance Mission I. This mode (explained in Appendix F-1) involves the surveillance of "known burglars." Any kind of statistical evaluation of this mode is impossible given the data available. On the basis of a content analysis

CONTINUED

1 OF 2

TABLE 39

Results of Analysis of Variance Test for Comparison of
Number of Residential Burglaries for Control and Experimental Districts
February 1-April 15, 1974 as Presented in Table 38

| Source of Variation | SS | df | MS | F |
|---------------------|-----|----|------|--------------------|
| Between Groups | 137 | 1 | 137 | 12.32 ^a |
| Error | 89 | 8 | 11.1 | |

^aF of 12.32 with given degrees of freedom is significant well past the .05 level.

TABLE 40

Number of Residential Burglaries During the Third Watch
in Control and Experimental Districts
February 1-April 15, 1974^a

| Bi-Monthly Periods | Residential Burglaries | |
|-----------------------|---------------------------|----------------------|
| | Experimental Districts | Control Districts |
| Feb 1-15 | 12 | 24 |
| Feb 16-28 | 9 | 16 |
| Mar 1-15 | 12 | 8 |
| Mar 16-31 | 6 | 14 |
| Apr 1-15 | 9 | 12 |
| Total | 48 | 74 |

^aReported residential burglaries.

TABLE 41

Results of Analysis of Variance Test for Comparison of Number of Residential Burglaries During the Third Watch for Control and Experimental Districts February 1-April 15, 1974 as Presented in Table 40

| Source of Variation | SS | df | MS | F |
|---------------------|-----|----|----|-------------------|
| Between Groups | 68 | 1 | 68 | 3.78 ^a |
| Error | 144 | 8 | 18 | |

^aF of 3.78 with given degrees of freedom is not significant at the .05 level.

TABLE 42

Number of Armed Robberies for Given Districts During the Watch Worked by SOS Units and for All Watches by Given Bi-Monthly Periods of 1973 and 1974^a

| District | Bi-Monthly Periods | Armed Robbery | | | | | |
|----------|--------------------|---------------|------|-----------|---------------------------|------|-----------|
| | | All Watches | | | Watch Worked by SOS Units | | |
| | | 1973 | 1974 | Deviation | 1973 | 1974 | Deviation |
| 301 | Feb 1-15 | 2 | 5 | +3 | 1 | 2 | +1 |
| 303 | Feb 16-28 | 2 | 3 | +1 | 1 | 2 | +1 |
| 305 | Mar 1-15 | 3 | 5 | +2 | 2 | 3 | +1 |
| | Mar 16-31 | 2 | 3 | +1 | 2 | 2 | 0 |
| | Apr 1-15 | 1 | 4 | +3 | 0 | 1 | +1 |
| 303 | Apr 16-30 | 12 | 4 | -8 | 9 | 1 | -8 |
| 307 | May 1-15 | 2 | 9 | +7 | 2 | 3 | +1 |
| | May 16-31 | 4 | 7 | +3 | 1 | 3 | +2 |
| 201 | Apr 1-15 | 4 | 1 | -3 | 3 | 0 | -3 |
| 202 | | 5 | 1 | -4 | 4 | 1 | -3 |
| 203 | | | | | | | |
| 205 | | | | | | | |
| 206 | | | | | | | |
| 106 | Apr 1-15 | 1 | 2 | +1 | 1 | 2 | +1 |
| 107 | Apr 16-30 | 6 | 3 | -3 | 3 | 1 | -2 |
| 108 | | | | | | | |
| 109 | | | | | | | |
| 204 | | | | | | | |
| Total | | 44 | 47 | +3 | 29 | 21 | -8 |

^aReported Armed Robberies.

of the Special Operations Mission Reports, there are many more instances in which this mode was used without apparent success. The preventative quality of such a mode, however, is impossible to assess with any validity. The relatively few arrests made using this mode were arrests made while the individual was involved in a criminal act. Such arrests of "known burglars" should not be underestimated. Another factor which becomes apparent in the analysis of the mission reports is the use of this mode in gathering intelligence data on burglars and fences. The value of such data is very difficult to assess.

In summary, there is strong evidence that the Preventative/Apprehensive Patrol Mission was successful in decreasing the number of residential burglaries for the time frames and districts worked. The Surveillance Mission II also proved to be effective in stopping armed robberies as is indicated in the content analysis of Special Operations Mission Reports. The effectiveness of Surveillance Mission I is questionable, not because of any doubt that it might be successful, but because the kind of data needed to completely assess the impact of such a mission is not available. The lowering of the residential burglary rates in "experimental" districts could be taken as an indication that Surveillance Mission I had the desired impact.

HYPOTHESIS 8

If the Criminal Opportunity Mission is used, arrest rates for auto burglary and auto theft will be significantly higher than when other modes are used.

The Criminal Opportunity Mission, as described in Appendix F-1, was used about four times during the first part of the second phase of the SOS program. The results of the mode were completely negative in terms of arrests. A quote from the Special Operations Mission Report of December 4 through December 8 summarizes the impact of the Criminal Opportunity Mission: "The criminal opportunity mode was used . . . and the anticipated results were not achieved. . . It was noted that no arrests were made. However, incident rate during this phase of operations declined." Because of its lack of success, the mode was abandoned early in the project.

HYPOTHESIS 9

The arrest rate for various types of property crimes will be significantly higher in the second phase of the SOS program than it was in the first phase.

The emphasis on the various modes as developed in the second phase of the SOS program was expected to bring about higher arrest rates for property crime. Table 43 includes all the arrests made by the SOS units for the four month period January 1 through April 31. Table 44 gives the total arrests by category for July 1 through October 31 (phase one of the SOS program) and from January 1 through April 31 (phase two). The total number of arrests is greater for the second half of the program (455) than for the first half (419). The number of felony arrests greatly decreased for the second half of the program. Increases are found in the area of "warrants." This increase is explained in terms of the Investigative Mission which was implemented during the second phase of the project. The increase in the felony narcotic arrests can be explained through a content analysis of the Special Operations Mission Reports. In the reports there are a number of incidents in which "known burglars" or "suspected burglars" are stopped for various reasons and are found to be using or in possession of hard narcotics. Tables 45 and 46 present the arrest data for property crimes. The totals indicate a sharp decline in the number of arrests for property crime during the second phase of the project. There were 91 property crime arrests during the first four months of the program and only 36 for a four month span during the second phase. Such a decrease in the number of arrests along with the decrease in the number of property crimes re-emphasizes the contention that the preventative role seems to be more important in controlling property crime than the arrest role.

In summary, the number of property crime arrests significantly decreased in the second half of the program. The data indicates, however, that there can be a significant decrease in property crime rates at the same time that there is a decrease in the number of arrests for such crimes.

TABLE 43

Number of Arrests for All Crimes by Bi-Monthly Periods 1974 by ACT Units

| Bi-Monthly Periods | ACT Units | Arrests | | | | | |
|--------------------|-----------|---------|-------------|------------------|-----------------------|-----------------|----------------------|
| | | Felony | Misdemeanor | Felony Narcotics | Misdemeanor Narcotics | Felony Warrants | Misdemeanor Warrants |
| Jan 1-15 | I | 4 | 4 | 11 | 2 | 14 | 1 |
| | II | 0 | 9 | 9 | 0 | 8 | 0 |
| Jan 16-31 | I | 1 | 7 | 5 | 6 | 3 | 2 |
| | II | 3 | 8 | 10 | 5 | 4 | 9 |
| Feb 1-15 | I | 2 | 10 | 5 | 3 | 3 | 5 |
| | II | 11 | 8 | 6 | 1 | 4 | 7 |
| Feb 16-28 | I | 1 | 8 | 0 | 0 | 1 | 5 |
| | II | 4 | 9 | 0 | 2 | 3 | 8 |
| Mar 1-15 | I | 0 | 8 | 4 | 0 | 8 | 13 |
| | II | 5 | 13 | 4 | 0 | 5 | 10 |
| Mar 16-31 | I | 5 | 15 | 2 | 6 | 3 | 6 |
| | II | 13 | 11 | 0 | 0 | 7 | 9 |
| Apr 1-15 | I | 1 | 6 | 0 | 0 | 0 | 3 |
| | II | 0 | 7 | 0 | 2 | 1 | 8 |
| Apr 16-30 | I | 1 | 8 | 0 | 1 | 1 | 8 |
| | II | 0 | 7 | 4 | 4 | 3 | 12 |
| Total | | 51 | 138 | 60 | 32 | 68 | 106 |

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TABLE 44

Number of Arrests by Category
July-October 1973 and January-April 1974

| Time Frame | Arrest Category | | | | | | Total |
|--------------|-----------------|-------------|------------------|-----------------------|-----------------|----------------------|-------|
| | Felony | Misdemeanor | Felony Narcotics | Misdemeanor Narcotics | Felony Warrants | Misdemeanor Warrants | |
| Jul-Oct 1973 | 108 | 159 | 16 | 61 | 11 | 64 | 419 |
| Jan-Apr 1974 | 51 | 138 | 60 | 32 | 68 | 106 | 455 |

