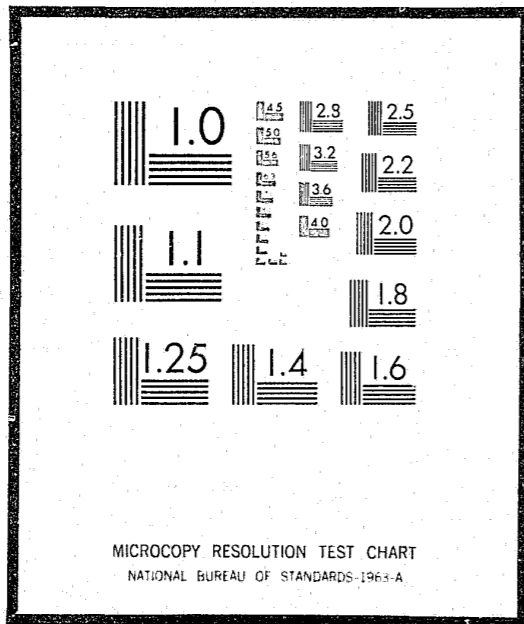


NCJRS

This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U.S. Department of Justice.

U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION
NATIONAL CRIMINAL JUSTICE REFERENCE SERVICE
WASHINGTON, D.C. 20531

12/29/76

Date filmed

35686

U. S. DEPARTMENT OF JUSTICE LAW ENFORCEMENT ASSISTANCE ADMINISTRATION		DISCRETIONARY GRANT PROGRESS REPORT	
GRANTEE California Council on Criminal Justice	LEAA GRANT NO. 72-DF-09-0001	DATE OF REPORT Sept. 1974	REPORT NO. 5
IMPLEMENTING SUBGRANTEE County/City of San Diego -	TYPE OF REPORT <input type="checkbox"/> REGULAR QUARTERLY <input type="checkbox"/> SPECIAL REQUEST <input checked="" type="checkbox"/> FINAL REPORT		
SHORT TITLE OF PROJECT Regional Law Enforcement Records & Communications System	GRANT AMOUNT \$385,000		
REPORT IS SUBMITTED FOR THE PERIOD November 1972	THROUGH June 1974		
SIGNATURE OF PROJECT DIRECTOR/Coordinator <i>Robert R. Hively</i>	TYPED NAME & TITLE OF PROJECT DIRECTOR/Coordinator Robert R. Hively Director of Communications		
COMMENCE REPORT HERE (Add continuation pages as required.) 1.0. <u>ABSTRACT</u> Operations RA _____ During 1971, a Steering Committee representing the County, cities, and DE _____ public safety agencies in Region U coordinated the efforts of a study PI _____ contractor in the development of a five year program for a regional law FI _____ enforcement records and communications system for the Region. The major OF _____ funding for the study contractor was provided by grant #CCCJ0108. An AZ _____ application was made in late 1971 to LEAA for a large city/large county CA _____ discretionary grant to provide partial funding for a project to implement HI _____ the first phase of the five year program. Grant #72-DF-09-0001 was NV _____ awarded and work on the project began in November 1972. The Regional AS _____ Steering Committee was charged by the project co-directors to coordinate GU _____ the grant project. The project consisted of a design study by a con- GM _____ sultant firm, and the upgrading of law enforcement communications in the PA _____ Region. SEC _____ The project design study was awarded to Arthur Young and Co. to conduct DATE: _____ three system studies consisting of (1) coordinated dispatching and com- munications system design, (2) regional responses to unusual occurrences, and (3) a regional criminal justice information system. The upgrading of law enforcement communications consisted of the acquisition and instal- lation of radio equipment for city police departments and the Sheriff's Department and the acquisition and installation of a regional public safety hot line communications system.			
RECEIVED BY GRANTEE STATE PLANNING AGENCY (Official)		DATE	
<i>[Signature]</i>		3/17/75	
LEAA FORM 4087/1 (REV. 1-73)		REPLACES LEAA-OLEP-109, WHICH IS OBSOLETE.	
		DOJ-1973-05	

There was a six month slippage in the completion date, however the project was successful. Nine city police departments and the Sheriff's Department received new radio equipment, and the Regional Public Safety Hot Line Communications System provides voice communication between public and private safety agencies desiring to use the system. The system studies resulted in (1) design of a regional coordinated communications system, (including a plan for implementing a "9-1-1" emergency call handling system), in support of police, fire and ambulance dispatching, (2) recommended improvements in responses to unusual occurrences, and (3) a conceptual design of an automated regional criminal justice information system.

