COMMUNITY ASSISTANCE
PLANNING REPORT NO. 32

RECOMMENDED ELECTRONIC DATA PROCESSING AND TRANSMITTAL SYSTEM FOR CRIMINAL JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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Special acknowledgement is due Mr. Harlan E. Clinkenbeard, former Commission Assistant Director and Mr. Richard A. Runte, Senior Systems Analyst, for their contribution to the preparation of this report.

COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 32

RECOMMENDED ELECTRONIC DATA PROCESSING AND TRANSMITTAL SYSTEM FOR CRIMINAL JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN

Prepared by the
Southeastern Wisconsin Regional Planning Commission
P. O. Box 769
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Waukesha, Wisconsin 53187

September 1979

Inside Region $1.50
Outside Region $3.00

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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September 25, 1979

Southeast Wisconsin Criminal Justice
Planning Council
c/o LaMarr Q. Billups
Regional Planning Director
800 Center Street
Room 331
Racine, Wisconsin 53403

On February 28, 1979, the Southeast Wisconsin Criminal Justice Planning Council requested the Southeastern Wisconsin Regional Planning Commission to conduct a study of the need for, and feasibility of, applying electronic data processing and transmittal to the administration of the criminal justice process in the six-county area encompassed within the Council's jurisdiction. The requested study has been completed by the Commission staff and the findings and recommendations thereof are presented in this report.

The report describes the major elements of the criminal justice process in southeastern Wisconsin, with particular attention given to information transmission, storage, and retrieval needs, and identifies the benefits of applying electronic data processing and transmittal to those needs. Alternative software and hardware systems, together with attendant supporting administrative structures capable of satisfying the identified needs, are presented and evaluated. Based upon cost and other considerations, a recommended alternative is set forth. The study was conducted under the direction of a Technical Coordinating and Advisory Committee comprised of knowledgeable professionals, including representatives of the courts, sheriffs' offices, police departments, and data processing agencies within the Region.

The Regional Planning Commission is pleased to be able to provide this report to the Criminal Justice Planning Council as part of the Commission's continuing community assistance program. The Commission staff stands ready upon request to assist the Council in presenting the findings and recommendations contained in this report to responsible officials of the six counties concerned in order to assist the Council in achieving implementation of the recommended alternative or variations thereof. Hopefully, each county board will address the needs and recommendations set forth in this report, for it is the opinion of the Advisory Committee that the application of electronic data processing techniques could not only reduce the cost but increase the effectiveness of the criminal justice process, with far-reaching benefits to the citizens of the Region and its constituent counties.

Sincerely,

Kurt W. Bauer
Executive Director

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Chapter I

INTRODUCTION

On February 28, 1979, the Southeast Wisconsin Criminal Justice Planning Council formally requested the Southeastern Wisconsin Regional Planning Commission to undertake the preparation of a study for the design and implementation of an automated court information system in the six-county area encompassed within the Council's jurisdiction and including Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties, all within the seven-county Southeastern Wisconsin Region. The request was based upon the Council's desire to assess the feasibility of implementing an electronic data transmittal system similar to that being implemented in Milwaukee County to strengthen the criminal justice system in that County and, specifically, to reduce the time required to process criminal cases.

On March 1, 1979, the Commission honored the Council's request and created a Technical Coordinating and Advisory Committee to guide the preparation of the requested community assistance planning report (see Appendix A). The Committee is comprised of representatives of the Regional Planning Commission, the Southeast Wisconsin Criminal Justice Planning Council, and local officials involved in criminal justice programs including judges, district attorneys, clerks of court, sheriffs, and community police. Also included on the Committee are representatives of state and federal agencies involved in criminal justice activities, including the Wisconsin Council on Criminal Justice, the Wisconsin Supreme Court, the Wisconsin Department of Administration, and federal judicial and criminal investigation agencies. Also included are staff representatives of county and city data processing installations within southeastern Wisconsin as well as the Commission's data processing manager. This community assistance planning report sets forth the findings and recommendations of that Technical Coordinating and Advisory Committee.

THE REGIONAL PLANNING COMMISSION

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) was created in August 1960 upon the unanimous petition of the seven county boards concerned under the provisions of Section 66.945 of the Wisconsin Statutes. The Commission exists to serve and assist local, state, and federal units of government in planning for the orderly physical and economic development of the seven-county Southeastern Wisconsin Region comprised of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties (see Map 1). The Commission's role is entirely advisory, and participation by local units of government is on a voluntary, cooperative basis.

The Commission is composed of 21 citizen members who serve without pay, three from each county of the Region. The powers, duties, and functions of the Commission are set forth in state enabling legislation. The Commission is authorized to employ experts and staff as necessary to execute its responsibilities. Funds necessary to support Commission operations are provided by member counties, with the budget apportioned among the seven counties on the basis of relative equalized assessed property valuation. The Commission is also authorized to request and accept aid in any form from all levels and agencies of government for this purpose. The Commission, its committee structure, its staff organization, and its relationship to consitituent units and agencies of government are shown in Figure 1.