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TABLE 45

Number of Felony Arrests for Given Property Crimes
by Bi-Monthly Periods 1974 by ACT Units

| Bi-Monthly Periods | ACT Units | Type of Property Crime | | | | | | |
|-----------------------|--------------|--------------------------|------------------|-------------------------|------------------------|------------------|---------------|--------------------------------|
| | | Strong Arm Robbery | Armed Robbery | Residential Burglary | Commercial Burglary | Auto Burglary | Auto Theft | Recovery Stolen Property |
| Jan 1-15 | I | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jan 16-31 | I | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | II | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Feb 1-15 | I | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | II | 0 | 1 | 8 | 0 | 0 | 1 | 0 |
| Feb 16-28 | I | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mar 1-15 | I | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | II | 0 | 4 | 0 | 0 | 0 | 1 | 0 |
| Mar 16-31 | I | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | II | 0 | 0 | 0 | 0 | 2 | 9 | 0 |
| Apr 1-15 | I | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Apr 16-30 | I | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 0 | 9 | 11 | 1 | 2 | 12 | 1 |

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TABLE 46

Number of Arrests for Property Crimes by Type of Arrests
for July-October 1973 and January-April 1974

| Time Frame | Type of Crime | | | | | | | Total |
|-----------------|------------------|--------------------------|-------------------------|------------------------|------------------|---------------|--------------------------------|-------|
| | Armed Robbery | Strong Arm Robbery | Residential Burglary | Commercial Burglary | Auto Burglary | Auto Theft | Recovery Stolen Property | |
| Jul-Oct 1973 | 26 | 9 | 10 | 10 | 23 | 5 | 8 | 91 |
| Jan-Apr 1974 | 9 | 0 | 11 | 1 | 2 | 12 | 1 | 36 |

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SUMMARY AND CONCLUSIONS

The total number of property crimes during the July-October 1973 period was not lower than the total for the same 1972 period. In terms of property crimes per capita, however, a definite leveling off tendency was found. The argument is made that a relatively small number of patrol units can have an important effect upon the property crime rate of an entire city. While property crime found in the control and experimental districts shows very little change from 1972 to 1973, evidence indicates that a greater number of districts in the experimental area showed a decrease in percent property crime than did control districts when bi-monthly periods were analyzed.

When comparing actual time spent in the districts for a four month period, the leveling off tendency in experimental vs control areas is impressive.

There is a strong indication that the SOS program was successful in lowering the number of residential burglaries. The significant reduction of residential burglaries has important ramifications for the overall property crime trend in Albuquerque because this specific type of crime accounts for a large percent of all property crime. In addition, there may be important psychological effects in the reduction of this type of crime because of the direct impact felt by the citizenry.

When analyzing the effects of various modes upon the property crime rate, some confusion arises in the data. There appears to be only a slight difference favoring the "marked mode" in terms of the percent of property crimes which took place in the experimental districts. However, when analyzing property crime trend lines, the "marked mode" is clearly superior to the other modes utilized.

The "residual effect" thought to be important in the initial stages of the project was not substantiated by the data in terms of the time

spans allocated. Data gathered in the smallest experimental district indicates trends which suggest that the saturation concept is more valid than more general data would imply. While there is an indication that unmarked units produce a higher arrest rate than marked, the difference between rates was not found to be significant beyond the .05 level. The preventative role seems to have been the most effective in lowering the property crime rate.

During the second phase of the project, a decrease of 8.2% in overall property crime lends support to the hypothesis tested dealing with this phenomena. The decrease also indicates that the second phase had a different impact on reported property crimes than did the first phase. The difficulty in comparing the phases to establish positive effectiveness arises from the unaccounted-for effect of the important foundations that were established during phase one.

Evidence indicates that the Preventative/Apprehensive Patrol Mission was successful in decreasing the number of residential burglaries for the time frames and the districts worked. In addition, Surveillance Mission II was effective in stopping armed robberies. We have questioned the effectiveness of Mission I on the basis of incomplete data to properly assess rather than because of a null hypothesis. The lowering of the residential burglary rates in the experimental districts may very well be taken as an indication that Mission I did have the desired impact.

The number of property crime arrests (with which the last hypothesis deals) significantly decreased in the second phase of the program.

We have found, however, that there is not a one-to-one relationship between property crime rate reduction and property crime arrest increase. That is, property crime rates may decrease while the arrest rate is decreasing.

APPENDIX F-1

OPERATIONAL MISSIONS



APPENDIX F-1

SURVEILLANCE MISSION I

This mission will be accomplished by discrete surveillance of known or suspected criminals involved in property crimes for the purpose of determining their activities, accomplices, hangouts, vehicles, and other information which will be of eventual value in affecting their arrests. Also, while operating this mission, in-progress arrests will be made as a result of surveilling suspects as they become engaged in criminal activities.

Surveillances will be conducted in an unmarked mode utilizing unmarked vehicles, bicycles, motorcycles, or other means to accomplish the mission, including foot patrol and stationary surveillance.

Targets for these surveillances will be determined from information and intelligence compiled by Investigations Section, Intelligence Section, and other investigative sources.

The purpose of this mission, in addition to apprehending a suspect in the act of committing a crime, will be to obtain intelligence that can be utilized at a later time to accomplish in-progress arrests.

SURVEILLANCE MISSION II

This mission will be accomplished by surveillance of convenience stores by means of stake outs.

Surveillance will be conducted in an unmarked and marked mode utilizing marked and unmarked vehicles.

Targets for these surveillances will be determined from information compiled by the analysis unit of S.O.S.

The purpose of this mission will be to prevent the occurrence of armed robberies as well as apprehending individuals in the act of committing armed robberies.

CRIMINAL OPPORTUNITY MISSION

This mission will be accomplished by assigning personnel to setting up situations in which suspects are able to fulfill their criminal intent. This includes surveilling vehicles that have been purposely parked with valuables inside, and in view, to attract potential auto burglars and auto thieves; acting as decoys in areas high in strong arm robberies; acting as decoys in fencing operations.

PREVENTIVE/APPREHENSIVE PATROL MISSION

This mission will be accomplished by assigning personnel to specific areas, during specific times, and for a specific length of time to perform saturation patrol. They will be assigned according to information compiled and generated by the Analysis Unit regarding property crimes, and will be assigned either in a marked mode for preventive purposes, in an unmarked mode for apprehensions, or a combination of both. The modes will include foot patrol, bicycles, or other means.

This mission will, in effect, be the basic mission of the A.C.T. squads and will be assigned to them except when other missions take priority.

INVESTIGATIVE MISSION

This mission will be accomplished by the temporary attachment of personnel to Investigations Section on a specific need basis, for specific lengths of time, to assist that Section

in the investigation of property crimes and apprehension of suspects involved in those crimes. These assignments will be made to Burglary Detail, Violent Crimes Detail (armed and strong arm robberies), Auto Theft Detail, and Pawnshop detail (fencing operations).

SPECIAL EVENTS MISSION

This mission will be accomplished by assigning personnel to such special police problems as parades, tours, marches, civil disturbances, strikes, visiting dignitaries, or other events in which the Unit's additional manpower and equipment will be required.



APPENDIX F-2

UNITS DEPLOYED OUTSIDE PRIMARY ASSIGNMENT CONCEPTSPECIAL
ASSIGNMENT

- 1 July 16, 1973. Assigned to crowd control, Kirtland Air Force Base, A-bomb demonstration, 0900-1500; ACT 2 only.
- 2 July 23, 1973. Assigned to County Court House for crowd control at trial for Robert Nakaidinae, 0700-1200, both ACTs.
- 3 July 30-August 3, 1973. Assigned to North City Yards for city employees strike, 0630-1030, both ACTs.
- 4 August 18, 1973. Assigned to County Court House for crowd control at trial for Robert Nakaidinae, 0800-1230, both ACTs.
- 5 September 9, 1973. Assigned to County Court House, 0700-1530, both ACTs.
- 6 November 23, 1973. Christmas parade and traffic and crowd control, 1830-1630, both ACTs.
- 7 November 10, 1973. UNM Homecoming for traffic control, 0800-2200, both ACTs.
- 8 January 12, 1974. Riot control practice, State Fair Grounds, 0900-1630, both ACTs.
- 9 January 26, 1974. Range for firearm practice.
- 10 August 17, 1973. Special assignment at 3000 4th St. N.W. on theft and vandalism, both ACTs.
- 11 February 27, 1974. Demonstration at Federal Building, both ACTs.
- 12 March 9, 1974. Demonstration at KAFB, 4 men assigned, 2 from each ACT.