2.0 PURPOSE

The purpose of this technical report is to present the general information required to assess the Coordinated Records and Communications system project partially funded by LEAA grant number 72-DF-09-0001, CCJ # D-3171.

This technical report describes the project design study, the upgrading of law enforcement communications, the problems encountered and publications issued during the grant period.

3.0 ACCOMPLISHMENTS

NOTE

AUG 3 1976

3.1 Project Design Study

The project design study was planned to be accomplished by a consultant. The Regional Steering Committee for the Coordinated Records and Communications System solicited proposals from 40 companies. Eleven companies responded and Arthur Young and Co. was selected and awarded a contract on March 28, 1973 to conduct the three system studies described below.

3.1.1 Coordinated Dispatching and Communications System Design Study

The study was started in April 1973 to develop a concept and a detailed implementation plan for coordinated dispatching of public safety services including police, fire and ambulances. Included as part of the plan was a dial 9-1-1 emergency telephone system design.

The initial step in the study was to collect quantitative and qualitative data regarding telephone and radio communications, operational characteristics of all Region U public safety communications operations and their use and sharing of records.

The data was collected from several public safety agencies in Region U including:

- 10 police departments
- 13 city fire departments
- 22 county fire districts
- The County Sheriff
- The State Regional Office of Emergency Services
- The County Office of Emergency Medical Services

Information was gathered from other agencies, such as the California Highway Patrol, California and Federal Departments of Forestry, Harbor District, Drug Abuse Center and Suicide Prevention Center.

The collected data was reviewed and verified by the participating agencies. In addition to the data collection, the activities of several communications centers and field unit operations were observed and monitored.

Analysis of the data collected and observation of public safety operations led to the following conclusions:

1. A central regional point should be established for all emergency calls and 9-1-1 should be established for facilitating emergency calls.

2. Local control and dispatch over police forces was necessary for effective and responsive field operations.
3. The small volume of fire calls going to each of the large number of individual fire departments suggested a consolidation of fire communications is desirable.
4. Direct inter-agency communications between adjacent public safety agencies is vital to mutual aid.
5. Establishment of county-wide fire, police and emergency medical services frequencies is vital to emergency communications and mutual aid.
6. There is a need to share records among cities and county agencies. While each agency should maintain case information locally, a common regional file cross-reference system of all files should be maintained on a regional computer system.
7. There is a limited potential for sharing radio channels. This could release frequencies for potential use for regional inquiry, non-emergency tactical operations, or to relieve radio traffic overload in other agencies.

The results of the data analysis were used to develop a summary description of 9 communications alternatives. The 9 alternatives represented combinations of local, multi-jurisdictional or central 9-1-1 call receipt and local, multi-jurisdictional or central described as follows:

- Local 9-1-1. Each city and the County would have separate local centers for receiving 9-1-1 calls.
- Multi-jurisdictional 9-1-1. Groups of adjacent cities and County areas would form 3 or 4 regional 9-1-1 centers to serve different portions of the Region.

- Central 9-1-1. One regional 9-1-1 center would be established for handling all 9-1-1 calls in the Region.
- Local Dispatch. Each city and County public safety agency would dispatch and control its resources and units.
- Multi-jurisdictional Dispatch. Agencies from groups of adjacent cities and unincorporated areas would combine into 3 or 4 centers to dispatch and control all units in each regional area.
- Central Dispatch. One regional dispatch center would dispatch and control all field units.

The advantages, disadvantages, and problems of each 9-1-1 call receipt and dispatch center concept were presented to the Regional Steering Committee. The concept selected was a central 9-1-1 call receiving center and local jurisdiction dispatch. (Note: Later information from the State Communications Department resulting from the Alameda 9-1-1 test revealed that the cost for selective routing was considerably lower than originally estimated. This information was not available during the project study, and therefore selective routing was not seriously considered as information then available showed selective routing to be very costly.) An implementation plan was developed for the selected concept that presented a schedule of tasks required to be accomplished in the next few years to conform with the State of California Government Code relative to 9-1-1.

