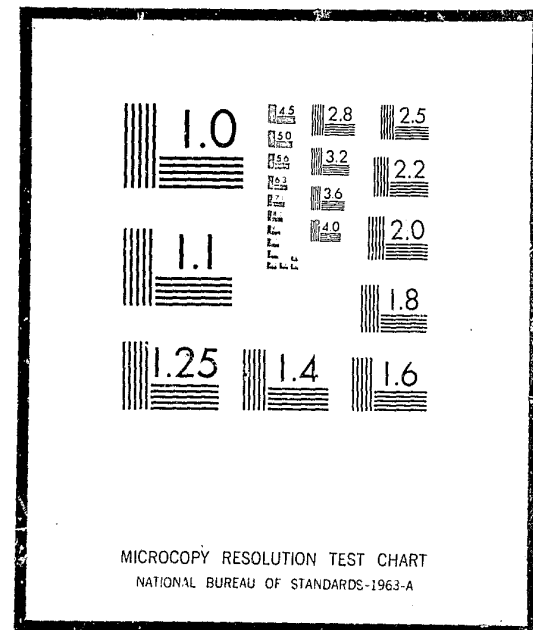


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FINAL REPORT
ON THE FEASIBILITY OF A
COORDINATED RECORDS AND
COMMUNICATIONS SYSTEM
FOR REGION XI
CALIFORNIA COUNCIL ON CRIMINAL JUSTICE
COUNTY OF SAN DIEGO

VOLUME I

30 JUNE 1971

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COUNTY OF SAN DIEGO - *Final Report, V I*
VOLUME I

30 June 1971

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Section 1

INTRODUCTION

PROJECT SCOPE

This report presents the findings and recommendations of a joint study team lead by Public Systems incorporated and supported by the Institute for Police Studies. The three-month study reported on in this document focused on the records and communications systems of emergency service agencies within San Diego County. Predominant attention was paid to the 15 law enforcement agencies of the region, including ten local police departments, one sheriff's office, two highway patrol stations, and two harbor police agencies; secondary emphasis was given to non-police criminal justice agencies, while a very modest effort was devoted to other emergency services (fire, ambulance, and civil defense).

The study concentrated on the requirements for record services, data processing support, and communication facilities for these agencies. In accordance with the terms of the contract under which this study was performed, this report documents the feasibility of a coordinated approach to the provision of these services on a countywide basis, suggests the extent to which such coordination should be achieved in order to attain maximum effectiveness and efficiency of these services without abrogating local control of emergency services, and recommends the broad outline of an implementation plan to achieve this coordination.

This report presents, in the form of specific recommendations, the major policy decisions which must be made within the county in order to achieve the coordinated system. In particular, an organizational structure by which design, implementation, and operation

of the coordinated system can be achieved is presented. Upon acceptance of these major policy recommendations, detailed design and implementation of the coordinated system can begin. There are no technical or economic hinderances to implementation of the system concept presented in this document.

RECOMMENDATIONS TAILORED TO SAN DIEGO COUNTY

The recommendations for organizational placement of system modules within the existing structure of San Diego County government presented in this document are, to say the least, non-traditional. Several functions normally carried out at the city level are recommended for implementation at the county level; conversely, several functions usually implemented at the county level are recommended for implementation within the City of San Diego with participation by county and other city agencies. These recommendations are based on current and projected workload, interests and capabilities of existing staff in the various governmental organizations, and available facilities for housing the functions. With full recognition that adherence to these recommendations will require "breaking new ground" in inter-governmental cooperation, we nevertheless believe that assignment of agency responsibilities in accordance with the recommendations presented in this document lead to implementation of a truly coordinated system responsive to the needs of users.

URGENT NEED FOR COOPERATION

It cannot be overemphasized that cooperation among the interested emergency service agencies, and among the administrators of local and county government is urgently required in order to carry out the system concept presented in this document. We can no longer afford (if, indeed, we ever could) the luxury of independent development in each user agency of communications, records, and data processing systems. If the coordinated approach is to work, management personnel at all levels and in all agencies must accept the

premise that coordination will result not only in increased efficiency but in increased effectiveness for each participating agency.

Expenditure of funds in these areas, whether local or derived from state and federal grants, must be coordinated to have maximum impact on achievement of the overall objectives of this system. Local agencies must also accept the premise that their prestige and usefulness to the community is measured not by the size or sophistication of their facilities, but by the peace and order achieved in their communities.

ACKNOWLEDGMENTS OF ASSISTANCE

To acknowledge the personal contribution of every person who cooperated with the PSI/IPS project team would be tantamount to listing the organization chart of every criminal justice and emergency service agency within the county. It must suffice to say that the unanimous willingness to cooperate and willingness to accept new ideas demonstrated by governmental managers within the county during the process of this study bodes well for the future of a coordinated records and communications system for the region.

Section 2

SUMMARY OF MAJOR RECOMMENDATIONS

This section describes briefly the important recommendations of the feasibility study. Each recommendation is presented in fuller context in following sections.

COMMUNICATIONS

The most significant recommendation of the study is the adoption of a central dispatch facility for all police, fire, and ambulance emergency dispatching. The City of San Diego's Command and Control facility should be utilized.

To better use the limited emergency radio frequencies available in the region, all channel allocation should be based on workload and need. This will require extensive reorganization of the present frequency allocations.

COMMUNICATIONS "911"

The region should implement a "911" emergency telephone number with centralized receipt of all calls at the central dispatch facility.

In addition to the adoption of "911", the county and city governments should, as a unit, request the telephone company to provide the following:

- Automatic telephone Number Identification (ANI)
- Labeling of all telephones as to their address and location
- "No pay" pay phones, for emergency calls.

DATA PROCESSING

The City of San Diego data processing center should concentrate on functions related to the criminal offense and police service. The County of San Diego data processing system should support processing of the criminal offender from arrest on through the justice system.

The City of San Diego should

1. Install communications computers to interface with the county, CLETS, NCIC, AUTO-STATIS, and AMIS.
2. Develop countywide computer-aided dispatch
3. Develop resource allocation, crime mapping, and crime analysis systems.
4. Support all law enforcement agencies

The County of San Diego should

1. Interface the computer with the city
2. Develop a want/warrant system
3. Pursue development in the areas of court, prosecution, county clerk, and probation systems.

POLICE RECORDS

Forms and data elements should be standardized to allow maximum sharing of information throughout the county.

The booking procedure should be simplified, a more realistic record retention schedule should be utilized. Maximum use of data processing (from the city) should be accomplished, and individual departments' record operations should be simplified.

Section 3
COMMUNICATIONS

OVERVIEW

Region XI has an abundance of communication systems and hardware. Programmed changes in both the San Diego City and County microwave systems, the planned development of a mobile teleprinter system by the sheriff's department, and continued implementation of the City of San Diego's Command and Control system will result in a very advanced system for the region. A coordinated, regional communications system will address two of the most pressing communication problems in the region, lack of additional radio channels and lack of a functioning mutual-aid communications system for the police.

Lack of Additional Radio Channels. The portion of the radio spectrum available to the police radio services in Southern California is essentially fully used. As the populated area expands and as the need for police services increases, the attendant requirement for expansion of the tactical communication capacity cannot be accommodated, unless a more efficient means of distribution of communication channels is adopted.

Lack of Mutual-Aid Communications for Police. The increasing frequency of occurrence of events of a regional importance (e.g., riots, demonstrations) and the ever present probability of natural disasters of a regional nature (e.g., fire, earthquake) require the development of a mutual-aid communications capability among various police, fire, and other emergency service units. In general, this emergency communication capability, although planned, is not now operational throughout the region.

A police mutual-aid communications system has been proposed by the county communications division. A channel has been allocated for this purpose the the sheriff's department vehicles are equipped with the frequency. To date only the El Cajon Police

Department has begun equipping its vehicles with police radios that will operate on the mutual-aid frequency.

The excellent cooperation shown by the fire agencies, in close working relationship with the county communications division, has resulted in a mutual fire net. The City of San Diego (with over half of the fire problem) has just begun to equip its vehicles; eight battallion chiefs are equipped. In most fire districts the chief and one other unit are also equipped to operate on the police mutual-aid frequency.

In order to achieve a truly coordinated communications system in the region, a sharing of some facility/resource items is desirable. In particular, joint use of some radio channels is necessary to balance the communications load. By careful programming of the sharing of these frequencies, the mutual-aid communications problem can also, in part, be solved.

COUNTYWIDE MICROWAVE SYSTEM

A countywide microwave system to provide the "shipment" of the telephone call to the decentralized dispatching facilities has been proposed. Under this previously proposed concept, an individual citizen would dial "911" when requesting police, fire, or ambulance services. An operator, with the aid of a computer, would identify the type of call (police, fire, ambulance), and the location of the citizen. The call would be "shipped" via microwave to the responsible agency. The responding agency would then dispatch the appropriate services.

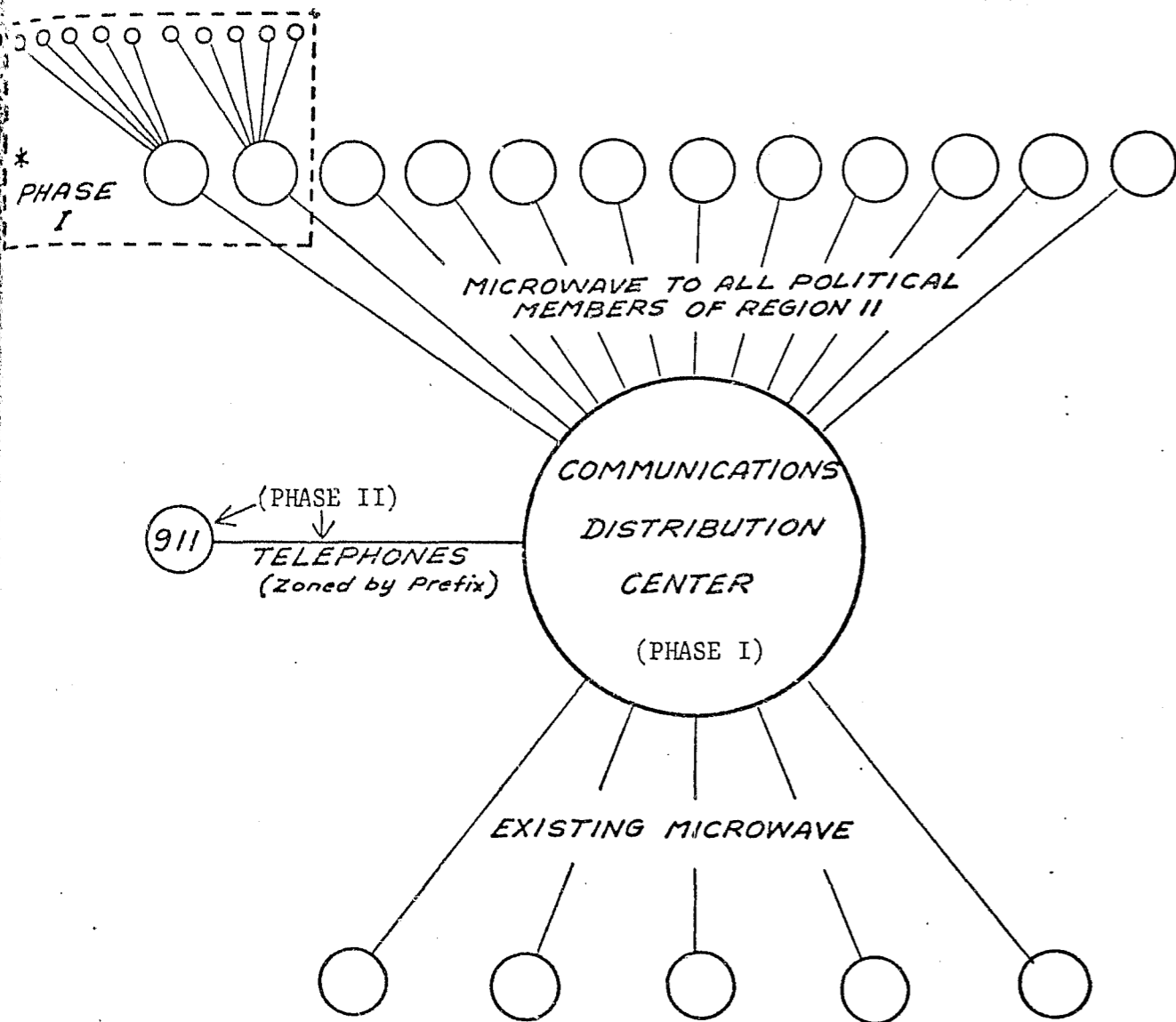
Exhibits 3-1 and 3-2 show how the "911" call would be handled and shipped to the appropriate agency in this previously proposed concept.

As originally conceived, the implementation of a region-wide "911" emergency telephone number would have required utilization of the proposed microwave system. The plan took into consideration the very difficult political jurisdictional boundaries, telephone prefix boundaries, and fire district boundaries.

REGION WIDE EMERGENCY COMMUNICATION SYSTEM

(AS PROPOSED)

DEDICATED LINES
TO POLICE, FIRE AND
OTHER EMERGENCY AGENCIES



EXISTING MOUNTAIN TOP RADIO REPEATER STATIONS FOR CONTACT WITH ALL COUNTY FIRE DISTRICTS, LAW ENFORCEMENT AGENCIES, MAJOR HOSPITALS AND CIVIL DEFENSE STATIONS. TO BE USED AS BACK UP FOR DEDICATED LINES.

* PHASE I - This identifies the pilot model described.

EXHIBIT 3-1

COMMUNICATIONS DISTRIBUTION CENTER

(AS PROPOSED)

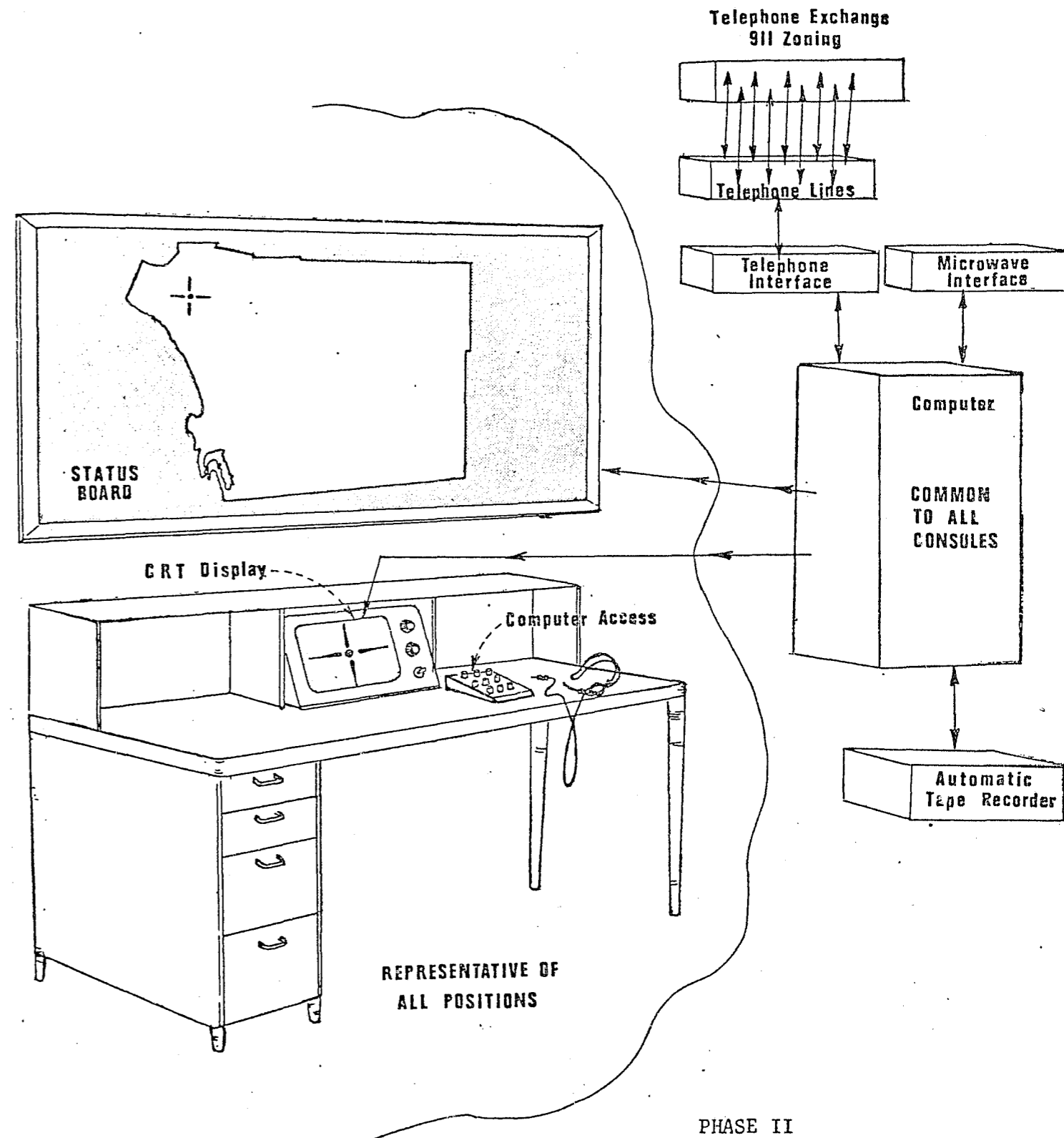


EXHIBIT 3-2

Those considerations are important but alone do not solve the problems of overloaded radio channels, growing population, and needs for improved radio facilities. Many of the police agencies in the region require new radios and dispatch facilities.