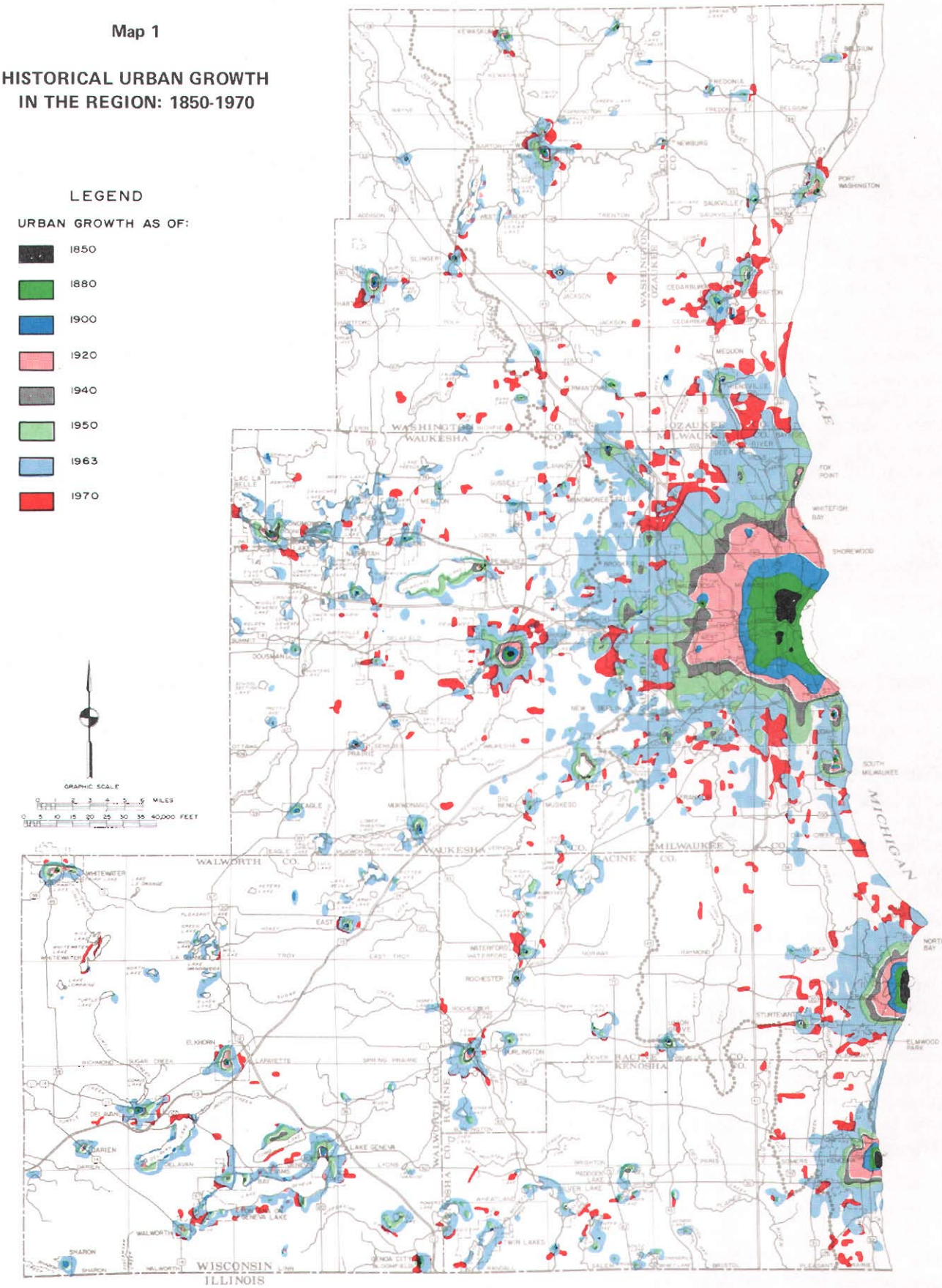
COMMISSION FUNCTIONS

The Commission exists to serve and assist federal, state, and local units of government in finding practical solutions to areawide developmental and environmental problems which cannot be resolved within the framework of a single municipality or county. As such, regional planning as conducted by the Commission has three principal functions:

1. Inventory—the collection, analysis, and dissemination of basic planning and engineering data on a uniform, areawide basis so that, in light of such data, the various levels and agencies of government and private investors operating within the Region can better make decisions concerning community development.

Map 1

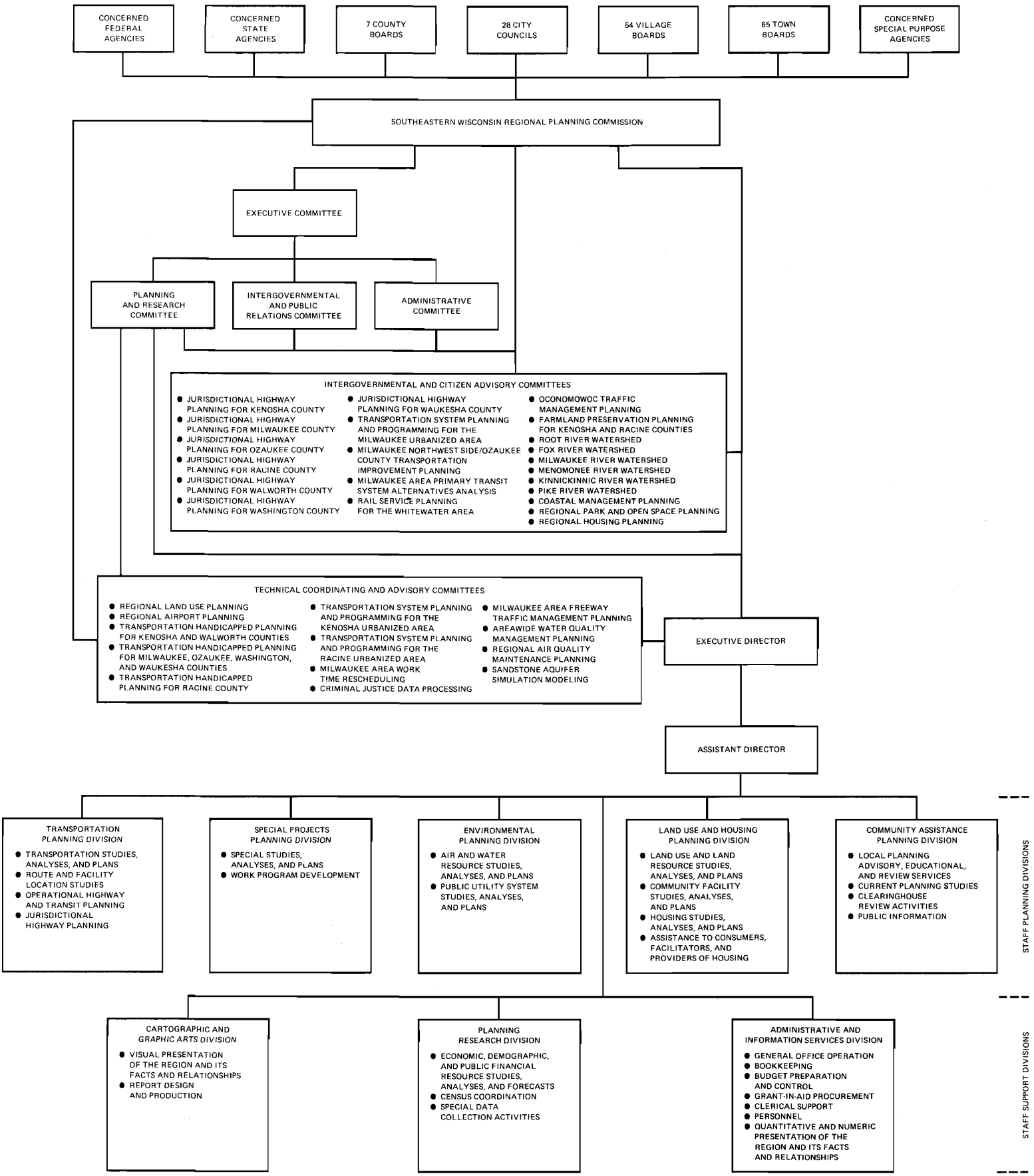
HISTORICAL URBAN GROWTH IN THE REGION: 1850-1970



Source: SEWRPC.

