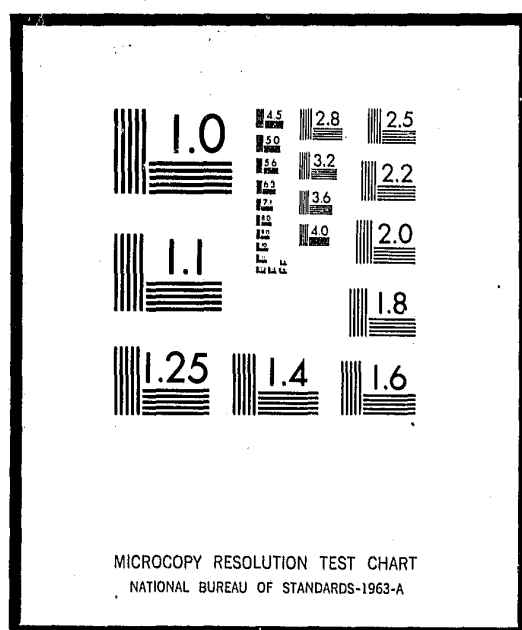


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ANNUAL REPORT

ANNOTATION:

AN AREA WIDE POLICE INFORMATION SYSTEM IN REAL-TIME.

ABSTRACT:

THE HAMILTON COUNTY POLICE ASSOCIATION STUDY COMMITTEE SURVEYED POLICE RECORDS OPERATIONS. THIS SURVEY LED TO THE FOLLOWING CONCLUSIONS - (1) AN ACCELERATING TREND TOWARD URBANIZATION AND A RAPIDLY INCREASING POPULATION HAS RESULTED IN ISOLATED COMMUNITIES GROWING TOGETHER. (2) IN RELATION TO THE CRIME PROBLEM, THE SOCIAL IMPORTANCE OF POLITICAL BOUNDARIES HAS BEEN ALMOST TOTALLY ELIMINATED. (3) FACTORS WHICH HAVE PRODUCED STEADILY INCREASING CRIME RATES HAVE BROUGHT ABOUT AN EVER INCREASING PUBLIC DEPENDENCE ON LAW ENFORCEMENT BODIES. THESE CONDITIONS HAVE LED TO THE CONCLUSION THAT- (1) METHODS OF COLLECTING AND PROCESSING POLICE INFORMATION MUST BE REVISED AND UPGRADED. (2) THE SCOPE, CONTENT, AND ACCURACY OF INDICES AND FILES MUST BE UPGRADED. (3) PRESENT PRACTICES RELATING TO ACCESS, RETRIEVAL, AND UPGRADE OF POLICE DATA ARE INADEQUATE. (4) THE SUFFICIENCY OF RECORDS SYSTEMS INFLUENCES THE VALIDITY OF POLICE ACTION. THE CONCLUSIONS CAN BE TRACED DIRECTLY TO - (1) PRESENT RECORDS SYSTEMS CANNOT MEET DEMANDS OF THE SERVICE. (2) PRESENT RECORDS PROCEDURES ARE TOO DEPENDENT ON MANUAL OPERATION. (3) FEW LAW ENFORCEMENT AGENCIES HAVE THE ASSISTANCE OF SKILLED RECORD MANAGEMENT PERSONNEL. (4) THERE MUST BE DEVELOPMENT AND ACCEPTANCE OF STANDARDS GOVERNING RECORDS MANAGEMENT. BASICALLY, THE GOAL OF PROJECT CLEAR IS TO PROVIDE AREA WIDE POLICE INFORMATION TO EACH PARTICIPATING DEPARTMENT ON A REAL-TIME BASIS. THIS MEANS A RESPONSIVENESS TO CHANGING POLICE NEEDS ON A 24-HOUR, 7-DAYS A WEEK BASIS. ACTIVITY AREAS COVERED WILL BE -

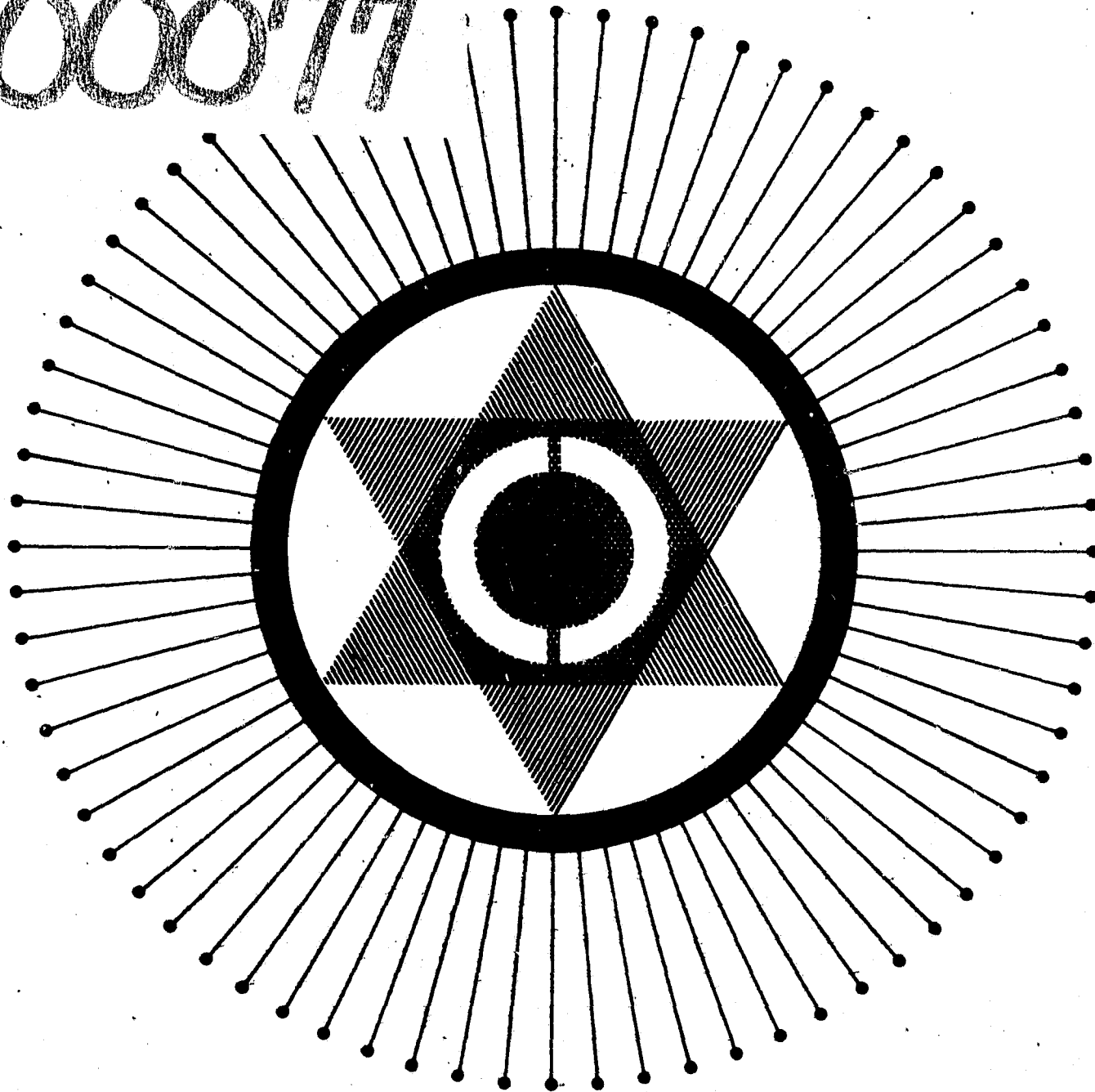
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ARREST WARRANTS, STOLEN VEHICLES, STOLEN PROPERTY, ARREST REPORTING,
OFFICER ACTIVITY ANALYSIS, CRIME REPORTING, STATISTICS.

CINCINNATI / HAMILTON COUNTY

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ANNUAL
REPORT
1967

REGIONAL COMPUTER CENTER

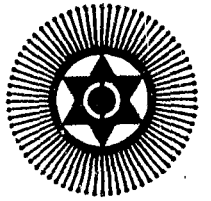
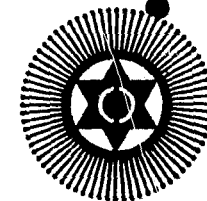


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INTRODUCTION

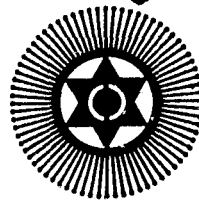
Late in 1965, City Council of the City of Cincinnati passed an ordinance establishing the Division of Data Processing within the Department of Finance for the purpose of developing an electronic data processing center serving all city agencies. This action was based upon the recommendation of Ernst & Ernst, consultants, retained originally by the City of Cincinnati for a Feasibility Study followed by assisting the Division in a Hardware Specification and Implementation Study.

On June 1, 1966, the Division was established with the selection of a Superintendent of Data Processing. Operation CINSY (Cincinnati Information System) evolved as a projected two-year implementation study requiring in excess of 35 man years of evaluation, development, design and conversion -- with the ultimate goal -- equipment installation by mid-1968.

The first six months of development involved contact with, and detailed studies of, almost all the 25 city agencies. The support and enthusiasm of these agencies tremendously enhanced the progress of

CINSY. At the same time, a staff of Analysts, Programmers, and Operators was screened, selected, and trained. CINSY has grown to a complement of 31 persons. The production of this period was a Hardware Specification Report of the City's data processing needs. With the release of this report, contractual agreements for equipment became a certainty, and the final systems design and implementation neared realization.

Even with the rapid development of capability by CINSY, the scope and responsibilities of the Division expanded even more dramatically. During the initial system studies of Operation CINSY, great emphasis was placed upon the obvious need of a major systems effort to satisfy immediate deficiencies for information, storage, retrieval, and dissemination to police officials. The response of the Division of Data Processing was to assign two men full-time to the Department of Safety's system study -- one man with 30 years police experience in the Division of Police itself.



The study also indicated that these needs were certainly not unique to the City of Cincinnati. Hamilton County officials met with the City administrators and resolved to combine forces and resources supporting a unified information center. Certain factors dictated the need for a regional information center serving all urban and rural law enforcement agencies in this geographic area regardless of size or political boundaries--Project CLEAR (County Law Enforcement Applied Regionally). The Hamilton County Police Association--representing the 38 police departments in this area--provided the essential media of implementing such a multi-jurisdictional center in Cincinnati.

The Office of Law Enforcement Assistance of the U. S. Department of Justice expressed interest in this unique co-operative commitment. In order to expedite the implementation, this agency was approached with a formal request to assist in the development of Project CLEAR.

Project CLEAR was formally initiated in January of 1967 as a combined City of Cincinnati/Hamilton County police information system. Federal support through Grant number 167 was received from the Office of Law Enforcement Assistance on March 1, 1967.

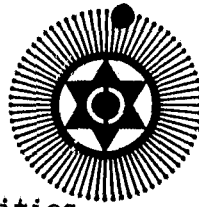
The City of Cincinnati contributed to Project CLEAR the staff, facilities and capabilities of the Division of Data Processing. The development of the Division of Data Processing represents an excess of

three years dedicated effort by Mr. James Flick, Finance Director of the City of Cincinnati, who, with full support of the entire City Management, directed and developed the feasibility study and plans required to justify the Division of Data Processing.

The securing, training and development of the staff supervised by the Superintendent of Data Processing, represents one of the outstanding accomplishments in the first year of operation of the Division of Data Processing. This staff has been handpicked from over 200 candidates and represents an outstanding foundation for the development of the CLEAR Regional Information Center.

The contribution of Hamilton County has been the dynamic motivating force of the Hamilton County Police Association complemented by the excellent direction of Dr. Frank Cleveland, Coroner, Mr. Melvin Rueger, County Prosecutor, and Sheriff Dan Tehan, who formally organized the County law enforcement agencies into a unified working body dedicated to the development of a police information system. It was their pioneering efforts which brought about initial contact with the Department of Justice relative to Federal support for Project CLEAR.

This group of men, along with Mr. Henry Sandman, Safety Director of the City of Cincinnati, Col. Jacob Schott, Police Chief of the City of Cincinnati, and Col. Donald Shanks, President of the Hamilton



County Police Association, form the bulwark of the Board of Advisors for Project CLEAR which represents another outstanding accomplishment in the first year of Project CLEAR.

The outstanding leadership, enthusiasm and dedication for Project CLEAR of the Board of Advisors is probably the underlying reason why a common time-shared Regional Computer Center for Project CLEAR, mutually supported by the City of Cincinnati and Hamilton County, is a reality.

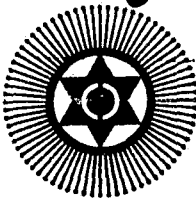
The first year's progress of Project CLEAR has been conducted according to a predeveloped schedule. For the most part, the Division of Data Processing has been able to meet the deadlines of this schedule. The goals of the first year of Project CLEAR were:

1. Select a competent vendor to provide equipment for the CLEAR Regional Information Center.
2. Secure OLEA support.
3. Select a consultant.
4. Select a site to locate the CLEAR Regional Information Center.
5. Establish the implementation priority for the application elements which had been determined as essential parts of the system.

6. Occupy new Regional Computer Center facilities.
7. Prepare a detailed systems design for critical priority areas. These systems designs are to be implemented as quickly as equipment can be installed.
8. Receive the Phase I components of the hardware required to support Project CLEAR. Initially, this hardware will be utilized on Project CINSY, Cincinnati Information System, applications in order to train our programming staff and better prepare them to implement a pilot communications system to be added in the next six months of our operation.

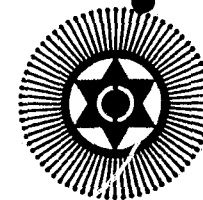
The basic goals of the next phase of the Regional Computer Center development are:

1. Design the details of the total Project CLEAR communications system and prepare to implement a pilot communications system during the first half of 1968.
2. Interface all of the Project CINSY and Project HAMCO operating applications into the operating requirements of the Regional Information Center.
3. Develop a Management Information System Evaluation and Review Panel to work with the Division of Data Processing in charting long-range goals of the City of Cincinnati, Hamilton County, and the Regional Information Center to insure that the activities of each agency are consistent with and complimentary to one another.



The stature and capabilities of the CLEAR /CINSY/HAMCO Regional Computer Center today represents the investment of three years of study, development, and planning. The progress of the Division of Data Processing in its $1\frac{1}{2}$ years of operation is evident -- the emergence of an effective and technically competent agency which has quickly gained the respect of the City and County Administrations by assuming the responsibility for, and becoming an integral part of, their operations.

The rapid growth of the scope, responsibility, capacity and capability of the CLEAR Regional Information Center and staff still continues at an almost staggering pace. It will be extremely hard to match the accomplishments and growth of the $1\frac{1}{2}$ years of the growth of the Regional Computer Center.



MANAGEMENT INFORMATION SYSTEM

A management information system simply, is an organized method of providing each manager with all the data and only those data which he needs for decision, when he needs them and in a form which aids his understanding and stimulates his action.

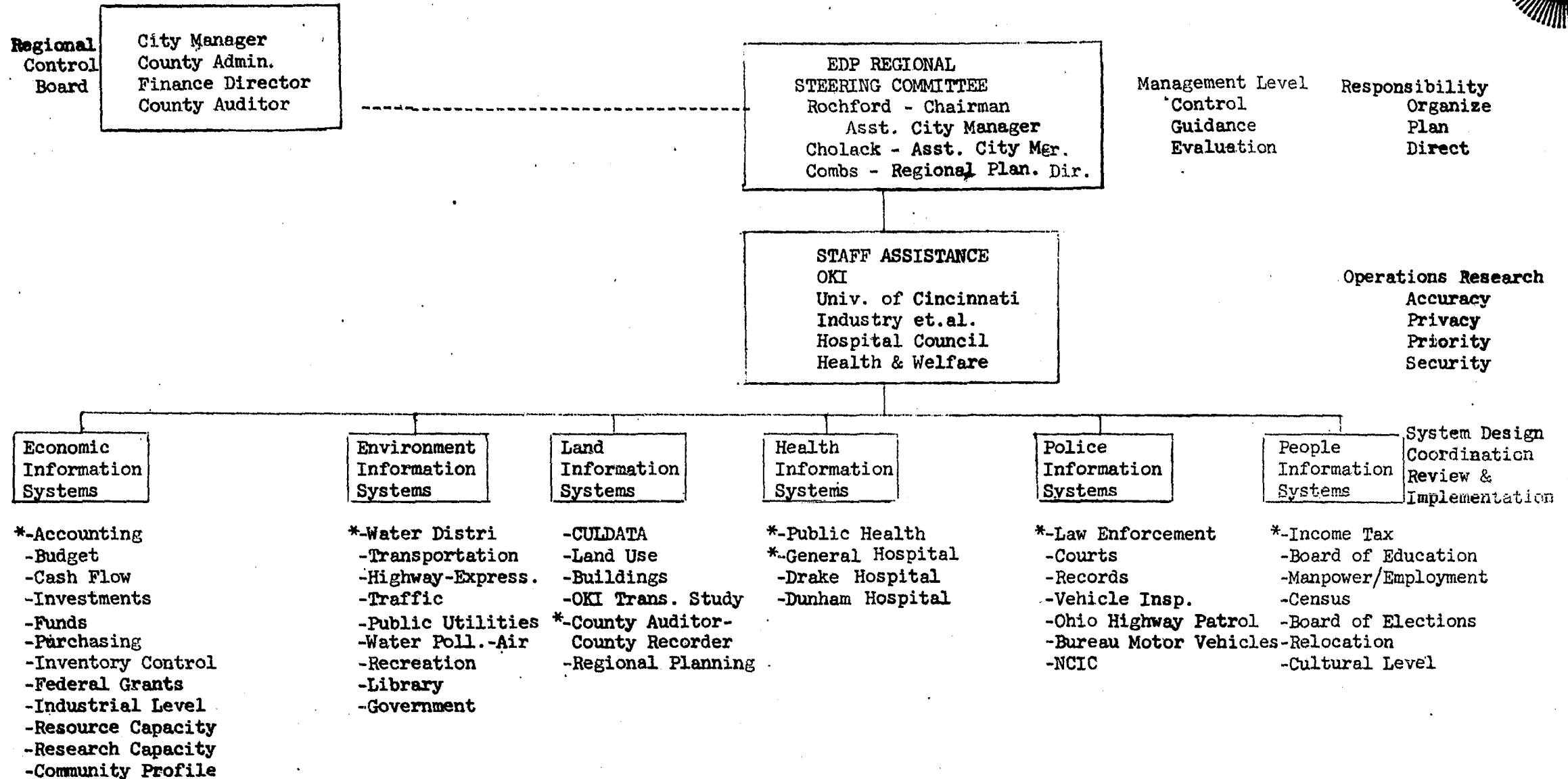
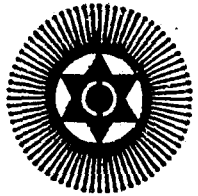
Such a system

1. Considers the full effect of a decision in advance by supplying complete, accurate, and timely data for use in the planning and decision making processes.
2. Eliminates from the planning and decision making processes the problems associated with the use of inconsistent and incomplete data by providing a means for preparing and presenting information in a uniform manner.
3. Uses common data and methods in the preparation of long-range and short-term plans.
4. Identifies, structures, and quantifies significant past relationships and forecasts future relationships through the use of advanced mathematical techniques in analyzing data.
5. Merges financial and production data to produce significant measures of performance to facilitate control of present costs and to facilitate planning decisions with minimum processing of data.
6. Recognizes the needs of all corporate units so that the requirements of each are met with a minimum of duplication while serving the corporation as a whole.
7. Reduces the time and volume of information required to make decisions by reporting to each level of management only necessary degrees of detail and usually only the exception from the standard or norm.
8. Utilizes personnel and data processing equipment effectively so that the optimum in speed and accuracy is achieved at the lowest cost.
9. Requires that the data be presented to those responsible for the decision making and planning processes in a form which minimizes the need for analysis and interpretation.
10. Provides flexibility and adaptability to change.

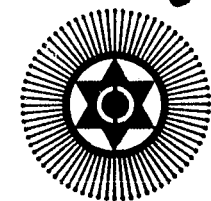
The concept of management information is one that would be equally valid if the organization were small or large or if the data were obtained and processed through the most simple manual means or through the most sophisticated computer.

MANAGEMENT INFORMATION SYSTEM

Organizational Concept



* Systems Studies Presently Underway



ECONOMIC INFORMATION SYSTEMS

Task Force Staff

1. Accounting:

The accounting systems are one of the most complex and interrelated of all our studies because they touch, in detail, every facet of every operation within local government. Until the sound and functional accounting system can be implemented which will provide complete information accurately and timely to all government agencies, we will not gain the full respect and support of government officials. This is the lifeblood of all government operations and instantaneous accounting information must be available to all management personnel, immediately upon request, without overloading with a tremendous amount of paper work.

It is imperative that "exception type" reporting be developed so that management is relieved of the burdens of reviewing information concerning reports and events following a typically normal pattern, so that they may concentrate and be immediately notified on problem areas once they begin to deviate from normal or predicted boundaries.

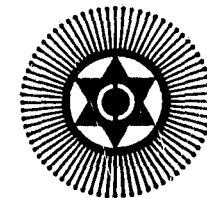
The establishment of these boundaries and controls is a tremendous systems design and will take the concentrated efforts of all members of management and supporting staff to insure that every detail is covered and allocated its correct priority and control.

The Task Force presently working in this systems area conservatively estimate this to be about a 2-year design project. Much of the system can be implemented as finalized--this is presently being done.

The Appropriation Accounting System includes the entry and processing of appropriations, encumbrances, cash receipts, cash disbursements, interdepartment transactions, and miscellaneous journal voucher transactions, and the writing of various financial control and analysis reports.

The objectives of the Appropriation Accounting System are to:

1. Provide an accurate and auditable accounting of the receipt and expenditure of City monies.
2. Satisfy all State and City legal requirements.
3. Furnish effective and timely accounting and budgetary information to the Department of Finance and City operating agencies.



2. Budgets/P.P.B.S.:

One of the most important areas in the total regional information system will be the implementation of a Planning, Programming, Budgeting System to be evaluated and administered through exception reporting techniques developed for the computer system. These reports should be a by-product of all operating reports and procedures of the total information systems. At the present time, this subsystem is in the planning stages. The work is being conducted jointly by Management Services offices and the Data Processing systems analysis team. Much groundwork is still to be accomplished in the accounting area before implementation of a PPBS system is possible.