APPENDIX F-3

CRIME RATES IN DISTRICTS ASSIGNED

APPENDIX F-3

OPTIMAL DISTRICT ASSIGNMENT GIVEN EQUAL OCCURRENCE OF CRIME
 JULY 1, 1972 TO MAY 31, 1973
 (PERCENT)

| DISTRICT ASSIGNED | | | DISTRICT CONTROLLED | | |
|-------------------|--------------|-------------|---------------------|--------------|-------------|
| DIST. | % CAT. CRIME | CUMULATED % | DIST. | % CAT. CRIME | CUMULATED % |
| 307 | 7.4 | 11.2 | 301 | 6.8 | 11.2 |
| 305 | 4.2 | | 304 | 4.4 | |
| 101 | 6.7 | 9.7 | 103 | 4.9 | 9.7 |
| 306 | 3.0 | | 303 | 4.8 | |
| 403 | 4.2 | 7.1 | 408 | 3.7 | 7.1 |
| 405 | 2.9 | | 404 | 3.4 | |
| 407 | 3.2 | 6.4 | 106 | 3.5 | 6.4 |
| 402 | 3.2 | | 205 | 2.9 | |
| TOTAL | 34.4 | 34.4 | TOTAL | 34.4 | 34.4 |

ACTUAL DISTRICT ASSIGNMENTS

| EXPERIMENTAL DISTRICTS | | | CONTROL DISTRICTS | | |
|------------------------|-----------------------|----------------|-------------------|-----------------------|----------------|
| DIST. | % TOTAL CAT. CRIME | CUMULATED % | DIST. | % TOTAL CAT. CRIME | CUMULATED % |
| 101 | 6.7 | 11.6 | 106 | 3.5 | 6.4 |
| 103 | 4.9 | | 205 | 2.9 | |
| 301 | 6.8 | 11.6 | 304 | 4.4 | 8.6 |
| 303 | 4.8 | | 403 | 4.2 | |
| 306 | 3.0 | 10.0 | 305 | 4.2 | 7.9 |
| 307 | 7.0 | | 408 | 3.7 | |
| 404 | 3.4 | 6.6 | 402 | 3.2 | 6.1 |
| 407 | <u>3.2</u> | — | 405 | <u>2.9</u> | — |
| TOTAL | 39.8 | 39.8 | TOTAL | 29.0 | 29.0 |

APPENDIX F-4

AN EXPLANATION OF S.O.S. DAILY ACTIVITY LOG

AND
ITS USE

ANALYSIS UNIT
SPECIAL OPERATIONS SECTION
ALBUQUERQUE POLICE DEPARTMENT

PREPARED FOR
REDUCTION OF CRIME AGAINST PROPERTY PROGRAM

PREPARED BY
BILL PARRAS
OPERATIONS RESEARCH ANALYST

APRIL 24, 1974

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INTRODUCTION

As defined in the Operation procedures of the S.O.S., the A.C.T.'s responsibility is to serve as a highly mobile, flexible and compact operational force in support of Field Services, Investigation, and Intelligence. In order to permit the A.C.T. to accomplish its mission, it would not answer calls-for-service under normal conditions. The A.C.T.'s primary mission would be to primarily concentrate on:

1. Burglary - Residential
2. Burglary - Commercial
3. Burglary - Auto
4. Auto Theft
5. Robbery - Armed
6. Robbery - Strong Arm
7. Civil Disorder
8. Surveillance (Property Crime Related)
9. Preventive Patrol (Property Crime Related)

The project which funded the operation of S.O.S. required a clearly structured and measurable S.O.S. operational approach. Thus, a form (~~Daily Activity Log~~ ^{delete} ~~Figure 1~~) was designed to identify the operational activity of each officer. The remainder of this report will identify and clarify the coding and processing of the Daily Activity Log.

A.C.T. ACTIVITY REPORTING: THE DILEMMA

In theory, the reporting of A.C.T. activity was designed to provide specific data information which could be analyzed and result in conclusions regarding the effectiveness of stakeouts, preventive patrolling, or other police apprehension and prevention tactics. Specifically, the general procedure for accomplishing the above task is outlined in Figure 2.

While the activity reporting procedure seems operationally trivial, it was to cause serious problems for the police officer as well as the procurator of the system. The most serious problems of the activity reporting procedure occurred during stage 1 through stage 4 and are listed as follows:

1. AVAILABLE CODES NOT APPROPRIATE
2. "TO LOG OR NOT TO LOG?"
3. CONSISTENCY IN USE OF APPROPRIATE CODES
4. "WHO GETS CREDIT FOR AN ARREST?"

1. AVAILABLE CODES NOT APPROPRIATE

The codes that were made available to log A.C.T. activity are listed in the following groups (Refer to bottom Figure 1):

- a. Category b. Type c. Action d. Offense

Those codes made available in the group Action were to be extremely limiting in describing the police activity. For example, if the activity was not related to a situation involving an arrest, then it was inevitably coded as Other because no other option was available. With this constraining effect, there was a tendency at the initial period of the program to code all police activity as follows:

| <u>CATEGORY</u> | <u>TYPE</u> | <u>ACTION</u> | <u>OFFENSE</u> |
|-----------------|-------------|---------------|-----------------|
| (6) Other | (5) OTHER | (3) Other | (12) No Offense |

The cumulative effect would have been to provide the evaluator of the program with a colossal amount of "Other" activity to analyze. To circumvent this effect, codes for Action were expanded as follows:

- ACTION*
1. Arrest
 2. Arrest - Warrant
 3. Non - Arrest
 4. Investigation
 5. Surveillance
 6. Other (Explain)

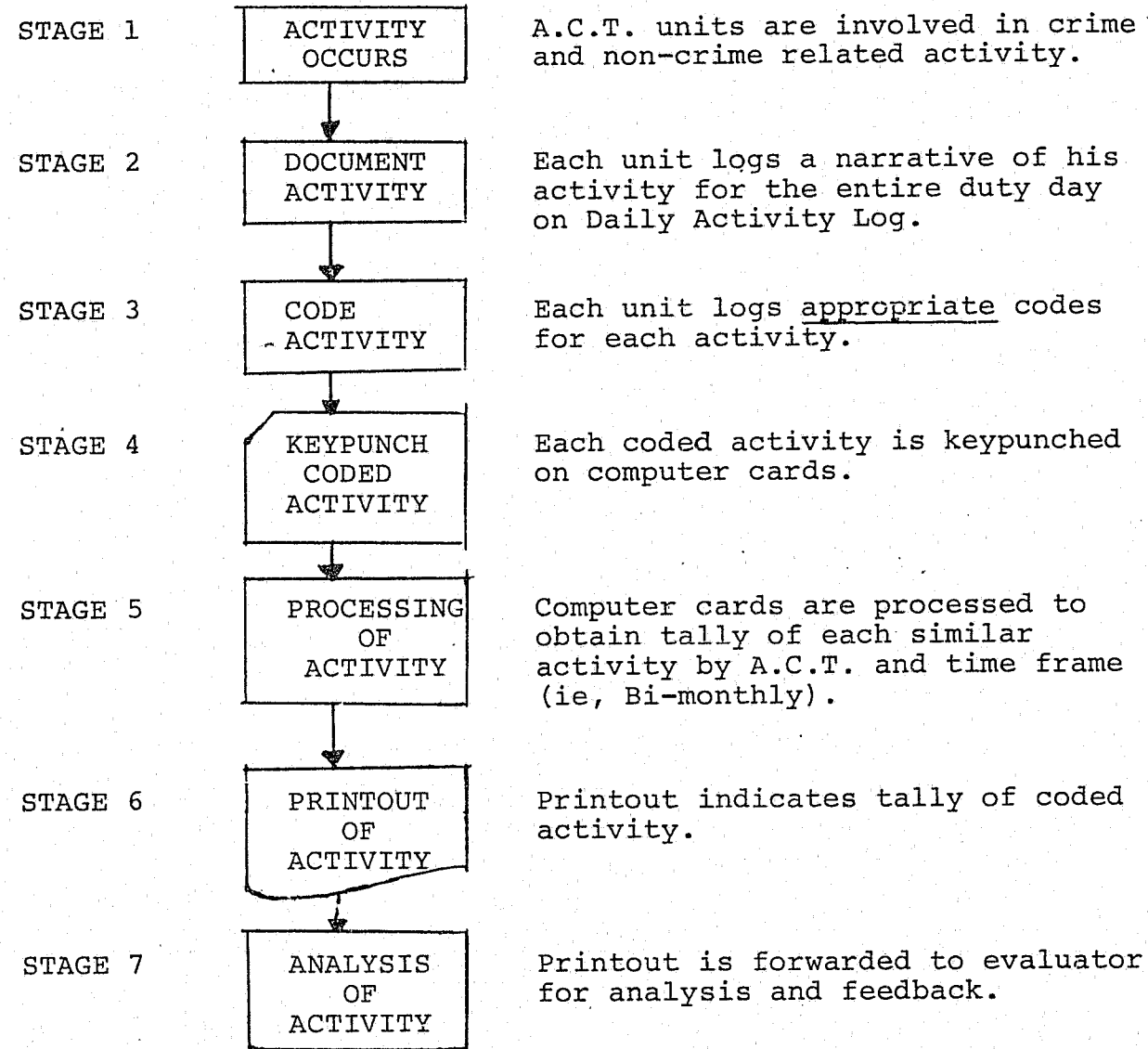
This would allow the officer to more accurately describe his activity since a great deal of his time is in other than arresting situations.