Figure 1

SEWRPC ORGANIZATIONAL STRUCTURE



Source: SEWRPC.

2. Plan Design—the preparation of a framework of long-range and short-range plans for the physical development of the Region, these plans being limited to functional elements having areawide significance. To this end, the Commission is charged by law with the function and duty of "making and adopting a master plan for the physical development of the Region." The permissible scope and content of this plan, as outlined in the enabling legislation, extend to all phases of regional development, implicitly emphasizing preparation of alternative spatial designs for land use and for supporting transportation and utility facilities.

3. Plan Implementation—promotion of plan implementation through the provision of a center to coordinate the planning and plan implementation activities of the various levels and agencies of government in the Region and to recommend solutions to areawide problems, and alternatives thereto, into the existing decision-making process.

The work of the Commission, therefore, is seen as a continuing planning process providing outputs of value to the making of development decisions by public and private agencies, and to the preparation of plans and plan implementation programs at the local, state, and federal levels. It emphasizes close cooperation among the governmental agencies and private enterprise responsible for the development and maintenance of land uses in the Region, and for the design, construction, operation, and maintenance of the supporting public works facilities. All Commission work programs are intended to be carried out within the context of a continuing planning program which provides for periodic reevaluation of the plans produced and for the extension of planning information and advice necessary to convert the plans into action programs at the local, regional, state, and federal levels. Unlike many large regional planning commissions in the United States, the Commission is not an "umbrella" agency encompassing all areas of planning, but rather encompasses only regional physical planning functions. Other agencies have been established in southeastern Wisconsin to undertake social and economic planning. Such agencies include the Southeastern Wisconsin Health Systems Agency, Inc., involved in regional health planning, and the Criminal Justice Councils, involved in criminal justice planning in the Region.

THE REGION

The seven counties that comprise the Southeastern Wisconsin Planning Region, exclusive of Lake Michigan, have a total area of 2,689 square miles, or about 5 percent of the total area of Wisconsin. About 38 percent of the state population lives in these seven counties, which contain three of the seven and one-half standard metropolitan statistical areas in Wisconsin. The Region contains about 38 percent of the tangible wealth in Wisconsin as measured by equalized assessed property valuation, and represents the greatest wealth-producing area of the State, with about 39 percent of the state's labor force being employed within the Region. The Region contains 154 local units of government, exclusive of school and other special-purpose districts, and encompasses all or part of 11 major watersheds. Until 1970 the Region had been subject to relatively rapid population growth and urbanization, and from 1960 to 1970 accounted for approximately 40 percent of the population growth in the State.

As shown on Map 1, urban development in the Region was, until about 1950, primarily concentrated in Kenosha, Milwaukee, and Racine Counties, where such development was closely related to the three major urban centers of the Region and to the various facilities and services which could be provided by such urban centers. Since 1950, however, urban development has spread out from these urban centers and, in some cases, "leap-frogged" close-in developable land, thereby converting agricultural land to urban use in remote rural areas of the Region where it is difficult, if not impossible, to extend urban services. Such urban sprawl has transcended political boundaries to form large complex multijurisdictional urban-rural communities within which the problems of an urban society have rapidly increased—problems with which the traditional structure of government has not been able to keep pace. Regional planning provides the mechanism to bring together the various individual local units of government to jointly prepare plans for this complex urban-rural structure—plans which are advisory to each individual unit and within which each unit can better prepare more detailed plans and establish development policy.

REGIONAL PLAN ELEMENTS COMPLETED TO DATE

As already indicated, the primary function of the Commission is to prepare both long- and short-

range plans for the physical development of the Region. Since the inception of the Commission staff function in 1961, the Commission has prepared and adopted 10 regional and subregional elements of a comprehensive plan for the physical development of the Region. The first of these elements was a regional land use plan for the design year 1990 prepared and adopted by the Commission in 1966, and the most recent element is the regional water quality management plan for the year 2000 adopted by the Commission in July 1979. Other regional plan elements are currently under preparation.

In addition to the physical plan elements that encompass the entire Region, the Commission has prepared comprehensive plans for 5 of the 11 major watersheds in the Region. Four of the five plans encompass watersheds that include two or more counties within the Region, and the fifth watershed plan—the Kinnickinnic River watershed plan—concerns a watershed contained wholly within Milwaukee County. The first of these plans, the Root River watershed plan, was prepared and adopted by the Commission in September 1966. The most recent plan, the Kinnickinnic River watershed plan, was prepared and adopted in March 1979. In addition to these major subregional plans, the Commission has prepared plans that are directed toward detailing and implementing the adopted regional comprehensive plans. Such plans include the county jurisdictional highway system plans and plans for the urbanized areas of Kenosha and Racine Counties, as well as plans for detailed neighborhood unit development in communities within the Region.

The Commission has in the past 19 years undertaken extensive inventories and analyses of various aspects of the physical, social, and economic structure of the Region for use by the Commission, as well as by other units and agencies of government. These efforts have been reported in technical reports and articles and include special studies on off-airport land use in the vicinity of General Mitchell Field, uniform street naming and property numbering systems for counties, and the deployment of paramedic emergency medical services in Milwaukee County.

In order to carry out all of the many planning functions and to effectively utilize the massive data base assembled in the regional planning effort, the Commission has, since 1963, maintained its own data processing staff and equipment. Since 1967, following the adoption of the first regional plan element, the Commission has had sufficient data processing capacity to permit the extension of data processing services upon request to units and agencies of government in southeastern Wisconsin. During the late 1960's, such service was accomplished through the traditional "batch" mode of processing, in which the county or community staffs delivered data to the Commission for processing and the Commission returned the appropriate reports and materials to the counties and communities. Beginning in 1978, the Commission began offering interested counties and communities the ability to control and process their own data through "on-line" use of small computer terminals attached to the Commission's large computer via telephone lines. Such terminal connections provide counties and communities with access to a large computer system at low cost. The Southeast Wisconsin Criminal Justice Planning Council, in its efforts to find ways to expedite the criminal justice process within its six-county jurisdiction, discussed with the Commission staff the possibility of the Commission providing data processing services to the Council or to the criminal justice agencies within the Region. This community assistance planning report is an outgrowth of those discussions.