With centralized dispatch the proposed county microwave system would not be used for shipment of the "911" call to local departments. The single location would both receive the requests for emergency service from the "911" trunks and dispatch the proper vehicles.

CENTRAL DISPATCHING

Centralized dispatching for the entire region is recommended. The major reasons for this recommendation are presented in the following paragraphs.

Radio Frequency Utilization. Exhibit 3-3 indicates the current channel unit loading by police entities within the region. Appendices A and B present related information. A loading of 30 to 35 units per channel is usually considered satisfactory. As the channel loading exceeds this level, the patrol system becomes communications limited. This limitation generally forces certain types of long messages to be eliminated from the channel (during the overload periods), e.g., all-points bulletins, vehicle/person checks. As the loading approaches 35 units, this access becomes very marginal.* In addition, as calls-for-service are delayed because units are forced to wait for clear air time, overall efficiency decreases.

Exhibit 3-3 indicates that the City of San Diego is already at this overload point during routine peak hours and the County becomes limited during emergency situations.

The high-band police radio service spectrum is essentially used up, not only in Southern California but in most urban areas

* APCO Filing, FCC Docket 18261, discusses the problem. The APCO Bulletin, Vol. 37, No. 5, May 1971, p. 22.

EXHIBIT 3-3

NUMBER OF
POLICE VEHICLES
USING SPECIFIC CHANNELS

	<u>CHANNEL 1</u>	<u>CHANNEL 2</u>	<u>CHANNEL 3</u>
CARLSBAD (1)	3(S)	N/A	N/A
CHULA VISTA	10(S)	N/A	N/A
CORONADO (2)	6(S)	N/A	N/A
EL CAJON	8(S)	N/A	N/A
ESCONDIDO	8(S)	N/A	N/A
IMPERIAL BEACH (2)	5(S)	N/A	N/A
LA MESA	4(S)	N/A	N/A
NATIONAL CITY	10(S)	N/A	N/A
SAN DIEGO P.D.	54(D)	54(D)	53(D)
SAN DIEGO S.O.	25(D)	25(D)	N/A
OCEANSIDE (1)	7(S)	N/A	N/A

(1) = CARLSBAD AND OCEANSIDE SHARE A CHANNEL

(2) = CORONADO AND IMPERIAL BEACH SHARE A CHANNEL

(S) = SIMPLEX OPERATION (TALK AND RECEIVE ON SINGLE FREQUENCY)

(D) = DUPLEX OPERATION (TALK AND RECEIVE DIFFERENT (2) FREQUENCIES)

N/A = AGENCIES SHOWN DO NOT HAVE THE INDICATED CHANNEL

in the United States. Current efforts to solve this problem on a national basis involve the granting of public safety licenses in the higher frequency bands, including a portion of the UHF television area. Unfortunately, the propagation characteristics of these higher frequencies become line-of-sight and foliage dependent. The characteristic canyon, mesa topography of San Diego County will not allow the required coverage to be obtained by using channels in these higher frequencies within reasonable economic bounds. The channel loading problem will have to be solved on a regional basis using the present allocations.

The development of a sharing plan for public safety channels involves optimizing such factors as geographic location, communication needs, licensing restrictions and technical limitations to minimize the peak communications load per channel. This development can best be accomplished by a planning group whose membership involves the operational, management, and technical elements of the departments within the affected areas.

Professional Communication Operation. In the smaller agencies, the dispatch operation is, and should be, a part-time function. Therefore, there would be little reduction of manpower in the smaller departments upon implementation of the central system.

One advantage of the central facility would be in developing trained career dispatchers. The facility would be large enough to conduct good training and to provide back-up personnel for emergency situations.

One Center with Overall Picture. Each chief of police would have the continuing support of the center. When a situation requires all local resources, the center could supply additional units from neighboring jurisdictions for routine patrol or emergency services. A chief of police could use all his officers at a high school

disturbance, while other units handle routine incidents in his community. The center would also be in a prime position to assist during the time of major disasters.

OPERATION OF A CENTRAL DISPATCHING FACILITY

Exhibit 3-4 suggests the operation of the joint-dispatching facility. The citizen requiring emergency assistance dials "911" and reaches an emergency service operator located at the joint-dispatch facility. This operator determines the location of the calling party, the type of emergency, and any other pertinent details. This data is entered into the computer and thereby displayed at the dispatch desk. The computer could also determine and display the nearest available unit and alternate units, any peculiarities about the location and/or event, and any local force requirements on the discipline or procedures for the dispatch. The dispatcher accepts or rejects the computer decision, performs the dispatch, and clears the display. The status of the responding unit will then be automatically changed in the computer, the local display and the remote displays.

Since each dispatch passes through the computer, the raw data necessary to generate management reports for each participating department are available. These reports can provide information on workload, crime mapping, crime reporting, new beat structures, and other field-based resource data.

By jointly sharing a computer-aided dispatch facility, all participating departments would have access to a common crime-related data base in nearly real time.

A current status board should be provided at each department. Exhibit 3-5 shows a decentralized status board. The decentralized facility would provide:

- Status of all vehicles

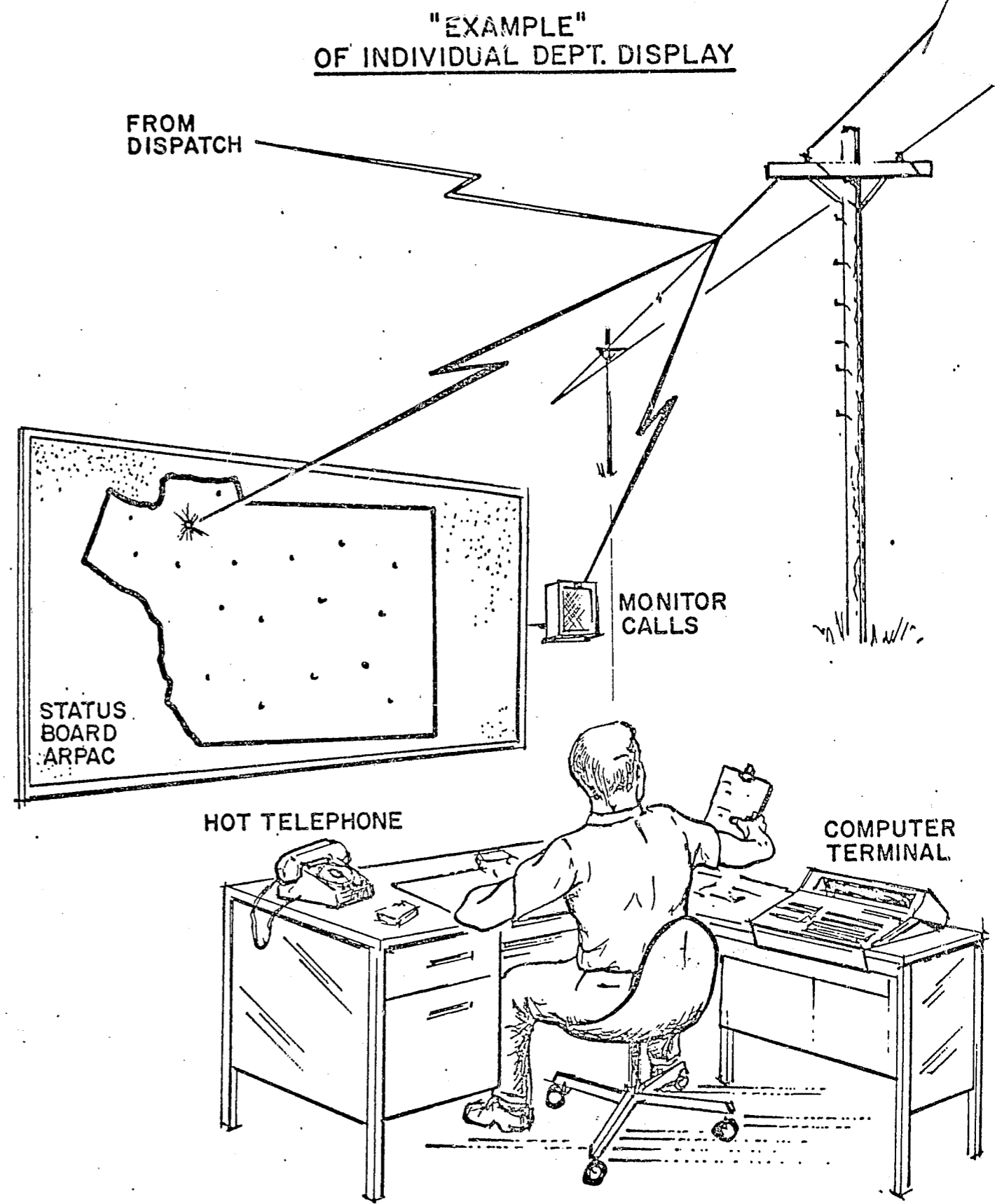
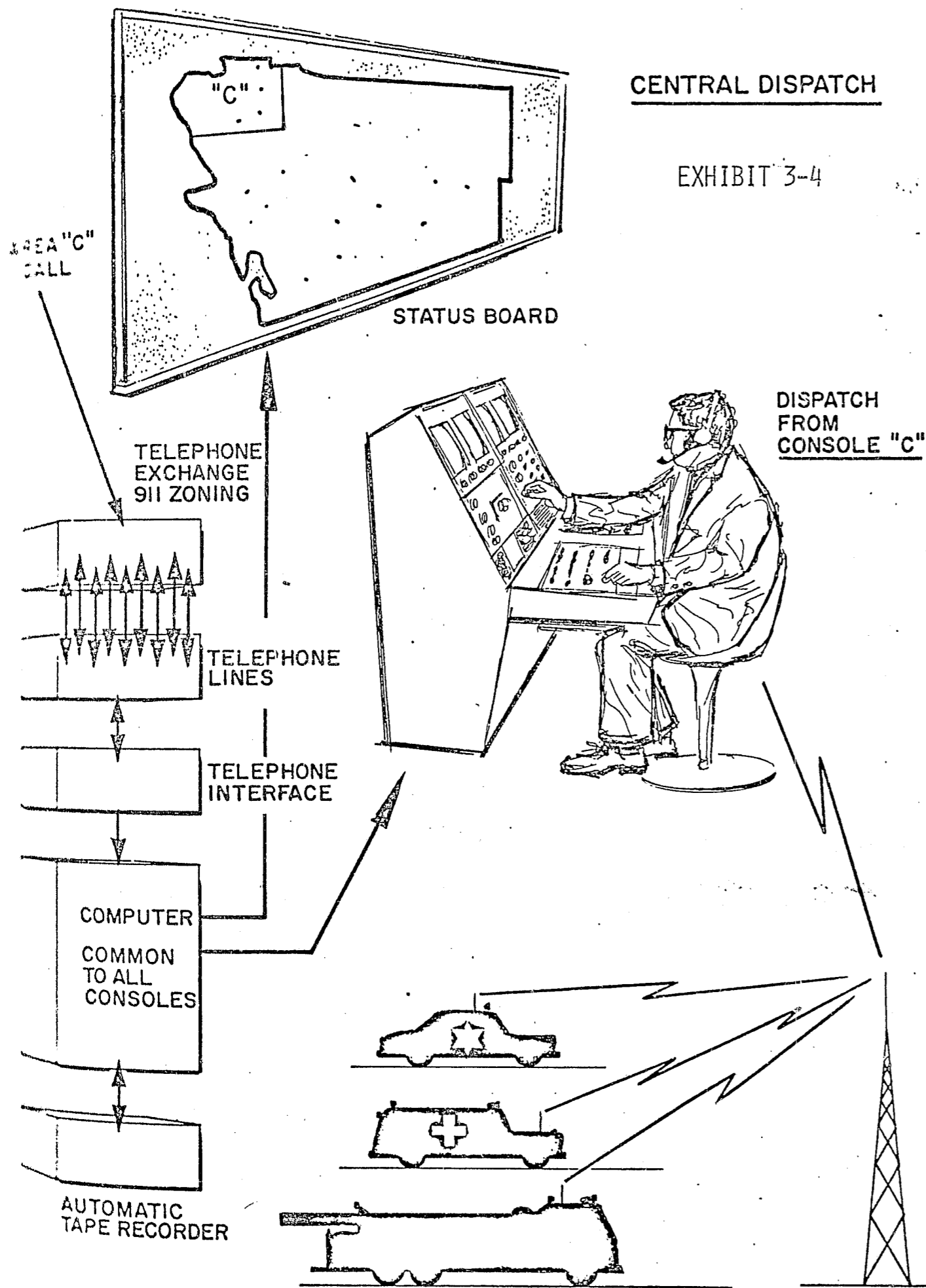


EXHIBIT 3-5

- Monitoring of all communication transmissions
- Hot-line telephone to central dispatching
- Computer input and inquiry capability.

Each department should participate in the management of the center through a board of directors. Each department should determine its own dispatching and communication policies, to be implemented by the center.

At the shift supervisor level, all departments should provide personnel. These individuals would be trained by the center and then become operational shift supervisors for a specified period. In addition to providing excellent training for mid-management personnel, this arrangement would promote inter-departmental cooperation. The officers who have served as countywide shift supervisors would have a much better prospective of law enforcement in the region.

The City of San Diego's command and control complex can be expanded to serve as the host for this joint-dispatch facility.

MUTUAL-AID COMMUNICATIONS

At present, Imperial Beach and Coronado share the 154,845-MHz channel and thereby can effectively provide mutual aid. As the sharing plan develops, similar arrangements will provide additional common communications ability. A regional emergency mutual-aid communications ability does not necessarily require that all mobile units are able to communicate with each other. The requirement can in general be accommodated by assuring that a portion of each department's fleet can use a common emergency channel or can be switched to the channel in use by adjacent departments. These vehicles are assigned as required during emergencies.

This approach would also apply to CLEMARS (California Law Enforcement Mutual Aid Radio System). A portion of the cars

could be equipped with the CLEMARS frequency. These cars then would be available for mutual-aid service.

In the appendix to this volume are two charts that give a good picture of the present radio communications system. The first chart (Appendix A) shows the number of radios owned by the various police departments and their manufacturers. The second chart (Appendix B) is a presentation of the police frequencies in operation within the county and the number of police vehicles assigned to each channel.

EMERGENCY MEDICAL COMMUNICATIONS

Planning has already taken place in this area of service. Planning must continue and be integrated into plans for the central dispatch facility.

The approach taken by the County of San Diego's Department of General Services should be adopted. The city and county should consider the purchase of radio equipment and rental to the ambulance companies.

The recommendations of the Department of General Services are included in Appendix Q of this volume.

CIVIL DEFENSE

A very brief review was conducted of the civil defense facility. This facility is not being included in the more advanced communications design taking place throughout the county.

Civil defense should be considered in planning for the central dispatch facility. Civil defense should provide a backup capability for centralized dispatching and countywide communication.

Section 4

TELEPHONE COMMUNICATIONS "911"

OVERVIEW

A universal emergency phone number has been discussed for many years. This concept recently received impetus when the President's Commission on Law Enforcement and Administration of Justice recommended "the telephone company should develop a single police number for each metropolitan area, and eventually for the entire United States."* This recommendation was only briefly discussed in the task force report, "Science and Technology," as one program which would improve existing communication, making it easier for the public to reach the police. The report noted the single number was feasible with existing telephone switching centers but suggested it be incorporated in new electronic switching systems presently being installed by the telephone company.

On January 12, 1968, AT&T announced it was ready to offer a universal emergency number "911" throughout the United States. The company reported that "911" was compatible with dialing systems of all U. S. telephone companies. All Bell System companies would be prepared to establish circuits bringing "911" calls directly to a central emergency switchboard, staffed and controlled by the local emergency agencies. The "911" system would not supplant either the individual telephone numbers of the various local agencies or the service of telephone operators "0" when they are called upon for help in an emergency. Appendix E presents a more detailed chronology of "911".

*"The Challenge of Crime in a Free Society," a report by the President's Commission on Law Enforcement and Administration of Justice (Feb 1967).

OBJECTIVE

The objective of a universal emergency number is to assist the citizen by providing an easy-to-remember emergency number which provides direct access to a local public safety/emergency service agency switchboard. The goal of the universal number is to achieve faster emergency response time for persons not knowing the telephone number of the proper agency. Therefore, the concept of a universal number is primarily an aid to the citizen rather than a direct aid to any public safety agency.

SELECTED PROBLEMS

What is An Emergency? Simple as it may sound, there are problems associated with defining the extent and nature of emergencies. Most persons will agree that a call for a policeman or fireman qualifies as an emergency call. Confusion begins when one starts considering such services as ambulances, emergency medical (e.g., poison control, suicide watch), rescue (e.g., Coast Guard), specialized investigation agencies (e.g., FBI), civil defense, and emergency road service.

Most major policing agencies have found it necessary to establish a police administrative number to handle the large volume of telephone traffic required in police operations. Departments facing field manpower shortages are considering alternatives to sending a police officer each time a citizen asks for one.

Police Departments in San Diego County currently have varying police response policies. Most departments dispatch a field unit on each call for police service, while others handle some calls over the phone (e.g., stolen property reports, missing persons). These differences reflect differences in the community's police needs and acceptable levels of service. These differences must be considered in any "911" system.

What Are the Geographical Boundaries? The lack of coterminous boundaries between telephone exchanges and political jurisdictions inhibits "911" implementation. This inhibition is compounded by the lack of a single public safety agency in most cities. Political and telephone exchange boundaries are shown in the following maps (Exhibits 4-1 through 4-3).