3.1.2 Regional Criminal Justice Information System Study

This study was started in April 1973, to conceptualize an integrated, computerized system, which would service all the law and justice agencies in Region U. The specific agencies considered in the study included the Sheriff, District Attorney, Superior Court, Municipal Court, Marshal, Department of Probation, County Clerk, and the police departments of all cities within the Region.

The study had three primary objectives: These were (1) determine a framework for development of the various application modules, within an overall integrated system, (2) allocate development responsibilities using logical criteria so that individual agencies will know what tasks they should be undertaking and, (3) review systems developed elsewhere and comment on their potential for transferability to Region U to minimize development costs.

In performing the study, each agency was visited to gather data to determine existing systems and requirements. A gross conceptualization of a new system was made and the users reviewed the proposed system, made necessary changes, and prioritized their applications. An estimate was then made of development costs, reasonable staffing levels for development efforts were determined, and an implementation plan prepared, based upon user priorities, technical constraints and overall management considerations. The result was a recommended organizational approach to achieve the plan through the proper application of available resources. The proposed system included these six major components of a regional justice information system.

1. Law enforcement components:

This component includes automated support for the Sheriff, Marshal, and each of the police departments in the Region.

2. Attorney component:

This component serves the District Attorney and, to a lesser extent, individual city attorney functions and/or a public defender function.

3. Court component:

This component serves San Diego Municipal Court, North County Municipal Court, El Cajon Municipal Court, Superior Court, and the County Clerk justice functions.

4. Probation component:

The component serves only the probation function.

5. State/National and Other County data bases:

This component provides the ability to access justice data bases at the state and federal level and in neighboring counties.

6. Name Data and Personal History component:

This component is the initial component of an integrated regional system. It contains a combined list of all the individuals with whom the justice agencies in the region do business and indicates which types of records are contained in the other components about the individual. It also contains numeric identifiers associated with an individual and a physical description.

An implementation plan was prepared describing how the proposed system should be developed. The plan contained estimates of costs for various modules, the philosophy behind how priorities were determined, a brief description of each module, and a schedule showing when each module is to be developed.

3.1.3 Responses to Unusual Occurrences

This study was started in July 1973 to recommend improvements to the existing unusual occurrence response capabilities of local government agencies in Region U. The ultimate goal is to provide rapid, effective, coordinated response to foreseeable, extraordinary, emergency situations which may threaten the safety and well-being of the community. The study effort focused on organizational and procedural considerations. An analysis was performed to define unusual occurrences and identify existing planning and operational procedures and to analyze alternative concepts for providing organizational, procedural and information plan improvements. This analysis phase involved a comprehensive analysis

and evaluation of existing conditions to develop economically feasible concepts compatible with existing laws and agreements in Region U. In completing this analysis, alternatives were assessed principally in accordance with the following standards:

- Compatibility with existing plans and agreements
- Utilization and enhancement of existing systems and planning accomplishments
- Compatibility with existing county/city organizational structures
- Likelihood of implementation
- Cost

The analysis resulted in recommended improvements in unusual occurrence response planning. The recommendations were incorporated into a detailed implementation work plan, which describes: (1) the major tasks involved, (2) the order of the task accomplishment, (3) personnel responsible for task accomplishment, (4) estimated time required for task completion and, (5) the estimated manhours and hardware costs associated with each task.

3.2 Upgrading of Law Enforcement Communications

The upgrading of communications was accomplished by insuring that all cities in Region U would have the following:

1. Radios to enable the city police departments to communicate on the County Law Enforcement Mutual Aid Network.
2. Regional public safety hot line communications system to provide voice communications over the County's regional microwave system between participating police chiefs, fire chiefs, hospitals, ambulances and other government officials.

3.2.1 Police Radios

The Regional Steering Committee appointed a sub-committee to prepare regional specifications for the procurement of police radios. The sub-committee met with all police departments in the Region and then prepared a specification that was sufficiently broad to make it applicable for the procurement of police radios and accessories for all cities and for the County. Competitive bids for the joint regional radio specifications were taken by the City of San Diego. The successful bidders were RCA, General Electric Company, Motorola Communications & Electronics, Inc. and F. Morton Pitt Company.