CRIMINAL JUSTICE PLANNING

To provide an areawide mechanism for the preparation of plans and the review of applications for federal funding of criminal justice programs, the U. S. Congress in 1968 passed the Omnibus Crime Control and Safe Streets (OCCSS) Act (also called PL 94-351). Passage of the OCCSS Act simultaneously created the Law Enforcement Assistance Administration (LEAA) of the U. S. Department of Justice. The LEAA provides federal funds to local and state units and agencies of government, and to qualified private nonprofit agencies to assist them in the reduction of crime, the improvement of law enforcement, and the expansion and streamlining of criminal justice services. The existing PL 94-351 will terminate on August 31, 1979, and it is anticipated that new replacement legislation now pending in Congress will be approved in the near future.

The Wisconsin Council on Criminal Justice

The Wisconsin Council on Criminal Justice (WCCJ) was created by the Governor in 1968 in response to the Omnibus Crime Control and Safe Streets Act. The WCCJ is a 34-member council responsible for an annual statewide criminal justice improvement plan and the administration of funding

policies directed at improving existing criminal justice systems and facilitating system innovation and experimentation throughout the State.

The WCCJ membership includes representatives of the state law enforcement and criminal justice agencies, as well as of citizens' interests. The Governor serves as chairman of the Council (see Figure 2 and Appendix B). The WCCJ's major responsibilities are review and approval of the annual state criminal justice improvement plan and implementation of the plan through preparation, monitoring, and evaluation of grants.

The preparation of the annual state criminal justice improvement plan is initiated by the four regional criminal justice planning councils. Each regional council submits its plan to the WCCJ, which then integrates the individual plans into a statewide plan. Included in the state plan is an up-to-date description of the criminal justice system in Wisconsin, a three-year schedule for improvement of criminal justice, a progress report, and a review of other existing plans and programs affecting the criminal justice system. The plan sets forth various programs under which funding can be obtained and establishes administrative policies for the programs.

All local units of government, state agencies, and private incorporated nonprofit agencies are eligible for assistance. Grant assistance from WCCJ is available in the following areas: law enforcement; courts, prosecution, and criminal defense; corrections; and juvenile justice systems. Funding assistance is considered "seed money" to initiate criminal justice improvement projects. When a project is considered for funding, local or state support is required in order to ensure continuation of the project after WCCJ funding is terminated.

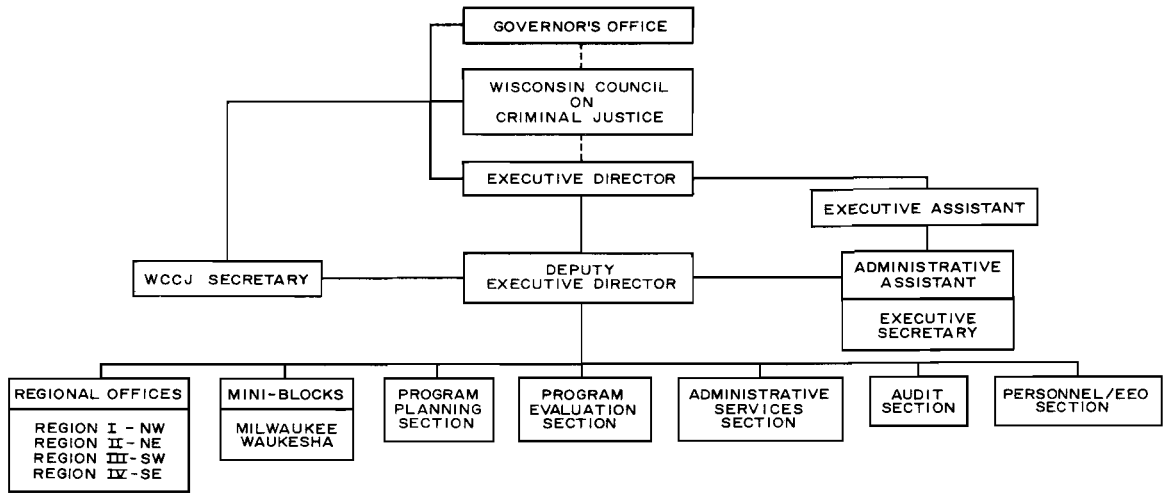
The Southeast Wisconsin Criminal Justice Planning Council

The Southeast Wisconsin Criminal Justice Planning Council (SEWCJPC) is one of four regional criminal justice planning councils in the State established by the Governor in 1969[1] to carry out the directives of the WCCJ. The SEWCJPC geographic jurisdiction is comprised of six of the seven Southeastern Wisconsin Region counties. The 15-member council, appointed by the Governor, includes representatives from all six counties and a representative of the Southeastern Wisconsin Regional Planning Commission (see Figure 3). All

[1] *Ten Criminal Justice Councils were initially established in Wisconsin. Subsequently, in April 1978, the state realigned the 10 Councils into four and the Governor established the Southeast Wisconsin Criminal Justice Planning Council as one of the four.*

Figure 2

WISCONSIN COUNCIL ON CRIMINAL JUSTICE—ORGANIZATIONAL CHART



Source: SEWRPC.

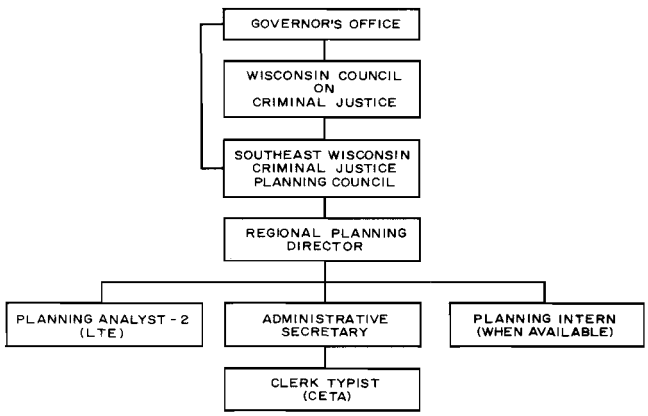
Council members are involved in criminal justice planning activities in their respective jurisdictions (see Appendix C). The seventh county in the Southeastern Wisconsin Region, Milwaukee County, is served by the Metropolitan Milwaukee Criminal Justice Planning Council, which has moved forward on its own to bring about the objectives of the Omnibus Crime Control and Safe Streets Act. Specifically, it has initiated an electronic data transmittal system in Milwaukee County.