For those exchanges which lie wholly within a single public safety agency jurisdiction, there is no particular problem. There are exchanges which cover more than one community. Where to terminate the exchange line and how to handle calls from outside the jurisdiction present major obstacles.

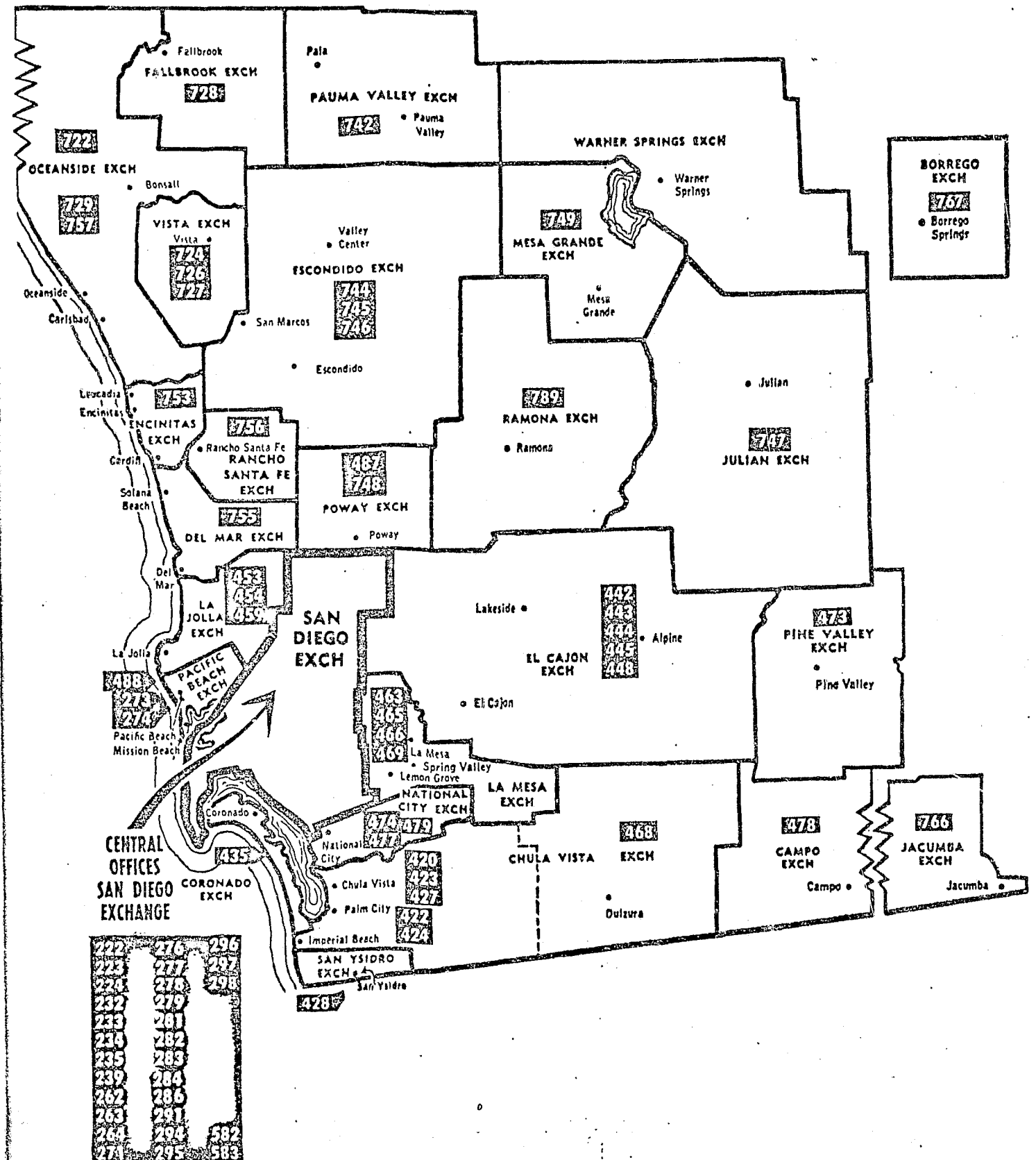
The incompatibility of telephone exchange boundaries and political boundaries dictates a multijurisdictional or regional effort. The telephone company has indicated its willingness to place the "911" termination point at any one location desired by the public safety/local government community.

OPERATIONAL CONCEPT ALTERNATIVES

Since boundaries of telephone exchanges, political jurisdictions, and emergency service agencies in San Diego County do not coincide, procedures must be established to handle calls for service. Several methods are available.

Decentralized Operations. Decentralization of both the receipt of emergency calls and the dispatch of field units would require the installation of multiple "911" communication centers to cover the county. This procedure allows the closest to existing practices of agencies (see Appendices C and D), but requires call transfer to the appropriate dispatching center in some cases. This operational configuration is inappropriate for San Diego due to the telephone exchange boundary problems which would require a substantial amount of transferring of calls from one jurisdiction to another.

EXHIBIT 4-1. TELEPHONE EXCHANGE BOUNDARIES



SAN DIEGO COUNTY REGION

4-5

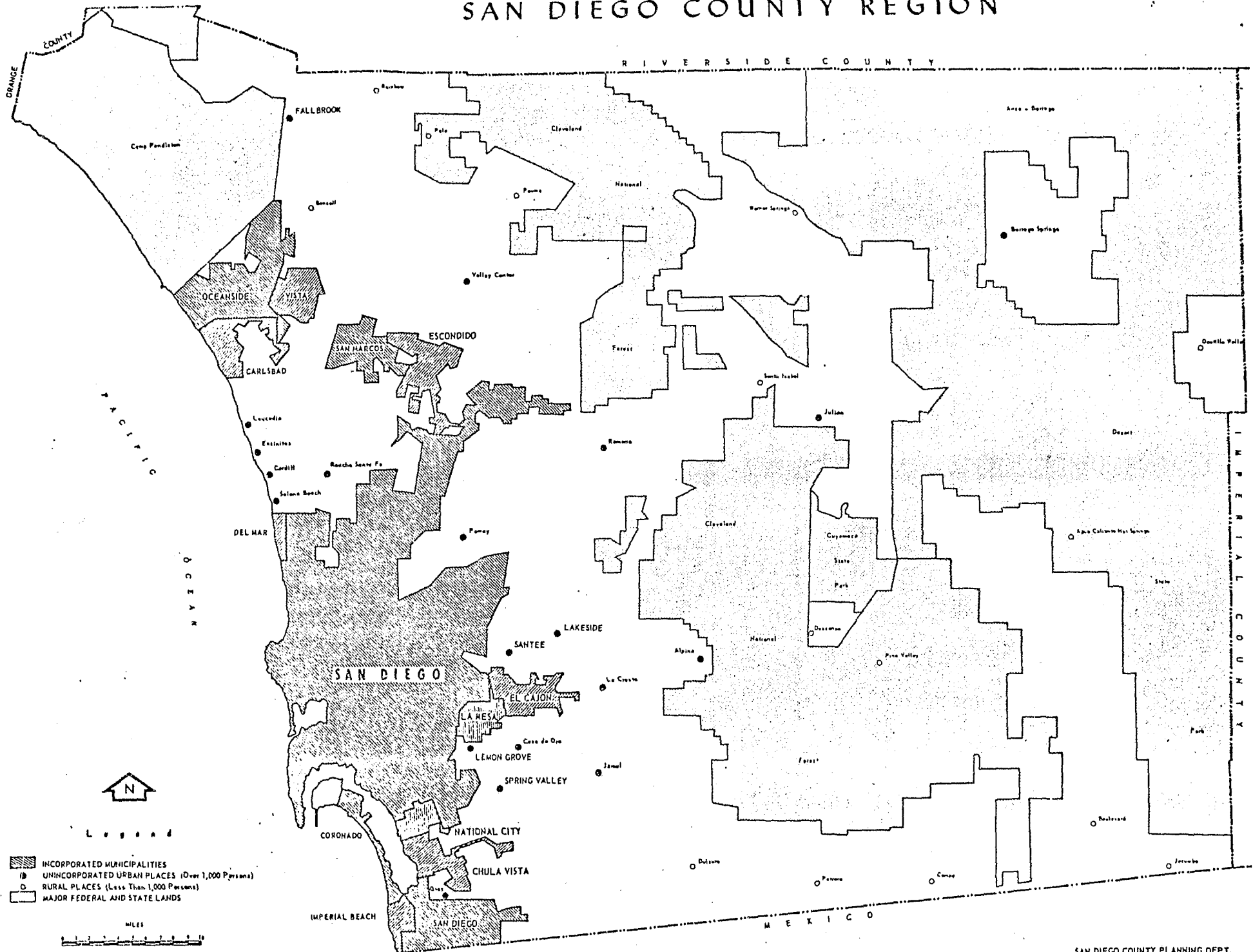
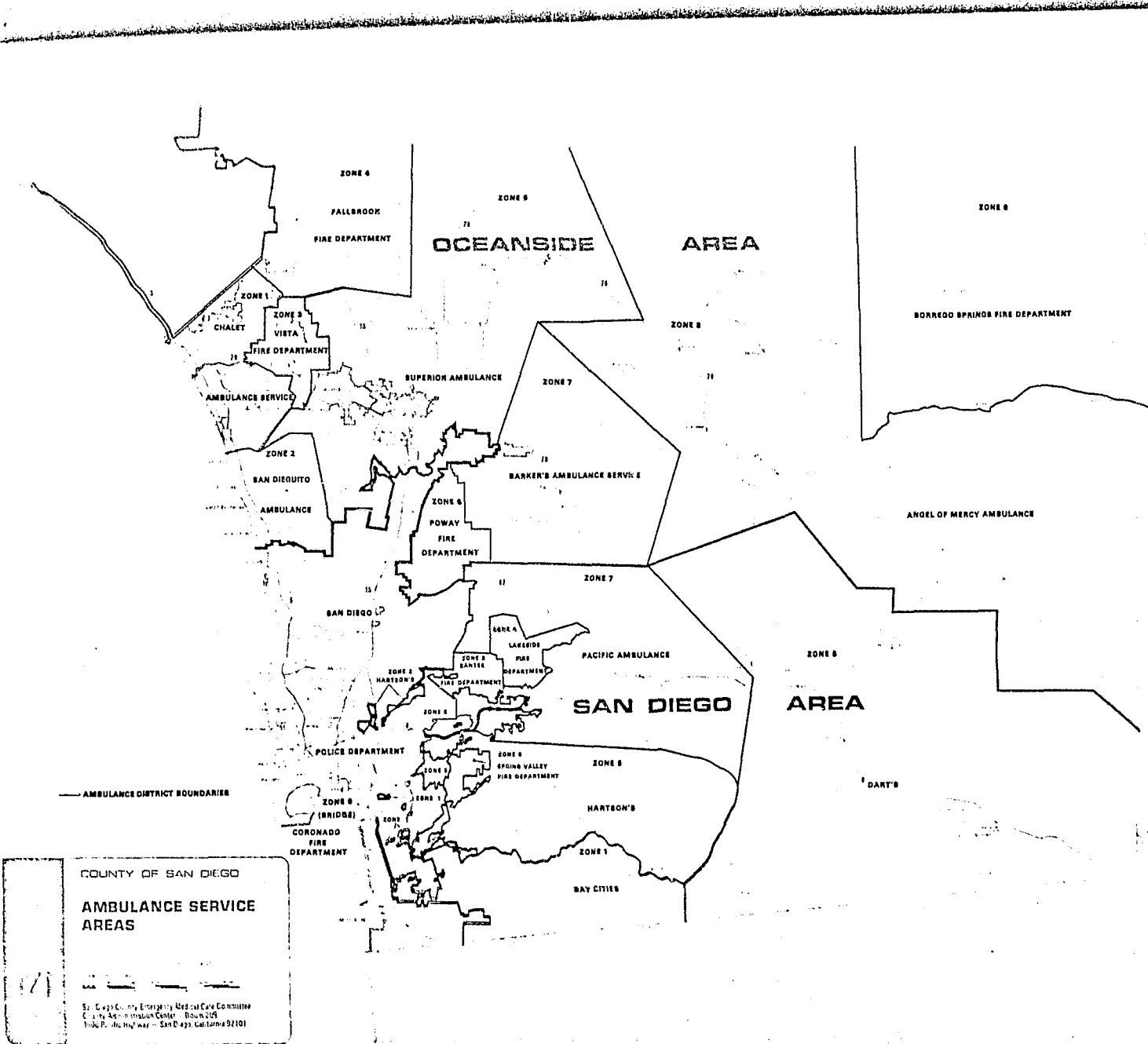


EXHIBIT 4-2



OCEANSIDE AREA

SAN DIEGO AREA

ZONE 4
FALLBROOK
FIRE DEPARTMENT

ZONE 5

ZONE 8

ZONE 1
CHALET
FIRE DEPARTMENT

ZONE 3
VISTA
FIRE DEPARTMENT

SUPERIOR AMBULANCE

ZONE 7

ZONE 8

BORREGO SPRINGS FIRE DEPARTMENT

AMBULANCE SERVICE

ZONE 2

SAN DIEGUITO
AMBULANCE

ZONE 6
POWAY
FIRE
DEPARTMENT

BARKER'S AMBULANCE SERVICE

ANGEL OF MERCY AMBULANCE

SAN DIEGO

ZONE 7

ZONE 4
LAKESIDE
FIRE DEPARTMENT

PACIFIC AMBULANCE

ZONE 8

ZONE 2
HARTSON'S
FIRE DEPARTMENT

ZONE 3
HARTSON'S
FIRE DEPARTMENT

SAN DIEGO AREA

POLICE DEPARTMENT

ZONE 6

ZONE 5
SPOHN VALLEY
FIRE DEPARTMENT

ZONE 8

DART'S

ZONE 8
(BRIDGES)

ZONE 1

CORONADO
FIRE DEPARTMENT

ZONE 1

ZONE 2

HARTSON'S

BAY CITIES

ZONE 1

Central Receipt of "911" Calls and Decentralized Dispatch.

This is the configuration proposed by Phase II of the San Diego County emergency communication system. This procedure calls for receipt of emergency calls at one control location and transfer of the call and/or information to the appropriate public agency dispatcher (Exhibits 3-1 and 3-2).

Centralized Operation. All "911" calls would be received at a central point, regardless of the location or nature of the incident. Appropriate units would be identified and centrally dispatched. Call reception and dispatch policies of individual agencies would be followed by the central staff. This procedure allows for the most efficient (time and cost) operation.

COMPARISON OF ALTERNATIVES

The existing command/control configuration of the region is suggested in Exhibit 4-4. A comparison of the three major alternative configurations possible as applied to the region is presented in Exhibit 4-5.

The decentralized system configuration holds the least likelihood of success in San Diego. Most telephone exchanges would require predetermined agencies to handle incoming emergency calls and a number of direct lines to the various agencies falling within the exchange boundary. For example, if the City of Oceanside decided to implement a "911" system for its citizens, it would have to condition eight telephone exchanges and have direct lines into the public safety agencies of Carlsbad, San Diego, the sheriff's office, the appropriate fire districts and ambulance companies.

The configuration utilizing a centralized distribution center with decentralized dispatching is feasible and practical for San Diego County. This is basically the system proposed in Phase II of the proposed county emergency communication system. It allows all telephone exchanges to be conditioned for "911"

EXHIBIT 4-4. PRESENT COMMUNICATIONS CONFIGURATION

Emergency Units	Number of Departments	Number of Unique Emergency Numbers	Number of Separate Switchboards	Number of Dispatch Centers	Number of Emergency Calls Per Day
Police	11	12	2	11	1386+
Fire	26	26	0	26	60+
Ambulance					
Public	11	11	0	10	74*
Private	13	0	0	0	33*
TOTAL	61	49	2	97	1553

+ Based on individual departments report.

* Based on survey by county.

EXHIBIT 4-5. COMPARISON OF MAJOR CONFIGURATION ALTERNATIVES

Item	Decentralized	Central Complaint with Decentralized Dispatching	Centralized
COSTS	Least expensive of the alternatives since most operations will be similar to present operations. Police receive majority of calls for service and usually have hot line to fire department and ambulance.	Requires additional direct lines to the various jurisdictional emergency service agencies to relay information or transfer calls for service. Some modification of complaint operation is necessary to handle telephone input.	Requires modification of communication center to handle all telephone and radio dispatching operation.
RESPONSE TIME	Depends on agency receiving telephone requests; if police, then 80-85% calls for service will be handled at complaint center and only 15-20% transferred to other emergency service agency. Dependent upon number of telephone exchange boundaries crossing into the jurisdiction.	Slowest response time since all calls must be routed to dispatching agencies either by transferring call or transmitting recorded information. There is the potential problem of losing calls while transferring information.	Least amount of response time since complaint center handles the entire communications function.
BOUNDARIES	Requires the most manipulation of boundaries due to lack of coterminous boundaries of political jurisdiction, emergency agencies and telephone exchanges.	Fairly easy resolution of boundary problems since all telephone calls terminate at a single location.	Most boundary problems are removed when operating in a central complaint/dispatch center.

EXHIBIT 4-5. (CONT'D.)