3. Cash Flow:

Because of the magnitude of funds and working capital controlled by City and County agencies, the accurate and timely analysis of working capital available at any given time can be of significant economic benefit to City and County officials. Large sums of money invested for only days can mean many thousands of dollars to assist in the conduct of an effective government.

Operations research techniques can be effectively applied in this area to determine day-by-day cash requirements so that the maximum amount of money can be maintained in securities and investments without endangering the operating performance of local

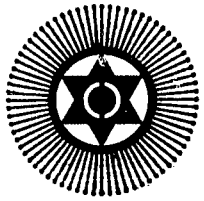
governments. The payoff in this area alone could support the entire computer system. Implementation of this systems study must wait on the details of the accounting study to be finalized, but can be implemented in parallel with these studies and need not wait on the total implementation of automated accounting operations.

4. Investments:

Accurate and timely cash flow, available to local management, and optimum utilization of cash available for investment will also produce many tangible dividends through effective guidance and control of management level finance experts. The computer should be able to instantaneously evaluate the most productive places to invest long- and short-term, large and small amounts of money to produce the maximum returns.

5. Funds:

Another by-product of the accounting system would be the accurate and timely information available on all funds used in support of local government. With cash flow and investment studies available, optimum utilization of all funds will be possible. Through these systems, management level personnel will be more able to effectively administer the conduct of their economic affairs. This will be a new dimension in their administrative responsibilities and



will probably involve as much, or more, training than actual data processing control.

6. Purchasing:

With the purchasing power of the local government agencies accurately and instantaneously available to all government management personnel, effective utilization and exercising of purchasing prerogatives can be instituted to take advantage of fluctuating labor conditions, rising prices, and material availability, which will permit substantial savings. Products and requirements, produced from history records of previous years and extended to accomodate growing City and County needs, can be analyzed against inventory records and optimum purchasing periods to effect, in local government, an extra dimension of investment in usable goods at the best time to purchase. The purchase order will also initiate all the base data required for inventory control and expenditure fund accounting systems.

7. Inventory Control:

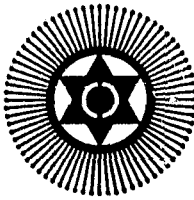
Another by-product of the accounting systems would be the central control of all stock items for all agencies standardized under a unique numbering system. This would then insure workable inventory levels while eliminating tremendous duplication of commodities and optimize the City's and counties purchasing and/or investment policies.

8. Federal Grants:

The data base may also be created to analyze and evaluate all federal funding available and compare against all projects controlled and conducted through the PPBS system. Management personnel will be notified whenever the implementation plans of the PPBS systems coincide with the objectives of federal support and indicate the detail of the federal grant. This will make available to government management another large pool of economic resources presently too wide and varied to be followed in any detail by any one agency.

9. Industrial Level:

As a by-product of our Land Information System, the staff of the Regional Data Center will be able to indicate and catalogue the industrial wealth and resources of the county. Through the application of operations research techniques, they will be able to indicate the type, degree, and potential of industrial capability within the area. As well as providing a useful economic indicator to management, it will also provide a wealth of knowledge for building and developing the community and selling the advantages of the community to other interested industrial firms.



10. Resource Capacity:

Utilizing the Regional Utilities as data bases, such as the local Telephone and Gas & Electric Corporations, and coordinating the information available from all these, perhaps through the University of Cincinnati, will provide regional information systems with a tremendously effective index for total development of the region. Communications and power, like industrial and research potential, will be extremely valuable in stimulating the growth of the region and selling the capabilities of this area to interested industrialists or manufacturers.

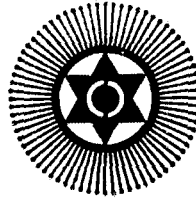
to indicate the overall effect on communities and neighborhoods of funds which might be invested and determine the equitable distribution of all resources available through local governments applied where they will do the most good throughout the region. The development of a community profile would be the final link in a total information chain and would be a fundamental part of the total regional information system.

11. Research Capability:

The research potential of the area will be able to be extracted from the land data base in the same manner as the industrial information will be obtained. The evaluation and application of this resource will be equally as valuable for planning, projecting and developing the region.

12. Community Profile:

Through operations research techniques, a mathematical model of the financial profile of all neighborhoods and communities in the region will be developed to permit simulation of management techniques and decisions,



ENVIRONMENT INFORMATION SYSTEMS

Task Force Staff

1. Water Distribution:

The primary operating objectives of the water information system would be to provide to the Cincinnati Water Works an extremely economic means for billing, Accounts Receivable, and control statistics of the water system. Through modern electronic computer design techniques, an optimum system can be developed to support the total users and potential users.

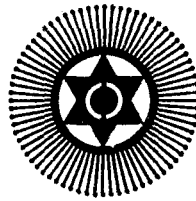
Once the billing system is established, the Master User File would become a valuable part of the Land, Health, Police, People and Economic information systems. This is an excellent example of the needs for a management level coordinating committee to direct and guide the development of these subsystems because of the tremendous interrelation with all other subsystems. The water system will also provide the billing and Accounts Receivable function for the Cincinnati Water Pollution Control and Hamilton County Sanitary Engineering Department.

Computer programmed hydraulic network analysis can provide long-range engineering design substantiated by operations research techniques applied to other valuable management indicators in the system.

The Commercial Division of the Cincinnati Water Works is responsible for the meter reading, billing, and collecting of 174,000 accounts. Billing and collection is for water and sewerage, this will be expanded to include chargeable meter maintenance or repair.

The objectives are:

1. To render a timely and accurate bill.
2. To automate account and Accounts Receivable file review and audit daily.
3. To maintain current and accurate account history.
4. To automate input and output requiring minimum manual operations.
5. To provide additional reporting and analysis for management as a by-product of billing.



2. Transportation:

An extremely valuable data base indicating all forms of passenger and freight transportation available to this region (water, rail, expressway and air) will provide a tremendous resource to governmental management and enhance industrial and research capabilities within the area. This will insure that the transportation potential keeps pace with all the other modern advances in other areas, as well as providing a valuable index to potential new industry which we would like to attract into the region.

3. Highways---Expressways:

A basic part of the transportation data base would be a completely computer-simulated highway and expressway network serving the entire region. This would again provide management level decisions for future developments, as well as providing a valuable indicator for effective police and fire coverage for the region.

4. Traffic:

The traffic studies, continually being conducted by the Public Utilities Department, will be invaluable in analyzing the total requirements of transportation, highways and

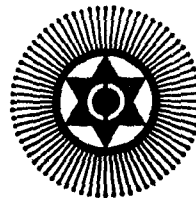
expressways. The application of operations research techniques to extrapolate this data and predict the growing needs for effective transportation networks in the region is essential.

5. Public Utilities:

The records of the Public Utilities Department and the capabilities of their design analyses will be extremely valuable in the projected developments of the region. Their studies and designs cover almost every detail of the Environment Information Systems, as well as directly affecting all the other information systems.

6. Water Pollution--Air Pollution:

Water and Air Pollution Control is becoming an ever-increasing necessity in our fast-growing society. The development and control of an effective means to eliminate pollution can be tremendously enhanced by our other information subsets which will provide key parameters to the total studies of these problems. The solution of these problems will insure, for the entire region, a very healthy and happy community in which to live and work.



7. Recreation:

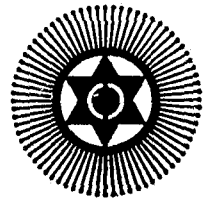
Included in all the dynamic developments of the resources of the region has to be the recreational facilities and outlets required to support a healthy and productive community. Utilizing the Land, Economic, Police and People Information Systems, the optimum location and distribution of recreation facilities will insure the area of proper coverage of these highly desirable facilities.

8. Library:

The ultimate goal of the Regional Information Center is to permit a total library indexing system control of textual information available throughout the region. This is a mammoth project and may be presently beyond the scope and capabilities of the Regional Information Center.

9. Government:

A data base designating and indexing the duties and responsibilities of all government agencies should be made available as part of the Environment Information Systems. This will be extremely important for the establishment of budgets, the delegation of responsibilities, and assurance of responsible and responsive government for the constituents of this region.



LAND INFORMATION SYSTEMS

Task Force Staff

1. CULDATA

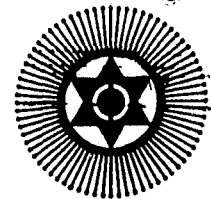
The basic goal of the CULDATA system is to develop a universal and unique system of land parcel identification and land parcel description which will be useful as a basic framework for relating all types of data, including title data, to particular parcels of land.

How one can make an intelligent decision about the best location for a new highway if he does not know the present uses and economic value of the land which will have to be acquired for the right-of-way, is a typical example of a decision of major importance which presently is impossible to substantiate. This represents a major expenditure and service to the region. It also applies to the major urban renewal projects presently underway. The relation of this basic land data with the other economic and environment details will provide the basic decision criteria for development of the entire region.

Every parcel of land within a political unit adopting a CULDATA system should be resurveyed, on the ground, to a uniform standard of accuracy, so that all coordinating associated with land title records is of consistent quality.

The coordinating of the controls might then be used as the parcel identification to supplement future addresses and other forms of identification providing unique identity of non-repeating numbers even if supplied.

The scope, magnitude and complexity of this project dictates that it be closely coordinated and controlled by local government since they are the agencies who will be responsible to operate, maintain, and insure effective application of these tools. The University of Cincinnati can provide a significant backbone to this study, but it falls to the operators of the system to determine the exact operating requirements.



2. Land Use:

Another significant factor in this massive data base will be the development of land-use indices and parameters. These will be fundamentally essential to the decision-oriented management information system.

3. Buildings:

A fundamental input and means of continually updating the base land and land use files will be the Building Permit Licenses issued through the City, County and region. These should be effectively tied into the system to automatically initiate action for inspection, re-evaluation and automatically initiate the updating of land and land-use files.

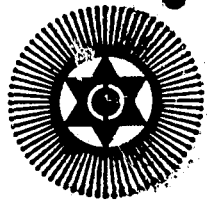
4. Ohio-Kentucky-Indiana Transportation Study:

The OKI Transportation Study information should become a fundamental part and continually updated link in the basic land information systems. The activities and work of this ongoing organization should be channeled as a basic arm of the system. This study is representative of many projects which should be closely coordinated with the Regional Computer Center Management Information Systems.

5. County Auditor--County Recorder:

One of the most important initial systems projects undertaken by the Regional Computer Center will be the automation of the County Auditor's Tax Evaluation and Name and Address Files for ultimate preparation of the semi-annual tax notices. This will be one of the first phases of our Management Information Systems data base and will always be one of the most important files available to regional management. The effective operation, application and utilization of this powerful data base is a tremendous responsibility and one which definitely commands a major portion of our system and operating capacity. There is no better index to the economic profile of this region than the Valuation File available through the County Auditor.

The responsibilities of the County Recorder, source of all legal documentation and records for the County, represent an extremely complex and massive project. The storage and indexing of this tremendously important information source, making it instantaneously available to any official or responsible citizen, is a task which has never been attempted anywhere and is probably beyond the scope of our present capabilities--but a role which we must ultimately serve.



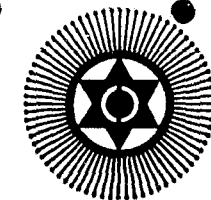
6. Regional Planning:

The wealth of information available through the Regional Information Center to planning officials at all levels will be unbelievable. The effective application and utilization of this data through mathematical modeling and operation research techniques will provide a new planning dimension. Our biggest responsibility in this area is making responsible planning officials aware of the powerful data base available to them and relating it to the decision-making capacity of the computer system.

The functional requirements of the system seem to point to the following overall requirements:

1. A complete cross-reference index giving access to files through parcel number, property coordinates, street address, occupant's name and owner's name as keys.
2. A unified system of input from each data-originating agency and reporting of the activity to all agencies affected by the transaction.
3. A standard method of reporting to interested parties concerning the changes to be made.

4. A means, with convenient response time, to inquire of the system concerning information unique to contributing agencies.
5. Facility to use a data bank based on the files to be created from cards now within City Planning jurisdiction.
6. Compatibility with the Urban Data Bank planned by the University of Cincinnati Services Department and the ability to interchange data between the two systems providing full utilization of this valuable research tool.



HEALTH INFORMATION SYSTEMS

Task Force Staff

1. Public Health:

The primary operating objectives of the Public Health system are to:

- 1) Centralize a master medical file system,
- 2) Prepare clinic schedules,
- 3) Third-party billing of clinic patients.

A by-product of this system, of significant value to our total management information system, is the health statistics which will be generated and made available through this subsystem.

The applications most desirable for data processing are:

- 1) Analysis of this data to assist in obtaining scientific conclusions in the field of criminology.
- 2) Vital Statistic reports of births and deaths on 25,000 persons annually.
- 3) Labor distribution of project or program areas for staff of 252 persons on bi-weekly payroll.

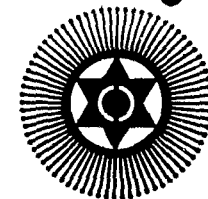
- 4) Visitation statistics on home (62,000 visited annually) and clinics (91,000 visited annually).

- 5) License and permit issuance annually to 6,300 firms.

- 6) Inspection records for recording and reporting coordinated inspection data for 18,000 firms or total of 85,000 inspections annually.

2. General Hospital:

At the present time, the Outpatient Department of General Hospital is the largest welfare clinic conducted in the City of Cincinnati and Hamilton County. The initial goals of the system study, being finalized at the present time, are to develop a single system for General Hospital and the City Public Health clinics. This is a prime necessity since the clientele of General Hospital's Outpatient Department and our Public Health clinics are one and the same. There is, presently, a massive duplication of records in health records and statistics, not only between General Hospital and the City of Cincinnati, but within the many clinics of the City of Cincinnati.



Outpatient scheduling and billing will be instituted at General Hospital through the Regional Computer Center in the first quarter of 1968.

Analyses to date indicate a need to design and implement a patient information system to accomplish the following:

1) Visitation Statistics:

The accumulation and reporting of visits statistics is a basic need for the effective planning and analysis of outpatient facilities. The number of visits each month is approximately 12,000. A tentative list of reports of greatest utility is:

- a. Age groups by payment source.
- b. Visit status (new or repeat) by clinic.
- c. Clinic visits by census tract.
- d. Visit status by census tract.
- e. Age group by census tract.

2) Third Party and Direct Billings, Accounts Receivable:

Billing to nine third party sponsors (70% of patients) and to a portion of the remaining 30% of the patients are presently required. The needs in this area are based on the present 150,000 visits made annually and currently increasing at a rate of 5,000 per year.

3) Clinic Scheduling:

The development of a block or semi-block scheduling procedure for these visits to approximately 50 clinics operating from 1 to 44 sessions monthly. As an extension of the scheduling procedure, the development of an automated storage, retrieval, updating, and purging operation of medical records.

Currently, there are some 150,000 active and 300,000 inactive records. Those records classified as active are those with any activity within the last four years.

4) Accounting (General and Cost)

5) Inventories

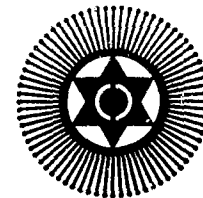
6) Personnel (1,529 employees)

7) Payroll (1,529 employees)

8) In-Patient Accounting (650 beds)

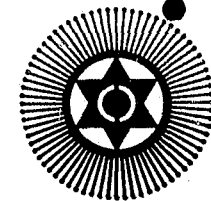
3. Drake Hospital:

Drake Hospital is one of two county-operated hospitals and will be greatly served by the implementation of the outpatient billing and scheduling system. In the future, they may also be served by fundamental accounting and payroll systems developed through the Regional Computer Center.



4. Dunham Hospital:

At the present time, Dunham Hospital has no outpatient clinics; therefore, the primary service available to this hospital would be the accounting, payroll and inventory control and other fundamental systems available through the Regional Computer Center.



POLICE INFORMATION SYSTEMS

Task Force Staff

Chairman-Dr. Frank P. Cleveland, Coroner of
Hamilton County

Vice Chairman-Mr. Henry Sandman, Director
of Safety of Cincinnati

Chief Donald Shanks, President of Hamilton
County Police Association

Mr. Melvin Rueger, Hamilton County Prosecu-
tor

Sgt. Harold Fassnacht, Vice President Hamil-
ton County Police Association

Chief Charles Fritz, Police Chief of Norwood
Col. Jacob Schott, Police Chief of Cincin-
nati

Mr. Dan Tehan, Sheriff Hamilton County

Mr. Paul Flaughner, Systems Analyst, Regional
Computer Center

Mr. Bruce Oberlin, Systems Analyst, Regional
Computer Center

Mr. Wayne Hartke, Systems Analyst, Regional
Computer Center

Mr. Wayne A. Browning, Consultant, Regional
Computer Center

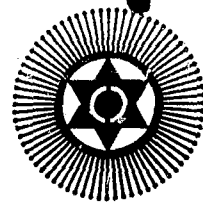
1. Project CLEAR:

The rapid growth of Hamilton County and its
population explosion has been reflected in
drastically increased demands for police
service. Supreme Court rulings have made
the rendering of this service more complex
by reason of the establishment of minimum

guidelines for the police approach to sus-
pects. Also, the concern for the civil rights
of persons who become the subject of police
consideration has led to a reduction in the
amount of time police may use to complete
the accusatory aspects of a criminal inves-
tigation.

The lack of a system for disseminating in-
formation to officers immediately upon re-
quest makes it possible for wanted persons,
in a highly mobile population, to avoid ap-
prehension merely by moving to a different
county jurisdiction. This shortcoming,
coupled with dependence upon slow moving
manual records methods, leads to a delay or
even failure to serve arrest warrants, re-
cover stolen property, and clear court
dockets.

These factors dictate the need for a re-
gional police information center, serving
all urban and rural law enforcement agen-
cies in this geographical area, regardless
of size or political boundaries. The Ham-
ilton County Police Association--represent-
ing the 38 police departments in this area--
provides the essential medium for implement-
ing such a multi-jurisdictional center in
Cincinnati.



Ultimately serving a tri-state region of Northern Kentucky, Southeastern Indiana, and Southwestern Ohio, the center would bring proven police information processing techniques to member agencies and institute research into innovative or improved applications of police data for crime prevention and enforcement areas. In addition, the center would provide access to planned state and national information centers.

2. Courts:

The optimizing of our court space and personnel, through continual analyses and evaluation of court dockets, will tremendously expedite the process of law enforcement and justice. While the volume of arrest activity can be predicted only in general terms, the nature of arrests may provide some leeway in planning for the hearing of cases. Project CLEAR can assist in scheduling and utilization of the courts through a review of procedures followed in granting initial hearings and continuances and a study of the parameters and size of court records. A study with court officials, at each level of hearing, would be essential.

3. Records:

Of tremendous tangible benefit to the 38 law enforcement agencies represented in Hamilton County will be the elimination of detailed records-keeping and the massive duplicate records now maintained throughout the City, County and State. Instead, Pro-

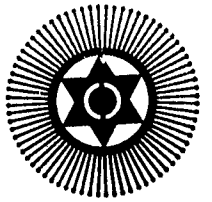
ject CLEAR will provide our law enforcement agencies access to all wanted persons, stolen or wanted vehicles, stolen property, auto registrations, and criminal history data for this region. The CLEAR system will also have access to the State of Ohio and National Crime Information data files.

4. Vehicle Inspection:

A tremendous wealth of information will be made available to the Regional Computer Center and our law enforcement officials by taking the records of the Vehicle Inspection Lane into the Regional Computer Center. Each vehicle passing through the lane can be checked against the state records maintained by the Ohio Highway Patrol and the Bureau of Motor Vehicles and against national records of the National Crime Information Center long before the vehicle would have ever completed its 5-minute journey through the inspection lane. This outstanding source of vehicle and driver information will be of outstanding assistance to our law enforcement officials and will greatly enhance law enforcement activities.

5. Ohio Highway Patrol:

Present systems work conducted by the Ohio Highway Patrol, parallel to that conducted locally for Project CLEAR, will bring about a computer-to-computer tie-up with all state records maintained by the Ohio Highway Patrol. This will eliminate a tremendous duplication of records many places throughout



the County and provide us with instantaneous updated and maintained data as an automatic by-product of the Ohio Highway Patrol's basic system.

the ability of Project CLEAR to implement an outstanding and effective Crime Information Center served by the CLEAR Communications Network.

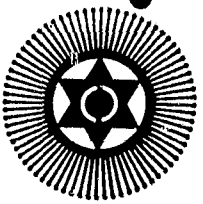
6. Bureau of Motor Vehicles:

The computer-to-computer communications with Ohio Highway Patrol will also make available to Project CLEAR the records for the Bureau of Motor Vehicles. Bottlenecks, such as the three month delay now experienced in receiving new auto license master information, will be completely eliminated through this system.

7. National Crime Information Center:

The National Crime Information Center computer system is actually the intelligence arm of the Federal Bureau of Investigation. Their systems studies have indicated that regional computer centers should be established to serve with the capital of each of the 50 states and each of the 25 largest metropolitan areas.

This design criterion dictates that the metropolitan areas; such as that served by Project CLEAR, the City of Cincinnati and Hamilton County, will be a fundamental link in a nationwide crime communications network. The ultimate capabilities of the entire National Crime Information Center network rests upon



PEOPLE INFORMATION SYSTEMS

Task Force Staff

1. Income Tax:

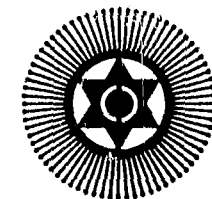
The Income Tax System includes the processing of daily taxpayer's transaction details for both cash and non-cash items; preparation from these details of summaries, partial payment notices and statistical reports. Also, the system requires the processing of changes to update a taxpayer's name and address file. Summary report, partial payment notices, labels or tax forms, master listings, and statistical reports are prepared from this file.

1. To assist the Income Tax Division to:
 - a. Collect and deposit taxes imposed.
 - b. Keep accurate records of taxes collected.
 - c. Seek and maintain compliance with law.
2. To improve the timeliness of reports and to shorten the time from processing cut-off date to report date.
3. Develop exception reporting of possible compliance problems together with better control of a small group of delinquent accounts.
4. Speed up processing of the name and address file.

The by-product of the Income Tax System will be a very valuable sub-system data base which can be evaluated and analyzed by operations research techniques applied to directing management policy concerning the economic changes which would be the result of changes in zoning or land use as affected by the income level of certain block, subdivisions, census tracts, or communities. An effective index to parameters, such as those on an income level, would provide a tremendous management tool for the development of an ideal community correlating this data subset to all the information systems.