CONSIDERATION OF ELECTRONIC DATA TRANSMITTAL SYSTEMS FOR CRIMINAL JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN

The process of dealing fairly with all parties involved in the criminal justice system has historically been long, burdensome, and disruptive to individuals and their families and to the units and agencies of government charged with upholding law and order. Because criminal activity is not confined to any municipal jurisdiction, criminal justice activities often involve more than one municipality and may, indeed, involve several municipalities, counties, states, and even nations. The more units and agencies of government involved, the more records must be kept, and the more time and effort must be expended in dealing with each individual criminal case. The individual participants in this process have for years attempted to find ways to improve the process without jeopardizing individual rights for the sake of expedient action.

Figure 3

SOUTHEAST WISCONSIN CRIMINAL JUSTICE PLANNING COUNCIL—ORGANIZATIONAL CHART



Source: SEWRPC.

The decidedly most burdensome element of the criminal justice process is the volume of paperwork apparently necessary in each case. Each file must be duplicated several times as the process is accomplished, and records of each duplicated file must be kept so that changes may be made in each file as the process continues. Files are added by each of the various departments and sections within a single jurisdiction and then are multiplied as other units and agencies of government become involved.

To those who have analyzed how to expedite criminal justice procedures without jeopardizing individual rights, the technological advances in electronic data processing appear to present an opportunity not only to reduce the time and paperwork involved in the total process, and thereby speed that process, but also to actually enhance the process, thereby creating an environment for an even better justice system.

This community assistance planning report explores the need for efficient management of the data produced in the criminal justice process; alternative means of improved criminal justice data management; the costs and financial ramifications of such management; and the levels and agencies of government which can best implement such management. The report does not deal with substantive issues of the law other than to take into account the need for any data transmittal system to protect the legal right to privacy of the individuals involved. It should, however, be noted that while this report does not deal with civil legal action, the results of this study effort may indeed have an effect on civil action procedures. Also, the results of this effort and the recommendations made herein may, when implemented, lead to use of the system for such procedural component activities as jury selection.

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Chapter II

PURPOSE OF THE COMMUNITY ASSISTANCE PLANNING REPORT

The purpose of this community assistance planning report is to explore and recommend the means by which an electronic data transmittal and communication system for criminal justice agencies can be established to best meet the needs of criminal justice agencies in southeastern Wisconsin. This community assistance planning report is intended to provide sufficient information to permit concerned governmental units and agencies to consider the costs and benefits of establishing such a system.

To this end, the specific purpose of the community assistance planning report is to:

1. Establish the need, if any, for an electronic data transmittal system for criminal justice agencies in southeastern Wisconsin, and if such a need is determined to exist, then to:
2. Specify the alternative means of configuring systems which will meet the stated needs;
3. Recommend the most effective system alternative and the procedure to be used in establishing, organizing, and accomplishing the implementation of such a system;
4. Recommend a definite schedule for implementing such a system; and
5. Provide sufficient cost data to permit the preparation of an initial budget and suggest possible allocations of costs among the various levels, units, and agencies of government concerned.

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Chapter III

THE NEED FOR AN ELECTRONIC DATA TRANSMITTAL SYSTEM FOR CRIMINAL JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN

Under the existing judicial system in Wisconsin, "justice" is meted out to criminals[1] at the local governmental level, primarily by county circuit and municipal courts. The "criminal justice" process involved requires establishing and maintaining records on each person involved in a crime, including, of course, the accused criminal. This report is directed at finding ways, if any, of reducing the extensive manual record-keeping efforts involved in the criminal process as that process is administered by the county circuit court system.

COUNTY POPULATION AND CRIMINAL CASE LOAD CHANGE

All activity related to a criminal case must be accomplished in a manner which protects the rights of both the individual and society while at the same time expeditiously dealing with the case. Such activity begins at the time of the arrest of a suspected criminal, delinquent, or violator and does not end until dismissal, acquittal, or conviction and full payment of the penalty prescribed by law and/or set by the court. The maintenance of related records also begins at the time of arrest, but does not truly end until the substantiated death of the perpetrator of a crime. Not only must the individual court—and in some cases multiple courts—prepare, process, store, revise, and, from time-to-time, reprocess each individual case file, which may encompass numerous forms, but every other agency or department of government dealing with a particular case must also do so or have access to such files for duplication, addition of data, and use.

There are five basic criminal actions with which circuit courts in Wisconsin must deal: felonies,[2] misdemeanors,[3] juvenile proceedings,[4] traffic,[5] and ordinance violations.[6] For example, every person charged with a felony or misdemeanor is subject to the process summarized in Figure 4. The four primary agencies involved in the process include the arresting agency, which is usually a municipal police or county sheriff department; the district attorney; the court judges and clerk of court; and the state correctional institutions. If a case goes to county circuit court and is appealed, a fifth agency enters the picture—the state court of appeals. As the accused offender proceeds through the process the case file created at the time of arrest is manually expanded at each step in the process, and as the case proceeds from agency to agency the file is usually duplicated. It is estimated that an average case file contains about 170 individual entries. There are two basic problems that result from the duplication of a file for other agency use: 1) the sheer cost of duplication including time, paper, and machine costs, and storage and retrieval costs; and 2) the need to update each duplicated file as new information is compiled or actions taken which must be recorded. As the number of cases increases, the record-keeping tasks also increase and, if performed manually, usually the number of persons involved and the time to accomplish the tasks increase.