Item	Decentralized	Central Complaint with Decentralized Dispatching	Centralized
COORDINATION/ POLITICAL	May be considered the easiest to coordinate and receive acceptance because it requires the least modification to existing operation. The number of telephone exchange boundaries will create a substantial amount of coordination effort.	Coordination depends upon desire of communication to implement "911" system. Most agencies will agree if they can keep their dispatching function and not have to pay for the cost of additional direct lines and complaint center staff.	Most difficult to coordinate and obtain political acceptance since major changes and commitments are necessary to establish a centralized communication center.
PERSONNEL	Slight increase in manpower in agency responsible for handling the incoming telephone calls. Some training is necessary to screen calls for service to determine nature of request.	Requires increase in staff to handle all incoming calls which must be transferred to appropriate agency which still requires some allocation of personnel to handle incoming calls from "911" center. Center telephone complaint desks must be trained to screen calls to determine nature of request and location.	Centralized system should consolidate all communications in one center thereby reducing or at least making more effective use of available manpower resources. A centralized system would require better selection and more training of qualified personnel.
FACILITIES AND EQUIPMENT	May require an additional direct line to agencies who would handle dispatching chores. Does not reduce need for upgrading individual dispatching operations.	Will require the cost of establishing a central switchboard & additional direct lines to all emergency service agencies. Does not reduce need to upgrade individual dispatching operations.	Will require substantial modification of central communication center to house staff & complete communication operation. Individual dispatch centers will be phased out.

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EXHIBIT 4-5. (CONT'D.)

Item	Decentralized	Central Complaint with Decentralized Dispatching	Centralized
RADIO FREQUENCIES	Requires present number & distribution of radio frequencies. Large police agency radio frequency congestion would not be relieved.	Requires present number & distribution of radio frequencies. Large police agency radio frequency congestion would not be relieved.	Better allocation of radio frequencies.
PROCEDURES	Present procedures will prevail except where transfer of calls or information is necessary. Coordination of field units will remain at present level. Some additional documentation of call will be necessary.	Present dispatching procedures will prevail & coordination of field unit will remain at present levels. New procedures will be needed to handle complaint receipt, determination if desired service & geographic location. A secondary system of documentation will be necessary.	Streamlined procedures will be instituted to handle incoming calls & dispatching appropriate units. More uniform practices can be instituted and maintained. Best coordination of field units will be available.
APPLYING ADVANCED TECHNOLOGY	Very limited use of new communication technology because of diffused, small dispatching centers and funds limited to local agency budgets.	Some potential use of new communication technology is specifically in central complaint center. Dispatching centers would be handicapped due to limited size and resources.	Provides most potential for utilizing advanced communication technology since all complaint & dispatching operations are consolidating providing adequate operational and financial base.

4-11

and terminated at one location. Individual complaint desks service broad geographical areas: north San Diego County, metropolitan San Diego, and south and east San Diego County, based on telephone exchange boundaries.

The north San Diego County would take in La Jolla and all points north, and Poway and all points east. The San Diego metropolitan area would take in the exchanges involving the city. The third area would include, to the south, the areas of Chula Vista, National City, Coronado, and Imperial Beach, and the areas east of La Mesa and El Cajon, to the county border. This division would consist of identifying locations and assisting in the transfer of calls to the appropriate public safety agencies. There is a substantial amount of telephone boundary overlapping, requiring individual determination of the responsible agency. Automatic equipment at the subscriber telephone instrument could provide location information if implemented.

The centralized "911" configuration offers the best operational advantage since all communication functions are housed and operated from a single center. This provides the opportunity to maximize the usage of telephonic equipment, radio channels, and base station equipment.

Short-Term Modification. The development of a centralized communication system will take time. An interim method to assist the public in reaching the desired emergency service should be provided. Through a joint effort of public safety agencies and the telephone company, each telephone instrument should have affixed a label showing the number, telephone location, and telephone numbers for police, fire, and ambulance services.

This label should be permanent, damage resistant, luminescent, using international symbols in lieu of the words fire, police, ambulance. This procedure will provide the citizen with a service approximating a "911" system without modification of telephone exchanges, complaint handling, or dispatching.

OTHER TELEPHONE COMMUNICATIONS CONSIDERATIONS

Coin-Free Dialing. A frequent complaint by the public is the inability to contact emergency agencies from public telephones without a coin. The telephone company, at a national policy level, is beginning to provide coin-free public telephones which will allow the public to obtain various telephone services including "911". Some reservation has been voiced by officials because of the potential influx of malicious false alarms and non-emergency calls. The county should pursue this possibility with the telephone company.

Automatic Number Identification (ANI). An important consideration in any dispatching operation is the problem of locating the emergency when the person does not know the location. Street addresses are often not uniquely correlated with location; for example, there are over 250 street names and suffixes duplicated in San Diego County. By omitting suffixes this duplication is much greater. Telephone numbers are almost unique.

The telephone company has the capability to identify the phone which is being used to initiate a call since it is required for billing purposes. Once the phone number is identified, an address and name can be obtained. Police officials, rightfully so, are anxious to obtain this service from the telephone company. However, it is not mandatory for installing a "911" system. The telephone company's national policy is to install these automatic systems as they are converting (upgrading) their main telephone exchange equipment over a period of years. This automatic, realtime capability of identifying the address and number of the telephone could be supplied to the "911" communication center in the same manner. The telephone company should be encouraged to supply this service to San Diego as soon as possible.

Forced Disconnect. The telephone company states that all police agencies have a semi-automatic disconnect feature, which clears the line 30 seconds after the police agency hangs up, irrespective of caller actions.

Incoming calls can exceed capacity of trunk lines. This overloading usually occurs when there is a natural or manmade disaster, riot, or other unusual situation. The telephone system should be designed, particularly within a central dispatch center, to limit trunk line loading and assure constant ability to place outgoing calls.

Call Party Hold. The "call party hold" feature allows the public safety agency to trace a call, even if the person initiating the call hangs up. This concept, most frequently conceived as useful against prank calls, bomb threats, and persons who, in the excitement, fail to give a location or other pertinent data, should be considered in any emergency dispatch operation. The feature is technically and economically feasible. San Diego communities do not have this capability at this time but planning is already underway to achieve it.

Exchange Boundary Lines. Some comments have been made to change telephone exchange boundaries to conform to political boundaries. Telephone boundaries are based primarily on population and population growth projections. Political boundaries also tend to expand, thereby bringing in new areas, people, and telephone exchanges. Future planning should not assume that telephone exchange boundaries will be changed to conform to city boundary lines.

Alarms. In any centralized "911" system, the termination point of private and public alarms becomes an issue. Most fire departments utilize alarm boxes. San Diego is now phasing out their old system and replacing it with a telephone system.

Selected alarms should terminate at the centralized center for rapid dissemination and input into other calls (particularly fire) to screen out multiple calls on the same incident. False alarms, particularly burglary alarms, cause communication and dispatching problems. Increases in private dwelling intrusion alarm systems, e.g., prerecorded telephone messages, will greatly compound the false alarm problem.

Police departments already confronted with high false alarm rates require commercial alarm companies to make the initial determination of whether or not the alarm is bonafide. Further study is recommended before a firm policy is established. It appears feasible that other procedures should be explored, such as redundant sensor device systems.

Multiple Calls. The fire services report that on most bonafied fire calls they receive, as an average, five separate telephone calls from citizens reporting the same fire. Major accidents and other selected events bring about multiple calls. Usually, complaint operators quickly and accurately handle these calls. A procedure found to be effective for major catastrophes, such as earthquakes, in other command and control centers allows a taped message to be activated which tells the caller the center has already been notified and to remain on the line only if they have further information or want to report another emergency.

Section 5
POLICE RECORDS

OVERVIEW

The analysis presented in this section is based primarily on an inventory of each of the law enforcement agencies of the region. Appendices of this volume present charts containing the data elements of the five major reports:

- Crime (or offense) report (Appendix F)
- Accident report (Appendix G)
- Traffic citations (Appendix H)
- Field interrogation (Appendix I)
- Arrest/booking reports (Appendix J)

Appendices K through P present the actual inventory of the five reports plus the name (alpha) files of the agencies. The elements inventoried are:

- Number of documents on file
- Yearly entries
- Retention schedule
- Filing sequency
- Average daily accesses
- Form numbers

Police records (together with effective communications systems) provide the vehicle by which each police agency is able to use and share information about crimes, store and retrieve pertinent data about crime and suspects, and make managerial decisions.

Due to the constant need for quick access to records, certain organizational and staffing problems arise. An appropriate resolution of these problems lies in the coordination, if not integration, of records services, rather than in the relatively independent approach often taken by local police departments.

The individual method of recording and storing of records is not as important as providing for the sharing of information. Data elements to be shared should be placed in rapid retrieval devices like computers. The full reports can remain as hard copy stored in the individual agency. The final decision to maintain hard copy reports after sharing the appropriate data remains with the individual departments.

POLICE RECORDS AND POLICE INFORMATION REQUIREMENTS

For our purposes an information requirement is defined as any data deemed necessary to support the operation and management of the local law enforcement agency. We will categorize the present information requirements according to the various positions which constitute a police or sheriff's department: chief of police, captain, lieutenant, sergeant, investigator, and patrolman. Each position is explained below according to its information needs.

- Broadly, the information needs of the chief of police or sheriff are of two types: crime and general service activities.

Crime and Incident Information. Crime and incident information is defined as information regarding the nature of the services performed which are either recorded through dispatch action or in the form of a field input document.

Activity Information. Since the crime and incident profile provides information on at most 25% of the total departmental activity, it is apparent that the chief or sheriff needs information reflecting the remaining 75%. Activity information is simply data that is generated by event information and miscellaneous services.

- A manager (police captain) needs much of the same information as listed for the chief. The major difference is in detail and frequency. In general, the types of information needed are the same as the chief except for one additional requirement, which is as follows:

Divisional Organization. As a commander, the manager is in need of detailed information regarding the total activities, unique attributes, and specific objectives of a particular division.

- The information needs of a middle manager (police lieutenant) are comparable to those existing for mid-managers in other public and private organizations. Essentially, there are five needs: policy, historical data, personnel, performance and emergency.

Policy Information. The lieutenant needs complete and up-dated information concerning departmental policies, procedures, and watch performance standards.

Historical Information. There is a need to know the activities of the prior watch.

Personnel Information. As a manager, there is a need for a sound awareness of subordinate officer capabilities to insure proper deployment.

Performance Information. Related to the above need, is one for information about the performance of an officer as compared to established standards, for use in counseling, training, and corrective actions.

Emergency Information. There is a need to acquire internal and external information on events of an urgent nature for purposes of operational decisions.

- The supervisor mainly needs information similar to that listed for the lieutenant. However, there are two additional informational needs.

Technical Information. The supervisor needs current information regarding criminal law and practice.

Procedural Information. The supervisor needs detailed information on reporting and the dynamics of the overall information system.

- The information requirements for an investigator (adult or juvenile) detective are:

- Assignment of cases ranked in order of priority.

- Information upon which to base decisions concerning the depth of investigation and follow up reporting requirements.

- Field reports from patrol which provide both the quantity and the quality of information necessary for effective investigation, without redoing the initial investigation.

- Crime pattern and activity information tailored to specific types of crimes.

- Information concerning persons (record checks and wants) and property.

- The information needs of a field patrol officer are the following:

- Information pertaining to departmental policies, procedures, and performance standards.

- Information on the community environment in which he must function. This includes day-to-day, watch-to-watch, and area-by-area information concerning crime and incident activity. Such information must

not be limited to statistical summaries' of reported items but must include feedback from detective and juvenile investigators both on general activity and on incidents in which the patrol officers are involved.

--Accurate and complete dispatch information to assure a response which is safe and effective.

--A fast response to field inquiries regarding information wants, warrants, records checks, and vehicle information.

--Routine feedback regarding personnel performance and suggested areas for improvement.

Unfulfilled Information Requirements. The existing police records systems fail to meet certain needs or specifications. In a universal sense (not limited to the County of San Diego), they are:

--No capability to interpret trends or meaning from data contained in the records.

--The records supply a reactive stimulus only--the person must ask a question before information is submitted.

--Records provide poor feedback. The police officer rarely receives information on the outcome of a case in which he has participated. If the disposition of a case is favorable, he would derive satisfaction from this knowledge. Of equal importance, if the outcome of the case is unfavorable, he might benefit from knowledge which could make his future performance more effective.

--Present records systems do not quickly react to inquiries. Normally an inquiry is relayed through the dispatcher to the records section. The transmission time, which involved one to three people, often is not compatible with the urgency of the request.

--There is an overemphasis on external reporting requirements. The police agency filing and reporting system is predominantly designed to support external (state and federal) requirements, rather than local information requirements.

--The existing police practice concerning records retention can be described as "keeping all records

forever." Often there exists a great reluctance to relinquish any data on the chance that once gone a need for it might appear.

--The authority to establish policy for police records retention and destruction is not clearly defined or vested in individuals.

New Information Requirements. In addition to the above unfulfilled information requirements, new ones are rapidly being created. These new requirements are determined by the types of decisions to be made throughout the police organization. The new information requirements placed on the records system are, in the main, based upon the four major categories of decisions:

--Information concerning the response to, and disposition of, community calls for police services. It is essentially descriptive information about people and property. It is ordered and analyzed most effectively according to five general types of police activity: arrests, criminal activities, community incidents, accident investigations, and traffic citations.

--Information concerning the changing efficiency in the use of organizational resources. This information reflects the current internal inventory status of personnel and equipment and their dispersion.

--Information concerning basically institutional inputs from social organizations that tend to support police operations.

--Information concerning the changing community and its institutional patterns, objectives, and values.

Crime analysis is largely overlooked in present operations. To support this function both from the individual departments standpoint and from an overall countywide view an analysis was conducted of the crime reports.

While departments in San Diego County use various types and formats of offense reports, most have the essential elements of the event, at least enough to allow an investigator to get a general understanding of the nature of the crime,

where and when it happened, and who the principals are. Investigators often complain that accurate information (e.g., names, addresses, and telephone numbers), and a summary of the preliminary investigation are not provided in the reports.

Most departments use a "fill in box" structured form with space for a narrative. Some forms lack adequate space to include identifying data of witnesses and suspects. Sufficient space should be allocated to record full name, residence address and phone number, employment or school address and phone number.

Accuracy and completeness of reports are vital to the success of any records operation. Records are not an end to themselves but a means of supporting the major operational units of the department. Without appropriate controls and safeguards, reports lose their utility and records become suspect.

The analysis of reports, from a viewpoint of defining patterns rather than case by case, create a somewhat different set of information needs. This analysis function has not been fully developed in the region. Smaller communities question the need for formal analysis since most police members receive or have readily available copies of reports for review. There is a need to exchange crime and criminal activity information throughout the region. Standardized reporting elements permit this exchange.

SPECIFIC RECOMMENDATIONS

The following recommendations are not listed in order or priority. Together, they serve to promote considerable improvement. Singularly, they at best cause limited improvements in a problem area that is plagued with numerous imperfections. The recommendations refer to hardcopy records and their processing.

Agency Responsibility. Existing police records should continue to be created, processed, and stored within the agency that generates them. Although the various activities involved in the creation and organization of information must be changed, other recommendations specify the needed changes.

Purge Criteria. Uniform criteria for record retention and purging should be established. The following purge schedule is suggested for all local law enforcement agencies:

- Crime Reports: felony, seven years; misdemeanors, two years
- Master Index (Alpha File): thirty years
- Incident Reports: two years
- Arrest/Booking Reports: thirty years
- Field Interview Cards: six months
- Traffic Citations: one year
- Traffic Accident Reports: three years

This schedule would minimize expensive record storage problems. Management information, crime analysis, and statistics should be aggregated from the hardcopy record on a routine basis.

Record Security. Local law enforcement agencies in the county should secure -- physically and organizationally -- their records sections. In nearly every instance, the records area is vulnerable to attack and destruction. This problem is common to old and new facilities. For a relatively small expenditure, most of the observed records areas can be hardened against external threats.

Standardization. Case reports (crime and incident reports), traffic-accident reports, traffic citations, and field interview cards should be standardized. The California Department of Justice, Highway Patrol, and other local police

organizations have promulgated recommended report formats. The local law enforcement agencies in the county should consider these forms. If different forms are desired the data elements in the standard forms should be included.

Duplicate Booking. Duplicate booking and fingerprinting should be eliminated. A single booking and fingerprinting should be made either at the central jail facility or at the jurisdiction of arrest. If performed at the latter location, the local law enforcement agency should first acquire a universal index arrest and booking number from the central jail facility and assign it. In either event, the booking and fingerprint reports connected with the arrest should be stored at the jail facility. Based on the present workload demands, it is recommended that all reports be completed at the location of arrest and accompany the arrestee to the jail facility. This also facilitates the collection of additional information and evidence concerning the case. After implementation of this recommendation, all fingerprint and booking files, save those at the central jail, should be destroyed.

Criminal Histories. Criminal history files should be eliminated as soon as the California Criminal Justice Information System (CJIS) is able to supply the information on a statewide basis.

Crime Analysis. A formal crime analysis unit should be housed in the City of San Diego Police Department but including staff from the Sheriff's Department and other agencies. The unit would provide crime intelligence through the review and analysis of offense reports and field contacts (FI's, traffic citation, arrests). Procedures should be established so appropriate input documents are received for analysis. Procedures are also necessary to assure the distribution of analyzed data to contributors.

Planning for the utilization of automated records in crime analysis should begin. The use of automated pin maps, map drawing, and other analysis techniques should be explored.

Work Simplification. Each local law enforcement agency should implement a work simplification program for report generation and record-keeping. The program should improve the physical layout of the record unit. A few general principles in physical structuring are: keep similar activities together, avoid clusters of workers, eliminate structural barriers to work flow, and reduce congestion by having at least two sides of an area open. In support of the methods improvement program, time/motion/process studies should be conducted to identify points needing correction.