In March, 1973 nine city police departments placed orders for radios with mutual aid capability. The participating cities, the equipment ordered by each, and the equipment vendors are shown below:

<u>City</u>	<u>Equipment Ordered</u>	<u>Vendor</u>
Escondido	10 microphones & speakers 1 siren 11 portable radios	General Electric Morton Pitt General Electric
Oceanside	13 mobile radios 2 base stations	Motorola RCA
Coronado	6 mobile radios	Motorola
National City	11 mobile radios	Motorola
Chula Vista	14 mobile radios	General Electric
Imperial Beach	8 mobile radios	General Electric
El Cajon	8 mobile radios 1 base station	Motorola RCA
Carlsbad	9 mobile radios 1 portable radio	General Electric General Electric
La Mesa	9 mobile radios	Motorola

The equipment was issued to the police departments of the participating cities. The cities installed the equipment, and the radios are in operation.

3.2.2 The Regional Steering Committee asked the County of San Diego to install the Regional Public Safety Hot Line Communications System. Specifications for such a system were prepared and issued to 18 companies. Four companies responded and Motorola Communications & Electronics was selected. An order for the system equipment was placed in April 1973 and installation of the system was completed in June 1974.

The participants and the equipment for each participant are shown below:

<u>Participant</u>	<u>Equipment</u>
City of Carlsbad	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
City of Chula Vista	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
City of Coronado	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
City of El Cajon	4 each MC-400 Multiplex 1 each 40 D PAX Switchboard 14 each type 80 telephones
City of Escondido	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
City of La Mesa	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
City of National City	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
City of Oceanside	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
Vista Regional Center	3 each MC-400 Multiplex 1 each 30 D PAX Switchboard 7 each type 80 telephones
Courthouse	4 each MC-400 Multiplex 1 each 40 D PAX Switchboard 14 each type 80 telephones
County Operations Center	40 each MC-400 Multiplex 1 each 30 D PAX Switchboard 1 each 100 T Tandem Switchboard 16 each type 80 telephones

4.0 PROBLEMS ENCOUNTERED

4.1 Contract Completion

The grant's initial completion date was December 31, 1972. Work on the project was authorized by the November 30, 1972 letter from the California Council on Criminal Justice. Problems were encountered in program priorities, in executing a contract with the consultant firms and in the delivery of radio equipment that delayed completion of the contract and required extension of the completion date from December 30, 1973 to June 30, 1974.

4.1.1 Program Priorities Problem

The California Council on Criminal Justice advised that they had received the grant award and would, upon receipt of an acceptable detailed budget, prepare a contract for sub-granting to the City and County of San Diego. It became apparant during preparation of this detailed budget, that certain revisions to the grant would be necessary due to changes in program priorities of the City of San Diego. The grant application was modified to reflect the required changes and the CCCJ letter of November 30, 1972 authorized the project to begin.

4.1.2 Contract Problem

A one year contract executed with the consultant firm on January 2, 1973 was submitted to CCCJ for review. CCCJ recommended that the fixed price contract be rewritten as a cost plus fixed fee contract and that CCCJ standard third party conditions be included. An amended contract including the suggestions was then executed with the consultant firm on March 28, 1973. Work on the contract started in April 1973, three months later than originally scheduled.

4.1.3 Radio Delivery Problem

The low bidder for the Regional Public Safety Hot Line Communications System equipment proposed some newly developed multiplex equipment with delivery in March 1974, about six months later than planned in the project schedule. It was considered to be in the best interest of the Region to accept the delivery schedule, as the multiplex equipment offered was superior in cost and performance to any equipment available from another manufacturer.

5.0 PROJECT PUBLICATIONS

Publications originated during the project period and included as a part of this technical report are:

1. Proposal for a Public Safety Hot Line Communications System for the San Diego Region.
2. Regional Bid Results for Communications Equipment
3. Coordinated Public Safety Communications and Dispatching.
4. Automated Regional Justice Information System (ARJIS) Volumes I & II.
5. Response to Unusual Occurrences.

END

7/10/1944