2. Board of Education--Cincinnati and Hamilton County:

The City of Cincinnati and Hamilton County Boards of Education are individual entities. At the present time, each have their own individual data processing and computer facilities. They have developed many valuable subsystem tools, such as an alphabetic street coding system which relates to elementary school districts and file census. This data would be included in a regional land use file. Data available through the Regional Information Center, such as welfare activities and migratory predictions, would assist the Boards greatly in long-range planning.



3. Manpower/Employment:

A critical index of high value to governmental management in determining the long-range policy and plans will be an indication of employment and manpower levels. The unique skills and educational levels available to the area will be significant in attracting prospective merchants and manufacturers into the area. Many of the data subsets, such as the Income Tax Division, water distribution, health statistics and legal records, will tremendously enhance and fortify the decisions affecting the manpower and employment levels of the region.

4. Census:

The tremendous wealth of information available through the Census Bureau cannot be effectively used unless all of the subsystems of our information systems are consistently indexed. All land information, health information, and police information can be most expeditiously directed by coordinating and evaluating the information available through the census studies. All information subsets in the basic information systems should be indexed to the common census tract base for ease of evaluation and correlation of significant facts.

5. Board of Elections:

The Board of Elections must presently maintain, on their rolls, all active voters in Hamilton County. Much of this project is presently being conducted through the use of

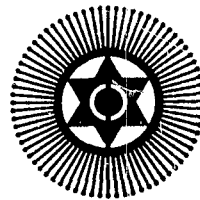
a local service bureau. This makes information readily accessible to automatic data processing. Efforts should be made, in the near future, to coordinate and edit the list available through the Board of Election with those data subsystems available through the City Income Tax, Water Distribution, Hamilton County Auditor, and other basic data-based subsets fundamentally utilizing the same people files. Unifying the updating and maintenance of this powerful data base would potentially make available to all government agencies a powerful information base and minimize the duplication of efforts in changes of our mobile population.

6. Re-Location:

Advances in construction and transportation have produced a much more mobile society throughout the country. As well as producing a tremendous amount of maintenance of legal records, utility documentations, it has placed a tremendous burden on planning and development people. A continual evaluation and analysis of the migratory tendencies of our present society is a necessity in order to plan the long-range water, power, recreation and government requirements of the future.

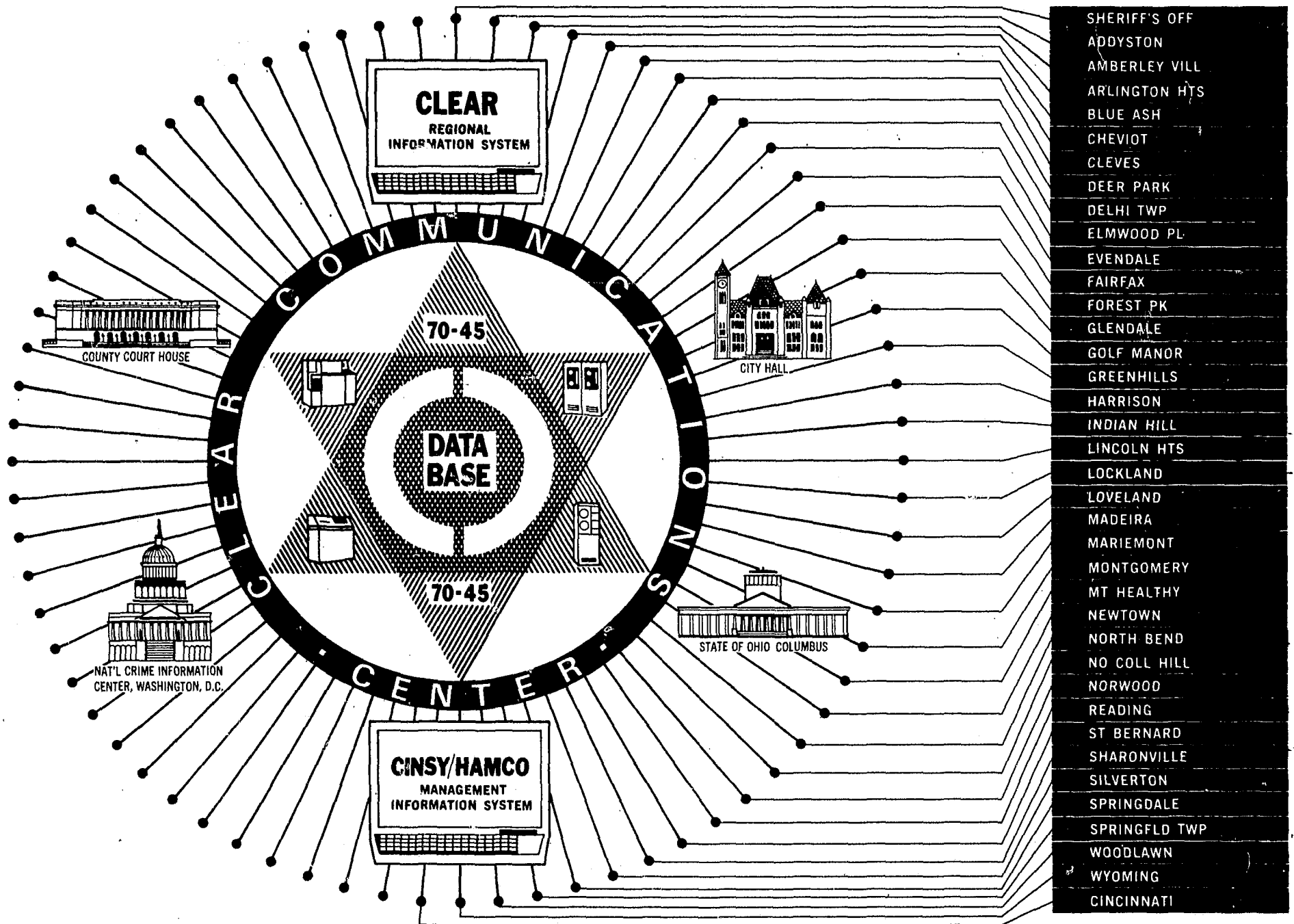
7. Cultural Levels:

The cultural level of the region can be extracted from the massive data base accumulated by analyses of an individual's educa-



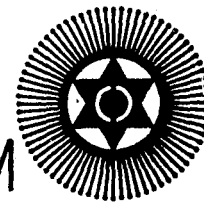
tional background and the social and recreational habits of the individuals. A good understanding and awareness of the different cultural levels of this community can be a tremendous asset to law enforcement officials, as well as management officials, who would strive to equalize the opportunities and cultural levels of the entire community.

THE DECISION IS CLEAR!!



COUNTY LAW ENFORCEMENT APPLIED REGIONALLY

THE CLEAR - REGIONAL INFORMATION SYSTEM



EMBLEM

The CLEAR Regional Information System emblem symbolizes the function, responsibility, coordination, and scope of the CLEAR computer center and communications network. The function of the system is indicated by the Data Processing Center depicted by the black ring enclosing the CLEAR Communications Center. Within the ring is the heart of the Regional Information System -- two RCA Spectra 70/45 computers operating as the heart of the system and symbolized by overlaid triangles indicating their strength and interrelation.

One computer system, dedicated to the CLEAR Regional Information System, supports the Hamilton County CLEAR Communications Network as well as instantaneously tying these agencies to the National Crime Information Center in Washington, D. C. and the State Highway Patrol in Columbus, Ohio. This is graphically depicted by locating the Nation's Capitol and the Statehouse in Columbus on the points of the base of the CLEAR triangle.

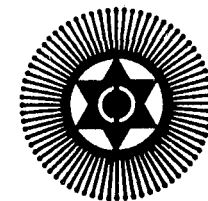
The CINSY/HAMCO Management Information System, symbolized by the triangle pointing downward, communicates with the Hamilton County Court House and the City of Cincinnati

City Hall located on the points of the base of its triangle.

The sharing of the equipment, facilities, staff and data is symbolized by the hexangular shaped overlap area of the two superimposed triangles which provide the real power of the data center and communications network. The two C's, one reversed, located in the overlapped area signify CLEAR communications.

The overlapped triangles also form a star which has been the emblem of all law enforcement agencies since the United States was founded. This star symbolizes the real purpose of the CLEAR Communications Center -- providing immediate, accurate and complete information to all law enforcement officials while eliminating duplication of files.

Emanating from the heart of the system are communications spokes reaching out to all 38 agencies presently to be served by the Communications Center. Open spokes indicate the expansion capability of the Regional Information Center. Connected to the spokes on the right is a list of all agencies which the CLEAR Communications Center is now dedicated to serving.



PROJECT CLEAR GOALS

The Hamilton County Police Association Study Committee surveyed police records operations. This survey led to the following conclusions:

1. An accelerating trend toward urbanization and a rapidly increasing population has resulted in isolated communities growing together.
2. In relation to the crime problem, the social importance of political boundaries has been almost totally eliminated.
3. Factors which have produced steadily increasing crime rates have brought about an ever increasing public dependence on law enforcement bodies.

These conditions have led to the conclusion that:

1. Methods of collecting and processing police information must be revised and upgraded.
2. The scope, content, and accuracy of indices and files must be upgraded.
3. Present practices relating to access, retrieval, and upgrading of police data are inadequate.
4. The sufficiency of records systems influences the validity of police action.

The conclusions can be traced directly to:

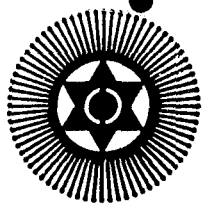
1. Present records systems cannot meet demands of the service.
2. Present records procedures are too dependent on manual operation.
3. Few law enforcement agencies have the assistance of skilled record management personnel.
4. There must be development and acceptance of standards governing records management.

Basically, the goal of Project CLEAR is to provide area wide police information to each participating department on a real-time basis. This means a responsiveness to changing police needs in a 24-hour, 7-days a week basis.

Activity areas covered will be:

Arrest Warrants
Stolen Vehicles
Stolen Property
Arrest Reporting
Officer Activity Analysis
Crime Reporting
Statistics

ACCOMPLISHMENT OF PROJECT CLEAR GOALS BY ELECTRONIC DATA PROCESSING



A. ARREST WARRANTS: Based upon figures obtained from the Hamilton County Communications Center questionnaire, police agencies received 28,561 warrants for service in 1966.

EDP APPLICATIONS: Real-time storage should be maintained. Some persons, knowing they are wanted, will make every effort to elude arrest. It is possible that police in our community may have contact with a person for whom a warrant has been issued in another area, and not be aware of this fact.

POTENTIAL BENEFITS: 1. A greater likelihood of making arrests on outstanding warrants. 2. A reduction in the number of outstanding warrants. 3. A possible decrease in warrant service effort as certain types of violators become more aware of the certainty of arrest. 4. More time available for patrol. 5. Eventual tie-in with the National Crime Information Center will broaden the inquiry base.

B. STOLEN VEHICLES: During 1966, police agencies in Hamilton County received reports on 1,557 stolen motor vehicles.

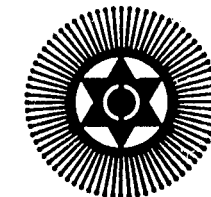
EDP APPLICATIONS: 1. Entry of stolen vehicle data in on-line files would help materially in informing all police officers about the auto theft. 2. Availability of on-line information could

obviate carrying stolen car lists. 3. Mobility of auto thieves would be thwarted by dissemination of car theft data.

POTENTIAL BENEFITS: 1. The major potential benefit lies in the more rapid recovery of stolen vehicles. 2. Police effort is measured in part by the value of stolen property recovered. A quick recovery reduces the dollar value of unrecovered stolen property. 3. Insurance costs can be reduced through reduction in interim travel expense. 4. There is a greater possibility of recovering vehicles while being operated by the car thief. Court testimony becomes more convincing. 5. Duplication of record keeping can be terminated. 6. Eventual tie-in with NCIC will broaden inquiry base.

C. STOLEN PROPERTY: County police agencies estimate that they will learn about 4700 pieces of identifiable stolen property in 1967. Exchange of information about stolen property is now difficult to accomplish.

EDP APPLICATIONS: 1. Many items of property are readily identifiable through brand name, type, and serial number. These identifiers lend themselves very readily to storage on a real-time basis. 2. Many items of stolen property remain within the Project CLEAR jurisdiction. This will assist in recovery through



real-time data storage.

POTENTIAL BENEFITS: 1. Inquiry on real-time basis may reduce theft investigation time. 2. Period reports on theft can be produced quickly. 3. Tie-in with NCIC will broaden inquiry base.

D. ACCIDENT REPORTING: Based on past experience, 40,000 vehicular accidents may occur in Hamilton County during 1967. The collection of facts about these is a time consuming process. Reporting is necessary to provide basis for legal action against violators and to compile information for engineering considerations. Many of the vehicles involved may be driven by wanted persons.

EDP APPLICATIONS: 1. Provisions for inquiry on a real-time basis about names and vehicle license numbers involved in accidents. 2. Processing of accident reports to determine time and area of accident locations. 3. Processing to determine compliance with National Safety Council standards. 4. Processing to establish facts which need consideration from an engineering, education, and enforcement standpoint.

POTENTIAL BENEFITS: Statistics reporting is based upon results of manual records. Report data is derived from only one source, the accident report. To keep a saving of time and effort in report preparation through a revision of the input document.

E. ARREST REPORTING: Over 270,000 arrests were made in Hamilton County in the year 1966. In every instance, copies of arrest information had to be prepared. Period reports were also made from arrest data.

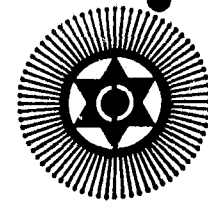
EDP APPLICATIONS: 1. Preparation of arrest records can be simplified. 2. Period reports about arrests can be provided as a by-product. 3. Court docking can be simplified.

POTENTIAL BENEFITS: 1. Information about previous arrests can be readily assembled. 2. On-line inquiry about arrested persons may disclose information about pending charges.

F. OFFICER ACTIVITY ANALYSIS: The accounting for use of an officer's time currently depends upon notations made by the officer. This is time consuming and is duplication of effort.

EDP APPLICATIONS: 1. Recording of information about activities includes the officer's identity. 2. Review of officer's reports by supervisors consumes too much time.

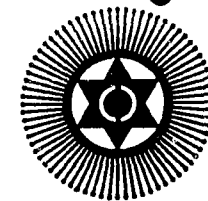
POTENTIAL BENEFITS: 1. Accurate recording will be realized. 2. The volume of file information will be reduced. 3. Duplication of effort will be terminated.



G. CRIME REPORTING: Crime reporting is required to meet standards set by the Uniform Crime Reporting section of the FBI. Crime reporting provides data upon which management decisions about employment of personnel and equipment are based.

EDP APPLICATIONS: 1. Automated methods can assist in the prompt handling of information needed for summary reports. Summary reports prepared promptly can make management decisions realistic. EDP operations can effectively replace manual operations now employed.

POTENTIAL BENEFITS: 1. A major lead appears in the timeliness of reporting. 2. EDP application can free clerical help to use in other areas of work. 3. EDP may conveniently adjust to desirable report formats. 4. Analysis of crime patterns may be more readily accomplished. 5. A correlation with other socio-economic factors dependable through services in the CINSY/CLEAR operations established.



AN ATTITUDE OF RESPONSIBILITY

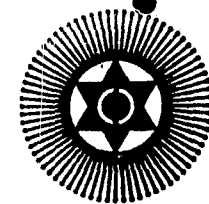
On November 7th, the Hamilton County voters voiced their concern for the problems of combatting crime by approving a tax levy to provide funds for the operation of the Crime Information Center. The voting on this issue is indicative of a general attitude of responsibility with which the voters approached this issue.*

Another indication of this attitude was reflected by the effort put forth by the members of the Hamilton County Police Association. Their efforts in distributing printed material and in making personal appearances before groups and organizations were most helpful in bringing the tax levy issue to the voters' attention.

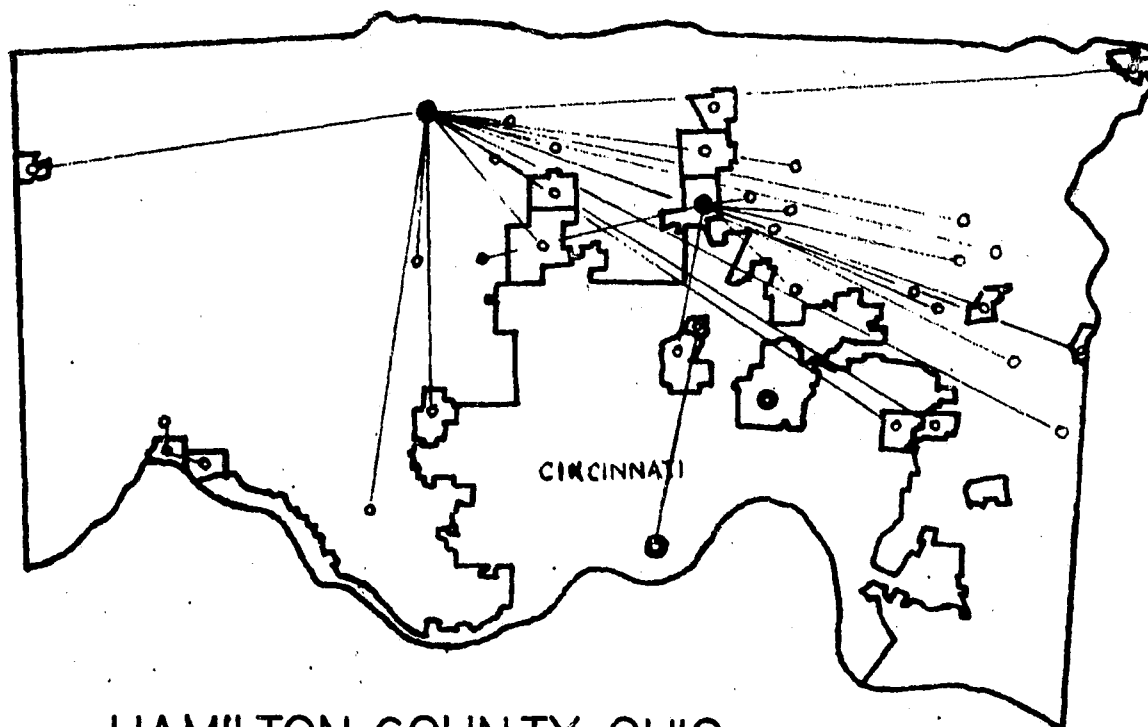
A special thanks should also go to the Cincinnati Citizens Police Association for their time, effort and financial support in assuring the passage of the Crime Information Center tax levy.

* Extracted from an Editorial comment in the Cincinnati Enquirer, November 9, 1967.

INITIAL SERVICE AREA FOR PROJECT CLEAR



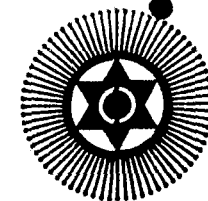
AT THIS TIME IT IS NECESSARY FOR EACH LAW ENFORCEMENT AGENCY TO TELEPHONE EACH OTHER AGENCY TO GET INFORMATION ABOUT PERSONS, VEHICLES, AND STOLEN PROPERTY.



HAMILTON COUNTY, OHIO

ON-LINE AND REAL-TIME COMPUTER SERVICE WILL CONNECT ALL COMMUNITIES TOGETHER GIVING COMPLETE ANSWERS TO ALL INQUIRIES. QUICK ACCESS TO ALL POLICE RECORDS IS THE MAJOR ADVANTAGE.

THE LARGE CIRCLES IDENTIFY THE FOUR BASE RADIO STATIONS IN THE COUNTY. SMALLER CIRCLES PINPOINT THE COMMUNITIES SERVED BY THESE STATIONS.