Recommendations for use of the county and city computer are presented in Section 6. When these recommendations are adopted, consideration of the need for hardcopy files and name indexes should be made.

Section 6
DATA PROCESSING

OVERVIEW

An inventory of operating systems presently serving the region revealed no duplication of effort between the City of San Diego and the County of San Diego. In the other police agencies, we found no data processing support of law enforcement presently operational, a minor exception being Chula Vista.

The data processing inventory is presented in Volume II. Volume II of this report contains descriptions of data processing applications in the City of San Diego, the County of San Diego, and the Command and Control Facility. Brief descriptions of all operating programs and samples of the reports produced are presented.

GENERAL RECOMMENDATIONS

The two data processing facilities should be interfaced through a communications computer. This will allow the establishment of data bases in a logical progression of activity and make them available to all users.

Each data processing center should supply (perhaps at a pro-rated cost of the operation) service to all agencies in the county. Services provided should include both on-line inquiry and batch processing systems such as statistics and crime analysis. Sharing applications programs and the information in a larger base not only provides the capability to small agencies, but begins to build an overall crime picture as it actually exists throughout the county.

Automatic checks of all state and national data bases should be made in response to each inquiry. At present, unless an officer specifically requests a check of NCIC, this information is not provided to him. Exhibits 6-1, 6-2, and 6-3 show how inquiries could be handled by the computer to check all data sources available.

In addition to these overall recommendations, a division of the applications necessary to support law enforcement is suggested. This "assignment" of roles is based on who best can perform the task, and the major agency responsibility for the application. The city or police side is assigned all activities that precede arrest; the county is assigned all activities from arrest on.

By dividing the data processing support along these operational lines, a more logical budgeting and support function evolves. The county is responsible for the handling of the jail, the prosecution, the trial, and probation of an individual offender, whereas the city police are responsible for the apprehension of criminals and the reduction of crime. The sheriff is involved both in police activities (apprehension of criminals and the reduction of crime) and in the processing of prisoners through the jail operation. Therefore, he receives support from both systems. In fact, all elements of the justice system will receive information from both systems.

Both the present city system and the county system operate in a batch-mode or off-line mode. Although both have on-line direct access capabilities, little activity of this nature occurs. Both centers are fully capable of expanding into this area. They will be encouraged by the suggested implementation schedule to move quickly to support the key information requirements of the on-the-street law enforcement officer.

OFFICER ASKS FOR

"WANTED INFORMATION"

HE RECEIVES:

1. COUNTYWIDE STATUS
2. STATEWIDE STATUS
3. NATIONWIDE STATUS

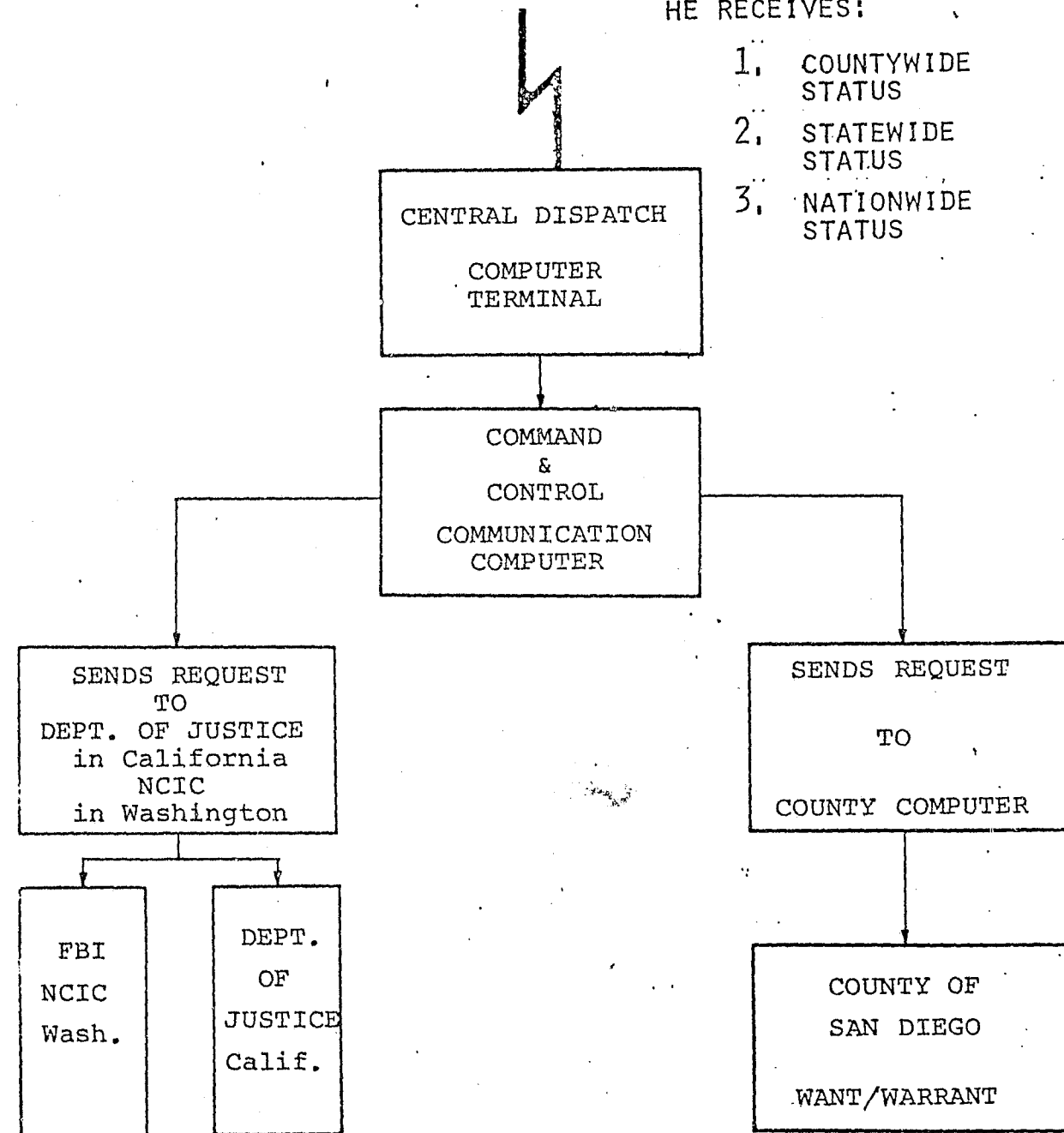


EXHIBIT 6-1

OFFICER ASKS FOR

"STOLEN PROPERTY REPORT"

HE RECEIVES:

1. COUNTYWIDE INFORMATION
2. STATEWIDE INFORMATION
3. NATIONWIDE INFORMATION

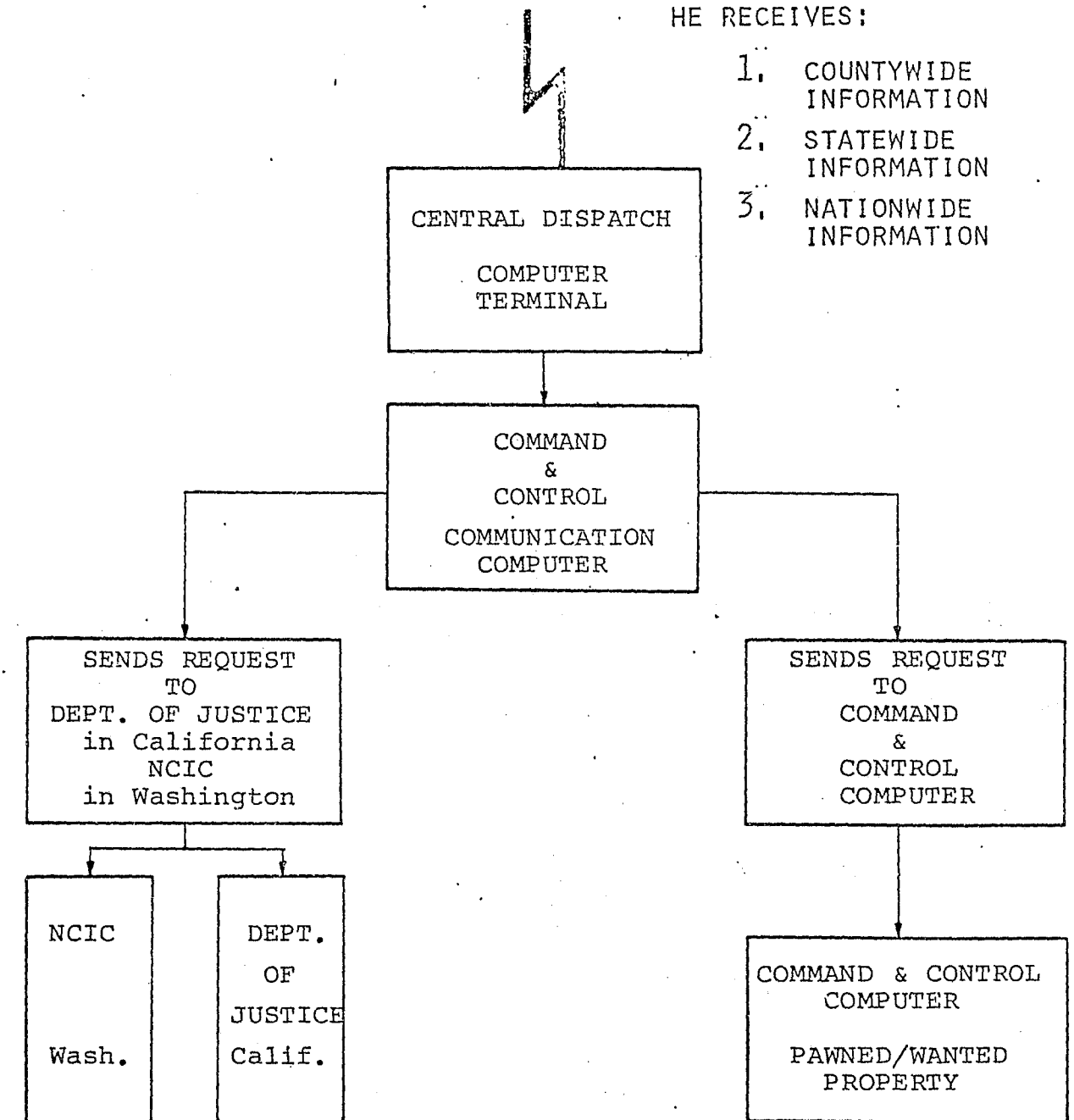


EXHIBIT 6-2

OFFICER ASKS FOR

"STOLEN CAR REPORT"

HE RECEIVES:

1. STATEWIDE INFORMATION
2. NATIONWIDE INFORMATION

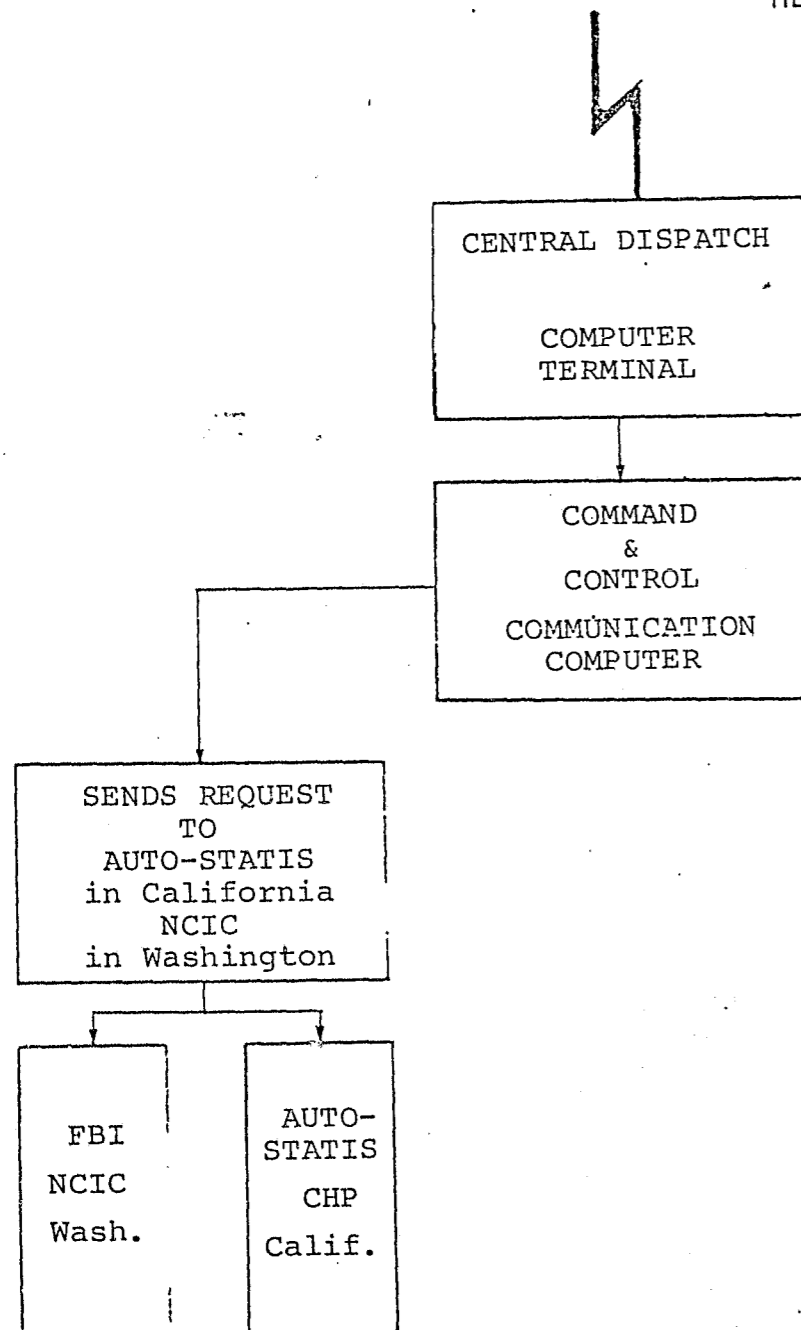


EXHIBIT 6-3

6-5

A recommendation for a centralized dispatch facility is made in Section 3. Because of this recommendation, the need for the two terminals presently operated by each of the small city police departments will be eliminated. A one-terminal operation can eventually evolve as the centralized dispatch facility is integrated into the system.*

CITY OF SAN DIEGO DATA PROCESSING

The city is presently moving all data processing support of law enforcement to the command and control facility. This requires modifications and improvements to the various systems prior to their being made operational on the NCR equipment.

Although the city data processing is developing the "command and control center," to support fire, police, and other emergency service type dispatching, the ability to perform a data processing communication's function was not included in the original requirement. One of the major recommendations of this report is to have the communications function added to the command and control computers being developed in the city.

The following applications are suggested for the command and control facility:

- Communications
 - Interfaces with NCIC, AUTO-STATIS, CLETS, AMIS.
 - Store and forward.
- Computer-Aided Dispatching
- Report generation
 - UCR crime reports
 - CII crime reports
- Wanted and Powned Property System
- Police Accident System

* Imperial Beach is operating one terminal.

- Moving Violation System
--On-line inquiry
- Resource Allocation
--Crime mapping
- Police Activity System
- Modus Operandi

Communications. Communication computers should have the ability to store and forward messages to other agencies within or outside the county. They should interface with state and national data bases by reformatting message inquiries into acceptable formats. A single inquiry from the field should trigger several formatted inquiries by the communications computer. For example, a single "wanted" check should trigger inquiries of the local, state, and national data bases.

Computer-Aided Dispatching. The present development of this activity at the command and control facility should be accelerated. It would be unreasonable to expect that the full utilization of computer-aided dispatch can be realized in a short period of time. This significant and technically complicated program must be implemented over a period of time. The development of this system should be modified to include the entire county.

Report Generation. The San Diego police have an excellent system presently in operation. This could easily be expanded to serve all law enforcement within the county. A description of the reports available from this system are included in Volume II.

The city is presently preparing its uniform crime reports by computer. Most of the smaller police departments complained of the effort required to prepare these reports.

By providing the data to the City of San Diego, their reports could also be prepared. Crime mapping and crime analysis functions can also use this data once it is mechanized.

CII crime reports are also computer generated by San Diego. Once the information has been reduced, these reports can be produced for the several agencies at a minimal cost.

Wanted and Pawned Property System. The present operating system (as explained in Volume II) is a good property system. It should be expanded to include automatic searching of state and national data bases. The system has limited value on a city basis. Including all agencies in the file would greatly increase the value of storing this information.

Modifications of the system software could provide an inventory system for plant property and an inventory system for evidence.

Police Accident System. This system is operational and provides data for the preparation of externally required reports. The system is also a valuable tool in planning patrol and selective enforcement activities.

This system could be made available to all agencies within the county. A review of the reports presently produced (see Volume II) should indicate the value to a smaller department of sharing in the service.

Moving Violation System. The operational moving violation system provides for on-line file search (including a search for incomplete license numbers), citation audits, and report generation.

The potential "hit" or payoff from its use would be enhanced by the larger data base of a county-wide system.

All law enforcement agencies should participate in the moving violations system. The departments may not be interested in all of the reports but would benefit from the on-line system.

Resource Allocation. Probably one of the most significant developments in the last few years, has been the utilization of the information provided from crime reports, calls for service, and field activity reports to produce a scientific basis for resource allocation. Such a system can predict the need for field officers by time-of-day and day-of-week.