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[1] *Defined for the purposes of this report as one who has committed a crime.*

[2] *Crimes for which the minimum sentence if convicted is confinement for more than one year in a correctional institution.*

[3] *Crimes for which the maximum sentence if convicted is monetary forfeiture and/or confinement for up to one year in a correctional institution.*

[4] *Juvenile proceedings include proceedings for crimes of delinquency and noncriminal proceedings, such as protective services, involving persons less than 18 years of age.*

[5] *Law violations involving a vehicle.*

[6] *Violations of a county or local ordinance for which the maximum sentence if convicted is monetary forfeiture and/or confinement for up to one year in a correctional institution.*

The criminal case load in the six outlying counties in southeastern Wisconsin and the concomitant work load involved in the criminal justice process have increased rapidly over the last decade. It may be assumed that this increase is due in part to increases in the resident populations of the outlying counties. A review of population changes over the period from 1970 through 1978, as summarized in Table 1, indicates that while the population of Milwaukee County decreased over this eight-year period by more than 93,000 persons, or by almost 9 percent, the population of three of the six outlying counties increased by more than 23 percent, and together the six counties experienced a population increase of over 15 percent. While there are no reliable comparative criminal case load data available for the eight-year period, information secured from the Wisconsin Courts Information System in Madison and from interviews with county clerks of court indicate that during this eight-year period the total criminal case load approximately doubled in all of the outlying counties except Racine County. However, Racine County did experience a larger percentage increase in criminal cases than in population. The number of criminal cases in Milwaukee County remained about the same over the eight-year period despite a substantial decrease in population. While it is not clear from the data available whether there is a direct correlation between population size and the amount of criminal justice activity, population is certainly a major factor, and criminal case loads may be expected to increase as populations increase. As shown in Table 2, the population of the Region is expected to increase to about 2.2 million persons in 2000, a 26 percent increase over the 1.8 million persons in the Region in 1970. The resident population of the six outlying counties is expected to increase by over 40 percent over this same period.

Data on the recent changes in the volume of record-keeping work involved in the criminal justice process in southeastern Wisconsin were obtained from the Wisconsin Court Information System in Madison as well as several clerks of court offices in the Region in an effort to compile recent historical data on case loads in each of the seven counties back to the year 1970. Unfortunately, no reliable data on county criminal case loads could be compiled for any years prior to 1978. This is due in part to the different methods used by each county to report case load data in past years; in part to changes in the laws relating to each type of case; and in part to the nonexistence of certain case load data. Also, analyses indicated that the case load data available from county sources on criminal and other cases for years before 1978 did not in every instance coincide with the case load data collated from the Wisconsin Court Information System. Confronted with this dearth of usable information, a determination was made to use only the 1978 and later data.

Table 1

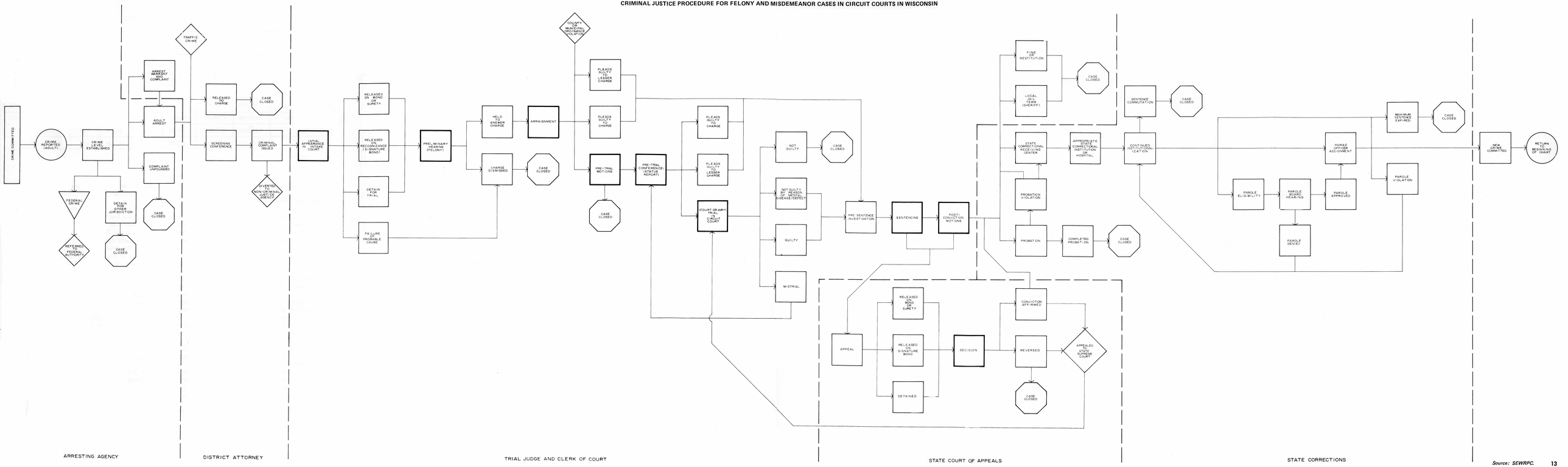
ACTUAL AND ESTIMATED POPULATION BY COUNTY IN SOUTHEASTERN WISCONSIN: 1970, 1976, AND 1978

County	Actual and Estimated Population			1970-1978 Change		Percent of Region		Average Annual Change
	1970	1976	1978	Number	Percent	1970	1978	1970-1978
Kenosha	117,917	127,053	125,808	7,891	6.7	6.7	7.1	986
Ozaukee	54,461	66,713	69,914	15,453	28.4	3.1	3.9	1,932
Racine	170,838	179,334	177,337	6,499	3.8	9.7	10.0	812
Walworth	63,444	68,170	69,058	5,614	8.9	3.6	3.9	702
Washington	63,839	78,287	83,282	19,443	30.5	3.6	4.7	2,430
Waukesha	231,335	269,927	285,100	53,765	23.2	13.2	16.1	6,721
Six-County Area	701,834	789,484	810,499	108,665	15.5	39.9	45.7	13,583
Milwaukee	1,054,249	1,004,139	960,993	- 93,256	- 8.9	60.1	54.3	- 11,657
Region	1,756,083	1,793,623	1,771,492	15,409	0.9	100.0	100.0	1,926

Source: 1970 U. S. Census of the Population, Wisconsin Department of Administration, and SEWRPC.

Figure 4

CRIMINAL JUSTICE PROCEDURE FOR FELONY AND MISDEMEANOR CASES IN CIRCUIT COURTS IN WISCONSIN



Source: SEWRPC.