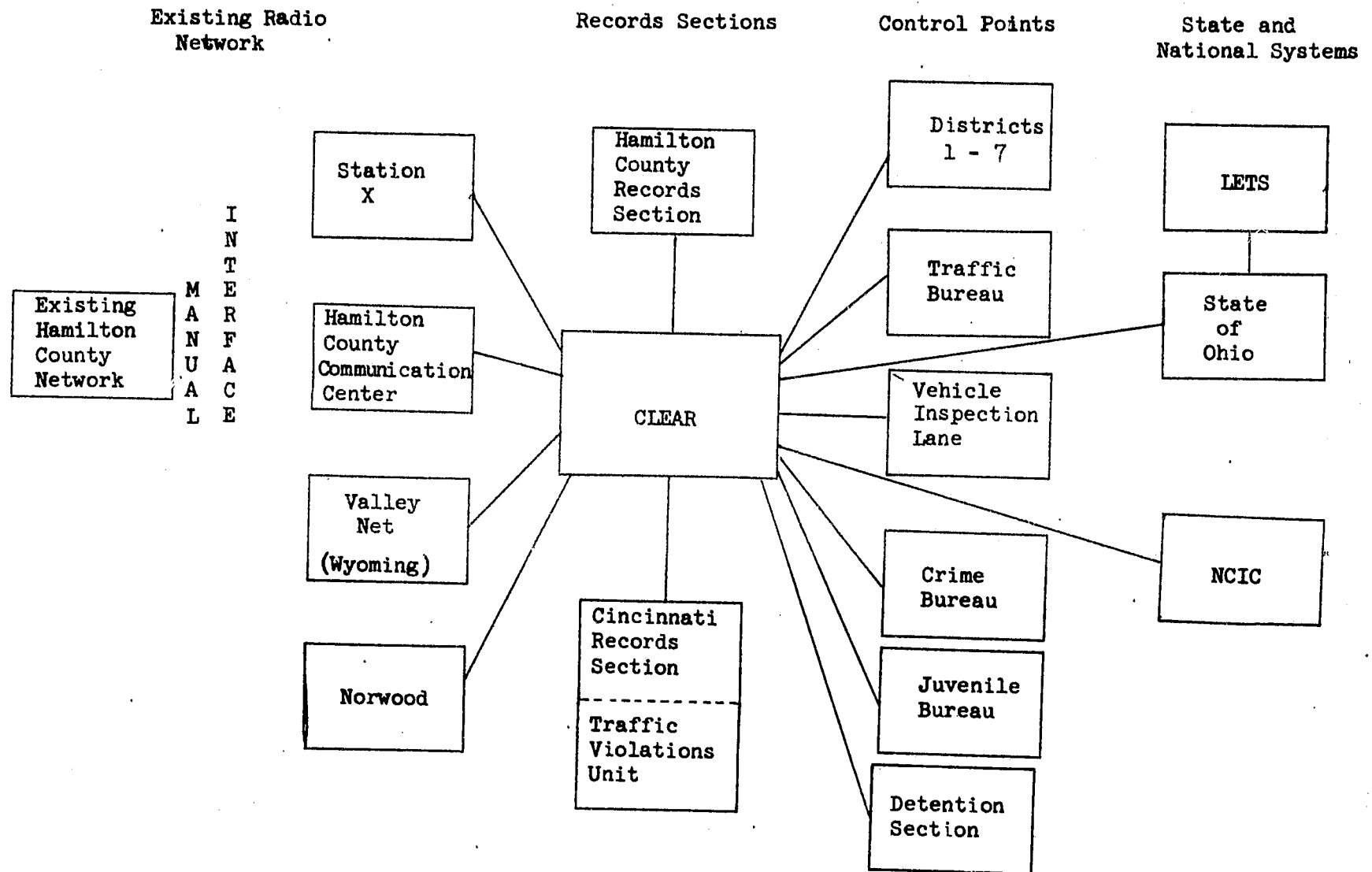
PROJECT CLEAR RESULTS

THE LONG RANGE PLAN SUCCESSFUL COMPLETION OF THIS PROJECT WILL ACHIEVE

1. Substantial economies in clerical time through:
 - a. reduction in volume of files required.
 - b. elimination of duplicate files required in manual operation.
 - c. greater flexibility in files searching through use of computer programming.
 - d. a termination of duplication in records preparation.
 - e. centralization of file maintenance.
 - f. transmission of information through data processing systems rather than by mail.
 - g. accomplishment of file check in one operation.
 - h. reduction or elimination of report manipulation.
 - i. reduction in volume of similar records maintained in co-operating police agencies.
 - j. reduction in errors through the employment of machine methods.
 - k. simplification in file maintenance.
 - l. a reduction in personnel services and a money saving resulting therefrom.
2. Substantial increase in effectiveness of police operations indirectly reflecting economic savings in clerical time and/or technical time.
 - a. file checks on arrested or suspicious persons.
 - b. warrant service should be much improved and crime investigation greatly facilitated.
 - c. inquiries from the street and in the records division will be answered more rapidly.
 - d. establishment of a priority system for filing with a periodic file purging.
 - e. use of computer programming techniques to obtain rapid retrieval of information.
 - f. a prompt interchange of information among law enforcement agencies searching for or serving the same persons.
 - g. more rapid clearing of court dockets and increased money income where assessment of fines and collection of court costs applies.
 - h. greater success in relating persons contacted to persons wanted.
 - i. more accurate identification of factors in vehicular traffic control as these relate to selective enforcement.

An overall result should be greater success in the apprehension of wanted persons and the recovery of stolen property. There should also be improvement in gathering information for management decision making.

CLEAR COMMUNICATIONS NETWORK



System Message Traffic Summary

<u>Message Type</u>	<u>Avg. Day</u>	<u>Avg. Hr.</u>	<u>Peak Hr.</u>	<u>Avg. Min.</u>	<u>Peak Min.</u>
<u>Inquiry</u>					
Name Criteria (24 hr.)	822	34	68	.40	.80
Vehicle Criteria (24 hr.)	325	13	26	.21	.43
" Inspection Lane (12 hr.)	<u>1200</u>	<u>100</u>	<u>125</u>	<u>1.66</u>	<u>2.08</u>
Sub Total	2347	147	219	2.27	3.31
Message Switching (24 hr.)	890	37	56	.61	.93
<u>Enter/Cancel</u>					
Warrants (8 hr.)	140	17	-	.28	-
Arrest/Disposition (8 hr.)	100	12	-	.20	-
Vehicle (8 hr.)	60	7	-	.12	-
Traffic Tags/					
Disposition (8 hr.)	1700	212	-	3.53	-
Accident Reports (8 hr.)	95	12	-	.20	-
Offense Reports (8 hr.)	55	7	-	.12	-
Other Miscellaneous (7 hr.)	<u>100</u>	<u>12</u>	<u>-</u>	<u>.20</u>	<u>-</u>
Sub Total	<u>3140</u>	<u>316</u>	<u>316</u>	<u>4.65</u>	<u>4.65</u>
TOTAL	5487	463	535	7.53	8.89

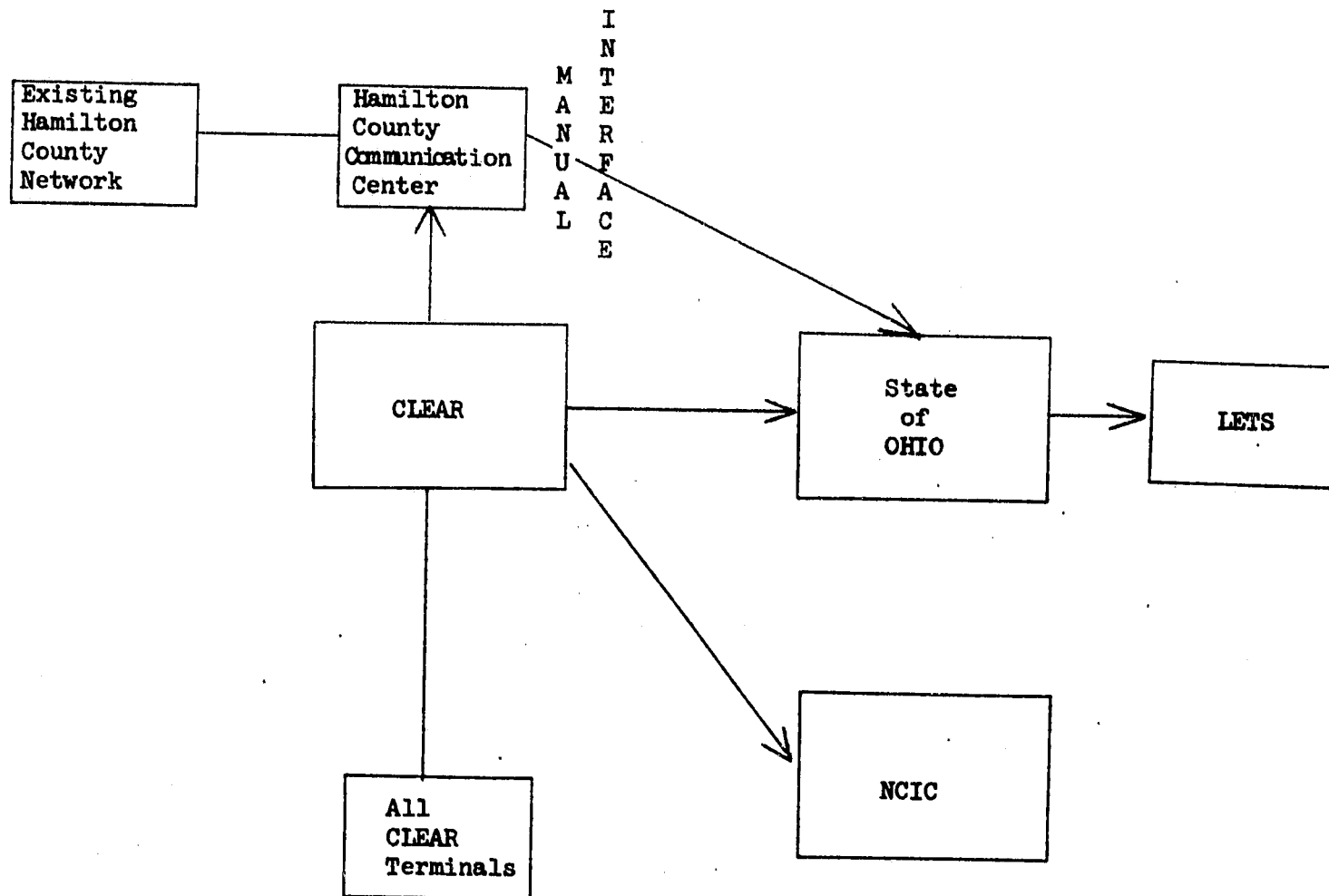
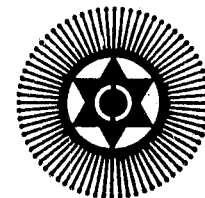
The above figures pertain to the number of input messages for computer processing. Each input message will generate at least one output message.

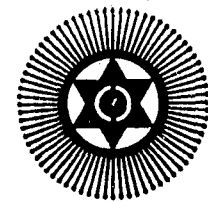
Average length of inquiry input and output message will be approximately 50 characters. Average length of all other input and output messages will be 150 characters.

Input traffic to be automatically directed to NCIC and the state systems are estimated as follows:

- a. NCIC inquiries (all types) -- 10% of all inquiries other than vehicle inspection lanes, 114 per day.
- b. NCIC enters and cancels -- approximately 30 per day based upon the selected criteria on file in the NCIC system.
- c. State inquiries (vehicle and operator license) -- 10% of vehicle inquiries, 33 per day.
- d. State enters and cancels -- approximately 20 per day pertaining only to vehicles.

CLEAR SYSTEM ACCESS TO STATE AND NATIONAL
CRIME INFORMATION SYSTEMS

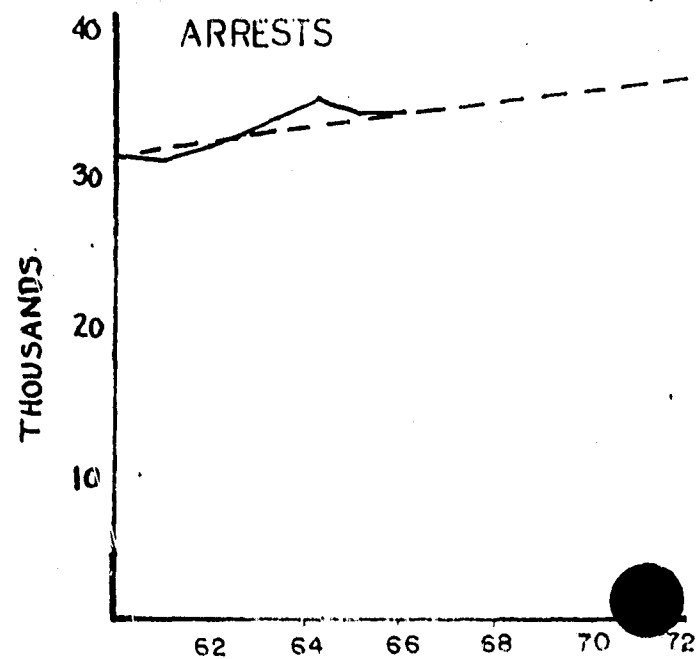
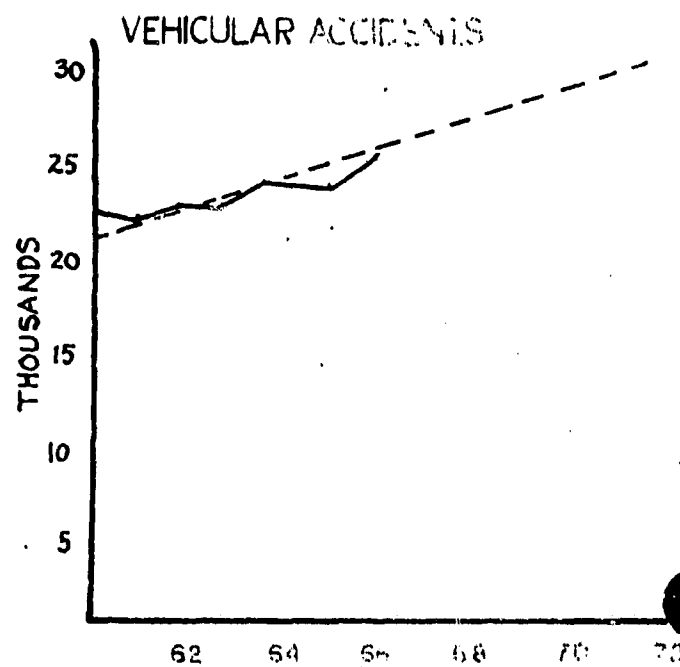
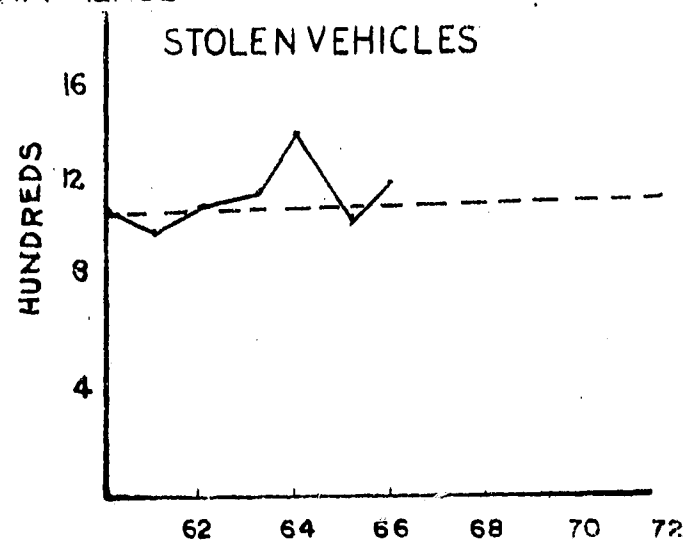
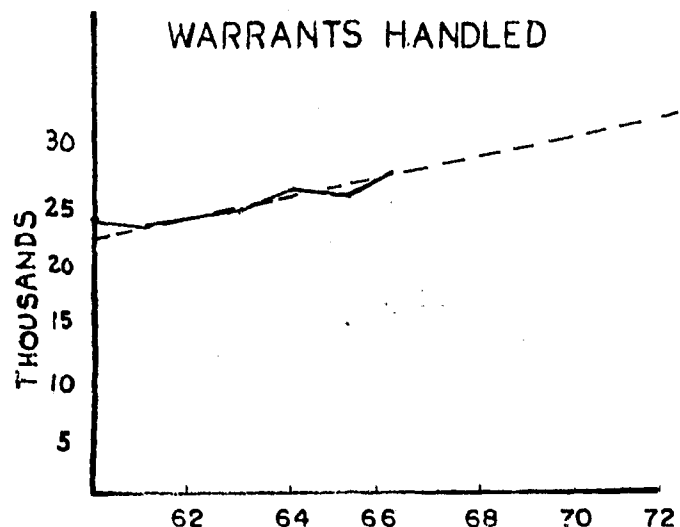




PROJECTED WORK LOAD FOR POLICE

1960-1972

BASED ON CINCINNATI POLICE EXPERIENCE

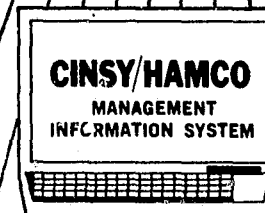
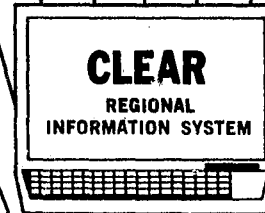
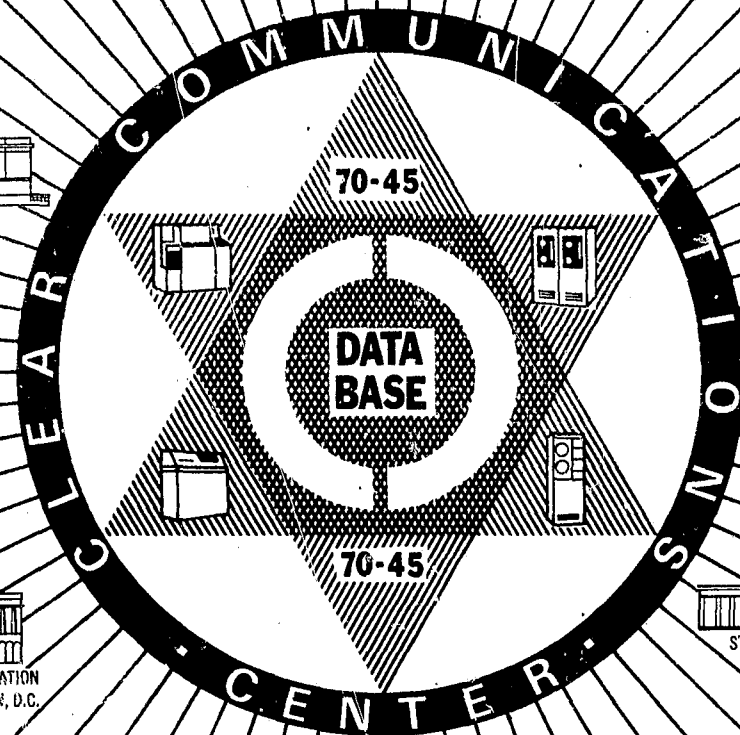
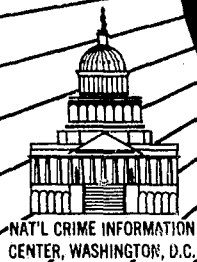


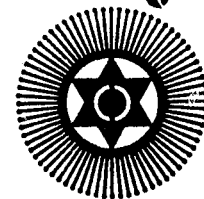
CINSY / HAMCO

CITY COUNCIL
CITY PLANNING
FINANCE
LAW
MANAGEMENT SERVICE
MUNICIPAL COURTS
MUNI. REFERENCE
PARKS
PERSONNEL & CSC
PUBLIC HEALTH
PUBLIC RECREATION
PUBLIC SAFETY
PUBLIC UTILITIES
PUBLIC WORKS
PURCHASING
SINKING FUND
URBAN DEVELOPMENT
WATER WORKS
CITY MANAGER

UNIV. OF CINCINNATI
GENERAL HOSPITAL

COUNTY COMMISSIONER
AUDITOR
BD. OF ELECTIONS
COURTS
ENGINEER
HOSPITALS
PUBLIC LIBRARY
RECORDER
REGIONAL PLANNING
TREASURER



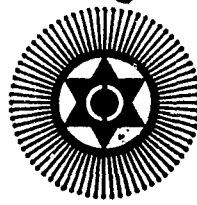


As explained in the Project CLEAR write-up, the CLEAR Regional Information System emblem symbolizes a dynamic dual RCA Spectra 70/45 system dedicated not only to Project CLEAR, but also to Project CINSY and Project HAMCO.

Just as 38 of the many communications spokes emanating from the heart of the system has been shown as dedicated to the

agencies united in Project CLEAR, there are as many other spokes servicing the agencies of CINSY and HAMCO to bring the most efficient and effective management systems to the City and County governments.

The inter-relationships of these systems are depicted by the emblem design on the previous page.



PROJECT CINSY

Almost all City agencies in Operation CINSY (Cincinnati Information System) have been evaluated as to potential EDP applications.

The critical project elements of our systems design for immediate implementation on the basic hardware configuration to be delivered in the fourth quarter of 1967, have progressed generally on schedule. Payroll, Accounting and Income Tax are in full operation on the IBM/360, Model 20 system and are being adjusted for ultimate conversion to the RCA Spectra 70/45 in 1968.

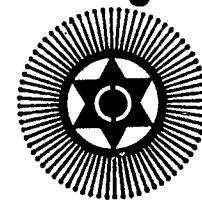
Systems studies for City Planning and Urban Development are presently awaiting the data base provided by the Hamilton County Auditor's land parcel records which are to be converted to the random access data base of the Regional Computer Center with the automatic preparation of the County tax notices. Once this data base has been created, total systems efforts will be dedicated, in conjunction with the CULDATA system, to developing a common unified land data identification system which will permit better control and automatic indexing of all land parcel systems in the County.

The Public Health study and General Hospital systems study are progressing on schedule and it is anticipated that, in the first

quarter of 1968, outpatient, clinic scheduling, third-party billing and the associated statistics involved in these records will be prepared by the Regional Computer Center.

During the first quarter of 1968, the Water Works quarterly billing and Accounts Receivable records will be converted to the regional computer system and a parallel run will be conducted of the almost 200,000 billing notices. Also to be implemented with this study will be the billing requirements of the City of Cincinnati Water Pollution Control and the Hamilton County Sanitary Engineering Department.

In 1968, the primary emphasis will also be placed on systems specifications and implementation in those systems involving the departments of Finance, Personnel and Purchasing because of their overall city-wide application and benefits.



Target dates have been indicated to approximate the start of final systems documentation and specifications. Target dates are specified in terms of Periods I through VIII each phasespanning an approximate period of three months.

Period designation is dependent upon several factors, such as:

1. Systems priority.
2. Equipment configuration required.
3. Communications and remote terminal requirements.
4. Availability of required personnel.
5. Systems timing (e.g.: fiscal year).
6. Inter-Agency relationships of a system.
7. Inter-system relationships.
8. Availability of data.
9. Overall benefit of implementation.

Systems requiring communications and remote terminals are dependent upon the results of pilot communications programs scheduled to begin in mid-1968. Some systems are dependent upon the implementation of other systems which create required files.

Although an agency may be currently identified for a particular period, earlier implementation of some of its systems may result because of their relationship to other systems already implemented.

FUNCTION

Carry out directives of the Planning Commission; guide all aspects of Planning staff activity.

EDP RECOMMENDATIONS

- Obtain budgetary report data from new EDP payroll and accounting systems.
- Prepare tentative program budgets and evaluate for most effective allocation of resources available for all projects.
- Prepare reports of actual-versus-budgeted time spent on projects as by-product of encumbrance and expenditure accounting process.

POTENTIAL BENEFITS

- Clerical and staff time available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 4

TERMINALS RECOMMENDED

(none)

5

VALUE

\$1420



FUNCTION

Perform various studies on which to base recommendation for most effective land use; make continuing review and recommendations for updating or improving the City's master plan.

EDP RECOMMENDATIONS

- Construction and use of comprehensive area land use file for planning purposes. Supplement County Auditor's property file and OKI data.
- Survey data reduction and analysis.
- Updating of land use file by introducing building permit, inspection, and survey data.

OTHER RECOMMENDATIONS

- Use of automated devices for drawing and updating area maps.

POTENTIAL BENEFITS

- One Clerk Typist II and one City Planner I available for reassignment.

FUTURE POSSIBILITIES

- Use of computer for further automation of mapping and display should result in one Draftsman I and two Draftsman II's available for reassignment.

STAFF

Regular: 23
Part-time: 1

TERMINALS RECOMMENDED

1 Video Data Terminal

VALUE

\$13,828



CONTINUED

1 OF 3

FUNCTION

Administer, control and maintain records on zoning and development of property by subdividing.