Unfortunately, system design and software development are difficult and time consuming. A resource allocation system should be started in San Diego County, on a county-wide basis in order to spread development costs over a larger user base.

Police Activity System. This system is presently operational on the city computers. It could easily be made available to all law enforcement agencies within the county. If the central dispatch concept is adopted, many of the reports produced by this system will be available to the small agencies.

Special tools like this system are of great management benefit but usually can only be afforded by large agencies. By sharing in their operational cost, all agencies could receive the reports.

Modus Operandi. At present the City of San Diego is developing an M.O. system. The system should remain experimental until results of its performance are known.

COUNTY OF SAN DIEGO DATA PROCESSING

The county presently operates a jail and booking system, the IBM basic court system (BCS), and a traffic warrant system

Although the county does not presently have communication computers, it appears that these will be added. Placing the main communication functions on the city computers will aid the county for a short period, but, as additional criminal justice agencies receive service from the county, the necessity for providing this capability will become apparent.

The county serves the sheriff, district attorney, municipal court, county clerk, superior court, and probation.

The sheriff is being served at the present time by the jail and booking system (described in Volume II). Although just recently operational, it will become a valuable tool. The law enforcement services required by the sheriff should be obtained from the city data processing system (Command and Control).

The District Attorney has no operational system at this time but development effort is planned for this year.

The Municipal Court is receiving support for traffic violations. Other activities are planned and will be recommended for the courts in general.

The County Clerk and the Superior Court are receiving support from the Basic Court System. Additional activities and indexes will be recommended. No activity is presently going on to serve probation.

The following applications are suggested for the county computer system:

- Jail and Booking System

- Want/Warrant System
- District Attorney System
 - Case history
 - Case location by court index
 - Attorney assignment index
- Basic Court System
 - Court calendar
 - Case histories
 - Name and I.D. index
 - Jury selection
 - Court statistical module
 - Profile of clientele file
- Probation System
 - Defendant case history
 - Defendant management module
 - Case worker and probation supervisor index
- Criminal History

Jail and Booking System. This system is presently operational in the county. Much information from the system will be available to the sheriff and the other criminal justice agencies. On-line inquiries about the status of individuals will be available through this system.

The name searching portion of this system should be combined with the name searching capability provided in the BCS program. By developing this approach, a name index system can be developed and implemented.

Want/Warrant System. A comprehensive want/warrant system should be built. The basic files are available through the traffic violations system and the name indexes can be built from the jail booking and basic court systems.

To the traffic violation data base must be added all other wants and warrants. The capability to add these both on-and off-line should be planned as a part of the system.

The want/warrant system should generate a message (update, modify, or cancel) to the state and national systems. This will be accomplished by having the county computer prepare the message in the correct format and then send it to the communication computers in the city.

District Attorney System. Design activity for District Attorney applications is scheduled to begin this year. The following general discussion of the activity of the prosecutor and some suggested files may help in that design effort.

The primary concern of the prosecutor's office staff is administrative support of the prosecution function. Secondly, the responsibility is to collect statistics for internal use. By better management there may be a significant improvement in the utilization of attorneys. By scheduling cases based on statistical analysis of average trial lengths, attorneys can be scheduled for court appearance at certain times for a specific, predictable duration. Analysis of attorney inputs and outputs in the number of cases tried, number of cases on hand, status of cases, and attorney history of failures or successes in certain types of prosecutorial functions would also be available to management.

Case History. The following minimum data elements should be included in the case history:

- A. Name of defendant
- B. Date of motions
- C. Time of motions
- D. Results of motions
- E. Location of case
- F. Level of proceedings

1. Preliminary hearing
2. Trial
3. Appeal

- G. Trial dates
- H. Jury selection
- I. Number of jurors called
- J. Arresting officer
- K. Lawyer

The primary use of the case history is for individual record retrieval. Statistical manipulation of the data base will also provide important management information concerning the distribution of time to specific court processes. This information will assist in case planning and resource allocation both for the courts and for the prosecutor.

Case Location by Court Index. To aid in the management of the prosecutor's office, certain information should be available to him on a daily basis to permit him to maintain an overview of the prosecutorial functions as it pertains to the entire county. A Case Location by Court Index file would permit the prosecutor to identify every criminal and civil case (aid to dependent children) entered into the judicial system by type of offense, location of the files (probation, court, etc.), and the defendant's plea. The file should also contain arraignment dates, courts, witnesses present, the facts necessary to seek indictments, preliminary hearings, etc.

Attorney Assignment Index. The Attorney Assignment Index should list each attorney within the county who has either a criminal or civil case. The file should include the case status, the type of case, the trial date, defendant, and other necessary identifying data. From this information, a case suspense file could be set up whereby attorney X has a case in a particular court. The data will aid the prosecutor in opposing a motion for a continuation if the attorney recently scheduled another type of legal proceeding at the same time

in another court. From an overall aspect, the entire judicial system would function more properly by having a file to manage its operations. This file would greatly cut down the number of "no shows" by attorneys and therefore would speed up trials and cut down on the number of continuances granted, often for frivolous reasons.

Basic Court System. The county is renting the basic court system from IBM. This package is an initial step in developing an overall court system for the county. The system supports the following type activities:

- Court calendar
- Case histories
- Name and I.D. index.

Case Cross Index. A cross-indexing of all cases tried in the county court system should be developed. The index should include:

Plaintiff name and identification,
Defendant name and identification,
Type of case,
Length of time in process,
Time to try.

Jury Selection. A better method of selecting, informing, and collecting jurors must be found. Programmatic selection of jury candidates from election lists should be developed countywide and selection programs held under court control to assure truly random selection of candidates.

Consideration should be given to calling a number of jurors to a central location for daily jury selection for

specific trials. This will speed up the entire process, once it is known how many cases are going to trial on a certain day, assuming that the information in the cross-indexing list is available as suggested.

A predetermined number of jurors can be called for a specific case. If past experience has shown that, in order to select 12 jurors plus one alternate in X case, one hundred individual jurors had to be summoned, then this information could be transposed into a mailed notification to one hundred individuals to be available on a certain day and time. By examining case histories, reasonable predictions can be made to notify prospective jurors on a realistic, preplanned basis. Long delays and unnecessary manpower utilization in calling several hundred people individually to give them one or two days notice would be eliminated.

Court Statistical Module. A Court Statistical Module would provide a quantitative basis for measuring activities within the system at any given time. For example, current work loads as of a specific day would be available. The inputs into the system, as well as the outputs, would be immediately available to top administrators. Backlogs in various courts could be predicted and identified to insure better management of the system. By automating, an overall view of the activities in the judicial system would be available on short notice.

Profile of Clientele File. Examples of client information in this file are simple biographical and work data, prior criminal history, and identified personal traits. Such a Profile of Clientele File would provide information needed during the sentencing process. For example, if an individual has background characteristics which show that he is amenable to a specific type of corrections training program, then the sentencing judge would know this and would sentence the

individual to the type of program which, in all probability, would be the best for the individual. The information in the Profile of Clientele File could be collected throughout the period of time the defendant is in the judicial system.

Probation System. Probation is a user of the criminal history. In the present manual operation, copies of the criminal history are maintained by probation once they have been received from the police. Probation develops new information, portions of which should not be made available to certain other agencies within the criminal justice system.

At the present time there is little data processing support for this function within the county. The following are suggested for consideration.

Defendant Case History. This would contain information provided by the system that describes activity that has transpired prior to the case reaching probation. To it will be added the information generated by the probation function. Some of this information may remain private or proprietary to probation. This decision will have to be worked out during the full design effort. This module will contain information such as employment, employment history, type of work, training, probation treatment of the individual, family situation, education, and other social data.

Defendant Management Module. This module should depict workload, work assignment, case worker, times for reporting, check lists as to activities that must take place, etc. The overall management of the probation system is reflected by the workload of the people under probation supervision.

Case Worker and Probation Supervision Index. This module is an index created from the Defendant Management Module for easy reference to the assignment of case workers. It is indexed by the name of the worker and the person under supervision. This module will also aid other agencies, especially the police, in rapidly identifying a person on probation.

As suggested earlier, this index can be implemented as a portion of the BCS index.

Criminal History System. The Criminal History Module is the basic police record of individuals who have been arrested. Individual identification data is presented as well as summary documentation of the criminal justice proceeding which have been taken against him. Indices and record numbers are included to allow further access to more detailed information concerning these proceedings. This more detailed information may be stored within other modules of the system, or may be in non-computerized files (e.g., mug shot files). Linkages to other modules of the system assure that the criminal history module is both current and complete.

Although the criminal history is a key file in the county system, care should be taken in its construction. The county should store only that information required to perform the county function. The state should be the general repository for this data.

Section 7

FIVE-YEAR IMPLEMENTATION PLAN

OVERVIEW

In preparation for a development plan that will span the next five years, considerable attention must be paid to the capacity of the present systems. Inasmuch as the present systems are being changed, it is difficult to be very accurate as to their exact capability.

Several cautions are appropriate when beginning a plan such as this:

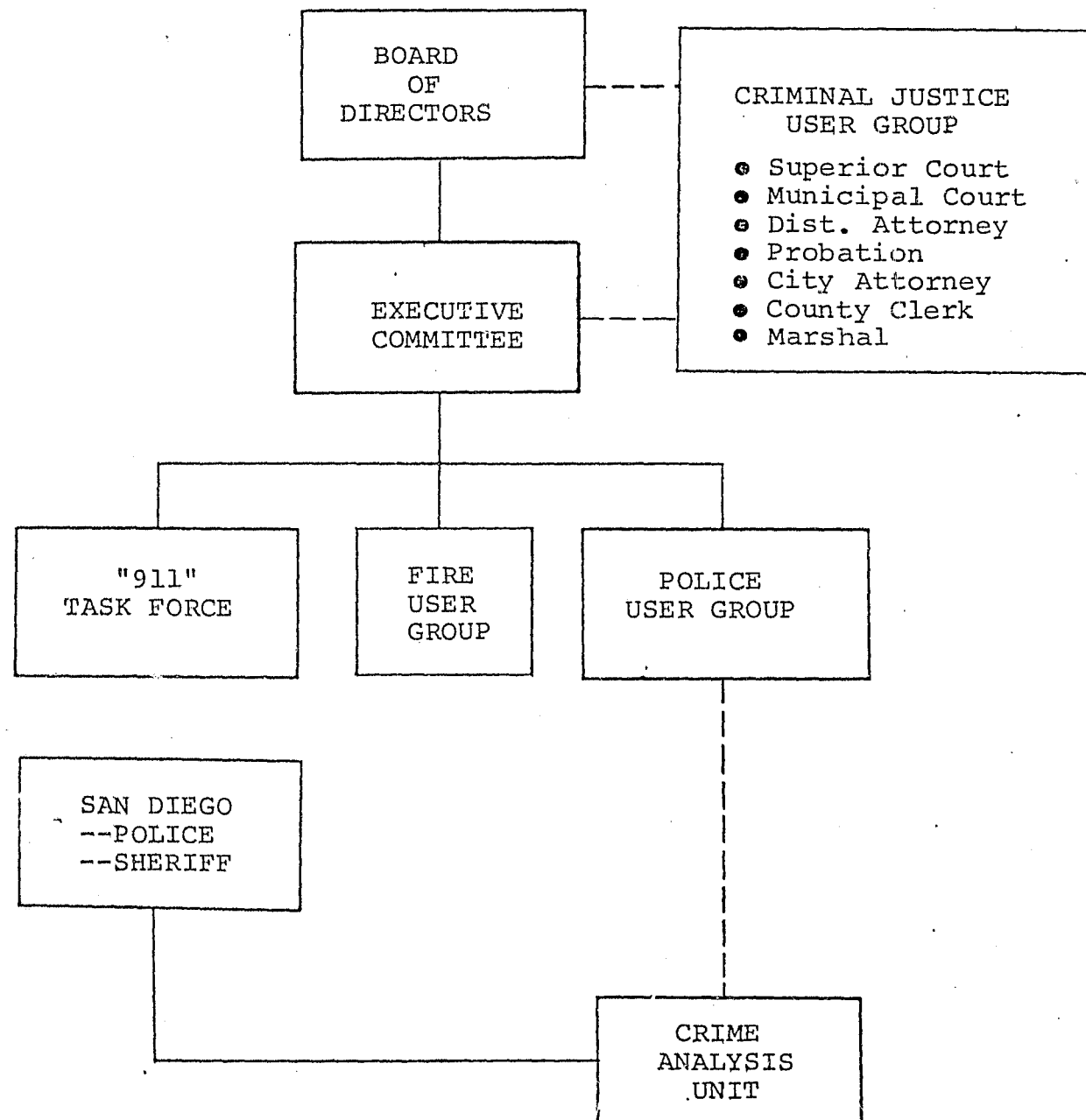
1. The plan should have various stages of implementation and test periods.
2. Too much activity should not be placed on one agency at one time.
3. Training must accompany all stages of development. This includes technical and operational training.
4. Management participation must be a part of each step.

This plan will address the implementation of the feasibility study as outlined in the preceding sections of the report. These recommendations are in five broad areas:

1. Communications
2. Telephone Communication "911"
3. Police Records
4. Data Processing Support of Criminal Justice
5. Suggested Organization Chart (Exhibit 7-1)

EXHIBIT 7-1

SUGGESTED ORGANIZATIONAL CHART FOR THE
IMPLEMENTATION AND OPERATION OF THE
COORDINATED SYSTEM



Although these areas are in different functional categories, there is considerable interdependency in implementation of the coordinated system. In addition to this interdependency, a significant change will be made in the Command and Control facility. Considerable planning must be accomplished and realistic schedules established or this new center could easily be overcome with changes.

Even though there is interdependency, some activities can proceed in parallel development. This is particularly true in the area of police records. A cooperative effort in the redesign of forms and the sharing of data should parallel the communications and data processing development.

Recommended Membership of the Various Committees. The Board of Directors should be comprised of the following:

- City Manager, City of San Diego
- County Administrative Officer, County of San Diego
- Sheriff of San Diego County
- Chief of Police, City of San Diego
- Fire Chief, City of San Diego
- Representative of County Fire Chiefs Association
- Representative of County Police Chiefs Association
- Representative of County City Managers Association
- Chairman of Executive Committee

The Board of Directors will establish the policies and priorities for the system, provide overall direction, and approve the budget.

The Executive Committee should be comprised of the following:

City Data Processing
County Data Processing
City Communications
County Communications
Manager of the Command and Control Center
Fire Commissioners Office
Police Commissioners Office

The Executive Committee shall provide technical support to the Board of Directors, be responsible for the day-to-day operation of the center, prepare the budget, and carry out the policy established by the Board.

The "911" Task Force should be established by the Board of Directors. It should comprise the necessary technical and administrative expertise to represent the region on a working basis.

The Police and Fire User Groups should be established by the Board of Directors and should be comprised of representatives experienced in planning, data processing support, and records.

The Criminal Justice Users Group should be established by the county. The Board of Directors should appoint police representation for that group. The Board of Directors should appoint the Executive Committee to provide technical support to the Criminal Justice Users Group.

The next three pages present a layout of the five-year plan by activity.

FIVE-YEAR PLAN

Activity	Years				
	1	2	3	4	5
1. C&C Establish Board of Directors	● 4 months				
2. Program to Implement Central Dispatch	● 30 months				
3. Develop Plan for 2 above	● 6 months				
4. Implement 2 above	● 30 months				
5. Board of Director Functions	● 60 months				
6. Establish "911" Task Force	● 2 months				
7. Plan Implementation Schedules	● 6 months				
8. Monitor Implementation of "911"	● 11 months				
9. Pursue "ANI" Labeling No-Pay Telephone	● 42 months				
10. Establish Crime Analysis Unit	● 4 months				
11. Definition of Data Elements for C.A. and Resource Allocations	● 8 months				
12. Basic Requirements for Crime Analysis	● 8 months				
13. Continue Work with D.P.	● 44 months				
14. Command & Control Data Processing Design	● 6 months				

7-5

FIVE-YEAR PLAN

Activity	Years				
	1	2	3	4	5
27. Accomplish Interface	●-----● 15 months				
28. User Group Review & Monitor D.P.	●-----		-----● 58 months		●
29. Establish Criminal Justice User Group	●● 2 months				
30. Develop Plan for: D.A., Courts, Probation	●-----● 6 months				
31. Develop Support for: D.A., Courts, Probation	●-----		-----● 36 months		
32. Program Want/Warrant System	●-----● 12 months				
33. Program City Interface	●-----● 15 months				
34. User Group Continues as Monitor	●-----		-----● 58 months		●

7-7

COMMUNICATIONS

In this area of the feasibility study are the most difficult tasks to implement. Every effort must be directed to assure the user agencies that they will not get hurt in the change. The change must be brought about slowly and with care to see that the "bugs" are out as the system is made operational.

Establish Board of Directors

1. The Board of Directors should start funding within the first four months (1-4).
2. One established, they should begin a program to implement the centralized dispatch operation. It is anticipated that this will take 36 months and will start at month 5 and proceed through month 41.

a. Develop an implementation plan for the central dispatch facility. This should take approximately 6 months to accomplish and will provide the following elements:

- Layout of dispatching areas
- Equipment modification and purchases required
- Detailed schedule for implementing the system in phases

b. Implementation of central dispatching. It is anticipated that it will take approximately 30 months to accomplish.

3. The Board will continue as a Board of Directors. It should approve changes and modifications to the system as they are recommended. For resources and day-to-day management, the Board will call on the Executive Committee.