Table 2

FORECAST POPULATION BY COUNTY IN SOUTHEASTERN WISCONSIN: 1985 AND 2000

County	Forecast Population		Forecast 1978-1985 Change		Forecast 1985-2000 Change		Average Annual Change 1978-2000	Percent of Region 2000
	1985	2000	Number	Percent	Number	Percent		
Kenosha	149,800	174,800	23,992	19.1	25,000	16.7	2,227	7.9
Ozaukee	86,800	114,000	16,886	24.2	27,200	31.3	2,004	5.1
Racine	195,500	217,700	18,163	10.2	22,200	11.4	1,835	9.8
Walworth	80,500	99,600	11,442	16.6	19,100	23.7	1,388	4.5
Washington	103,900	143,000	20,618	24.8	39,100	37.6	2,714	6.4
Waukesha	322,600	420,600	37,500	13.2	98,000	30.4	6,159	19.0
Six-County Area	939,100	1,169,700	128,601	15.9	230,600	24.6	16,327	52.7
Milwaukee	1,015,000	1,049,600	54,007	5.6	34,600	3.4	4,028	47.3
Region	1,954,100	2,219,300	182,608	10.3	265,200	13.6	20,355	100.0

Source: SEWRPC.

Tables 3 and 4 depict the case load data for 1978 in each county in the Region. Because some types of cases are combined when reported by counties, Table 3 divides the total circuit court case load into felony and misdemeanor, juvenile, and traffic and ordinance cases. As shown in Table 3, there were a total of 17,305 felony and misdemeanor cases in the Region in 1978. Such cases represent almost 13 percent of the total county court case load in the Region. Basically, each case must be processed through the procedure illustrated in Figure 4. Once within the jurisdiction of a court, such cases can be expected to take 90 to 365 days to conclude. Officers of the court estimate that 30 to 40 percent of these cases deal with felonies. It is interesting to note that Racine and Milwaukee Counties both have a high percentage of the felony and misdemeanor cases in the Region in relation to their percent of total population. Criminal justice officials in the Region relate this situation to the relatively high density of the urban populations of these two counties. In contrast, for example, Waukesha County has a very low number of felony and misdemeanor cases compared to its percent of total population. While there are no reliable statistics on which to establish a trend of growth or decline in felony and misdemeanor cases in the Region, it is clear that as the population of each county grows numerically, as each county becomes more densely settled, and as industrial and commercial development increases, criminal cases may be expected to increase, thereby increasing the load on those agencies involved in the criminal justice process.

As indicated in Table 3, crimes involving juveniles account for less than 7 percent of the total circuit court case load. A total of 9,061 such cases were handled in the Region in 1978. Unlike felony and misdemeanor cases, in which all but two or three steps in the process are open to public inspection, as shown in Figure 4, juvenile cases are restricted from view to all but a few individuals in each agency involved in the process, shown in Figure 5. Juvenile cases generally move more rapidly through the process than adult criminal cases, taking from 30 days to 90 days to conclude after it has been determined that the case will indeed be decided in court. The juvenile criminal justice process involves the routing of the case between the various agencies involved, including the agency or person having custody of the juvenile at any point in the process. The key people in each agency must have access to the case file and may duplicate parts of the file for their confidential use.

Table 3 and Table 1 indicate that the proportion of juvenile cases in both Kenosha and Racine Counties exceeds each county's proportion of the total regional population. It is not surprising that these third and fourth largest counties in the Region have the third and fourth highest number of juvenile cases in the Region. It is not known, however, why the proportion of juvenile cases to

Table 3

CIRCUIT COURT CASE LOAD BY TYPE OF CASE, BY COUNTY IN SOUTHEASTERN WISCONSIN: 1978

County	Felony and Misdemeanor		Juvenile		Traffic and Ordinance		Total	
	Number of Cases	Percent of Region	Number of Cases	Percent of Region	Number of Cases	Percent of Region	Number of Cases	Percent of Region
Kenosha[a]	990	5.72	966	10.66	12,879	11.71	14,835	10.88
Ozaukee[a]	381	2.20	204	2.25	12,315	11.19	12,900	9.46
Racine[b]	3,194	18.46	1,192	13.16	12,290	11.18	16,684	12.23
Walworth[b]	655	3.78	320	3.53	8,992	8.17	9,967	7.31
Washington[b]	779	4.50	456	5.03	8,564	7.78	9,799	7.18
Waukesha[a]	716	4.14	1,389	15.33	25,313	23.01	27,418	20.10
Six-Area County	6,715	38.80	4,527	49.96	80,361	73.04	91,603	67.16
Milwaukee[b]	10,590	61.20	4,534	50.04	29,662	26.96	44,786	37.84
Region	17,305	100.00	9,061	100.00	110,023	100.00	136,389	100.00
Percent of Regional Total	12.69	--	6.64	--	80.67	--	100.00	--

[a] *Data provided by the Wisconsin Courts Information System from statistical reports.*

[b] *Data provided by the various county clerks of court.*

Source: SEWRPC.

Table 4

CIRCUIT COURT CASE LOAD RELATED TO ESTIMATED CURRENT AND FORECAST POPULATION BY COUNTY IN SOUTHEASTERN WISCONSIN: 1978 AND 2000

County	Total Case Load 1978[a]	1978 Estimated Population	1978 Case to Population Ratio	Forecast Year 2000 Population	Projected Year 2000 Case Load[b]	Percent of Regional Case Load		Average Annual Case Load Increase 1978-2000
						1978	2000	
Kenosha	14,835	125,808	1/8.48	174,800	20,613	10.88	11.29	262
Ozaukee	12,900	69,914	1/5.42	114,000	21,033	9.46	11.51	370
Racine	16,684	177,337	1/10.63	217,700	20,480	12.23	11.21	173
Walworth	9,969	69,058	1/6.93	99,600	14,372	7.31	7.87	200
Washington	9,799	83,282	1/8.50	143,000	16,824	7.18	9.21	319
Waukesha	27,418	285,100	1/10.40	420,600	40,442	20.10	22.14	592
Six-County Area	91,603	810,499	--	1,169,700	133,764	67.16	73.23	1,916
Milwaukee	44,786	960,993	1/21.46	1,049,600	48,910	32.84	26.77	187
Region	136,389	1,771,492	--	2,219,300	182,674	100.00	100.00	2,103