EDP RECOMMENDATIONS

(none)

POTENTIAL BENEFITS

(none)

FUTURE POSSIBILITIES

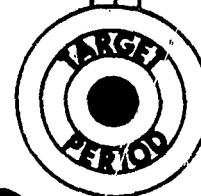
- Use of computer for graphical display to provide rapid analysis of land use.
- Use of University of Cincinnati's Urban Data Center data bank for information such as population movements.

STAFF

Regular: 7

TERMINALS RECOMMENDEDVALUE

(none)



FUNCTION

Keep official Council records and publish legislative notices.

EDP RECOMMENDATIONS

- Automate and combine street inventory file with that of the Engineering Division.

POTENTIAL BENEFITS

- Clerical time available for reassignment.

FUTURE POSSIBILITIES

- Provide automated information retrieval method to improve filing, referencing, and accessing of legal documents.

STAFF

Regular: 4

TERMINALS RECOMMENDED

(none)

VALUE

-0-



FUNCTION

Fiscal advisor to City administration.
Prepare financial records and reports of
the City's fiscal activities. Audit and
control encumbrances and expenditures.

EDP RECOMMENDATIONS

- Process cash disbursements and receipts,
payroll and fund accounting transactions.
- Accumulate cost accounting control data as
by-product of above.
- Produce fund accounting and budgetary
control reports.
- Issue cash disbursement checks.
- Process interdepartmental billings.

OTHER RECOMMENDATIONS

- Eliminate use of claim vouchers in
accounts payable processing.
- Simplify vendor invoice approval pro-
cedure.
- Transfer payroll deductions authorization
process to Personnel Department.

POTENTIAL BENEFITS

- Nine employees available for reassign-
ment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 18

TERMINALS RECOMMENDED

(none)

VALUE

\$53,595

FUNCTION

Administer City income tax, collect taxes, maintain tax records, and enforce tax regulations.

EDP RECOMMENDATIONS

- Obtain budgetary report data from EDP payroll and accounting systems.
- Prepare payment summaries by taxpayers for annual audit, and produce statistical reports as by-product.
- Produce transaction file and prepare summary reports, taxpayer billings and partial payment notices, and statistical reports.
- Maintain name and address file; when updating, produce new index card for manual file maintenance procedure.
- Produce labels for file folders and bulk mailing.
- Produce master list for file maintenance procedure.
- Prepare periodic exception reports of possible compliance problems.
- Prepare exception reports to assist in audit prior to processing refunds and overpayments.
- Maintain master file on all special auditing accounts for history purposes, on special payments, on payment follow-up, and on dunning procedures.

STAFF

Regular: 60
Part-time: 13

TERMINALS RECOMMENDED

- 1 Video Data Terminal
- 1 Teletypewriter Terminal



OTHER RECOMMENDATIONS

- Evaluate potential value of alternate document filing methods.

POTENTIAL BENEFITS

VALUE

- Five full-time and seven part-time personnel available for reassignment as follows:

Accounts & Collections: 1 Clerk III and other clerical time.	\$ 6,097
Classification and Records: 1 Clerk II and 7 part-time Clerk I's.	11,680
Regular Auditing: 1 Tax Audit Clerk and 1 Tax Auditor.	14,630
Special Auditing: 1 Tax Auditor.	<u>7,885</u>
	\$40,292

FUTURE POSSIBILITIES

- Simplify cash and non-cash processing by editing transactions and producing daily statistics now done in NCR remittance control system.
- Produce monthly statistical reports and annual forecasts of potential revenues.
- Assist in regulatory auditing by computer edit of all final returns.

FUNCTION

Provide Accounting and record keeping for 8400 members of the City Retirement System which includes 3500 from University of Cincinnati and General Hospital, as well as 1800 members of Police, Fire and State pension systems.

EDP RECOMMENDATIONS

- Create member records and update contribution and service credit as by-product of centralized payroll/personnel system.
- Make loan histories a part of member history file.
- Interrogate member files as inquiries occur to report on loan and benefit status.
- Program annual actuarial study from member master file.
- Prepare monthly reports to the three state pension systems -- Police, Fire and PERS.
- Report loan, retirement, separation and enrollment statistics periodically.
- Obtain data from University of Cincinnati and General Hospital in machine-readable form.

POTENTIAL BENEFITS

- One Clerk Typist II available for reassignment.
- Supervisor's time available for more productive matters.

FUTURE POSSIBILITIES

- Computer analysis of investment portfolio.

STAFF

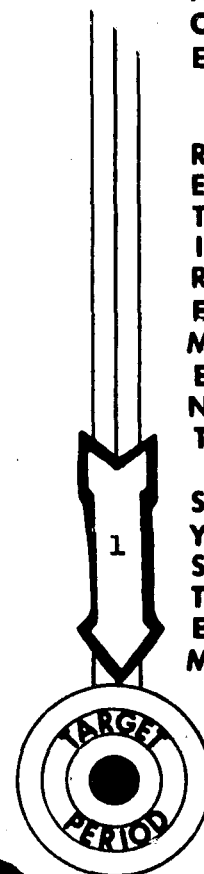
Regular: 5

TERMINALS RECOMMENDED

- 1 - Video Data Terminal

VALUE

\$5,128



FUNCTION

Collection, custody, and disbursement of all monies; safekeeping, sale and exchange of securities; issuance of licenses.

EDP RECOMMENDATIONS

- Automate control and issuance of payroll, pension and general checks.
- Simplify and automate cash receipts reporting and collection.
- Perform distribution of parking meter income.
- Control collection of delinquent accounts and special assessments.
- Reduce manual records kept on licenses and banking transactions statistics.
- Centralize accounts receivable functions for all agencies.
- Utilize remittance control machines to extract by-product data for direct computer input.

OTHER RECOMMENDATIONS

- Standardize license formats and prepare on automatic writing machines; extract data for direct entry to computer system.

POTENTIAL BENEFITS

- A Clerk Typist III and a Clerk I available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

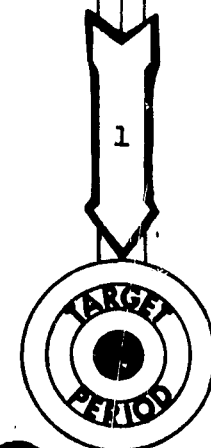
Regular: 27

TERMINALS RECOMMENDED

- 1 Video Data Terminal
- 1 Teletypewriter I/O Terminal

VALUE

\$10,298



FUNCTION

To provide to the indigent persons of Cincinnati and Hamilton County necessary medical services for the preservation of health.

EDP RECOMMENDATIONS

- Produce visitation statistical reports monthly from individual visitation data for approximately 12,000 monthly visits.
- Prepare third party and direct billings monthly to non-sponsoring groups (covering 70% of patients and to a portion of remaining 30% on a direct minimum billing basis).
- Perform clinic scheduling for some 50 clinics for two months in advance.
- Provide as by-product a method of purging medical history records.

POTENTIAL BENEFITS

- Two clerks available for reassignment.

FUTURE POSSIBILITIES

- General cost accounting, including labor distribution.
- Inventory control.
- Personnel records.
- Payroll.
- In-patient accounting.

STAFF

Regular: 53

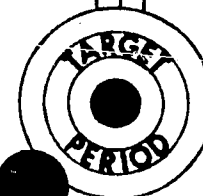
TERMINALS RECOMMENDED

1 Teletypewriter terminal

VALUE

\$9,000.00



FUNCTION

Provide business services and accounting controls for all divisions of the Department of Health. Operate the Vital Statistics Office.

EDP RECOMMENDATIONS

- Prepare budgetary reports as by-product of Fund Accounting and Labor Distribution applications recommended in Accounts and Audits and Payroll.
- Prepare statistical reports and maintain magnetic tape record of medical records as a by-product.

OTHER RECOMMENDATIONS

- Use microfilm rather than roll film storage for Vital Statistics.

POTENTIAL BENEFITS

- Two Clerk I's and other clerical time available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 14

TERMINALS RECOMMENDED

(none)

VALUE

\$8,402

FUNCTION

Enforce health laws and insure safe supply of meat, dairy products, and poultry.

EDP RECOMMENDATIONS

- Schedule inspections and maintain history records.
- Issue annual food and sanitation permits and licenses.
- Access County Auditor's File for ownership data.

POTENTIAL BENEFITS

- One Clerk Typist III and other clerical time for reassignment.

FUTURE POSSIBILITIES

- Correlate inspection data with those of other City and County inspection programs.

STAFF

Regular: 78
Part-time: 7

TERMINALS RECOMMENDED

- One video data terminal
- One teletypewriter AR terminal

VALUE

\$6,097.00



FUNCTION

Provide medical service to schools, clinics and homes.

EDP RECOMMENDATIONS

- Compile statistics and prepare reports on school, clinic and home visitations.
- Bill individuals or third party sponsor.
- Provide cost analysis by nursing districts, projects and programs.

POTENTIAL BENEFITS

- One Clerk Typist I and other clerical time available for reassignment.

FUTURE POSSIBILITIES

- Create and maintain medical history records on all persons treated.
- Scheduling of visits to various Health Centers and Clinics.
- Access General Hospital and other hospital patient files.

STAFF

Regular: 132
Part-time: 6

TERMINALS RECOMMENDED

(none)

VALUE

\$4,201.00



FUNCTION

Operate psychiatric and alcoholism clinics.

EDP RECOMMENDATIONS

- Access Police and Medical files to facilitate analysis of patient history.

POTENTIAL BENEFITS

- Clerical time available to handle increasing work load.

FUTURE POSSIBILITIES

- Analyze interview records for scientific research.

STAFF

Regular: 5
Part-time: 1

TERMINALS RECOMMENDED

(none)

VALUE

-0-



FUNCTION

Principal representative of the City on legal matters.

EDP RECOMMENDATIONS

-Participate in centralized accounting and payroll systems.

POTENTIAL BENEFITS

-Clerical time available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 2

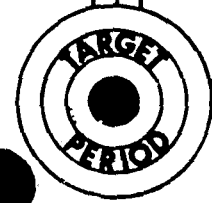
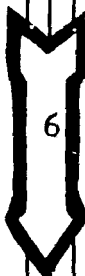
TERMINALS RECOMMENDED

(none)

VALUE

-0-





FUNCTION

Prosecute Police and Traffic Court cases.

EDP RECOMMENDATIONS

- Access police files for past police records and other data to facilitate investigations.
- Access County Auditor's file for verification of good ownership when bond is offered.
- Access docket schedules through EDP methods.

POTENTIAL BENEFITS

- Clerical and staff time available for reassignment.
- Eliminate property bond forfeitures.

FUTURE POSSIBILITIES

- Create cross-indexed file of criminal law and cases.

STAFF

Regular: 8

TERMINALS RECOMMENDED

1 Teletypewriter I/O Terminal.

VALUE

-0-

FUNCTION

Handle all civil court actions.

EDP RECOMMENDATIONS

-Transfer collection of City claims to Department of Finance for centralized billing and collection.

POTENTIAL BENEFITS

-Reduce clerical work of Claims Collection Officer.

FUTURE POSSIBILITIES

-Indexing of uncodified Council ordinances to facilitate reference.
-Active case scheduling to facilitate conformance to statutes of limitations.
-Creation of cross-indexed file on Code of Ordinances, City Charter, and City Solicitor's opinions to facilitate preparation of briefs and legal opinions.

STAFF

Regular: 17

TERMINALS RECOMMENDED

(none)

VALUE

-0-

5



FUNCTION

Acquisition of property and securing rights in property for City and University of Cincinnati improvement projects. Also responsible for legal problems relating to City-owned properties.

EDP RECOMMENDATIONS

- Access County Auditor's file for ownership and property data.
- Develop subsystem property file to facilitate acquisition program by providing current status of each property.
- Access County Auditor's file for tax payment information.

POTENTIAL BENEFITS

- Clerical and staff time available for reassignment.

FUTURE POSSIBILITIES

- Conduct title search by computer methods.

STAFF

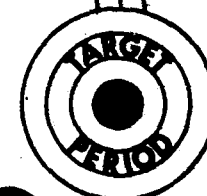
Regular: 19

TERMINALS RECOMMENDED

1 Teletypewriter I/O Terminal

VALUE

-0-



FUNCTION

Levy special assessments for boulevard lights, street lights, sewer improvements and similar projects.

STAFF

Regular: 2

EDP RECOMMENDATIONS

- Access County Auditor's file for ownership and property data.
- Use computer methods to prepare special assessments work sheets.

TERMINALS RECOMMENDED

(none)

POTENTIAL BENEFITS

- Clerical and staff time available for reassignment.
- Duplicated files in Law, Finance, and Public Utilities consolidated.

VALUE

\$2400

FUTURE POSSIBILITIES

(none)



FUNCTION

Prepare annual budgets; perform management research studies; prepare and issue budgetary and operating reports; serve as members of evaluation committees.

EDP RECOMMENDATIONS

- Obtain budgetary performance data as a by-product of encumbrance and expenditure accounting system.
- Devise a budgetary compilation routine for rapid construction and evaluation of proposed budgets.
- Extract research data from routine accounting procedures.
- Automate preparation and printing of basic budget.
- Automate job complement file and prepare monthly listing of authorized job complement which includes incumbents and salary information.

POTENTIAL BENEFITS

- One Budget Analyst II and one Clerk Typist II available for reassignment
- Eliminate manually maintained job complement files in this office, in the Personnel Department, and in operating agencies.
- Provide more current and timely information for management decisions.

FUTURE POSSIBILITIES

- Forecast budgetary requirements.

STAFF

Regular: 8

TERMINALS RECOMMENDED

1 Video Data Terminal

VALUE

\$14,804
2,220

\$17,024



FUNCTION

Perform duties related to criminal proceedings of the Cincinnati Police and Traffic Courts.

EDP RECOMMENDATIONS

- Generate court dockets with arrest records as inputs.
- Prepare and update "Out on Bond" list.
- Prepare index of persons arrested.
- Prepare statistical summaries of numbers of persons heard by the courts and listed by charges.
- Prepare reports for County Prosecutor, listing names and charges of persons bound to Grand Jury.
- Prepare analysis of cases to improve court scheduling.
- Accumulate data concerning continued cases.
- Check against wanted persons, stolen vehicles, previous arrest, and outstanding tags files when warrant is issued or at time of payment of fines.

POTENTIAL BENEFITS

- Clerical time available for reassignment
- More effective court scheduling.
- Reduces warrants.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 24
Part-Time: 1

TERMINALS RECOMMENDED

1 Teletypewriter I/O Terminal

6

VALUE

-0-



FUNCTION

Criminal jurisdiction in Cincinnati and civil jurisdiction in matters up to \$3000 in Hamilton County.

EDP RECOMMENDATIONS

- Utilize automated police master files to facilitate pre-sentence investigations.
- Develop file of persons on probation.
- Participate in centralized accounting and payroll systems

POTENTIAL BENEFITS

- Clerical and staff time available for reassignment.
- Reduce duplication of Police files.

FUTURE POSSIBILITIES

- Participate in projected state-wide system of storing, searching, and retrieving court cases, opinions, and decisions.

STAFF

Regular: 27

TERMINALS RECOMMENDED

(none)

VALUE

-0-



FUNCTION

Provides information, reference facilities
and research services to City administration.

EDP RECOMMENDATIONS

(none)

POTENTIAL BENEFITS

(none)

FUTURE POSSIBILITIES

-Should scope of activity increase,
some automation of files and records
would eliminate need for increasing
staff.

STAFF

Regular: 3
Part-time: 1

TERMINALS RECOMMENDED

(none)

VALUE

(none)



FUNCTION

Operate and maintain all City parks as well as nursery and a horticultural conservatory.

EDP RECOMMENDATIONS

- Participate in centralized payroll/ personnel system.
- Participate in centralized inventory management system.
- Prepare budgetary reports as by-product of fund accounting system.

POTENTIAL BENEFITS

- One Clerk I available for reassignment.

FUTURE POSSIBILITIES

- Maintain property records.

STAFF

Regular: 193
Part-time: 42

TERMINALS RECOMMENDED

(none)

VALUE

\$4,201.00



FUNCTION

Enforce City ordinances and park regulations relating to protection of park properties and facilities.

EDP RECOMMENDATIONS

- Utilize regional CLEAR files.

POTENTIAL BENEFITS

- Improved park protection service through better utilization of manpower.

FUTURE POSSIBILITIES

- Will be affected by Project CLEAR applications.

STAFF

Regular: 22

TERMINALS RECOMMENDED

One teletypewriter I/O Terminal

VALUE

-0-



FUNCTION

Recruit personnel for City, University of Cincinnati, General Hospital and Board of Education; process personnel changes; certify payrolls; maintain various files related to personnel functions; and compile wage and fringe benefit statistics.

EDP RECOMMENDATIONS

- Facilitate exam process by using machine-readable source documents to prepare roster lists and exam answer sheets; by using EDP methods to access and to notify exam applicants; and by automating eligible list expiration notices.
- Prepare injury statistics.
- Prepare inter-city and local salary and fringe benefit survey notices and previous year's data, and provide various analyses of returned data.
- As by-product of centralized payroll system, maintain master attendance records, employee history records, and various statistical summaries. Also automate balancing of vacation and sick leave credits.

POTENTIAL BENEFITS

- One Clerk II and one Clerk III available for reassignment.
- Staff time available for reassignment.

STAFF

Regular: 24
Part-time: 3
NYC: 2

TERMINALS RECOMMENDED

- 1 Video Data Terminal
- 1 Teletypewriter I/O Terminal

VALUE

\$11,225.00



FUNCTION

Purchase supplies, materials, and equipment required by the City and its institutions.

EDP RECOMMENDATIONS

- Purchasing statistics available as by-product of encumbrance and expenditure accounting procedures.
- Commodity records and reports prepared from purchase history data available from encumbrance information.
- Maintain inventory records for Centralized Stores.
- Operations research techniques applied to provide better inventory control and usage.
- Perform interdepartmental billing from reproduction and printing services, and keep cost and production statistics for such services.

POTENTIAL BENEFITS

- Clerical time of two Clerk II's and other clerks available for reassignment.
- Inventory investment and carrying costs reduced.

FUTURE POSSIBILITIES

- Standard specifications maintained on computer and reproduction masters produced by computer. One clerk would be available for reassignment, and one Dura automatic typewriter could be eliminated.

STAFF

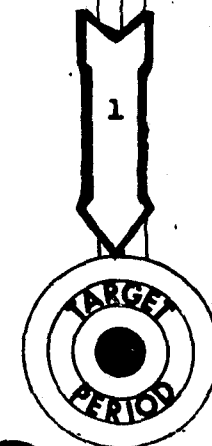
Regular: 24

TERMINALS RECOMMENDED

- 1 Video Data Terminal
- 1 Teletypewriter Terminal

VALUE

\$11,794



FUNCTION

Responsible for utility rate and service regulations, audits, and negotiations of contracts as related to utility companies.

EDP RECOMMENDATIONS

- Comparative studies of current electric, gas, telephone, and transit companies operations in relation to historical data.
- Utility rate analysis for ordinance and contract negotiations.
- Participate in centralized payroll, labor distribution, and fund accounting systems.

POTENTIAL BENEFITS

- Clerk III (Accounting) and Clerk Stenographer II (Payroll) would be available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 9

TERMINALS RECOMMENDED

(none)

VALUE

\$11,385



FUNCTION

Planning and designing all traffic control devices and street lighting, supervision and control of mass transit and public vehicle operations, analysis of traffic data, and licensing of private off-street parking facilities. The sports stadium coordinator is assigned from this department.

STAFF

Regular: 35
Part-Time: 14

EDP RECOMMENDATIONS

- A complete street inventory including: control signals, signs, other utility on-street and underground inventories, physical properties of street, accident history, speed limits, grade, width, surface, and access.
- Solutions to traffic control problems using sophisticated computer programming control devices including traffic monitoring.
- Forecasting demands on highways based on population movements and points of gravitation, as well as analysis of the influence on traffic of new construction or temporary detours.
- Accident analysis.
- Structural and design problem solution.
- Mechanized systems and files for taxicab and bus driver licensing and private parking lot licensing.
- PERT capabilities for evaluation and review of sports stadium construction.

TERMINALS RECOMMENDED

2 - Teletypewriter I/O Terminals

POTENTIAL BENEFITS

-Two Clerk III's, Two Clerk I's (.25), Traffic Data Analyst, and an Engineering Tech. I (coop) positions should be available for reassignment.

VALUE

\$25,486



POTENTIAL BENEFITS (continued)

VALUE (continued)

- Clerical time of a Traffic Engineering Tech II should be available for more productive assignments.
- A card punch and a sorter can be eliminated for an annual savings of \$768 rental fees.

FUTURE POSSIBILITIES

- Scheduled PM.
- Graphics display of timing relationship and related intersection plans.

FUNCTION

Maintenance and operations of physical properties at Lunken Airport, municipally-owned parking facilities, street lighting, traffic signals, illuminated traffic control signs, and the administration of electrical rules and regulations on public ways.

EDP RECOMMENDATIONS

- Mechanize inventory control of electrical shop material and parking meters.
- Prepare statistics on parking requirements, availability, influences and trends.
- Utility permit registration.

POTENTIAL BENEFITS

- One Light and Signal Construction and Maintenance Man II should be available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 54
Part-Time: 5

TERMINALS RECOMMENDED

(none)

VALUE

\$7,397



FUNCTION

Provide all basic engineering services through design, supervision, and inspections of streets, expressways, sewers, bridges, and other public improvements constructed by City or private enterprises.

EDP RECOMMENDATIONS

- Access master land usage file for easement and right-of-way parcels, cost and income reports.
- Capture project cost records and automate preparation of billings.
- Automate compilation of cost figures for preparation of both Operating and Capital Improvement Budgets.
- Eliminate records keeping in all work and programs and consolidate in Accounts and Records. These duplicated records include project cost as well as parcel or land usage records.
- Design work and engineering calculation by computer.

POTENTIAL BENEFITS

- One Engineering Technician II, one Engineering Technician I, one Accounts Clerk III and one Clerk Typist III available for reassignment.

FUTURE POSSIBILITIES

- Use of PERT and CPM programs for project Managements.
- Master street file for use of Engineering, Water Works, and Public Utilities.

STAFF

Regular: 23¹/₂
Part-time: 0

TERMINALS RECOMMENDED

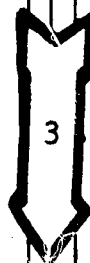
1 Teletypewriter I/O Terminal

VALUE

\$23,904.