All previously coded activity logs were changed to coincide with the expansion of the Action group.

* These codes will be explained in detail in the next section.

Figure 2

A.C.T. ACTIVITY REPORTING PROCEDURE



2. "TO LOG OR NOT TO LOG?"

Police officers in general are inundated with documentation of paperwork (ie. Crime Reports) and the daily activity log added to this work load. Thus, quite rationalistically "The path of least resistance" or shortcuts will be used if possible in documenting additional paperwork. These shortcuts in documentation differ by each officer and presented the following problems:

What activity is significant enough to be logged on the activity log?

Obviously, a serious crime situation posed no problem as to whether to document the situation. However, in other than crime related situations, there can exist discretion as to whether the activity is worth documenting.

EXAMPLE 1: A stake-out of store is initiated. Unit is called to respond in assistance to possible commercial burglary. The unit resumes original stake-out assignment. Discretion existed whether to log the resumption of the stake-out.

EXAMPLE 2: A contact card is filled out on five suspicious individuals. Discretion existed as to logging five separate contact card incidents or all five on one entry.

This dilemma of "To log or not to log" existed because the criteria for evaluating the A.C.T. activity had not been provided with the Daily Activity Log. The result was that some officers logged every activity (including lunch breaks, coffee breaks, latrine breaks, administrative duties, refuel vehicle and other activity which had little value for analysis) while others were meticulous about entering only "important" information.

3. CONSISTENCY IN USE OF APPROPRIATE CODES

Needless to say, it was a "Rude awakening" for police officers to have to describe their activity with numbers (codes). Thus, the normal amount of expected errors would be extremely high at the initial period (ie, Code: 7 used for category, type or action when no such code existed for these groups.)

Each officer did want to properly code the narrative of his activity to the extent that there soon existed a wide span of variability in coding even similar activity.. This developed because each officer developed his own definition of the available codes.

EXAMPLE 3: A suspicious individual is stopped and warrant check is run. Contact card is filled out. Individual is not arrested. Following code was made on same situation depending on discretion of officer.

| <u>CATEGORY</u> | <u>TYPES</u> | <u>ACTION</u> | <u>OFFENSE</u> |
|-----------------|--------------|-------------------|-----------------|
| 2 (Misdemeanor) | 2 (On Sight) | 3 (Non-Arrest) | 12 (No Offense) |
| 3 (Contact) | 2 | 3 | 12 |
| 3 | 2 | 4 (Investigation) | 12 |
| 6 (Other) | 2 | 3 (Non-Arrest) | 12 |
| 6 | 2 | 4 (Investigation) | 12 |
| 6 | 2 | 6 (Other) | 12 |

The example indicates 6 different ways to code the same activity depending on the interpretation of the various codes. The cumulative effect was to have a multiplicative variation in coding like activities.

The following possible coding combinations were feasible with the available codes.

| <u>CATEGORY</u> | <u>TYPES</u> | <u>ACTION</u> | <u>OFFENSE</u> | <u>POSSIBLE FEASIBLE COMBINATIONS</u> |
|-----------------|--------------|---------------|----------------|---------------------------------------|
| 6 | X | 5 X | 6 X 13 | = 2,340 |

The above feasible combinations could be used with unique or different activities. However, with discretion allowed as to the definition of codes, then the possible combinations for similar activity would be astronomical.

4. "WHO GETS CREDIT FOR AN ARREST?"

This title does not imply that A.C.T. officers were greedy for fame and glory but rather that the Logging of arrests posed a problem when more than one officer responded. Each officer tended to document his activity independently of his fellow officers. This meant not only duplication of entries within the squad; but later when both squads worked together, duplication existed among both squads.

An arrest is basically a count of a "Body" that has been apprehended. If two officers respond and arrest one "Body", then there was only one arrest. The officers would tend to indicate that each had made the arrest which in the final analysis would inflate the actual number of arrests.

No system had been initially established to prevent this duplication of entries.

DAILY ACTIVITY LOG: THE CODING

Instruction for coding S.O.S. Activity Logs (Figure 3) were distributed and explained in detail to each user. The following clarifies the present use of the various codes and special instruction.

INSTRUCTION

1. An Actual felony occurs (in progress) or occurred. Then following codes must be used:

| <u>CATEGORY</u> | <u>POSSIBLE TYPES</u> | <u>POSSIBLE ACTION</u> | <u>POSSIBLE OFFENSE</u> |
|-----------------|----------------------------|---------------------------|--|
| 1 (Felony) | 1,2,3, or 4 (Exclude 5) | 1 or 3 (Arrest or not) | 1-6, 11, or 13 (Property crime Specified) |

EXAMPLE: Arm Robbery occurs and is discovered on sight resulting in arrest with no assist.

CODE: 1-2-1-6

(Felony, on-sight, arrest, armed robbery)

2. Investigation of felony with negative results. The felony may not have occurred (False alarm) or an investigation of a previously reported felony. Note "Action" code 4 is only difference between instructions 1 and 2.

EXAMPLE: Auto theft reported but owner's wife picked up the car. Dispatched officer.

CODE: 1-1-4-4

(Felony, dispatched, investigation, auto theft)

NOTE: Instructions 1 and 2 above are only time that "Category" 1 is used.

3. Felony-Narcotics crime occurs or occurred and arrest or non-arrest.

EXAMPLE: An individual is arrested on sight for possession of Heroin;

CODE: 4-2-1-10

(Felony-Narc, on-sight, arrest, contraband)

NOTE: Possible "Offense" will always be 10 for narcotics related crime.

4. Investigation of felony-narcotics with negative results.

EXAMPLE: A suspect does not possess heroin and is not arrested. Officer assisted on sight.

CODE: 4-4-4-10

(Felony-Narc, on-sight assist, investigation, contraband)

5. Misdemeanor actually occurred (possibly in progress) and either arrest or non-arrest. Note same as instruction 1 but "Category" is 2 and "Offense" 7-10, or 13.

EXAMPLE: A driver refuses to accept a citation. Officer arrests on sight.

CODE: 2-2-1-7

(Misdemeanor, on-sight, arrest, traffic)

6. Same as instruction 2 but misdemeanor related. Note only difference again is "Action" code 2 and "Offenses" 7-10, or 13.

7. Misdemeanor-Narcotics related occurred and arrest or non-arrest. Typically, possession of marijuana (Less than 8 oz.)

8. Similar to instruction 7 except "Action" code 4 is used.

9. Contact suspicious individual on foot or in a vehicle, and no offense occurred. Contact card may be filled out. NCIC check or action check to identify if individual is wanted. In general, this code was used quite extensively.

EXAMPLE: "Assisting Unit 528 at Pacific and Barelas reference two suspicious subjects. Negative warrants. Contact card made."

CODE: 3-4-4-12

(Contact, on-sight assist, investigation)

NOTE: The evaluator of program suggested that assists for this code were irrelevant. Thus, they were not picked up for keypunching if possible.

10. If individual is contacted and is wanted, he is arrested on that warrant. Identity of crime for warrant was not always available. Especially on failure to appear. In this case, "Other" (13) was specified as offense.

EXAMPLE: Individual stopped on-sight and found wanted on Auto Burglary warrant. He is arrested without assistance.

CODE: 1-2-2-3

(Felony, on-sight, arrest-warrant, auto burglary)

11. Patrolling, surveillance or stake-out activity. This was the code used most extensively. If the unit was involved in this activity for the entire duty day, it was coded several times on the log but picked up for keypunching only once. If a stake-out were changed to different stores, it was still keypunched only once. This procedure hopefully would reduce the needless repetition of the same basic activity.

12. If a traffic violation was issued the code would be:

2-(2,3 or 4)-6-7

(Misdemeanor, on-sight or disp-asst. or on-sight asst, other, traffic)

If a traffic violation was verbal then code would be:

2-(2,3 or 4)-4-7 (this is very similar to activity in instruction 9).

NOTE: Evaluator indicated that assists on traffic citation were not relevant. Thus, they were not picked up for keypunching if possible.

13. Stop vehicle and made arrest on traffic charge. This instruction was just a special clarification of instruction 5. There is no inconsistency between this instruction and instruction 5 (See example in instruction 5.)

14. Further clarification of instruction 5 except only applicable to D.W.I.

15. Officer may recover stolen property and offender not on the scene.

CODE: 6-(1,2,3 or 4)-6-9

(Other, dispatch or on-sight or etc., other, contraband)

16. Investigation of vehicle accident or may assist in controlling traffic scene.

CODE: 6-(1,2,3 or 4)-4-7

(Other, dispatch or on-sight or etc., investigation, traffic)

17. Response to audible or silent alarm with negative results. This is a slight variation of instruction 2 but occurred somewhat frequently to warrant special code.