COMMUNICATIONS "911"

The Board of Directors should establish a "911" Task Force to pursue the "911" concept, within two months after its establishment.

Plan and Implement "911"

1. Upon establishment of the task force, work should begin on a schedule that will bring "911" into the Command and Control Center at the appropriate time. This schedule will take at least six months to prepare and planning should not begin until about the eighth month of the five-year plan.

2. Monitor installation of the "911" system. This activity will be accomplished from about the 30th month and will proceed until month 41.

3. Pursue the development of automatic number identification, phone labeling, "no pay" pay phones for emergencies.

POLICE RECORDS

There are several important aspects of the recommendations as regards police records. For those elements that should be gathered and shared, a unit is recommended to be responsible for the coordination of this function. For improvements in individual departments, it is suggested that this be left to the department.

Establish Crime Analysis Unit

1. This unit should work with the police users group to modify forms and to establish the required data elements for mechanization of crime analysis. The definition period will last about eight months. It should be accomplished during months 4 and 12.

2. Continue to work with data processing during the development of resource allocation systems, months 12-60.

3. Establish basic requirements for other types of reports to support crime analysis. This should be accomplished during months 4-12.

4. Continue to work with data processing during the development of crime analysis reports from the 12th month on.

DATA PROCESSING

Command and Control Facility

1. Design, 1-6 months. During this period a detailed design should be pursued that will provide:

- Implementation plans
- Hardware specifications
- Functional software design
- Development budgets
- Operational budgets

This design will be devoted specifically to expanding the computer capability at the Command and Control Center to provide the service to the entire county.

2. Development, months 7-18. During this phase the software will be written and hardware installed.

3. Implementation. During this phase each police agency should be brought into the system. After the San Diego Police and Sheriff's Departments are operational, the other departments should be brought in one at a time. This process will take approximately three years.

Data Processing Support of Law Enforcement Agencies

1. Establish a user group to coordinate the support effort, months 1-2.

2. Review present operating programs (Volume II of this report). Determine, months 4-8:

- a. applications desired by individual agencies,
- b. costs sharing formulae,
- c. program modifications desired.

3. Develop plans for design, development, and implementation of resource allocations including, months 4-12:

- a. geo-coding scheme
- b. data reduction procedure

- c. forms or report modifications required, including data elements,
- d. service required from computer,
- e. types of reports.

4. Development resource allocation application programs. This project will take approximately 12 months to complete starting at about month 12 and being completed around month 24.

5. Implement the resource allocation system in selected jurisdictions (probably two) for a six-month trial period.

6. Modify system based on trial period experience.

7. Implement countywide system in three-month test, during months 34-37.

8. Develop plans for a want/warrant system in the period of three to five months. Although the county is assigned this task, it is suggested that the police user group develop the following:

- a. definition of files (felony, misdemeanor, etc.),
- b. when warrants are added,
- c. responsibility for adding, modifying, and deleting,
- d. response time required.

9. Develop plans to interface computers; this includes:

- a. City and county
- b. NCIC
- c. CLETS
- d. AUTO-STATIS
- e. AMIS

The development of plans to accomplish this task should take approximately six months to complete and should take place during months 4-9. Coordination with the county data processing is essential.

10. It is suggested that the interface be accomplished by the end of month 24. This allows development for a period from months 7-24.

11. Continue as a monitor and review group for all support (non-command and control) applications for law enforcement.

DATA PROCESSING SUPPORT OF CRIMINAL JUSTICE AGENCIES

1. Establish user group, months 1-2. Many techniques can be employed in establishing this. The county data processing group could deal with each agency separately. It is suggested that representatives from each of the following agencies make up the user group:

- a. District Attorney
- b. County Clerk
- c. Municipal Court
- d. Superior Court
- e. Probation
- f. Sheriff's Office

2. The suggested group would have several advantages over working independently with each agency.

- a. Each would see the interrelationship of data within the county criminal justice system.
- b. Each would begin to learn about the overall function of data processing support for his agency.
- c. Interface between agencies would be much better and would improve design.

3. Develop plans for design, development, and implementation of a three-phased program. This program will be developed to support, prosecution (D.A.), courts (county clerk), and probation.

4. The design phase of this program should last about six months. Several decisions should be made during this period.

- a. How much parallel development can be accomplished for the three basic areas.
- b. A detailed schedule should be written.
- c. Budget considerations made.

5. Begin development of the plan to support the three broad areas. It is anticipated that this will be a 36-month program.

Implementation should be accomplished and portions of the overall system when available.

6. Develop want/warrant system based on police user group specifications and needs of the marshal and courts. The development period should be approximately 12 months.

7. Work with city to develop computer-to-computer interface from months 10 through 24.

8. Continue user group as a monitor for criminal justice support for the county data processing operation, months 1-60.

APPENDICES

Appendix A

TYPES AND NUMBERS OF MOBILE RADIO EQUIPMENT

<u>Agency</u>	<u>Number of Mobile Radios</u>	<u>Manufacturer</u>
Carlsbad	8	Motorola
Chula Vista	44	7 Motorola, 37 G.E.
Coronado	12	Motorola
El Cajon	2	Motorola
Escondido	22	G.E. & RCA
Imperial Beach	9	Motorola
La Mesa	16	Motorola
National City	23	Motorola
Oceanside	21	19 Motorola, 2 G.E.
San Diego P.D.	394	214 G.E., 180 Motorola
San Diego S/O	315	Motorola
San Diego CHP	90	Motorola
Oceanside CHP	43	Motorola
San Diego H.P.	27	Com Co, G.E. & Motorola
Oceanside H.P.	12	Motorola
Totals	1038	11 RCA; 9 Com Co; 745 Motorola; 273 G.E.

Appendix B

SAN DIEGO COUNTY POLICE AGENCY

FREQUENCY ASSIGNMENTS

<u>Agency</u>	<u>Frequency</u>
Carlsbad	simplex, 45.54
CHP	simplex, 42.34; simplex, 42.54
Chula Vista	simplex, 154.815
Coronado	simplex, 154.845
El Cajon	simplex, 155.625
Escondido	simplex, 158.745
Imperial Beach	simplex, 154.845; simplex, 154.920
La Mesa	simplex, 158.815; simplex, 158.865
National City	simplex, 155.790
Harbor Patrol-San Diego	simplex, 155.895
Harbor Patrol-Oceanside	simplex, 155.760; simplex, 155.895
San Diego-P.D.	simplex, 39.06; simplex, 155.625
	duplex duplex duplex
	154.950 155.550 154.875
	158.730 158.970 159.090
San Diego-S/O	simplex, 153.995; simplex, 155.025
	duplex duplex
	153.875 154.055 154.755 154.965
Oceanside	simplex, 45.54; simplex, 155.43; simplex, 155.760

Appendix C

EMERGENCY TELEPHONE NUMBER & NUMBER OF TRUNKS

<u>Agency</u>	<u>Emergency Telephone Numbers</u>	<u>Number of Trunks</u>
Carlsbad	729-1144	2
Chula Vista	427-3131	5
Coronado	435-3123	4
El Cajon	442-3351	8
Escondido	745-6150	2
Imperial Beach	423-8111	5
La Mesa	461-1222	3
National City	474-5511	7
Oceanside P.D.	722-2166	5
San Diego P.D.	232-6981	28
San Diego S/O	232-3811	18
San Diego CHP	ZE1-2000	1
Oceanside CHP	ZE1-2000	1
San Diego H.P.	291-3900	2
Oceanside H.P.	722-1418 722-1419	2
Totals	15	93

Appendix D
 FIRE SERVICE FREQUENCY ALLOCATION,
 TELEPHONE NUMBERS & NUMBER OF TRUNKS

Fire Agency	Frequency (s)	Telephone	Trunks
Alpine F.D.	47.12 & 154.205	445-2663	3
Bonita-Sunnyside	154.415	479-2345	2
Borrego Springs	155.085 & 154.235	767-5575	1
Carlsbad F.D.	46.08	729-1144	2
Chula Vista F.D.			
Coronado F.D.	155.085 & 155.280	435-3146	1
Crest Local F.D.			
Del Mar F.D.			
El Cajon F.D.	154.205 & 155.085	442-5595	2
Encinitas F.D.			
Escondido F.D.			
Fallbrook Local F.D.		728-1171 728-1172	4
Imperial Beach F.D.	155.085 & 154.415	423-8222	4
La Mesa F.D.	154.205 & 155.085	469-2122	2
Lakeside F.D.	154.205 & 155.085	448-6112	3
Lemon Grove F.D.	46.46 & 154.205 & 155.085	469-4113	1
Lower, Sweetwater			
Montgomery LFPD	154.415 & 155.085	422-1101	3
National City F.D.	154.415 & 155.085	477-4111	3
Oceanside F.D.	46.08	722.1222	4
Poway F.D.			
Romona LFPD	154.235 & 155.085	789-1414	1
Rancho Santa Fe	46.46 & 46.32 & 154.385 & 155.085	756-1126	4
San Diego F.D.	154.310 & 154.145	238-1212	9
San Marcos F.D.	155.085	744-1234	3
Santee F.D.	154.205 & 155.085	448-3646	4
Spring Valley F.D.	154.415 & 155.085	463-0255	1
Vista F.D.	154.235 & 155.085	726-2142	3
Woodlawn Park			

CONTINUED

1 OF 2

Appendix E

CHRONOLOGICAL LISTING OF SELECTED DOCUMENTS
RELATING TO "911" ACTIVITIES IN SAN DIEGO

<u>Date</u>	<u>Publication/Document</u>
Feb 1967	"The Challenge of Crime in a Free Society," the President's Crime Commission recommended the telephone company develop a single police number.
12 Jan 1968	AT&T announced "911" would be made available as a single emergency telephone number
27 Feb 1968	"The Universal Emergency Service Number." This report discusses objections associated with 911 and presents needs for a universal number.
14 Aug 1969	Results of "911" survey by County Supervisors Association of California.
25 Aug 1969	The San Diego County Board of Supervisors requests the establishment of a "911" study committee.
24 Oct 1969	Memorandum from County Civil Defense on suggested study of "911" with recommendations to confine to information receipt and relay. (Estimate 18 man-years and \$20K equipment.)
Nov 1969	General information, "911 Dialing," County of San Diego, Office of Civil Defense and Disaster preparedness.
11 Dec 1969	National Service to Regional Councils (NSRC) receives grant for "911" information exchange program.
28 Jan 1970	NSRC emergency telephone communication workshop.
29 Jan 1970	Memorandum from Deputy Co. Engineering regarding Los Angeles County "911" implementation study.
13 Mar 1970	Preliminary application by County of San Diego to HUD for planning and engineering a regional emergency communication and coordination center and used to implement "911".

Mar 1970	"A Study of the Single Emergency Telephone Number," Frankling Institute Research Laboratories.
Jul 1970	"A Summary Report on '911'," National Service to Regional Councils.
Sep 1970	Justification of 12-kMz Microwave licensed for 25,000 F9 report by Public Works Agency.
15 Sep 1970	Application by County of San Diego to DOT for a demonstration of a regional coordinated "911" communication system (\$905,000).
15 Sep 1970	Application by County of San Diego to LEAA for discretionary funds for large counties for Phase I of a communication system for coordinated law enforcement (microwave extension and equipment, \$756,034).
5 Nov 1970	Correspondence between City of San Diego and Pacific Telephone & Telegraph Company regarding operational and technical problems and costs associated with "911" service.
17 Dec 1970	Proceeding of emergency telephone communications workshop in Omaha, Nebraska, NSRC.
24 Feb 1971	Memorandum to all City Managers in San Diego region to form CAU and CM of San Diego providing background and status of "911".
10 Mar 1971	Correspondence from Pacific Telephone & Telegraph Company answering questions raised by San Diego County.

CRIME REPORTS (CONT.)

CRIME REPORTS (CONT.)	SPACE FOR ADDITIONAL VICTIMS	SPACE FOR ADDITIONAL WITNESS	SPACE FOR ADDITIONAL SUSPECTS	ROUTED BY	REVIEWED BY/ DATE	DETAILS SECTION	R.P. BUS. ADDRESS BUS. PHONE	PERSON WHO DISCOVERED CRIME-NAME ADD. RES. PHONE	CRIMES AGAINST PROPERTY - P.O.E.	LOCATION OF PROP. WHEN STOLEN	CRIMES AGAINST PERSON - WEAPON USED	LOCATION OF VIC. AT TIME OF OFFENSE	CASE # OF OTHER RPTS. CONNECTED WITH THIS REPORT	CASE NUMBER	CLASSIFICATION	PERSON WHO SECURED THE PREMISES	TYPE OF PROP. TAKEN	WHERE WERE OCCUPANTS AT TIME OF CRIME
CARLSBAD	X	X	X	X	X	X	X							X	X			
CHULA VISTA	X	X	X	X		X	X							X	X			
CORONADO		X	X			X		X	X					X	X	X		X
EL CAJON			X			X	X	X	X	X		X	X	X	X			
ESCONDIDO	X	X	X	X	X	X	X							X	X			
IMPERIAL BEACH						X	X	X	X	X				X				X
LA MESA		X	X				X	X	X	X	X			X				X
NATIONAL CITY		X				X		X	X	X				X	X	X		X
OCEANSIDE	X	X	X	X	X	X	X							X	X			
SAN DIEGO POLICE		X				X	X	X	X	X				X	X	X		X
SAN DIEGO SHERIFF	X	X	X	X	X	X	X							X	X			X
CALIFORNIA HWY. PATROL																		

NA

ACCIDENT REPORTS (Cont.)	VICTIMS OR INJURED								ACCIDENT CHARACTERISTICS											
	Name	Address	Taken to/ By	Age/Sex	Extent of Injury	Victim was ped. driver, etc.	Ejected by Impact?	Traffic Control	Control Condition	Weather	Lighting	Road Character curves, straight,	Road Surface	Rd. Condition Dry, Wet, etc.	Posted Speed Limit	Drivers Violation	Vision Obscurements	Drivers Physical Condition	Drivers Sobriety	Speed before Accident
CORONADO	X	X	X	X	X	X				X	X			X	X					
CHULA VISTA								X		X	X				X				X	X
CORONADO	X	X	X	X	X			X		X	X	X	X	X	X		X			X
EL CAJON	X	X	X	X		X	X													
ESCONDIDO								X		X	X				X				X	X
IMPERIAL BEACH								X		X	X				X				X	X
LA MESA	X	X	X	X	X			X		X	X	X	X	X	X		X			
NATIONAL CITY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
OCEANSIDE								X		X	X				X				X	X
SAN DIEGO POLICE								X		X	X				X				X	X
SAN DIEGO SHERIFF								X		X	X				X				X	X
CALIFORNIA HIGHWAY PATROL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

I-H

TRAFFIC CITATIONS	DATE OF CITATION	TIME OF CITATION	DAY OF WEEK OF CITATION	NAME	RES. ADDRESS	BUS. ADDRESS	DRIVERS LIC. NO.	D. L STATE	D. L CLASS	D.O.B.	SEX	HAIR/EYES	HT/WT	OTHER DES.	VEHICLE LIC. NO/ STATE	PASSENGERS M F	VEHICLE YR/MAKE	VEHICLE MODEL/BODY STYLE	VEHICLE COLOR	REG. OWNER
CARLSBAD	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X
CHULA VISTA	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X
CORONADO	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
EL CAJON	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X
ESCONDIDO	X	X	X	X	X	X	X	X		X	X	X	X		X		X	X	X	X
IMPERIAL BEACH	X	X	X	X	X	X	X	X		X	X	X	X		X		X	X	X	X
LA MESA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NATIONAL CITY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
OCEANSIDE	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X
SAN DIEGO POLICE	X	X		X	X	X	X	X		X	X	X	X		X		X	X	X	X
SAN DIEGO SHERIFF	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X
CALIFORNIA HWY. PATROL	X	X	X	X	X	X	X	X		X	X	X	X		X		X	X	X	X

TRAFFIC CITATION (CONT.)	REG. OWNER'S ADDRESS	VIOLATION(S)	CODE/SECTION	DESCRIPTION	APPROX. SPEED	P/F MAX. SPEED	VEH. SPD. LIMIT	ACCIDENT YES NO	LOCATION OF VIOLATION	DIRECTION OF TRAVEL	OFFICER SIGNATURE	DATE/TIME TO APPEAR	SIGNATURE OF ARRESTER	AREA	BEAT	SAFE SPEED	WEATHER CONDITIONS	ROAD CONDITIONS	TRAFFIC CONDITIONS
CARLSBAD	X	X	X	X	X	X	X	X	X	X	X	X	X						
CHULA VISTA	X	X							X	X	X	X	X						
CORONADO	X	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X
EL CAJON	X	X	X	X	X	X	X		X	X	X	X	X						
ESCONDIDO	X	X	X	X					X	X	X	X	X	X	X				
IMPERIAL BEACH	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X
LA MESA	X	X	X	X	X	X	X	X	X	X	X	X							
NATIONAL CITY	X	X		X	X	X	X		X	X	X	X	X				X	X	X
OCEANSIDE	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X
SAN DIEGO POLICE	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	
SAN DIEGO SHERIFF	X	X	X	X	X	X	X		X		X	X	X				X	X	X
CALIFORNIA HWY. PATROL	X	X		X	X	X	X	X	X		X	X	X	X	X	X			

FIELD INTERROGA-TION CARDS (CONT.)