2





FUNCTION

Maintains and cleans all dedicated streets, expressways, bridges, viaducts, and sewers and installations of non-electric devices for traffic control.

EDP RECOMMENDATIONS

- Combine labor distribution reports with cost reports on materials and equipment used to incorporate units of work accomplished for operation type statistical reports.
- Benefit from City-wide equipment fees for automated preparation of monthly equipment rental I. D. Bills.
- Monthly budgetary reports of open balances on certifications, etc. to ease manual bookkeeping.
- Development and use of standard inventory package to maintain stock balances and afford optimum use of planned purchasing procedures.

POTENTIAL BENEFITS

- Three Clerk III's available for reassignment.

FUTURE POSSIBILITIES

- Produce research and analysis of manufacturing by computer as is performed in private manufacturing concerns.

STAFF

Regular: 508
Part-time: 54

TERMINALS RECOMMENDED

(none)

VALUE

\$6,097
3
\$18,291

FUNCTION

Is responsible for maintenance of all motorized equipment owned by the City.

STAFF

Regular: 146
Part-Time: 0

EDP RECOMMENDATIONS

- Establish equipment file in computer to edit and record all cost data for each vehicle for computer preparation of cost reports.
- Use equipment file as simplified means for calculating and applying equipment rental cost to using agencies.
- Participate in centralized inventory management system.

TERMINALS RECOMMENDED

(none)

OTHER RECOMMENDATIONS

- Modify Cost Accounting of certain labor charges (washing, lubrication) to actual time from standard charge formula to simplify cost reporting.

POTENTIAL BENEFITS

- One Clerk II and a Storekeeper will be available for reassignment.
- Eliminate user accounting of equipment rental costs.
- Three Clerks in Cost Section of Div. of Accounts & Audits available for reassignment.

VALUE

\$11,387

FUTURE POSSIBILITIES

(none)





FUNCTION

Responsible for maintenance and repair of all city buildings under control of City Manager and city-owned property.

EDP RECOMMENDATION

- Labor distribution system will provide computer compiled cost by building number and activity coding to provide automatically major building maintenance cost.
- Provide additional cost figures of material used and equipment used by project cost area (building number) to complete building maintenance cost through centralized cost accounting system.

OTHER RECOMMENDATIONS

- Development of inventory control application (non-computer due to size).
- Development of major renovation costs by type of project for future estimation of proposed renovations in City-owned building.

POTENTIAL BENEFITS

- One day per week of Clerk III's time available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 85

TERMINALS RECOMMENDED

(none)

VALUE

\$1,220

FUNCTION

Under the Superintendent of Automotive Fleet, provides for the compulsory inspection of all vehicles using City streets.

EDP RECOMMENDATIONS

- Record inspection data and fee collections devices for daily cash receipt balancing and summaries of inspection defects, etc.
- Maintain file of inspection due dates, compliance, etc.
- Prepare reminder notices.
- Maintain file of rejected inspection reports by auto license numbers instead of seal number, for inclusion in law enforcement system.

POTENTIAL BENEFITS

- Two Clerk II positions could be saved.

FUTURE POSSIBILITIES

- On recording inspection data, inquire into police files for an outstanding warrants against vehicle.

STAFF

Regular: 44

TERMINALS RECOMMENDED

- 1 - Teletypewriter I/O Terminal

VALUE

\$10,256



FUNCTION

Collection and disposal of waste material.

EDP RECOMMENDATION

- Utilize labor distribution and cost accounting systems to produce cost of operations as by-product of encumbrance and expenditure accounting.
- Eliminate keeping of duplicate records on attendance, etc., by subscribing to automated payroll system.

OTHER RECOMMENDATIONS

- Minimize clerical activities of operating personnel by recording only basic data on tonnages collected.

POTENTIAL BENEFITS

- Six Clerk II's available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

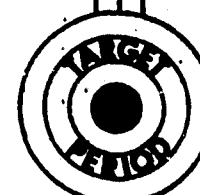
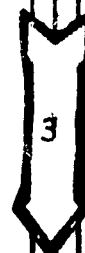
Regular: 509

TERMINALS RECOMMENDED

(none)

VALUE

\$30,768.00



7

FUNCTION

Operate and maintain the Cincinnati Metropolitan Regular: 192
Sewage Disposal System. Assign sewerage
service charges and surcharges.

STAFF

EDP RECOMMENDATIONS

- Participate in centralized payroll/personnel system.
- Utilize cost reports available from centralized fund accounting system.
- Participate in city-wide inventory management system.
- Perform industrial sewerage service rate calculations.
- Prepare statistical analyses of laboratory results.
- Develop mechanized preventive maintenance program.
- Calculate industrial user sewerage service surcharges.

TERMINALS RECOMMENDED

- 1 - Data Gathering System

POTENTIAL BENEFITS

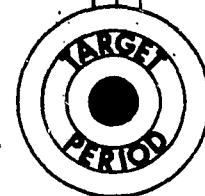
- Account Clerk II, Bookkeeping Clerk, and an Asst. Accountant available for reassignment.
- Equivalent of one laborer available for reassignments.
- Clerical time of operating and technical staff available for reassignment.

VALUE

\$23,747

FUTURE POSSIBILITIES

- Perform engineering design calculations.



FUNCTION

Perform departmental clerical, accounting, and personnel activities.

EDP RECOMMENDATIONS

- Produce punched paper tape as by-product of cash register operation; use for direct entry of cash receipts data, preparation of cash receipts schedule and sales analysis report.
- Develop operating cost data as by-product of fund and labor distribution accounting applications.
- Produce bills to Board of Education in manner similar to interdepartmental billing recommendations.
- Participate in centralized payroll/personnel systems.

POTENTIAL BENEFITS

- One Cashier II, two Clerk I and one Clerk II, available for reassignment.
- Annual overtime eliminated in amount of \$1800.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 9
Part-time: 1

TERMINALS RECOMMENDED

(none)

VALUE

\$6,259
8,401
6,097
1,800
\$22,558

RECREATION
COMMISSION
ACCTS
AND
RECORDS



FUNCTION

Conducts programs in neighborhood community centers and summer playgrounds to provide recreation and training for all age groups.

EDP RECOMMENDATIONS

- Use machine-readable source documents to compile statistical data on recreational activities.

POTENTIAL BENEFITS

- More effective use of technical staff time.

FUTURE POSSIBILITIES

- Recreational needs forecasting utilizing regional land use and population statistics.

STAFF

Regular: 31
Part-time: 138

TERMINALS RECOMMENDED

(none)

VALUE

FUNCTION

Operate four golf courses and one playfield.

EDP RECOMMENDATIONS

- Replace present cash registers with units which can produce punched paper tape for direct entry of cash receipts and sales analysis data.
- Replace manual system of inventory control with city-wide inventory management system.

POTENTIAL BENEFITS

- Manager's clerical time made available for more productive work. Eliminates intermediate step at Commission Office in depositing cash receipts.

FUTURE POSSIBILITIES

- Forecast recreational needs by utilizing regional land use and population statistics.

STAFF

Regular: 25
Part-time: 105

TERMINALS RECOMMENDED

(none)

VALUE

RECREATION COMMISSION

AND PLAYFIELDS
GOLF COURSES

6



FUNCTION

Repair and maintenance of all buildings, grounds, and fixtures of the Department and certain properties of the Board of Education.

EDP RECOMMENDATIONS

- Include project time analysis in centralized payroll and labor distribution system.
- Replace manual inventory system with a city-wide inventory management system.

POTENTIAL BENEFITS

- A Stockhandler and a Storekeeper available for reassignment.
- Reduce inventory carrying costs and increase turnover of stock.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 48
Part-time: 65

TERMINALS RECOMMENDED

1 teletypewriter I/O terminal

VALUE

\$11,547.00



FUNCTION

Conduct all recreational activities at outside facilities, such as school athletic fields and tennis courts.

EDP RECOMMENDATIONS

- Prepare all schedules and alternate schedules, including facilities and umpires.
- Use machine-readable source documents to compile recreational activities statistics.

POTENTIAL BENEFITS

- Clerical time available for reassignment.

FUTURE POSSIBILITIES

- Recreational needs forecasting utilizing regional land use and population statistics.

STAFF

Regular: 19
Part-time: 44

TERMINALS RECOMMENDED

(none)

VALUE

6



FUNCTION

Planning and developing new recreational areas.

EDP RECOMMENDATIONS

(none)

POTENTIAL BENEFITS

(none)

FUTURE POSSIBILITIES

- Simulation programs to facilitate the planning and constructing of athletic fields, tennis courts, and swimming pools.
- Utilization of various Civil Engineering package programs.

STAFF

Regular: 8

TERMINALS RECOMMENDED

(none)

VALUE



FUNCTION

Review all building construction plans and permit applications for mechanical and air pollution control equipment. Conduct air pollution control programs in the City and, by contractual agreements, in the neighboring communities.

EDP RECOMMENDATIONS

- Calculate air pollution statistics and prepare reports on computer.
- Residential inspections data available as by-product of a Master Property File and a Building Division Property Sub-file.
- Inspection activities report available as by-product of labor distribution application recommended in the Payroll study.
- Inspection forms and receipts included as by-product of a Master Property File, not only in storing information, but also in preparing applications and receipts.
- Participate in centralized Payroll/Personnel and fund accounting systems.

POTENTIAL BENEFITS

- By mechanizing air pollution statistical work, clerical and technician time available for reassignment.
- Availability of more timely and pertinent property information will reduce clerical work of inspectors and clerks, allow consolidation of similar files in several agencies.
- Eliminate need for three cross-indexed files to maintain inspection forms and receipts.

STAFF

Regular: 24
Part-time: 1

TERMINALS RECOMMENDED

1 Teletypewriter I/O Terminal

VALUE

\$1,600 (20% of 1 Technician)
2,000 (Clerk III: 2 hrs/wk)
(Supervising Clerk: 10 hrs/wk)



- Clerical time available for reassignment through centralized Payroll/Personnel and accounting systems.

FUTURE POSSIBILITIES

- Collection and recording of air pollution data by computer to eliminate manual collection and compilation of data.
- Regional data center for the tri-state area.

FUNCTION

Administer and enforce City building and zoning codes on all building operations. Prepare legislation necessary to keep codes up-to-date and responsive to present-day standards.

EDP RECOMMENDATIONS

- Access County Auditor's File and Property File and print Property Record to be attached to Building Permit Application and Plans. Upon approval, write permit and, at the same time, generate statistical data and store in Property File. Access File daily for Cash Receipts Schedule, and weekly for Activities Report.
- Access Property File and batch print inspection schedules and forms.
- Participate in centralized payroll/personnel system.

POTENTIAL BENEFITS

- Clerical time available for reassignment.
- One Housing Inspector stationed at the County Court House available for reassignment.

FUTURE POSSIBILITIES

- Use computer methods to facilitate review and subsequent updating of building and zoning codes sections under consideration for changes.
- Plan examination by mathematical simulation techniques.
- Automatic notification to other City and County agencies affected by building activities.

STAFF

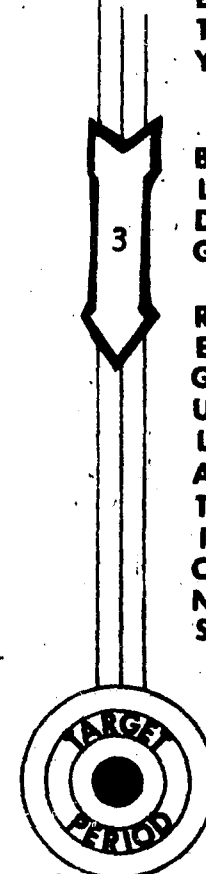
Regular: 101

TERMINALS RECOMMENDED

- 1 - Video Data Terminal
- 1 - Teletypewriter Terminal

VALUE

\$11,300



FUNCTION

Install, maintain, and repair all communication facilities of the City. Supervise Police and Fire emergency dispatching stations.

EDP RECOMMENDATIONS

- For tow truck dispatching, use VDT I/O process to replace present manual card systems to reduce clerical time of Police officers and to provide automated documentation for statistical reports.
- Update and print Municipal Telephone Directory by computer.
- Participate in centralized payroll/personnel system.
- By providing teletype terminals in the Fire Division, automate fire data collection and transmission.

POTENTIAL BENEFITS

- Clerical time available for reassignment.

FUTURE POSSIBILITIES

- Monitoring police calls and dispatches (selection of mobile units and tow trucks, transmission of information to teletype, developing statistical analysis of police response time, and so forth) by computer.
- Amend claim voucher process so that vendor invoices will be sufficient.
- Replace manual inventory control system with a City-wide inventory management system.

STAFF

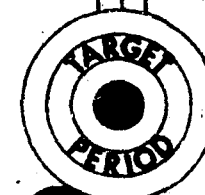
Regular: 50
Part-Time: 4

TERMINALS RECOMMENDED

- 4 - Video Display Terminals
- 1 - Teletypewriter I/O Terminal

VALUE

\$300



FUNCTION

Fire fighting; fire prevention through building inspections and public education programs

STAFF

Regular: 932
Part-Time: 20

EDP RECOMMENDATIONS

- Input exceptions on daily basis and print daily count of active personnel report by computer.
- As by-product of a Master Property File, prepare inspection schedule by computer methods on machine-readable inspection forms.
- Facilitate statistical data collection and transfer by use of teletypes with paper punch tape producing capabilities, and produce reports through EDP methods.
- Participate in centralized payroll/personnel system.
- Replace manual inventory control system with city-wide computerized inventory management system.

TERMINALS RECOMMENDED

- 6 - Teletypewriter I/O Terminals
- 1 - Video Display Terminal

POTENTIAL BENEFITS

- Clerical time of 1½ Clerk II positions available for reassignment
- Fire personnel time in every Fire House available for reassignment.

VALUE

\$6000

FUTURE POSSIBILITIES

- Utilize computer as fire fighting equipment through instant retrieval of pertinent information about a building on fire -- type of construction, use, storage of flammables, egress, owner, etc.
- Will be affected by Project CLEAR.

3



FUNCTION

Inspect scales and other measuring devices, pre-packaged goods, and vendor premises for compliance with local, state, and federal regulations on weights and measures, for proper labels and contents, and for licenses and permits. Supervise three City-owned open markets.

EDP RECOMMENDATIONS

- Inspection schedule data available as by-product of a Master Property File. Prepare forms and receipts by computer
- Use machine-readable inspection documents to compile statistical data and produce reports to computer methods.

POTENTIAL BENEFITS

- Clerical time available for reassignment. If increase in inspection staff is needed in the future, replace a clerk with an inspector and assign one inspector part-time in the office as clerical backup.

FUTURE POSSIBILITIES

-none-

STAFF

Regular: 14

TERMINALS RECOMMENDED

-none-

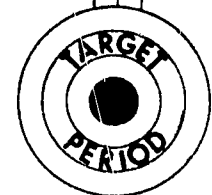
VALUE

-0-



CONTINUED

2 OF 3



FUNCTION

Accept and process for custody some 8500 prisoners per year. Provide medical and social care, recreation, and food for the inmates.

EDP RECOMMENDATIONS

- Provide work detail reports and statistics as a by-product of the labor distribution system.
- Produce prisoner work detail assignments by computer, based on factors such as age, work experience, confinement days left, type of inmate, last detail worked, etc.

OTHERS

- Eliminate arrest record and finger print files by making data available from a central booking agency.
- Design universal prisoner record forms for use by the Police, the Courts, and this Division.
- Standardize confinement documents for use by all courts and jurisdictions.
- Transfer billing and cash receipts procedures for confinement of prisoner from other jurisdictions to a centralized accounts receivable agency.

POTENTIAL BENEFITS

- 2/3 of one guard available for reassignment.

FUTURE POSSIBILITIES

(affected by Project CLEAR)

STAFF

Regular: 54
Part-time: 2

TERMINALS RECOMMENDED

- 1 Teletypewriter I/O Terminal

VALUE

\$4,000

FUNCTION

Administer and control the Sinking and Bond Retirement Fund.

EDP RECOMMENDATIONS

(none)

POTENTIAL BENEFITS

(none)

FUTURE POSSIBILITIES

- Set up Master Sinking & Bond Retirement Fund File with inquiry ability by the Sinking Fund and the Department of Finance for preparation of required accounting statements, not only annually, but also periodically as needed.
- Set up Master File of owners of registered bonds for automated interest payments and accounting of such issues.

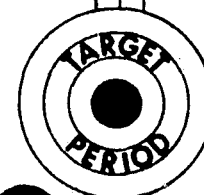
STAFF

Regular: 3

TERMINALS RECOMMENDED

(none)

VALUE



FUNCTION

Directs and coordinates City's program of urban improvement. Applies for and administers loan and capital grants from HUD and HHFA of Federal Government.

EDP RECOMMENDATIONS

-Prepare budgetary work sheets and project performance reports as by-product of payroll and fund accounting system.

POTENTIAL BENEFITS

-Clerical work of staff reduced.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 3

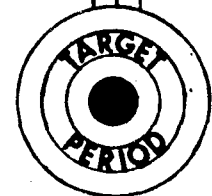
TERMINALS RECOMMENDED

(none)

VALUE

-0-





FUNCTION

Administration of personnel and fund accounting.

EDP RECOMMENDATIONS

- Extract encumbrance and expenditures data from fund accounting system, and prepare project status reports as required by the Federal Government.
- Prepare interdepartmental bills as by-product of centralized accounting system.

OTHER RECOMMENDATIONS

- Eliminate duplication of property management record keeping between City and Fifth-Third Bank.

POTENTIAL BENEFITS

- One Bookkeeping Clerk and two Clerk Typists I available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

Regular: 9

TERMINALS RECOMMENDED

(none)

VALUE

\$16,575.00

FUNCTION

Conduct programs for conservation, re-habilitation, or demolition of structures to inhibit formation or extension of slum areas.

EDP RECOMMENDATIONS

- Develop accounting and budgetary performance data as by-product of fund and labor distribution accounting system.
- Develop computer compatible building inventory file which meets requirements not only of this Division, but also those of the Division of Real Estate of the Law Department.

POTENTIAL BENEFITS

- One Clerk III available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

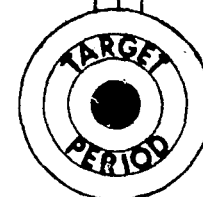
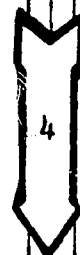
Regular: 24

TERMINALS RECOMMENDED

(none)

VALUE

\$6,300.00



FUNCTION

Coordinate revitalization programs of the Riverfront, Central Business and Queensgate areas.

EDP RECOMMENDATIONS

- Develop reports on actual vs estimated performance on Federal projects as by-product of fund accounting and labor distribution process.
- Prepare required reports for City, State and Federal agencies.
- Provide a land use file for analytical work.

POTENTIAL BENEFITS

- One Urban Development Technician I available for reassignment.

FUTURE POSSIBILITIES

- Apply graphical display and other computer graphical techniques.

STAFF

Regular: 23

TERMINALS RECOMMENDED

(none)

VALUE

\$8,895.00



FUNCTION

Detail planning and research to identify specific application areas for potential urban renewal projects.

EDP RECOMMENDATIONS

- Develop machine-oriented statistical techniques to aid information of plans.
- Develop and use urban renewal land use inventory file as a sub file to the main area land use file discussed in City Planning

POTENTIAL BENEFITS

- Staff time available for reassignment.

FUTURE POSSIBILITIES

- Expand use of demographic data.

STAFF

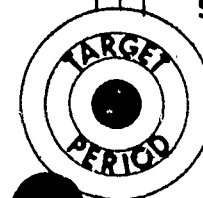
Regular: 13

TERMINALS RECOMMENDED

1 Video Data Terminal

VALUE

-0-



FUNCTION

Provide administrative direction for department, as well as professional engineering services.

EDP RECOMMENDATIONS

- Participate in centralized payroll/personnel system; obtain labor distribution as a by-product.
- Participate in centralized fund accounting system.
- Control accounts receivable as planned under centralized water billing system.
- Combine responsibility for remaining accounting functions in office of Director with those of Commercial Division.

POTENTIAL BENEFITS

- Two Bookkeeping Clerks and one Systems and Procedures Analyst 3 available for reassignment.

FUTURE POSSIBILITIES

(none)

STAFF

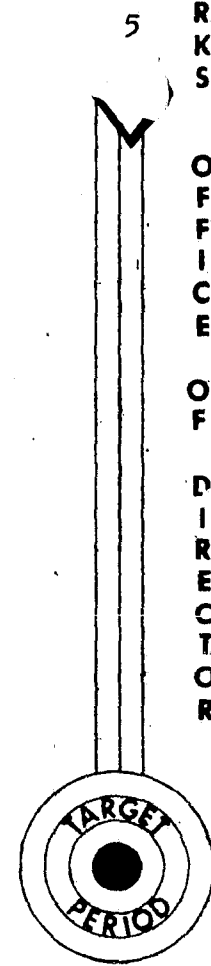
Regular: 11

TERMINALS RECOMMENDED

(none)

VALUE

\$23,010.00



FUNCTION

Read water meters, bill and collect fees for water and sewerage service..

EDP RECOMMENDATIONS

- Utilize County Auditor's Master Property File for property data.
- Participate in centralized payroll/personnel system.
- Process meter readings, water bills, accounts receivable, and related reports on the central computer with ability for daily update of all accounts and daily balancing of Accounts Receivable.
- Billing analyses.
- Automatic daily review of delinquent accounts.
- Utilize Master Street Address File to facilitate meter route analyses, and maintenance of customer files.

POTENTIAL BENEFITS

- Equivalent of 12 employees available for reassignment.
- Phase out of unit record equipment and cancellation of Model 20, System 360.

FUTURE POSSIBILITIES

(none)

STAFF

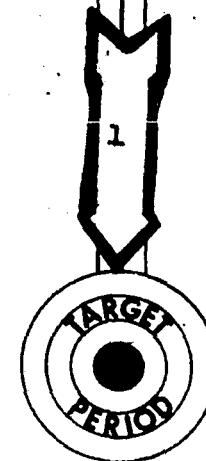
Full-Time: 80
Part-Time: 4

TERMINALS RECOMMENDED

- 3 - Video Data Terminals
- 2 - Teletypewriter AR Terminals
- 1 - DCT-2000 Reader/Printer

VALUE

\$45,600



FUNCTION

Planning, designing and engineering of water distribution systems. Construction and maintenance of water distribution mains and branches. Investigation of customer complaints.