CODE: 6-(1,2,3 or 4)-4-12

18. Investigation of individual on warrant. This could occur both in-house or outside of the department, if individual is arrested, then another entry was made in line with instruction 10.

If the code 6-5-6-12 is indicated, there was usually an activity that was unique. For example, if officer assisted a motorist, this did not occur on a regular basis and was coded as above.

Other coding should only be a slight variance on the above instructions. These instructions limited the possible combinations (2,340) that could have been printed for each A.C.T. unit on a Bi-monthly basis.

Other potential coding possibilities are:

WARRANT SERVED ON PRISONER

CODE: 1-5-2-13 (Or warrant offense)
(Felony, other, arrest warrant, other offense)

DRINKING IN CAR - NON ARREST

CODE: 2-(1-4)-3-10
(Misdemeanor, dispatch or on-sight or etc., non-arrest, contraband)

Figure 3
SPECIFIC INSTRUCTION FOR CODING OF SOS ACTIVITY LOGS

- | | | |
|-----------------------------|---------------------|--------------------|
| CATEGORY: | TYPES: | ACTION: |
| 1. Felony | 1. Dispatched | 1. Arrest |
| 2. Misdemeanor | 2. On-sight | 2. Arrest-Warrant |
| 3. Contact | 3. Dispatch-Assist. | 3. Non-Arrest |
| 4. Felony-NARC | 4. On-sight-Assist. | 4. Investigation |
| 5. Misdemeanor-NARC | 5. Other | 5. Surveillance |
| 6. Other Activity (Explain) | | 6. Other (Explain) |
-
- | | |
|-------------------------|-----------------------------------|
| OFFENSE: | |
| 1. Burglary Residential | 7. Traffic |
| 2. Burglary Commercial | 8. DWI |
| 3. Auto Burglary | 9. Recovered Property |
| 4. Auto Theft | 10. Contraband |
| 5. Strong Arm Robbery | 11. Violent Crime |
| 6. Armed Robbery | 12. No Offense Occurred (Explain) |
| | 13. Other Offense (Specify) |

| <u>INSTRUCTION</u> | <u>SITUATION</u> | <u>POSSIBLE CATEGORY</u> | <u>POSSIBLE TYPES</u> | <u>POSSIBLE ACTION</u> | <u>POSSIBLE OFFENSE</u> |
|--------------------|---|--------------------------|-----------------------|------------------------|-------------------------|
| 1. | Felony Occurred (in progress) and either arrest or non-arrest | 1 | 1-4 | 1,3 | 1-6,11,13 (Specify) |
| 2. | Investigation of felony with negative results. | 1 | 1-4 | 4 | 10 (Specify) |
| 3. | Felony-Narcotics related occurred and either arrest or no arrest. | 4 | 1-4 | 1,3 | 10 |
| 4. | Investigation of felony narcotics with negative results | 4 | 1-4 | 4 | 10 |
| 5. | Misdemeanor occurred (in progress) and either arrest or non-arrest. | 2 | 1-4 | 1,3 | 7-10,13 (Specify) |
| 6. | Investigation of misdemeanor with negative results. | 2 | 1-4 | 4 | 7-10,13 (Specify) |

| | | | | | |
|-----|---|--|-----|-----------------------------------|---------|
| 7. | Misdemeanor Narcotics-related occurred and either arrest or non-arrest. | 5 | 1-4 | 1,3 | 10 |
| 8. | Investigation of misdemeanor narcotic-related with negative results. | 3 | 1-4 | 4 | 10 |
| 9. | Contact suspicious individual or vehicle occupant and no offense occurred. Fill out contact card, NCIC checks | 3 | 2-4 | 4 | 12 |
| 10. | Contact suspicious individual and arrest on warrant. | Identify 2-4 if crime for issued warrant | 2 | Identify crime for issued warrant | |
| 11. | Patrol, surveillance or stake-out of individual, vehicle, occupant or building. | 6 | 5 | 5 | 12 |
| 12. | Stop vehicle and make arrest on traffic charge. | 2 | 2-4 | 6 | 7 |
| 13. | Stop vehicle and make arrest on traffic charge | 2 | 2-4 | 1 | 7 |
| 14. | Stop vehicle and arrest for DWI | 2 | 2-4 | 1 | 8 |
| 15. | Recover stolen property | 6 | 1-4 | 6 | 9 |
| 16. | Investigate and write vehicle accident report | 6 | 1-4 | 4 | 12 |
| 17. | Alarm Response | 6 | 1-4 | 4 | 12 |
| 18. | Investigation of individual on warrant. | 6 | 6 | 4 | 1-11,13 |

DAILY ACTIVITY LOG: THE PROCESSING

It was previously recorded that the A.C.T. activity reporting procedure was described in Figure 2. However because of the various problems in Stages 1 to 4, the processing of the logs had to become more complex in order to insure some validity at the analysis stage.

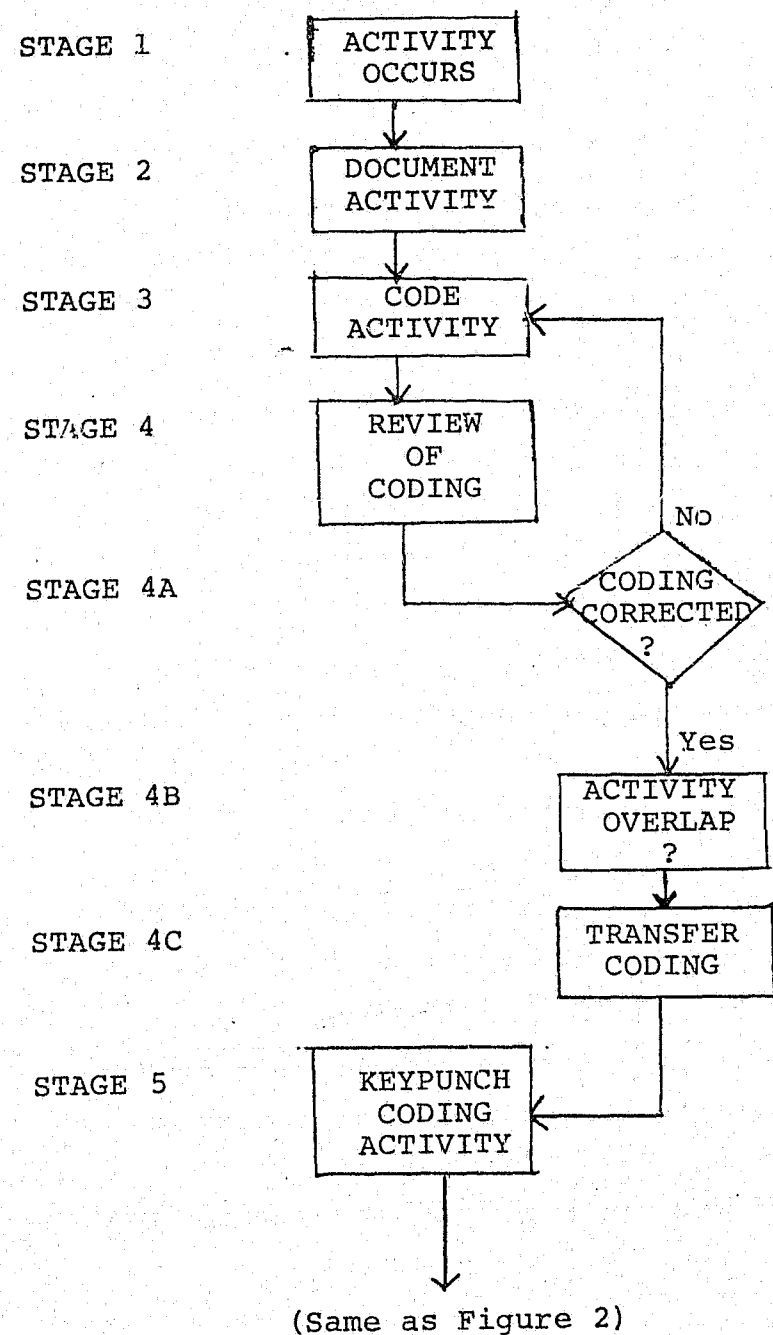
Figure 4 indicates the addition of a step for reviewing the activity coding. The process during this stage was accomplished by only one individual for the sake of consistency. The following describes the new stages:

Stage 4A: Each individual activity on each log was examined for the appropriate coding. If the narrative of the activity was in complete conflict with the coding, then feedback was requested from the officer to clarify the activity.

Stage 4B: If more than one officer was involved in an incident, then care was needed in identifying the accurate amount of arrests. At this point, only one officer was arbitrarily given credit for arrest and all others were given credit for assists. If coding omissions were required by the evaluator, then these omissions were noted (ie. assists on contact card incident).