	SUSPECT'S BUS. ADDRESS	NAME OF PERSONS WITH SUSPECT	REASON FOR INTERROGATION	DISPOSITION	OFFICER'S NAME/BADGE #	ATTITUDE	OCCUPATION	SOCIAL SECURITY #	BEAT											
CARLSBAD	X	X	X	X	X															
CHULA VISTA	X	X	X	X	X															
CORONADO	X	X	X	X	X															
EL CAJON	X	X	X	X	X															
ESCONDIDO	X	X	X	X	X			X												
IMPERIAL BEACH	X	X	X	X	X	X														
LA MESA	X	X	X	X	X															
NATIONAL CITY	X	X	X	X			X	X												
OCEANSIDE	X	X	X	X	X		X													
SAN DIEGO POLICE		X	X	X	X				X											
SAN DIEGO SHERIFF	X	X	X	X	X															
CALIFORNIA HWY. PATROL																				

I-F

ARREST/ BOOKING REPORT	DESCRIPTION																			
	MISD. FELONY INVEST.	DATE/TIME OF ARREST	CHARGE	PERSON ARRESTED NAME	ALIAS/AKA	ADDRESS	PHONE	S/S #	SER. NO.	SEX	RACE	HT/WT	AGE	BUILD	COMPLEX.	OCCUPATION	MARKS/SCARS TATTOOS	BIRTHPLACE	# OF DEPENDENTS	BOOKING #
CARLSBAD		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
CHULA VISTA		X	X	X	X			X		X	X	X	X	X	X	X		X		
CORONADO		X	X	X		X		X	X	X	X	X	X	X	X	X	X	X		
EL CAJON		X	X	X		X				X	X	X	X			X				
ESCONDIDO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
IMPERIAL BEACH			X	X		X				X	X	X	X			X				
LA MESA		X	X	X		X		X	X	X	X	X		X	X	X		X		
NATIONAL CITY		X	X	X	X	X		X		X	X		X			X				
OCEANSIDE		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SAN DIEGO POLICE		X	X	X	X	X	X		X	X	X	X	X			X				X
SAN DIEGO SHERIFF	X	X	X	X				X		X	X									
CALIFORNIA HWY. PATROL		X	X	X		X		X		X	X	X	X		X	X		X		

ARREST/ BOOKING REPORT	D.O.B.	HOW LONG AT PRESENT ADDRESS	HOW LONG IN COUNTRY/STATE	NAME OF NEAREST RELATIVE	ADDRESS CITY/COUNTY/STATE	D.L. # AND STATE	AUTO MAKE/TYPE	WHERE AUTO STORED	VEH. LIC. #	STATE/YEAR	EMPLOYER	EMPLOYER ADDRESS CITY/STATE	LOCATION OF ARREST	ARRESTING OFFICER (S)	SEARCH BY	LOCAL CASE #	WITNESS NAME	WITNESS ADDRESS/PHONE	BOOKING OFFICER	PRIOR RECORD
CARLSBAD	X					X		X					X	X		X				
CHULA VISTA	X			X	X	X	X		X		X	X	X	X						
CORONADO	X			X	X	X					X	X	X	X		X				
EL CAJON	X													X		X				
ESCONDIDO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IMPERIAL BEACH							X	X	X	X			X	X		X				
LA MESA	X					X	X	X	X	X	X	X	X	X						
NATIONAL CITY						X		X				X	X	X						
OCEANSIDE	X					X	X	X	X		X	X	X	X						
SAN DIEGO POLICE	X					X	X	X			X		X	X						
SAN DIEGO SHERIFF	X															X				
CALIFORNIA PATROL	X					X	X	X	X	X	X	X	X			X				

Appendix K

CRIME REPORT FILE SIZE AND USAGE

Agency	Present Size (# of Doc)	Yearly Entries	Retention Schedule	Aver. Daily Access	Filing Sequence	Form # (if used)
Carlsbad	11,938	10,841	Indef.	125	Yr/Seq#	Caljus CR #1
Chula Vista	32,125	6,565	Indef.	30	Numerical	PD 611
Coronado	15,000	2,000	7 yrs.	5	Numerical	N.A.
El Cajon	40,000	4,500	Indef.	40	Numerical	422-13
Escondido	16,300	2,718	Indef.	25	Chron.	Caljus CR #1
Imperial Beach	13,500	900	Indef.	4	Year/#	N.A.
La Mesa	27,000	4,500	Indef.	230	Chron.	LMPD 86
National City	18,000	5,000	5 yrs.	15	Chron.	PD 7
Oceanside	41,000	10,000	Indef.	30	Crim/Chron	OPD Z1
San Diego P.D.	635,743	57,238	Felony-Indef. Misd 2 yr	70	Letter Code Seq. Number	PD 330
San Diego S/O	148,628	16,834	Indef.	234	Numerical	#13
San Diego CHP	493	263	Current Yr & 3 Yr	3	Alpha	CHP 202
Oceanside CHP	Unknown	Unknown	Current Yr & 3 Yr	1	Alpha	CHP 202
San Diego H.P.	1,532	237	Indef.	1 Mo.	Date	UPD 664
Oceanside H.P.	500	223	Indef.	20	Numerical	N.A.
Totals	1,001,751+	121,819+		832		

Appendix L

ACCIDENT REPORTS FILE SIZE AND USAGE

Agency	Present Size (# of Doc)	Yearly Entries	Retention Schedule	Aver. Daily Access	Filing Sequence	Form # (if used)
Carlsbad	3,377	334	Indef.	25	Yr/Number	555
Chula Vista	3,862	1,700	Current & 2 Yrs.	15	Numerical	PD 505
Coronado	3,000	400	7 Yrs.	8	Numerical	N.A.
El Cajon	17,000	1,300	Indef.	5	Numerical	422-9
Escondido	7,700	1,284	Indef.	10	Chron.	PD 154
Imperial Beach	2,250	400	Indef.	2	Letter Code Seq. Number	N.A.
La Mesa	14,000	800	Indef.	100	Chron.	LMPD 5
National City	2,500	1,000	3 Yrs.	5	Chron.	CHP 110
Oceanside	11,000	1,700	10 Yrs.	5	Chron.	OPD 22
San Diego P.D.	27,698	19,000	18 Mos.	75	Letter Code/No.	PD 154
San Diego S/O	74,314	8,417	Indef.	117	Numerical	#13
San Diego CHP	20,342	8,398	Current Yr & 3 Yrs.	150	Code #/Mo/ Yr/Seq. #	CHP 110
Oceanside CHP	10,864	2,716	Current Yr & 3 Yrs.	Unk.	Numerical Off. Name	CHP 110
San Diego H.P.	625	86	Indef.	1 Mo	Date	UPD 620
Oceanside H.P.	150	17	Indef.	1 Wk	Chron.	N.A.
Totals	198,682	47,592		518+		

Appendix M

TRAFFIC CITATIONS FILE SIZE AND USAGE

Agency	Present Size (# of Doc)	Yearly Entries	Retention Schedule	Aver. Daily Access	Filing Sequence	Form # (if used)
Carlsbad	21,100	1,809	Indef.	8	Yr/No.	N.A.
Chula Vista	9,120	9,000	Current Yr. & 1 Yr.	1	Date	N.A.
Coronado	75,000	10,000	7 Yrs.	2	Numerical	N.A.
El Cajon	30,000	10,000	3 Yrs.	10	Alpha	N.A.
Escondido	-----N.A.-----					
Imperial Beach	3,600	3,000	Current Yr & 1 Yr.	1	Numerical	N.A.
La Mesa	43,500	10,000	Indef.	30	Numerical	N.A.
National City	60,000	10,000	5 Yrs.	5	Alpha	N.A.
Oceanside	30,000	9,000	3 Yrs.	4	Numerical	N.A.
San Diego P.D.	Moving- 368,800	Moving- 184,662	Moving- 1 Yr.	125	Date/Alpha	PD 159
	Parking- 113,600	Parking- 113,600	Parking- 2 Yrs.			
San Diego S/O	28,488	6,336	4 Yrs.	1	Numerical	N.A.
San Diego CHP	221,677	77,991	6 Mos.	100	Officer Seq. #	CHP 215
Oceanside CHP	221,677	77,991	6 Mos.	100	Officer/ Seq. #	CHP 215
San Diego H.P.	11,462	320	Indef.	1	Date	UPD 604
Oceanside H.P.	1,300	31 cits 71 warn.	Indef.	1	Chron.	N.A.
Totals	555,997	487,369		389		

Appendix N

FIELD INTERROGATION CARDS FILE SIZE AND USAGE

Agency	Present Size (# of Doc)	Yearly Entries	Retention Schedule	Aver. Daily Access	Filing Sequence	Form # (if used)
Carlsbad	7,480	457	Indef.	35	Alpha	None
Chula Vista	7,000	2,037	Indef.	10	Alpha	PD 531
Coronado	2,000	725	3 Yrs.	3	Alpha	N.A.
El Cajon	6,000	6,000	1 Yr.	70	Alpha	N.A.
Escondido	8,900	3,523	Indef.	10	Alpha	R85
Imperial Beach	3,000	950	3 Yrs.	2	Alpha	N.A.
La Mesa	3,130	2,520	2 Yrs.	30	Chron/ Alpha	LMPD 16
National City	15,000	3,000	5 Yrs.	5	Alpha	N.A.
Oceanside	20,000	3,000	5 Yrs.	3	Alpha	N.A.
San Diego P.D.	12,000	18,418	6 Mos.	4 Mo	Alpha	PD 238
San Diego S/O	44,520	17,470	3 Yrs.	2	Alpha	85
San Diego CHP	-----N.A.-----					
Oceanside CHP	-----N.A.-----					
San Diego H.P.	1,500	279	Indef.	1 Mo	Alpha	N.A.
Oceanside H.P.	750	260	Indef.	1	Alpha	N.A.
Totals	131,280	58,639		172		

Appendix O

ARREST/BOOKING REPORTS FILE SIZE AND USAGE

Agency	Present Size (# of Doc)	Yearly Entries	Retention Schedule	Aver. Daily Access	Filing Sequence	Form # (if used)
Carlsbad	3,000	279	Indef.	35	Numerical	N.A.
Chula Vista	16,730	1,258	Indef.	50	Numerical	PD 553
Coronado	10,000	1,250	Indef.	1	Numerical	N.A.
El Cajon	40,000	3,000	Indef.	40	Numerical	422-11a 422-14
Escondido	19,588	1,680	Indef.	5	Numerical	PD 104
Imperial Beach	9,000	600	Indef.	4	Numerical	N.A.
La Mesa	12,459	850	Indef.	36	Numerical	LMPD 21
National City	34,000	1,200	Indef.	24	Chron.	PD 14
Oceanside	10,000	3,500	Indef.	10	Crime/ Chron.	N.A.
San Diego P.D.	424,124	33,756	Indef.	100	Numerical	PD 100
San Diego S/O	371,502	72,210	Indef.	800	Numerical	C11 15
San Diego CHP	-----	-----	N.A.	-----	-----	-----
Oceanside CHP	-----	-----	N.A.	-----	-----	-----
San Diego H.P.	1,872	573	Indef.	1 Mo	Chron.	UPD 652
Oceanside H.P.	-----	-----	N.A.	-----	-----	-----
Totals	952,275	120,156		1,105		

Appendix P

ALPHA FILES SIZE AND USAGE

Agency	Present Size (# of Doc)	Yearly Entries	Retention Schedule	Aver. Daily Access	Filing Sequence	Form # (if used)
Carlsbad	30,600	Unknown	Indef.	200	Alpha	N.A.
Chula Vista	336,000	Unknown	Indef.	400	Alpha	N.A.
Coronado	60,000	4,130	Indef.	50	Alpha	N.A.
El Cajon	150,000	24,000	Indef.	200	Alpha	N.A.
Escondido	80,000	7,000	Indef.	200	Alpha	N.A.
Imperial Beach	40,000	2,000	Indef.	15	Alpha	N.A.
La Mesa	72,424	Unknown	Indef.	350	Alpha	N.A.
National City	49,000	3,250	Indef.	150	Alpha	N.A.
Oceanside	156,000	22,000	Indef.	100	Alpha	N.A.
San Diego P.D.	916,800	169,230	Indef.	338	Alpha	N.A.
San Diego S/O	500,000	61,500	Indef.	400	Alpha	N.A.
San Diego CHP	-----	-----	N.A.	-----	-----	-----
Oceanside CHP	20,400	Unknown	Indef.	Unk.	Alpha	N.A.
San Diego H.P.	-----	-----	N.A.	-----	-----	-----
Oceanside H.P.	1,725	Unknown	Indef.	80	Alpha	N.A.
Totals	2,412,949	293,110+		2,483+		



GERALD B. WILSON
Director

Department of General Services

County Operations Center, 5550 Overland Avenue, San Diego, California 92121 . . . Telephone 276-3300

May 4, 1971

TO: Communications Subcommittee of
Emergency Medical Care Committee
c/o Jim Gleason, Emergency Medical Care Coordinator

FROM: Gerald B. Wilson, Director
Department of General Services

SUBJECT: EMERGENCY MEDICAL CARE COMMUNICATIONS SYSTEM

On April 2, 1971, the San Diego County Emergency Medical Care Subcommittee on Communications asked that the Communications Division of the Department of General Services investigate the technical feasibility of establishing radio communications between ambulances and hospital emergency rooms. This memorandum describes the current status of the Emergency Medical Care Communications System, discusses ambulance to hospital communications, and recommends the steps needed to complete the system.

PRESENT EMERGENCY MEDICAL CARE COMMUNICATIONS SYSTEM

The present system is composed of two separate radio networks, namely, the hospital administrative net, and the hospital emergency net. Both networks utilize a portion of the County microwave system, and two mountaintop repeater sites to provide reliability of operation and extended range of radio coverage.

1. Hospital Administrative Network

The hospital administrative net is fully operational, with 14 hospitals, the Doctors' Service Bureau, and the San Diego Blood Bank participating. Attachment #1 is a current list of participating agencies.

This network was designed to provide point to point (hospital to hospital) communications as a backup to the commercial telephone system during peak loads or in the event the commercial telephone service is interrupted.

2. Hospital Emergency Network

The hospital emergency net has not yet become fully operational.

This network was designed to provide ambulance to emergency room radio communications by patching through:

Mr. Gleason

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May 4, 1971

Station "A" Control. Only the Station "A" to hospital emergency room portion of the network is currently operational.

DISCUSSION OF AMBULANCE TO HOSPITAL COMMUNICATIONS

Ambulance to hospital emergency room communications are desirable for two reasons. First, the ambulance can notify the hospital that an emergency case is enroute, can provide information on the nature of the case, and can determine if the hospital is prepared to handle this particular emergency. Second, the hospital can provide professional assistance to the ambulance attendant in caring for the patient while enroute.

There are two basic methods of obtaining ambulance to hospital communications. These are:

Communications relay from an intermediate point such as an ambulance dispatch office, or San Diego County's Station "A" radio room.

Direct communications between ambulance and hospital.

For communications verbally relayed by a third party, the trade-offs are as follows:

Advantages

1. The ambulances can use their present radios (if any) to contact their dispatch offices for relay of information. Only one new radio per ambulance dispatch office would be required.

Disadvantages

1. The present ambulance radios have very short range, and in many cases could not talk to their own dispatch office since they have no mountaintop repeater stations to extend their range.
2. The small ambulance companies do not have a dispatcher on duty when making an emergency run, and so would have no radio contact.
3. The requirement for a third party verbal relay creates delays, and if the third party has no medical training, it could generate errors or misunderstandings in the relay of information.
4. Future growth of ambulance services to include telemetry of medical data measured enroute would not be possible.

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For direct communications between ambulance and hospital, the trade-offs are as follows:

Advantages

1. County-wide coverage through benefit of mountain-top automatic repeater stations.
2. Direct contact which minimizes delays or possible errors due to retransmission or interpretation of instructions.
3. Independent of any other radio system.
4. Makes possible the future use of telemetry of medical data measured enroute.
5. Most fire agencies that provide ambulance service in the County are equipped with mobile radios that are compatible with the hospital radio system, and can easily be integrated into the network.


Disadvantages

1. Most ambulances do not have high-band radio systems that could be converted to the hospital frequency.
2. Each ambulance would have to acquire radios that are compatible with the hospital radio system at a cost of approximately \$850 per radio plus installation costs.

When the communications subcommittee has determined that the various agencies, such as cities, hospitals, and ambulance companies, would benefit from having ambulance to hospital communications, it is

RECOMMENDED: That

The Hospital Emergency Network be made operational by requiring that all ambulances that desire to participate be required to procure mobile radios that are compatible with the existing Emergency Medical Care Communication System. The Communications Division of the Department of General Services will then furnish specifications for the mobile radios, and will make the necessary modifications in the Station "A" Radio Room to enable "patching of signals for direct communications between ambulances and hospital emergency rooms.


G. B. WILSON, Director
Department of General Services

GBW:RRH:1b
Attachment

ATTACHMENT #1

PARTICIPATING AGENCIES ON HOSPITAL NET

Bay General Hospital*
Chula Vista Community Hospital
Coronado Hospital
Donald Sharp Community Hospital
Doctors Hospital
Doctors Service Bureau**
Edgemoor Geriatric Hospital**
El Cajon Valley Hospital
Grossmont Hospital
Hillside Hospital
Kaiser Foundation Hospital
Mercy Hospital
San Diego Blood Bank
Scripps Memorial Hospital
Tri-City Hospital
University-County Hospital

* Expected to join net in May 1971.

** Administrative net only (has no emergency network radio).

END