EDP RECOMMENDATIONS

- Utilize Water Works Commercial Division Customer Master File instead of own card file.
- Develop and maintain meter history file.
- Participate in city-wide inventory management system.
- Evaluate and control construction progress by use of PERT, PERT/cost, CPM, etc.
- Participate in centralized data through fund and labor distribution systems.

POTENTIAL BENEFITS

- One Clerk II available for reassignment.
- Reduce inventory carrying costs and increase turnover of stock.

FUTURE POSSIBILITIES

- Use of computer engineering programs to perform design calculations.
- Develop models of the distribution system for design simulation.

STAFF

Regular: 210
Part-time: 4

TERMINALS RECOMMENDED

- 1 Teletypewriter I/O Terminal
- 1 Data Gathering System

VALUE

\$5,128.00

5



FUNCTION

Operation and maintenance of treatment and pumping of water.

EDP RECOMMENDATIONS

- Participate in centralized payroll/personnel system.
- Extract cost reports from fund accounting and labor distribution systems.
- Provide coding compatibility with standard utilities method of accounting for reporting to Public Utilities Commission.
- Provide mechanized preventive maintenance program.
- Replace inventory control system with city-wide inventory management system.
- Prepare statistics of various laboratory tests.

POTENTIAL BENEFITS

- One Assistant Accountant available for reassignment.
- Reduce inventory carrying costs and increase turnover of stock.

FUTURE POSSIBILITIES

- Utilize PERT, CPM, and statistical packages.

STAFF

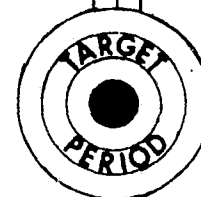
Regular: 219
Part-time: 4

TERMINALS RECOMMENDED

- 1 Teletypewriter I/O Terminal
- 1 Data Gathering System

VALUE

\$7,234.00



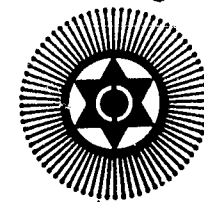
PROJECT HAMCO

Project HAMCO is the newest project level operation being conducted by the Regional Computer Center. For this reason, and because of the magnitude of the conversion of the 265,000 land parcel tax records which will provide such a powerful data base for the Regional Computer Center, all systems and programming effort, to date, have been concentrated on this area.

At the present time, it is anticipated that the Regional Computer Center will be able to handle the extension of the evaluation portion of the semi-annual tax notices. This computer run was previously conducted by another agency and should save a tremendous amount of manpower and time to be able to handle these at the Re-

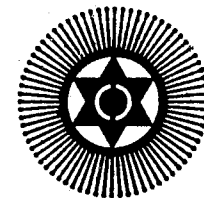
gional Computer Center. Actually, the entire operations are being programmed for the Spectra 70/45 and will be run in parallel with the regular tax notice preparation conducted on unit record equipment by the Hamilton County Auditor's staff. The entire tax notice cycle will be prepared by the Regional Computer Center at the next billing date of June 1968.

As previously indicated, only preliminary review and evaluation of the other project elements have been conducted and, because of the heavy workload required for the tax notices, very little other activity is anticipated for other elements of Project HAMCO until necessary manpower is available.



A UDITOR — ACCOUNTING

The County Accounting application will be studied by the Analyst staff of the Regional Computer Center in order to determine feasibility of converting the Accounting operations to the computer. Many of the accounting jobs are now being performed on the County's unit record equipment. In studying these areas in the conversion of these jobs which are presently run by the County's Data Processing Department, similarities between County and City accounting operations and added applications will be taken into consideration.



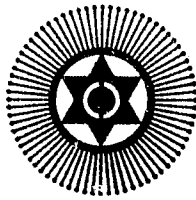
AUDITOR - REAL ESTATE

The Real Estate applications of Hamilton County require systems to handle extensive master files. These files will contain all property description, owners' names and values of each parcel in Hamilton County.

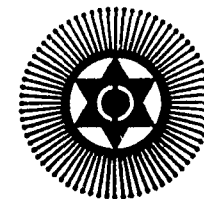
In order to make the records within these files sensitive to the numerous occurrences which result in alteration to these records, extensive systems work is necessary.

Producing the Property Tax Bills and Duplicates, handling the accounting for the collection of tax payments and providing information required concerning unpaid accounts, are systems which must be devised in 1968.

BOARD OF ELECTIONS



The study of the Board of Elections for the first quarter of 1968 is to determine the practicality of implementing some of their operations. Maintenance of the voter registration files, precinct location files and election tabulation and required reporting are the immediate applications.

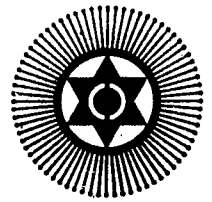


COURTS

The Court System in Hamilton County has a need for improved methods of information storage and retrieval, for more timely and efficient techniques of court utilization and scheduling, for better access to police records (i.e. previous traffic violations) and for an analysis of other areas within the Courts' jurisdiction where improvements can be made. To fill these needs, a detailed analysis of the existing system is required. For those

areas which can be feasibly converted to the computer, a system would be designed, programmed, and implemented.

See Project CLEAR

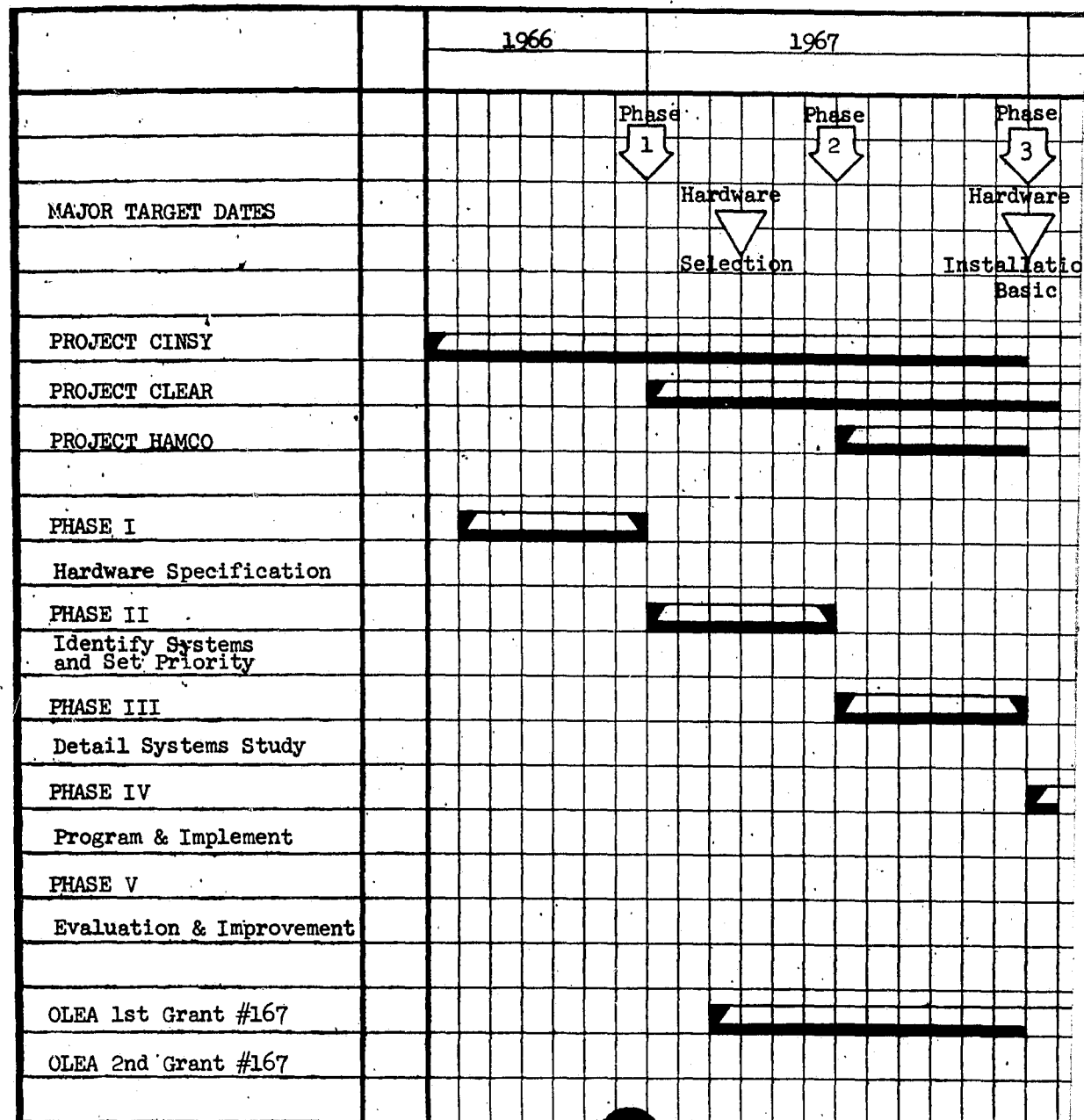


PAYROLL

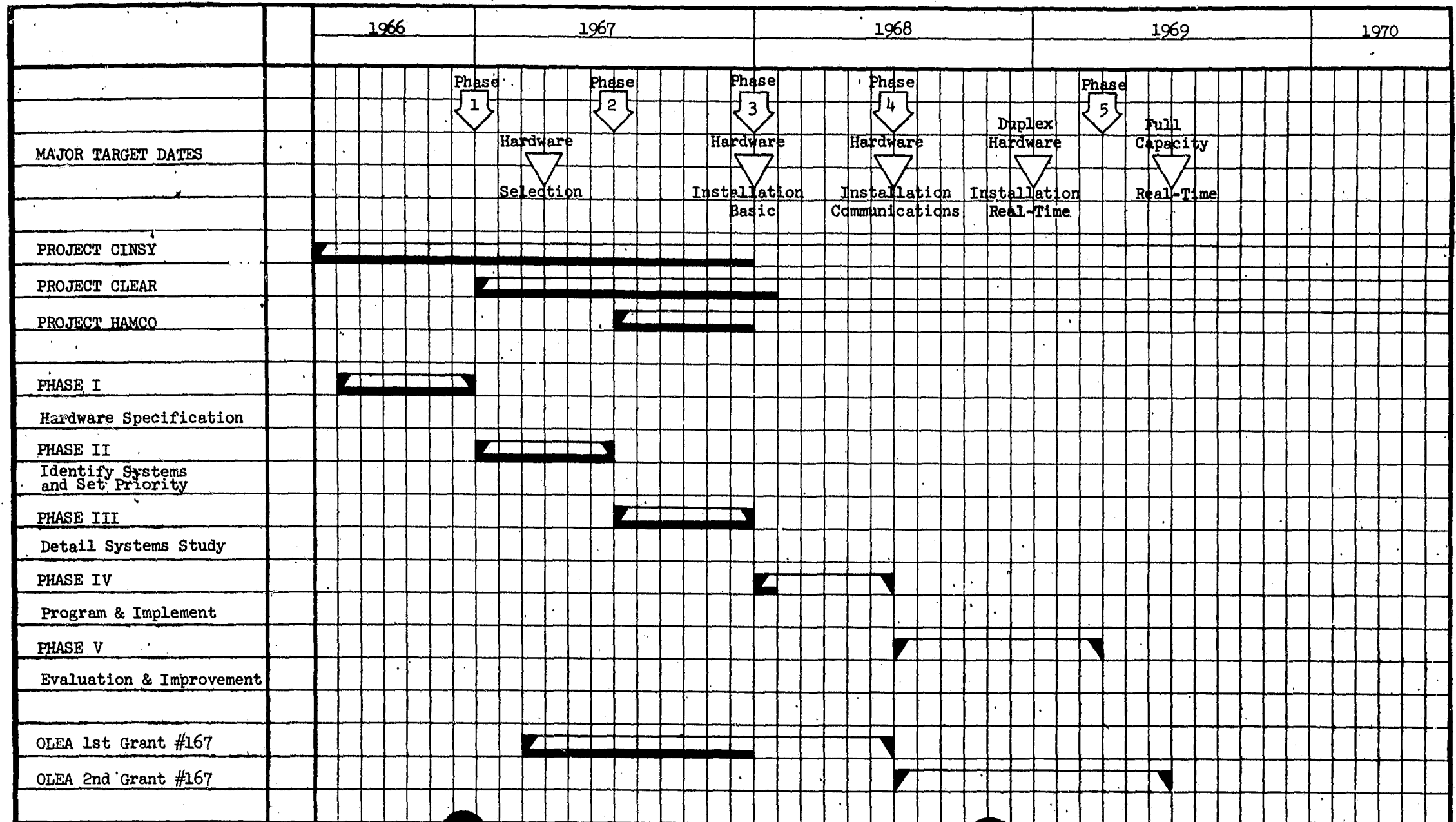
The Hamilton County Payroll is presently run on the County's Data Processing unit record equipment. The Regional Computer Center staff is in the process of developing a new general payroll system for all government agencies.

A study of the County Payroll procedure will establish the payroll requirements of the County and provide information necessary to integrate this operation with the general system being developed for all governmental agencies in Hamilton County.

PROJECTED SCHEDULE FOR
Project CINSY, Project CLEAR, Project



PROJECTED SCHEDULE FOR
Project CINSY, Project CLEAR, Project HAMCO



REGIONAL COMPUTER CENTER SPECIFICATIONS DEVELOPMENT

1968

ELEMENTS DESCRIPTION		PROJ NOB	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOVE.	DEC.
			1 12 1926 2 9 1623 1 8 1522 29 5 12 1926 30 17 24 31 7 14 21 28 5 12 1926 2 9 1623 30 6 13 20 27 4 11 18 25 1 8 15 22 29 6 13 20 27											
Hardware Specs	Hardware Evaluation	4.01												
	CPU Capacity/Options	4.02												
	Peripheral Devices	4.03												
	Communications Devices	4.04												
	Off-Line Equipment	4.05												
Software Specs	Software Evaluation	4.10												
	Operating System	4.11												
	Support Program Languages	4.12												
	Program Library/Standards	4.13												
	Systems Library/Standards	4.14												
Data Base Specs	Data/File Control	4.20												
	Storage Mode/Capacity	4.21												
	Records -- I/O Forms Design	4.22												
	Data Conversion	4.23												
Facilities Specs	Physical Plant	4.30												
	Personnel/Training	4.31												
	Operations Control/Standards	4.32												
Communic. Specs	National	4.40												
	State	4.41												
	Regional	4.42												
Coord. Data Proces. Specs.	City of Cincinnati	4.50												
	Hamilton County	4.51												
	University of Cincinnati	4.52												
	General Hospital	4.53												

1 9 6 8

PROJECT CINSY	SUBJECTS DESCRIPTION	PROJ NOE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOVE.	DEC.
			1/12/96	2/9/97	1/8/97	2/20/97	3/17/97	4/14/97	5/12/97	6/9/97	7/7/97	8/4/97	9/1/97	9/29/97
	Office of Clerk of Council	2.01												
	Municipal Court Judiciary	2.02												
	Office - Clerk of Municipal Court	2.03												
	Law	2.04												
	Personnel	2.05												
	Finance	2.06												
	Purchasing	2.07												
	Municipal Reference Library	2.08												
	City Planning	2.09												
	Urban Development	2.10												
	Public Recreation	2.11												
	Parks	2.12												
	Public Safety (other than CIC)	2.13												
	Public Works	2.14												
	Public Utilities	2.15												
	Public Health	2.16												
	Water Works	2.17												
	Water Pollution Control	2.18												
	Vehicle Inspection Lane	2.19												
	Sinking Fund	2.20												
	Municipal Garage	2.21												
	Hamilton County	2.22				(SEE PROJECT HAMCO)								
	General Hospital	2.23												
	University of Cincinnati	2.24												
	Implementation periods as shown in CINSY section.		Phase I	Phase II	Phase III	Phase IV	Phase V	Phase VI	Phase VII	Phase VIII	Phase IX	Phase X	Phase XI	Phase XII
	Key		Systems	Programming	Test/Debug	Operational								

1968

[illegible]

PROJECT CLEAR

1968

ELEMENTS DESCRIPTION	PROJ. NOS.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
		6/13/20/27/31/10/17/24/31/10/17/24/31/7/14/21/28/5/12/19/26/2/9/16/23/30/2/14/21/28/4/11/18/25/1/8/15/22/29/6/13/20/27/3/10/17/24/1/8/15/22/29											
Warrant/Wanted	3.01												
Vehicle	3.02	See	3.01										
Stolen Property	3.03												
Accident Reporting	3.04												
Arrest Reporting	3.05												
Crime Reporting	3.07												
F.I.R.	3.15	See 3.52 and 3.26											
Gun Applications & Registrations	3.16												
Minor Accident, Aided Case, Gen. condition report and other data	3.17												
Vehicle Registration	3.18												
Communications Executor	3.19												
File Executor	3.20												
Query Program	3.21												
Purge Programs, Real-Time	3.22												
File Backup & Dump Programs	3.23												
Hot Sheet Program	3.24												
Name File Analysis	3.25												
Criminal History Update	3.26												
Vehicle Inspec. Le. Query Update	3.27												
RCA Hardware Final Specs	3.50												
Terminal Dev. & Imp. Schedule	3.51												
I/O Format Design	3.52												
External Filing Procedures	3.53												
Conversion	3.54												
Operations Manual Preparation	3.55												
Training Sch. (Oper. & Exc.)	3.56												
O.H.P. Liaison	3.57												
NCIC Liaison	3.57												
Final Sys. Review & Documentation	3.58												

1968

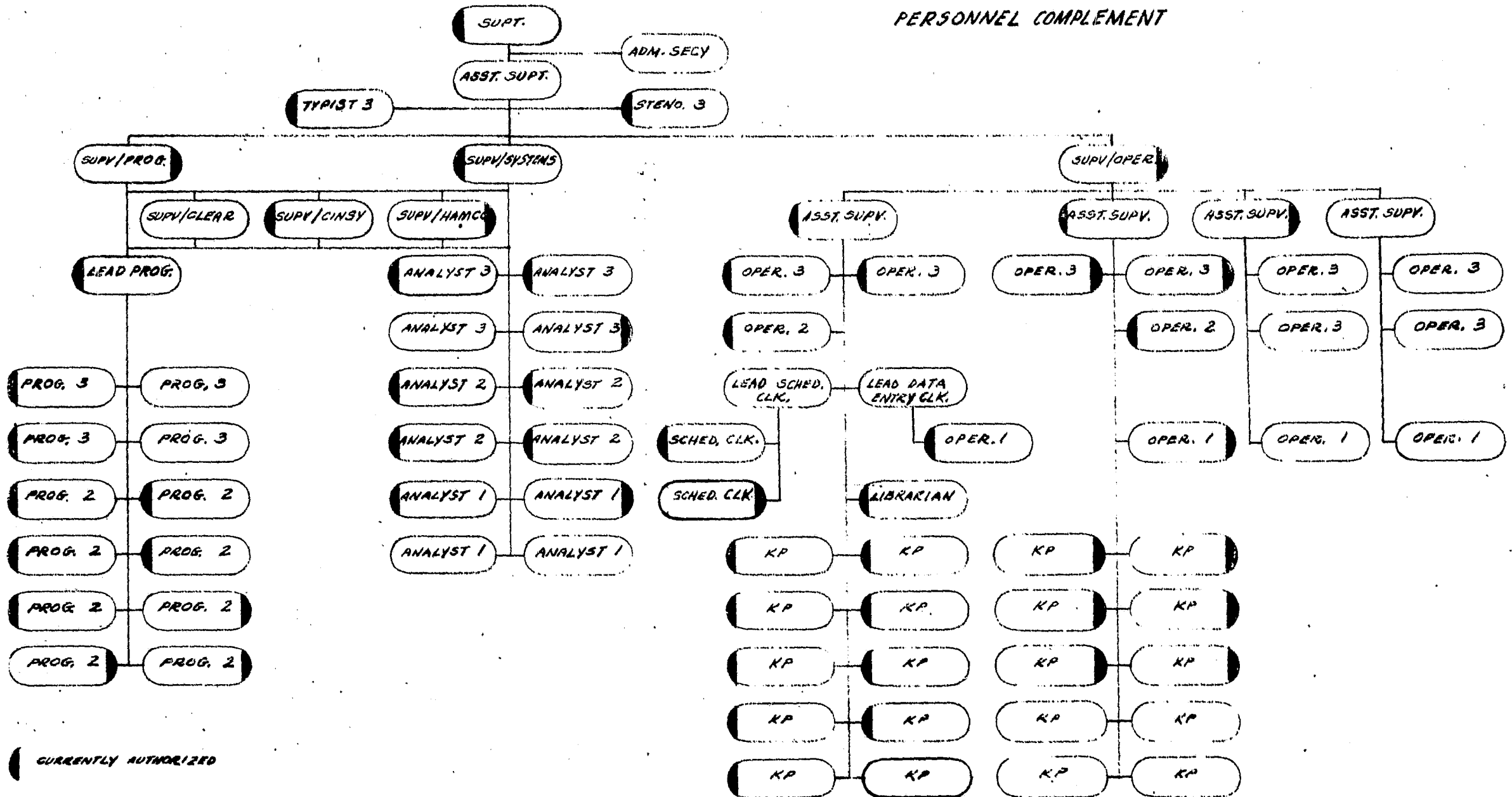
-115-

Project HAMCO

1968

	ELEMENTS DESCRIPTION	PROJ NOB	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
			1121926	291623	181522	255121926	30172431	71421265	121926	291623306	1320274	1118251	18152229	6132027
Auditor -- Treasurer	Real Estate													
	Master Properties													
	A/R -- Collections													
	Billing													
O.K.I.	Land Information System													
Accounting	Appropriations													
	Budget													
Payroll	Checks/Registers													
	Labor Distribution													
	Vacation/Sick Leave Balances													
Courts	Dockets/Scheduling													
Board of Elections	Feasibility Study													
	Precinct Location Files													
	Election Tabulations													
	Voter Registrations													
Training -- Education	EDP Fundamentals													
	Executive Seminar													