Stage 4C: At this point, all of the requirements of Stage 4B were initiated because transfer of codes was limited to only Bona-fide codes. It also facilitated keypunching since no decision making was required by the keypuncher.

FIGURE 4
REVISED PROCESSING OF D.A.L.



Is appropriate code used? Is proper coding instruction followed? Get feedback from officer.

Is there activity overlap? Are there any omission requirements?

Transfer of Activity codes to IBM coding sheets excluding omission requirements and activity overlap.

Since there were periods when both A.C.T. squads were not fully manned, the following is only an approximate of D.A.L. workload:

| MONTH | D.A.L. PER SQUAD | | D.A.L. BOTH SQUADS | D.A.L. CODES PUNCHED |
|-------|------------------|--------|--------------------|----------------------|
| | ACT I | ACT II | | |
| JULY | 130 | 136 | 266 | 515 |
| AUG | 121 | 123 | 244 | 438 |
| SEPT | 150 | 116 | 266 | 763 |
| OCT | 123 | 137 | 260 | 948 |
| NOV | 118 | 115 | 233 | 567 |
| TOTAL | 642 | 627 | 1269 | 3231 |

The above workload indicates that 1,269 Daily Activity Logs were reviewed from which 3,231 codes were obtained. A distortion exists in the coding activity per activity log (3,231/1,269 = 2.5). On occasion, the activity of more than one officer was documented on the same log. In addition, those codes punched represent bona-fide calls (ie, less calls that overlapped or considered irrelevant by evaluator). Thus, the coding activity per activity log is a poor indicator of the average A.C.T. activity.

DAILY ACTIVITY LOG: THE PRINTOUT

Because of the large potential combinations of coding A.C.T. activity (2,340), the use of a computer to sort, select and tally was necessary. A program was written to accomplish the following:

1. Edit any keypunching errors.
2. Sort dates to first or second halves of month.
3. Sort unit numbers to respective A.C.T. squads
4. Order combinations of activity according to "Category" (ie, 1. Felony, 2. Misdemeanor, 3. Contact, 4. Felony-Narcotic, etc.)
5. Tally or count (in absolute terms) the number of occurrences of A.C.T. activity.
6. Sum the total occurrences of A.C.T. activity.
7. Printout results by half of the month and A.C.T. Squad (ie, 1st half of month for A.C.T. 1, 1st half of month for A.C.T. 2; 2nd half of month for A.C.T. 1, etc.)

RECOMMENDATIONS: FUTURE USEFULNESS OF
RECORDING POLICE DAILY ACTIVITY

The usefulness of recording any data should be subject to a cost-benefit analysis. Specifically, the following questions are pertinent:

COST

1. How easy is it to record the information? Is the recording process clear, concise, and standardized, or is it subject to discretionary decision making?
2. How long does it take to process the data? How many people and other resources are required? What is the workload likely to be on a weekly or monthly basis?
3. What are the opportunity costs of the data collecting and analysis process?

BENEFITS

1. Is the data collection fulfilling a specific, defined purpose? Does the format for data collection provide the needed information?
2. Can the data be used for more than one purpose (ie. evaluation and decision making)?
3. How often will the data be analyzed and used?

If the costs exceed the benefits, then two situations may exist. Either the data that is collected is not useful or the wrong data is being collected.

As was indicated in the first section of this report, there were numerous operational problems with the D.A.L. Many of these problems could have been avoided in the initial stages had the following been addressed:

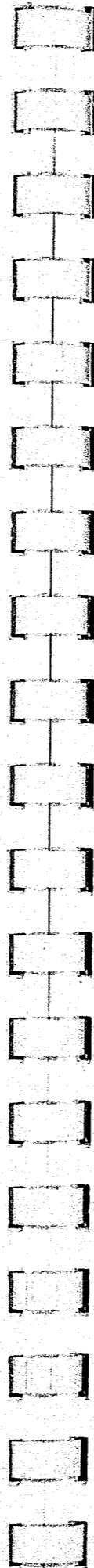
1. Testing of daily activity log to identify problems with regard to recording of information (ie, Standardized procedure to prevent discretionary or useless data collection).
2. Identification of time and resource constraints of the D.A.L. process. Was the scope of data collection identified?
3. What activities must be neglected to accomplish D.A.L. process? What priority does D.A.L. have?
4. Can the D.A.L. data be used for more purpose and how well does it meet these purposes? *ok*
5. Will the final analysis be useful for other than evaluating purposes (ie. police management decision-making)?

Needless to say, the "designers" of the daily activity log felt that their responsibility had ended with the designing stage. The result was that the analyst had to forego the task of analysis and become a data processor (ie. edit, collect, and tabulate D.A.L. data). The priority or importance of data collection and processing was never identified and probably would not have been identified until the last month of the program.

Future usefulness of recording police activity must be determined in the context of cost-benefit analysis. The costs of recording D.A.L. have been well identified in this report, but there must exist some skepticism about the benefits. Only final analysis of D.A.L. activity and feedback on results will truly identify the potential benefit of continuing D.A.L. data, collection, and processing.

Until the S.O.S. analyst completes the D.A.L. data collection (2 months back log at this time), the identification of the benefits on in-house basis will be delayed. Thus, it is

suggested that the evaluator of the program expedite an analysis of D.A.L. activity if for no other reason than to identify that he does have viable information. The future usefulness of recording D.A.L. can then be identified and can be either discontinued, continued on limited basis, or continued as is.



APPENDIX F-5

ACTIVITY SCHEDULE OF ACT UNITS¹

This document identifies the following ACT Unit activities:

1. Special assignment (See Appendix ~~F-2~~ F-2)
2. Data (range) of assignment
3. ACT Unit assigned
4. Assignment area 1
 - a. Time of assignment
 - b. Area of assignment
 - c. Mode: marked (m), unmarked (u)
5. Assignment area 2 (Split shift)
 - a. Time of assignment
 - b. Area of assignment
 - c. Mode: marked (m), unmarked (u)
6. Property Crime Concentration
(i.e., Burglary, Armed Robbery, etc.)

¹Source of information was the Daily Mission Reports.

| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|---|------------------|-------------|--------------|---------|------------------|--------------|---------|------------------|-------------------------------|
| L A C T I V E U N I T | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | M O D E | FROM-TO | AREA | M O D E | |
| | <u>JULY</u> | | | | | | | | |
| 1 | 3,5-7,10-14 | 1 | 1000-1300 | 101,103 | U | 1700-2200 | 101-103 | U | Res. Burg., SAR |
| | 5-8,11-15 | 2 | 1000-1300 | 306,307 | M | 1700-2200 | 306,307 | M | Res. Burg, A Rob. |
| | 17-21,24-27 | 1 | 1000-1300 | 301,303 | U | 1700-2200 | 301,303 | U | Res. Burg., Auto Burg. |
| 2,3 | 19-28 | 2 | 1000-1300 | 404,407 | M | 1700-2200 | 404,407 | M | Auto Burg.,Auto Theft |
| | <u>AUGUST</u> | | | | | | | | |
| | 4,8-12 | 1 | 1000-1300 | 101-103 | M | 1900-2400 | 101-103 | M | Res. Burg., Auto Burg. SAR |
| | 4-11,14-15 | 2 | 1000-1300 | 306-307 | U | 1900-2400 | 306-307 | U | Res. Burg. |
| 4 | 15-17,19,22-26 | 1 | 1000-1300 | 301-303 | M | 1900-2400 | 301-303 | M | Res. Burg., Auto Burg. |
| | 29-31 | 1 | 1000-1300 | 301-303 | M | 1900-2400 | 301-303 | M | Auto Theft |
| 5 | 16,17,21-25 | 2 | 1000-1300 | 404-407 | U | 1900-2400 | 404-407 | U | Burg., Arm. Rob. |
| | 28-30 | 2 | 1000-1300 | 404-407 | U | 1900-2400 | 404-407 | U | Burg., Arm Rob. |
| | <u>SEPTEMBER</u> | | | | | | | | |
| | 1,5-8,10 | 1 | 1000-1300 | 306-307 | M | 1900-2400 | 306-307 | M | Burg., Auto Theft |
| | 11-15 | 1 | 1800-0200 | 306-307 | M | | | | Burg., Auto Theft |
| | 1,5-8 | 2 | 1000-1300 | 101-103 | U | 1900-2400 | 101-103 | U | Robbery, Burg. |
| | 11-13 | 2 | 1800-0200 | 101-103 | U | | | | Robbery, Burg. |
| | 22,25-29 | 1 | 1800-0200 | 404-407 | M | | | | Res. Burg. |

| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|----------|------------------------|----------|--------------|---------|------|--------------|------|------|--------------------------------------|
| ACTIVITY | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | <u>SEPTEMBER CON'T</u> | | | | | | | | |
| | 18-22, 25-29 | 2 | 1800-0200 | 301-303 | U | | | | Burg., Robbery |
| | <u>OCTOBER</u> | | | | | | | | |
| | 2-6, 11, 12 | 1 | 1800-0200 | 306-307 | U | | | | Res. Burg., Auto Theft |
| | 10 | 2 | 1600-2400 | 101-103 | M | | | | Burg., Robbery |
| 6 | 2-6, 11, 12 | 2 | 1800-0200 | 101-103 | M | | | | Burg., Robbery |
| | 16-20, 24-27, 30, 31 | 1 | 1800-0200 | 404-407 | U | | | | Res. Burg., Auto Theft Auto Burg. |
| | 13 | 2 | 1600-2400 | 101-103 | M | | | | Arm Robbery |
| | 16-20, 24-27, 30-31 | 2 | 1800-0200 | 301-303 | M | | | | Burg, Robbery |
| | <u>NOVEMBER</u> | | | | | | | | |
| | 1-3, 6-10, 13-15 | 1 | 1800-0200 | 101-103 | U | | | | Res., Auto Burg., SAR, Auto Theft |
| 7 | 1-3, 6-9, 13-15 | 2 | 1800-0200 | 306-307 | M | | | | Burg., Robbery |
| | 15 | 2 | 1400-2300 | 306-307 | M | | | | Arm Robbery, Res. Burg. |
| | 16-17, 20-21, 24 | 1 | 1800-0200 | 301-303 | U | | | | Auto Burg. |
| 8 | 16-17, 20-21, 24 | 2 | 1800-0200 | 404-407 | M | | | | Burg., Robbery |
| | 27-30, 1 | 1 | 1530-2330 | Winrock | U | | | | Auto Burg., Theft, Arm Robbery |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|----------|-----------------------|----------|--------------|---------------------|------|--------------|----------|------|--|
| ACTIVITY | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | <u>NOVEMBER CON'T</u> | | | | | | | | |
| | 27-30, 1 | 2 | 1530-2330 | Coronado | U | | | | Auto Burg., Theft, Arm Robbery |
| | <u>DECEMBER</u> | | | | | | | | |
| | 4-8 | 1 | 1530-2330 | Globe | U | | | | Auto Burg., Theft, Arm Robbery |
| | 4-8 | 2 | 0830-1630 | 101 | | 1530-2330 | N.E.Hts. | | Auto Burg., Theft, Arm Robbery |
| | 11-13 | 1 | 1530-2330 | Winrock Coronado | U | | | | Auto Burg., Theft, Arm Robbery |
| | 11-12 | 2 | 1530-2330 | N.E., S.W. | U | | | | Res. Burg., Arm Robbery |
| | 14-15 | 1 | 0800-1600 | Winrock | U | | | | Arm Robbery |
| | 13-14 | 2 | 0930-1730 | Heights | U | | | | Auto Theft, Burg., Arm Robbery |
| | 15 | 2 | 0900-1700 | City | | | | | Burg., Arm Robbery |
| | 18-20 | 1 | 1530-2330 | N.E. Hts. | M/U | | | | Burg., Arm Rob., Auto Theft, Fug. Warrant |
| | 21-22 | 1 | 1530-2330 | City | U | | | | Fugitive Warrant |
| | 19-22 | 2 | 1530-2330 | Heights | | | | | Burg., Arm Robbery |
| | 26-29 | 1&2 | varied hrs | City | U | | | | Fugitives |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-----------------|----------|--------------|-------------|------|--------------|---------|------|-------------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | <u>JANUARY</u> | | | | | | | | |
| | 2-5 | 1&2 | Various hrs | City | U | | | | Fugitives |
| | 8-11 | 2 | 0800-1600 | 307 | M/U | | | | Burglary |
| | 8-11 | 1 | 1500-2300 | 305 | M/U | | | | Burglary |
| 9 | 15-19 | 1&2 | 0800-1600 | 307 | M/U | | | | Burglary |
| | 15-19 | 1&2 | 1500-2300 | 305 | M/U | | | | Burglary |
| | 22 | 1 | 1000-1800 | City | U | | | | Fugitives |
| | 23 | 1 | 0830-1630 | City | U | | | | Surveillance |
| | 24-25 | 1 | 1500-2300 | 301,303,305 | U | | | | Burglary |
| | 22-23 | 2 | Various hrs | City | U | | | | Fugitives |
| | 24-25 | 2 | 1500-2300 | S.E. | U | | | | Fugitives, Arm Robbery |
| 10 | 29-31 | 1 | 1530-2330 | 303,305 | M/U | | | | Burg., Robbery |
| | 29-31 | 2 | 1530-2330 | 103,301 | M/U | | | | Burg., Arm Robbery |
| | <u>FEBRUARY</u> | | | | | | | | |
| | 1-2 | 1 | 1530-2330 | 303,305 | M/U | | | | Burg., Robbery |
| | 1-2 | 2 | 1530-2330 | 103,301 | M/U | | | | Burg., Robbery |
| | 5-9 | 1 | 1000-1800 | 103,301 | U | 1700-2300 | 103-301 | U | Res. Burg., Arm Robbery |
| | 5-9 | 2 | 1030-1830 | 303,305 | U | 1530-2300 | 303-305 | U | Res. Burglary |
| | 12-16 | 1 | 1500-2300 | 301,303,305 | U | | | | Res. Burg., Arm Robbery |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-----------------------|----------|--------------|-------------|------|--------------|-------------|------|-----------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | <u>FEBRUARY CON'T</u> | | | | | | | | |
| | 12-16 | 2 | 1030-1830 | 101,103,301 | U | 1530-2330 | 101,103,301 | U | Arm. Rob., Res. Burg. |
| | 19-23 | 1 | 1530-2330 | 101,103,301 | M/U | 1000-1800 | 101,103,301 | U | Arm. Rob., Res. Burg. |
| | 19-23 | 2 | 1030-1830 | 101,103,301 | U | 1530-2330 | 101,103,301 | U | Arm. Rob., Res. Burg. |
| 11 | 26-28 | 1 | 1530-2330 | 101,103,104 | M | | | | Res. Burg., Arm. Rob. |
| | 26-28 | 2 | 1530-2330 | 101,103 | M | | | | Res. Burg., Arm. Rob. |
| | <u>MARCH</u> | | | | | | | | |
| | 1-2 | 1 | 1530-2330 | 101,103 | M | | | | Res. Burg., Arm. Rob. |
| | 1-2 | 2 | 1530-2330 | 101,102,104 | M | | | | Res. Burg. |
| 12 | 5-9 | 1 | 1530-2330 | 301,303 | M | | | | Res. Burg., Arm. Rob. |
| | 5-9 | 2 | 1530-2330 | 301,303,305 | M | | | | Res. Burg., Arm. Rob. |
| | 12-16 | 1 | 1530-2330 | 301,303,305 | M | | | | Res. Burg., Arm. Rob. |
| | 12-16 | 2 | 1530-2330 | 301,303,305 | M | | | | Res. Burg., Arm. Rob. |
| | 17-23 | 1 | 0900-2330 | S.E. Hts. | M/U | 1530-2330 | S.E. Hts | | Res. Burg., Arm. Rob. |
| | 19-23 | 2 | 0900-1700 | S.E. Hts. | M/U | 1530-2330 | S.E. Hts | | Res. Burg., Arm. Rob. |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-------------|----------|--------------|-----------------------|------|--------------|------------------|------|----------------------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | MARCH CON'T | | | | | | | | |
| | 26-28 | 1 | 1200-2000 | 301,303, 305,307 | M/U | | | | Res. Burg., Arm. Rob., Fugitives |
| | 26-30 | 1 | 0900-1700 | 301,303, 305,307 | M/U | 1530-2330 | 301,303, 305,307 | M/U | Res. Burg., Arm. Rob. |
| | 29 | 1 | 1400-2200 | 301,303, 305,307 | M/U | | | | Res. Burg., Arm. Rob. |
| | 30 | 1 | 1530-2330 | 301,303, 305,307 | M/U | | | | Res. Burg., Arm. Rob. |
| | APRIL | | | | | | | | |
| 13 | 2-5,6 | 1 | 1530-2330 | 301,303, 305,307 | M/U | | | | Res. Burg., Arm. Rob. |
| 13 | 2-5,6 | 2 | 1530-2330 | 301,303, 305,307 | M/U | | | | Res. Burg., Arm. Rob. |
| | 9-12 | 1 | 1530-2330 | 101,103 | M/U | | | | Burg., Arm. Rob. |
| | 9,11-13 | 2 | 1530-2330 | 201,202, 203,205, 206 | M/U | | | | Res. Burg., Arm. Rob. |
| | 10 | 2 | 1530-2330 | 201,202, 203,205, 206 | M/U | | | | Res. Burg., Arm. Rob. |
| | 13 | 1 | 1530-2330 | 101,102, 103,104 | M/U | | | | Res. Burg., Arm. Rob. |
| | 16-17 | 1 | 1530-2330 | 201,202, 205,206 | M | | | | Burg., Arm. Rob. |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-------------|----------|--------------|-----------------------|------|--------------|------|------|-----------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | APRIL CON'T | | | | | | | | |
| | 19-20 | 1 | 1530-2330 | 201,202, 205,206 | M | | | | Burg., Arm. Robbery |
| | 19 | 1 | 1430-2230 | 201,202, 205,206 | M | | | | Burg., Arm. Robbery |
| | 16-17,20 | 2 | 1530-2330 | 101,103, 104 | M | | | | Res. Burg., Arm. Rob. |
| | 18 | 2 | 1530-2330 | 101,102, 111,112 | M | | | | Res. Burg., Arm. Rob. |
| | 19 | 2 | 1430-2230 | 101,103, 104 | M | | | | Res. Burg., Arm. Rob. |
| 14 | 23,24 | 2 | 0800-1600 | 303,304, 305,306 | M | | | | Burg., Arm. Robbery |
| 15 | 23-25 | 2 | 0800-1600 | 303,304, 305,306, 307 | M | | | | Arm. Rob., Res. Burg. |
| | 25-26 | 1 | 0800-1600 | 303,304, 305,306, 307 | M | | | | Res. Burg., Arm. Rob. |
| | 26 | 2 | 0800-1600 | 303,304, 305,306, 307 | M | | | | Rob., Res. Burg. |
| | 27 | 1 | 0900-1700 | 303,304, 305,306, 307 | M | | | | Burg., Arm. Robbery |
| | 27 | 2 | 1700-0100 | 303,304, 305,306, 307 | M | | | | Rob., Res. Burglary |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-------------|----------|--------------|---------------------------|------|--------------|------|------|----------------------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | APRIL CON'T | | | | | | | | |
| | 30 | 1 | 1300-2100 | 303,304 305,306 307 | M | | | | Burg., Arm. Robbery |
| | 30 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | MAY | | | | | | | | |
| | 1 | 1 | 1300-2100 | 303,304 305,306 307 | M | | | | Burg., Arm. Robbery |
| | 1 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 2 | 1 | 2000-0400 | 301 | U | | | | Res. Burg., Sex Offense |
| | 2 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 3 | 1 | 2000-0400 | 301 | U | | | | Res. Burg., Sex Assault |
| | 3 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 4 | 1 | 0400-0800 | 301 | U | | | | Spec. Assgn., Burg., Sex Assault |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-----------|----------|--------------|--|------|--------------|------|------|---------------------------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | MAY CON'T | | | | | | | | |
| | 4 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 8-10 | 1 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 8-11 | 2 | 1530-2330 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 11 | 1 | 0800-1600 | 301 | M | | | | Res. Burg., Arm. Rob. |
| 16 | 12 | 1 | 1200-2000 | Princess Jeanne Pk Roosevelt Pk | M | | | | Rock Concerts |
| | 12 | 2 | 1200-2000 | Rio Grande Pk Roosevelt Pk | M | | | | Rock Concerts |
| | 14 | 1 | 1530-0030 | 301,303 | M/U | | | | Burg., Arm. Rob. |
| | 14 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 15-16 | 1 | 1000-1300 | 301 | U | 2400-0500 | 301 | U | Sex Assault, Res. Burg. |
| | 15 | 2 | 1200-0500 | 301 | U | | | | Spec. Assign., Sex Aslt Res. Burg. |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-----------|----------|--------------|--------------------------------|------|--------------|------|------|-------------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | MAY CON'T | | | | | | | | |
| | 16-18 | 1 | 2100-0500 | 301 | U | | | | Res. Burg., Sex Aslt. |
| | 16-19 | 2 | 2100-0500 | 301 | U | | | | Res. Burg., Sex Aslt. |
| | 21 | 1 | 0800-1600 | 301,302 303,305 306 | M | | | | Res. Burg., Arm. Rob. |
| | 21 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 22 | 1 | 1530-2330 | 301,302, 303,304 305,306 | M | | | | Res. Burg., Arm. Rob. |
| | 22 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 23 | 1 | 1530-2330 | 303,305 307 | M | | | | Res. Burg., Comm. Burg. |
| | 23 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 24 | 1 | 1530-2330 | 301,302 303,304 305,306 | M | | | | Res. Burg., Arm. Rob. |
| | 24 | 2 | 0800-1600 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |