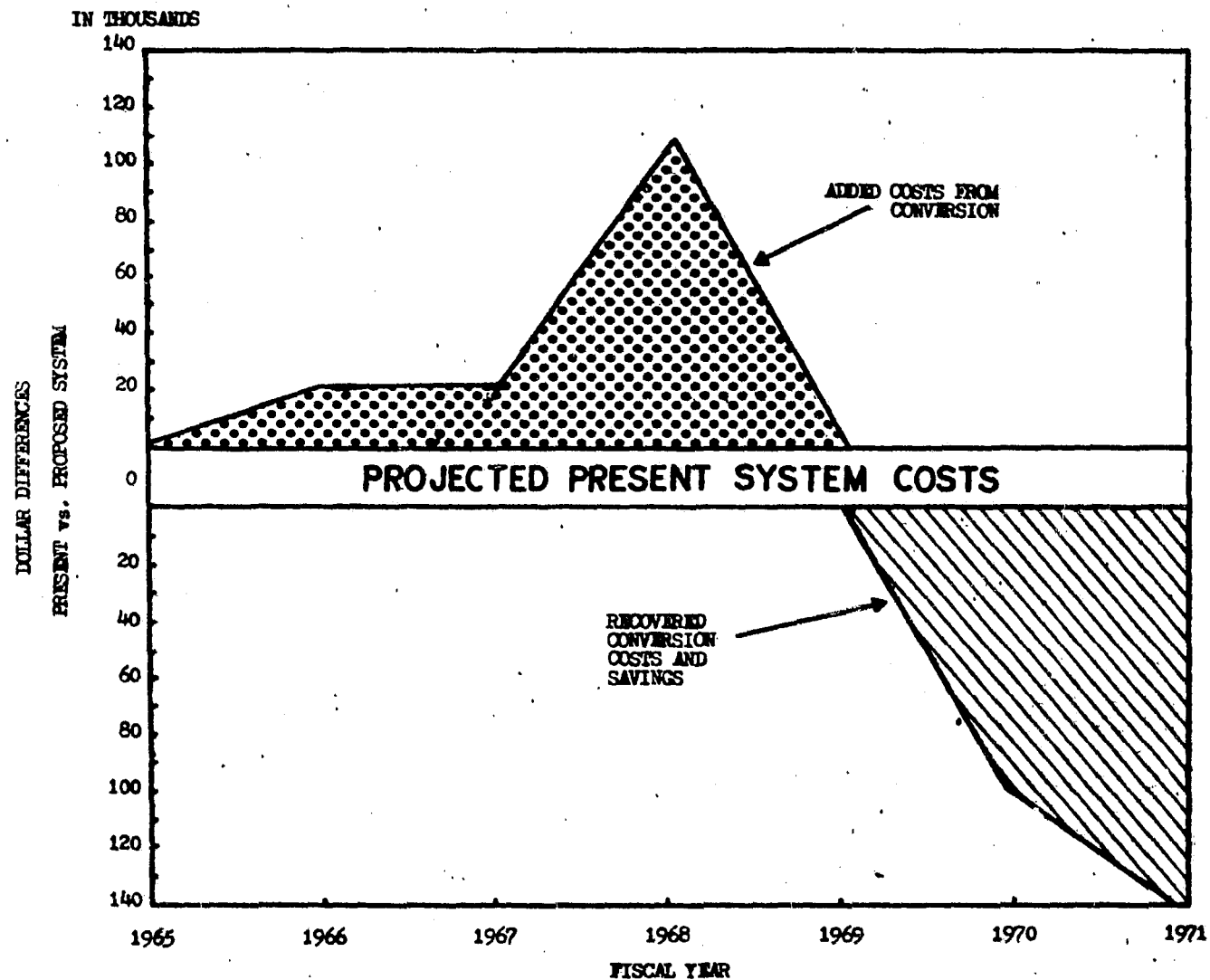
REGIONAL INFORMATION CENTER
PERSONNEL COMPLEMENT

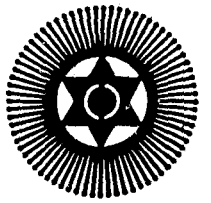


CURRENTLY AUTHORIZED

REQUESTED FOR 1968

BUDGET CHANGES WITH FURTHER AUTOMATION



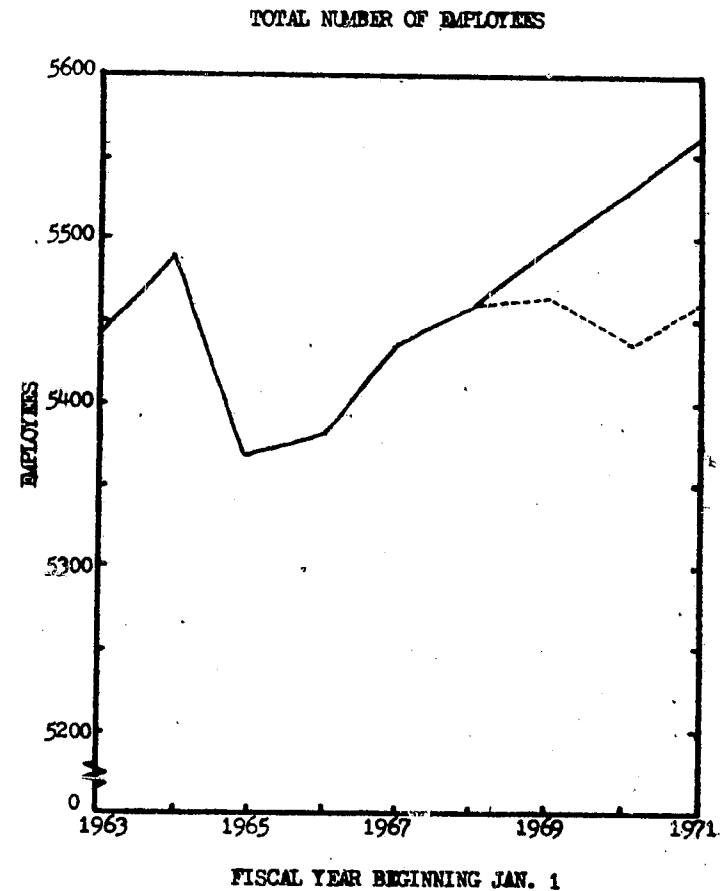
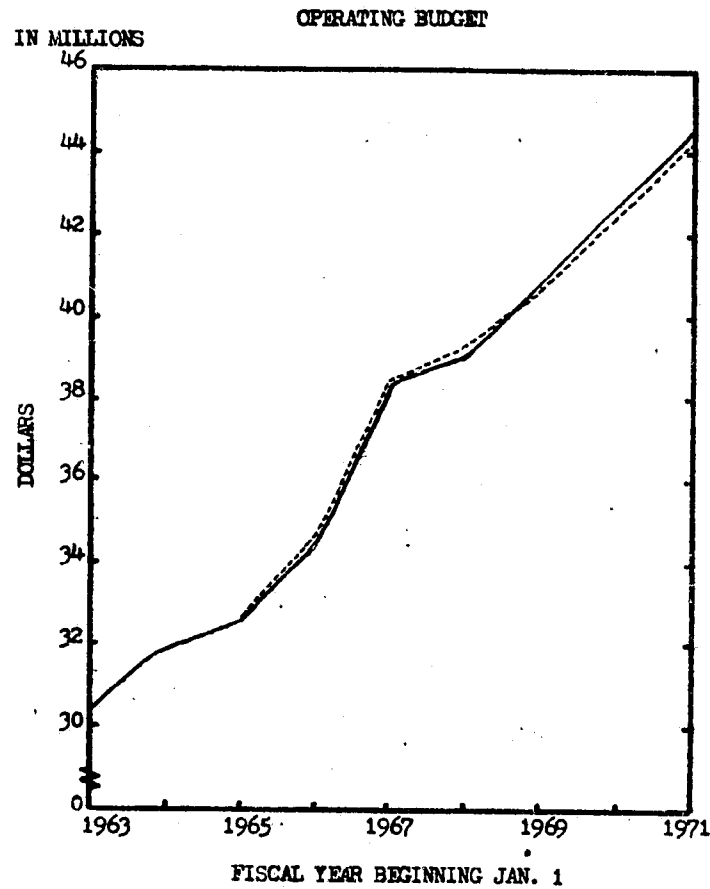


The operating budget includes only the cost of personal services and not total city expenditures. All expenses other than personal services were ignored because they were not significantly affected by data processing or because they varied too much from year to year and were uncontrollable. The future budget without further automation is based on a least squares prediction.

Savings with further automation result from personnel positions which can be re-assigned. If an individual can be relieved of some duties and thus perform others more efficiently and completely, additional savings result. The savings are applied against the additional costs of the Division of Data Processing.

CITY OF CINCINNATI

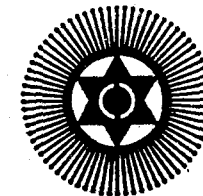
GROWTH IN OPERATING BUDGET
AND TOTAL EMPLOYEES
SHOWING BENEFITS FROM FURTHER AUTOMATION



THE EQUIPMENT



TWO RCA SPECTRA 70/45 COMPUTERS



EQUIPMENT AND SOFTWARE

PHASE I

The following configuration was delivered in November 1967:

- 1 65K 70/45 Processor
- 6 30 KB Magnetic Tape Drives
- 1 100 CPM Card Punch
- 1 1435 CPM Card Reader
- 1 1250 LPM Printer

This batch processing system gives the Regional Processing Center an opportunity to convert existing applications and newly developed applications to the RCA computer. This Phase I equipment also gives the systems analysts, programmers, and operating personnel firsthand experience in working with the hardware and the RCA Tape Operating System software.

PHASE II

The second phase will add random access capability to the Spectra 70/45 system. In January 1968, the following equipment will be installed:

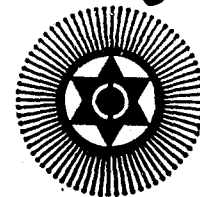
- 2 Random Access Disc Drives
- 1 Random Access Controller

At this time, the Regional Data Processing Center will begin using the Tape Disc Operating software and the processing center personnel will have the opportunity to work with the more sophisticated software and to gain experience in random access processing techniques.

In mid 1968 additional random access hardware will be added to the system.

- 2 Random Access Mass Storage Units
- 1 Communications Controller Multichannel
- 10 Video Data Terminals
- 3 Teletype Units

With the installation of this equipment and with the hardware and software experience gained up to this point, the Regional Processing Center personnel will begin testing the RCA Multichannel Communication System software and the Project CLEAR software and application programs written in house. In addition, the data files of the law enforcement agencies in Hamilton County will be converted to the computer system in anticipation of the implementation of the County Law Enforcement information system in January 1969.



PHASE III

The Regional Computer Center will receive a second RCA Spectra 70/45 in January 1969.

- 1 131 K 70/45 Processor
- 6 30 KB Magnetic Tape Drives
- 1 Card Reader
- 1 Printer
- 1 Random Access Controller
- 1 Random Access Disc
- 1 Switch Controller
- 1 Line Switch Adapter
- 1 Communications Controller Multichannel
- 15 Video Data Terminals
- 20 Teletype Units

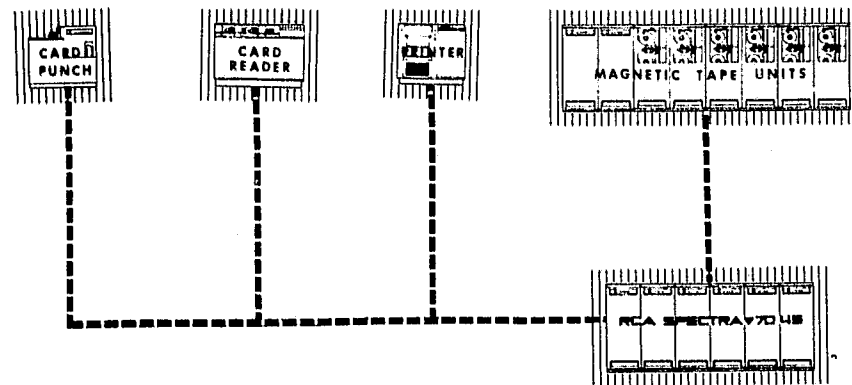
The two systems (one dedicated to Project CLEAR, the other to Project CINSY and HAMCO) will be interconnected to provide back up for each other. After an initial period of testing the switching and change over capabilities between the two systems, the Project CLEAR real-time communications system will be operational.

PHASE IV

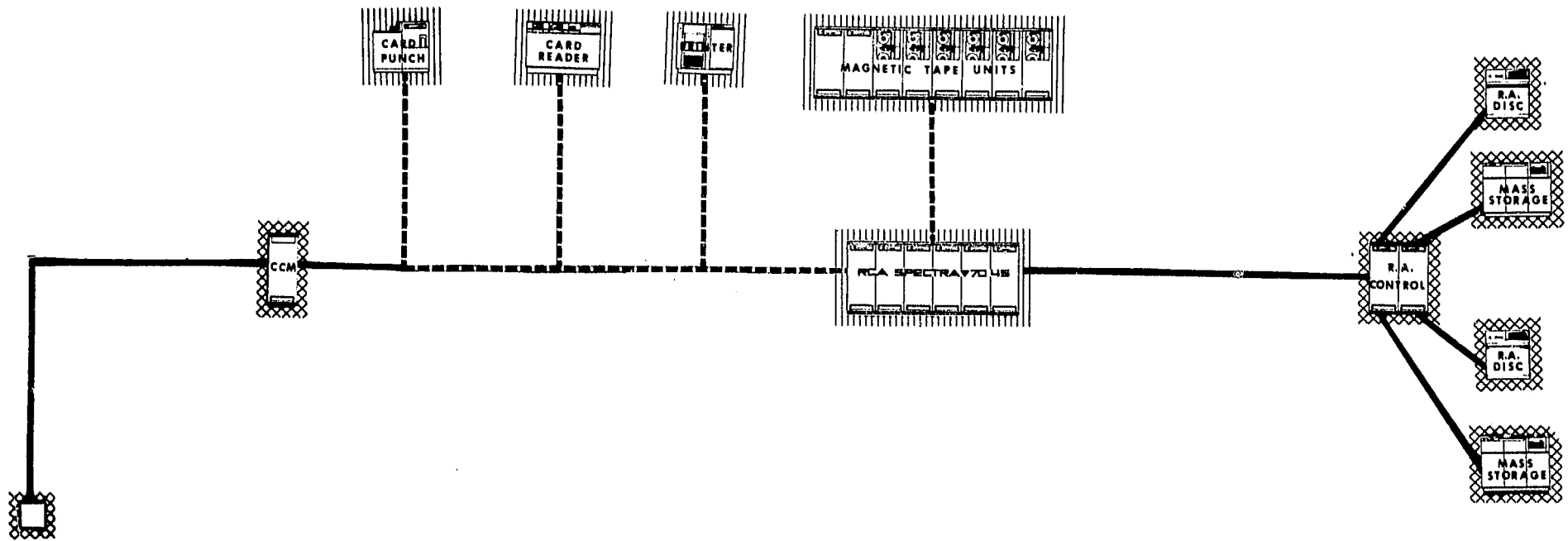
Additional random access equipment will be added as greater file capacity is required for new applications.

- 1 Random Access Controller
- 2 Random Access Mass Storage Units
- 1 Random Access Disc Drive

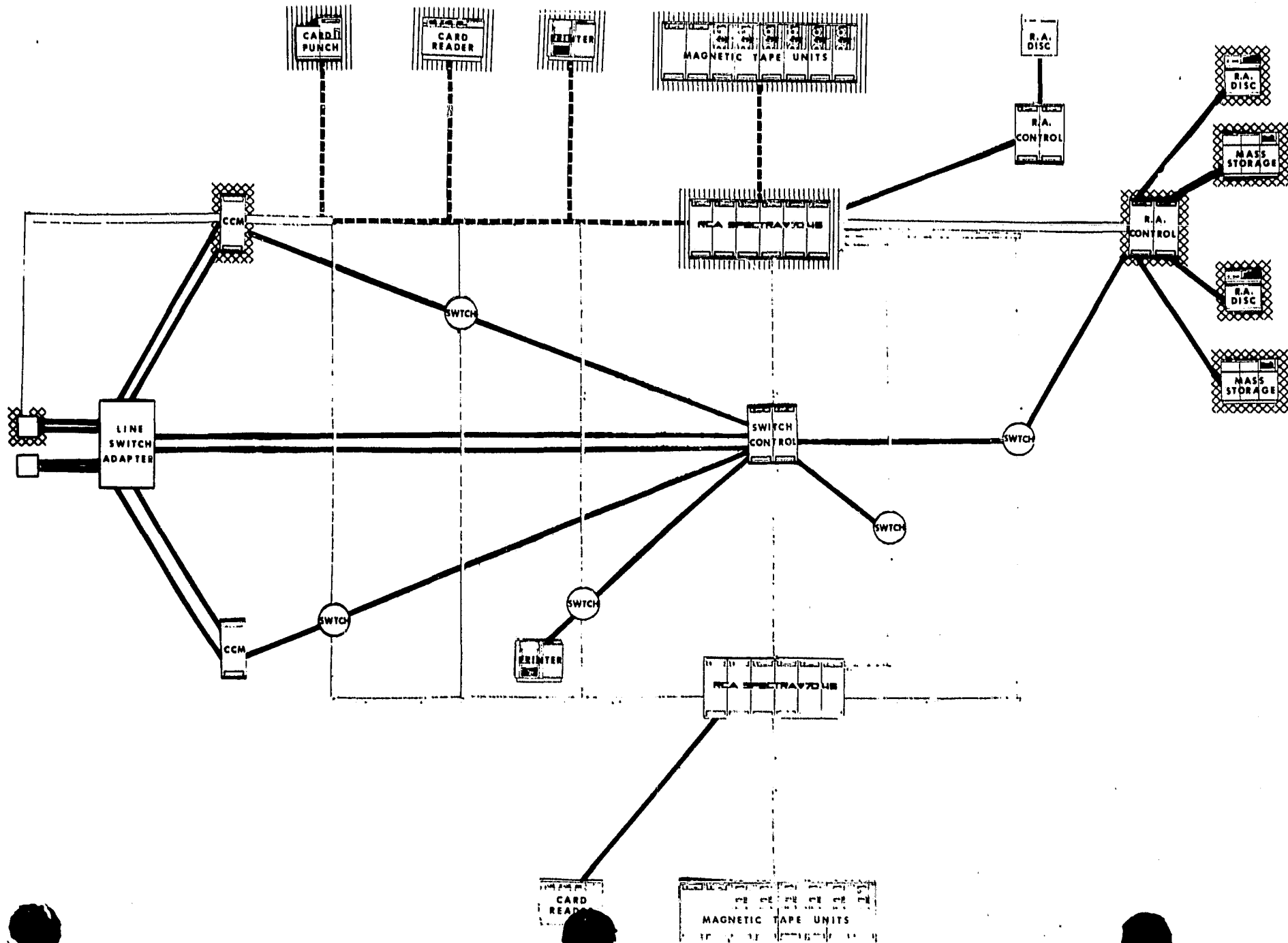
PHASE 1



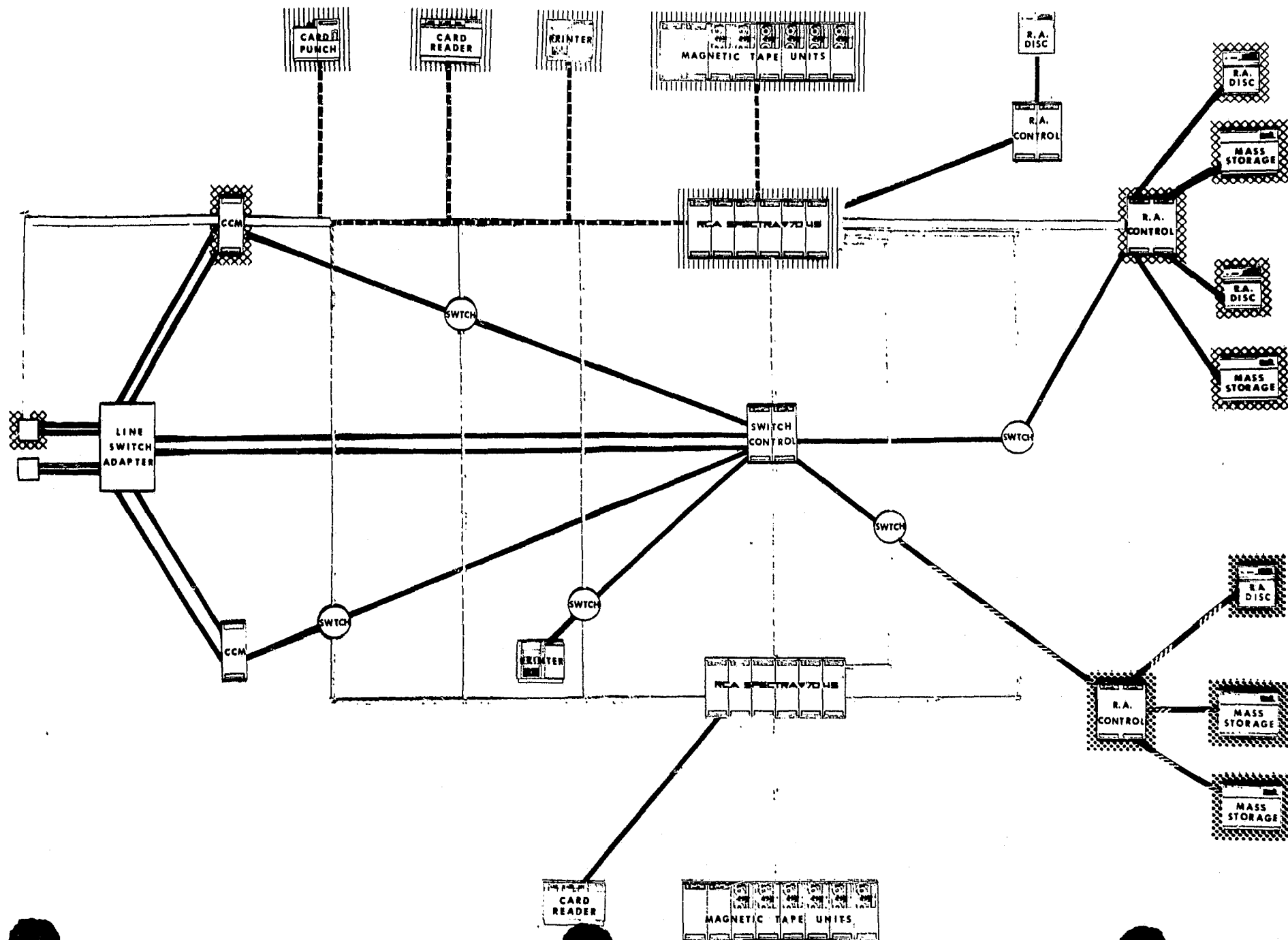
PHASE 2



PHASE 3



PHASE 4



END