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| (1) | (2) | (3) | (4) | | | (5) | | | (6) |
|--------------------|-----------|----------|--------------|-------------------------------|------|--------------|------|------|-----------------------|
| SPECIAL ASSIGNMENT | DATE | ACT UNIT | ASSIGNMENT 1 | | | ASSIGNMENT 2 | | | CRIME CONCENTRATION |
| | | | FROM-TO | AREA | MODE | FROM-TO | AREA | MODE | |
| | MAY CON'T | | | | | | | | |
| | 29 | 1 | 0800-1600 | 301,303 | M | | | | Res. Burg., Arm. Rob. |
| | 29 | 2 | 1530-2330 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 30 | 1 | 0800-1600 | 301,302 303,304 305,306 | M | | | | Res. Burg., Arm. Rob. |
| | 30 | 2 | 1530-2330 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |
| | 31 | 1 | 0800-1600 | 301,302 303,304 305,306 | M | | | | Res. Burg., Arm. Rob. |
| | 31 | 2 | 1530-2330 | 303,304 305,306 307 | M | | | | Res. Burg., Arm. Rob. |

F-141

APPENDIX F-6

MONTHLY ARMED ROBBERY CLASSIFICATION DEVIATION

APPENDIX F-6
MONTHLY ARMED ROBBERY CLASSIFICATION DEVIATION

(October - December, 1973)

| | OCTOBER | | | NOVEMBER | | | DECEMBER | | |
|-----|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|
| | ANALYSIS | Services | Deviation | ANALYSIS | Services | Deviation | ANALYSIS | Services | Deviation |
| 101 | 4 | 5 | +1 | 7 | 6 | -1 | 4 | 5 | +1 |
| 102 | 2 | | -2 | | | | 1 | 3 | +2 |
| 103 | 6 | 1 | -5 | 2 | 2 | | 1 | 1 | |
| 104 | 1 | 1 | -1 | 2 | 3 | +1 | | | |
| 105 | 2 | 1 | | 1 | 1 | | 3 | 5 | +2 |
| 106 | 4 | 4 | | 3 | 3 | | 6 | 6 | |
| 107 | 4 | 4 | | | | | 1 | 1 | |
| 108 | | | | | | | 1 | 1 | |
| 109 | 2 | 2 | | 1 | 1 | | 2 | 2 | |
| 110 | 1 | 1 | | 1 | | -1 | 4 | 2 | -2 |
| 111 | | 5 | +5 | 1 | 1 | | 2 | | -2 |
| 112 | | | | | | | | 1 | +1 |
| 201 | 2 | | -2 | 1 | 1 | | 1 | 1 | |
| 202 | 1 | 1 | | | | | | | |
| 203 | | 1 | +1 | | | | 1 | | -1 |
| 204 | | | | | | | 1 | 1 | |
| 205 | 3 | 3 | | 3 | 4 | +1 | | 1 | +1 |
| 206 | 2 | 2 | | 2 | 2 | | 1 | 2 | +1 |
| 207 | | 1 | +1 | | | | | | |
| 301 | 3 | 4 | +1 | 2 | 2 | | 2 | 1 | -1 |
| 302 | | | | 1 | 1 | | 3 | 4 | +1 |
| 303 | 2 | 1 | -1 | 10 | 9 | -1 | 2 | 2 | |
| 304 | 6 | 7 | +1 | 3 | 4 | +1 | 2 | 3 | +1 |
| 305 | 1 | 1 | | 1 | 1 | | 4 | 4 | |
| 306 | 1 | 1 | | 6 | 2 | | 2 | 3 | +1 |
| 307 | 3 | 3 | | 2 | 2 | | 2 | 3 | +1 |
| 308 | | | | | | | 2 | 1 | -1 |
| 309 | | | | 2 | 1 | -1 | 1 | 1 | |

| | | | | | | | | | |
|----------------------|----|----|-----|----|----|-----|--|----|-----|
| 401 | 1 | 1 | | | | | | 1 | +1 |
| 402 | | | | 1 | 1 | | | 2 | -1 |
| 403 | 4 | | | 10 | 9 | -1 | | 5 | |
| 404 | | | | | | | | | |
| 405 | | | | 3 | 3 | | | 1 | 1 |
| 406 | | 1 | +1 | 2 | 3 | +1 | | 1 | 1 |
| 407 | 5 | 5 | | 7 | 6 | | | 1 | -1 |
| 408 | 1 | 1 | | 2 | 2 | -1 | | | |
| 409 | 1 | | -1 | 1 | 1 | | | | |
| 410 | | | | | | | | | |
| TOTAL | 63 | 62 | | 78 | 77 | | | 64 | 67 |
| Total Absolute Error | | | 23 | | | 11 | | | 21 |
| Percent Error | | | 36% | | | 14% | | | 33% |

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7 Misprints

END