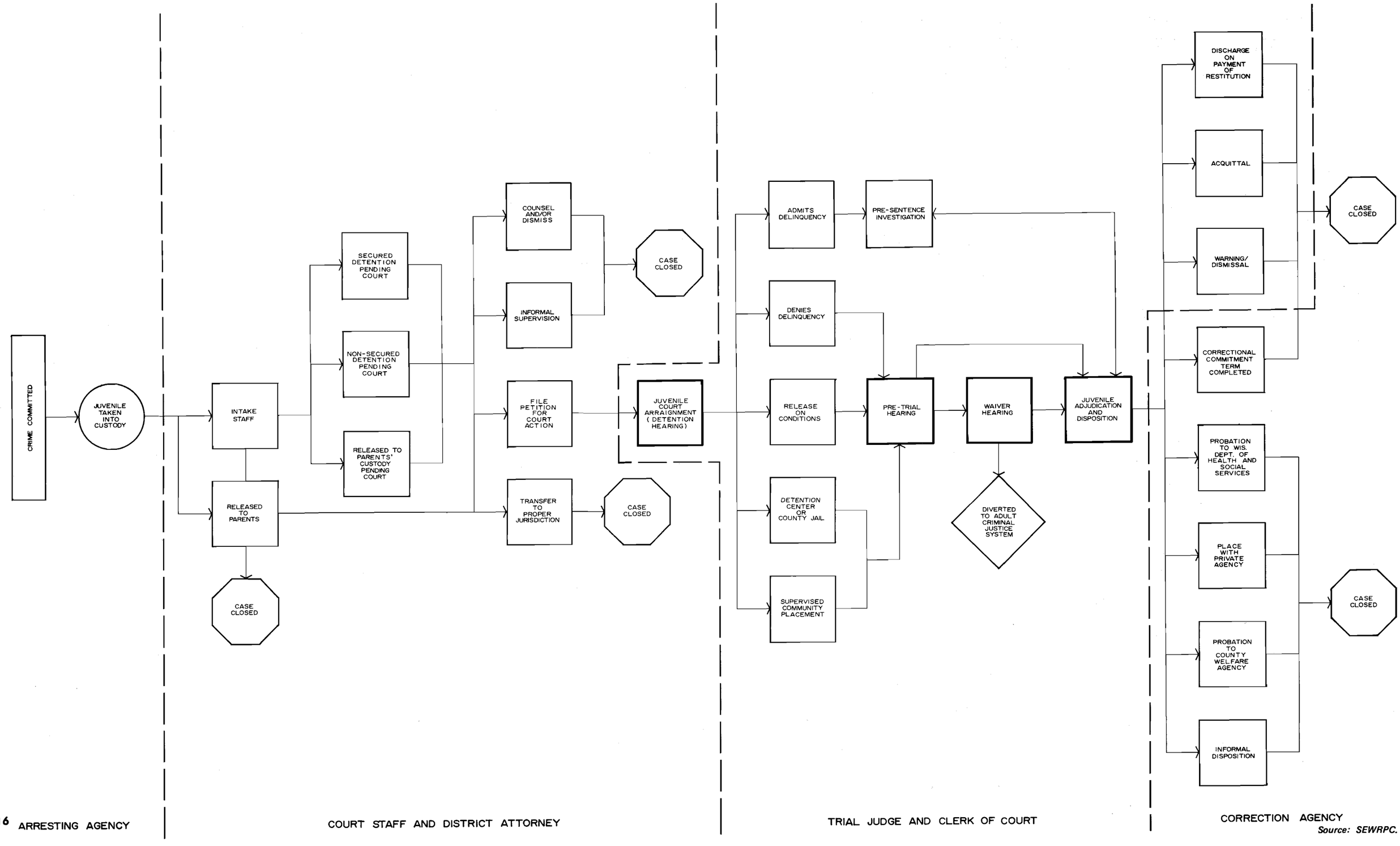
[a] *All felony, misdemeanor, juvenile, traffic, and ordinance cases in circuit courts.*

[b] *Based on 1978 case-to-population ratio.*

Source: Wisconsin Department of Administration, Wisconsin Courts Information System, County Clerks of Court, and SEWRPC.

Figure 5

CRIMINAL JUSTICE PROCEDURE FOR JUVENILE CASES IN CIRCUIT COURTS IN WISCONSIN



Source: SEWRPC.

total population is exceptionally high in these two counties. One possible explanation is that there is more stringent law enforcement activity in these two counties. Another theory, held generally by criminal justice agency staff contacted, is that economic conditions are a major triggering device for all types of crimes. Unemployment, a major indicator of economic conditions, increased sharply in these two counties in 1978, possibly explaining the number of crimes committed.

When annually reported, traffic and local ordinance violation cases are often combined. These two types of violations are usually processed as shown in Figure 6, although if either type of case is diverted to the felony and misdemeanor procedure, the procedure described in Figure 4 is then followed. Once traffic and local ordinance cases come within the jurisdiction of the courts, the case may be expected to be concluded within 90 to 180 days. As shown in Table 3, these two types of cases account for over 80 percent of all circuit court-related cases in the Region. Traffic cases comprise the majority of the combined traffic and ordinance cases processed each year. Ozaukee and Walworth Counties reported the highest proportion of traffic and ordinance cases, in relation to the total crimes committed in the two counties, in the Region in 1978. Walworth County staff attribute the relatively high incidence of both traffic and ordinance violations to the many recreation and tourist facilities in the County, which abuts northeastern Illinois. It should also be pointed out that the population of some lake communities in Walworth County increases substantially during the summer months—population that is not counted in the census or in state estimates but that may commit traffic and local ordinance violations. It is not known why the number of traffic cases is so high in Ozaukee County, but more stringent traffic policing may provide part of the explanation. Milwaukee County was the only county in the Region in which the proportion of traffic and ordinance cases in relation to total cases was lower than the proportion of the county population to the regional population.

Overall, as indicated in Table 4, criminal justice case loads in the Region in 1978 numbered more than 136,000, or an average of one case approximately every minute of the working day. As also indicated in Table 4, the incidence of cases per population appears to be higher in the lesser populated counties than in the highly populated counties. It is clear from a review of the case-to-population ratios that case loads are not directly related to population, and indeed appear to increase at a decreasing rate as population increases. Application of the 1978 case-to-population, therefore, results in what may be considered a high number of expected criminal justice cases in the year 2000. In any event, an average annual case load increase in the Region of about 2,100, albeit probably high, means an additional case every working hour of the year due only to increases in population growth and attendant urban development.

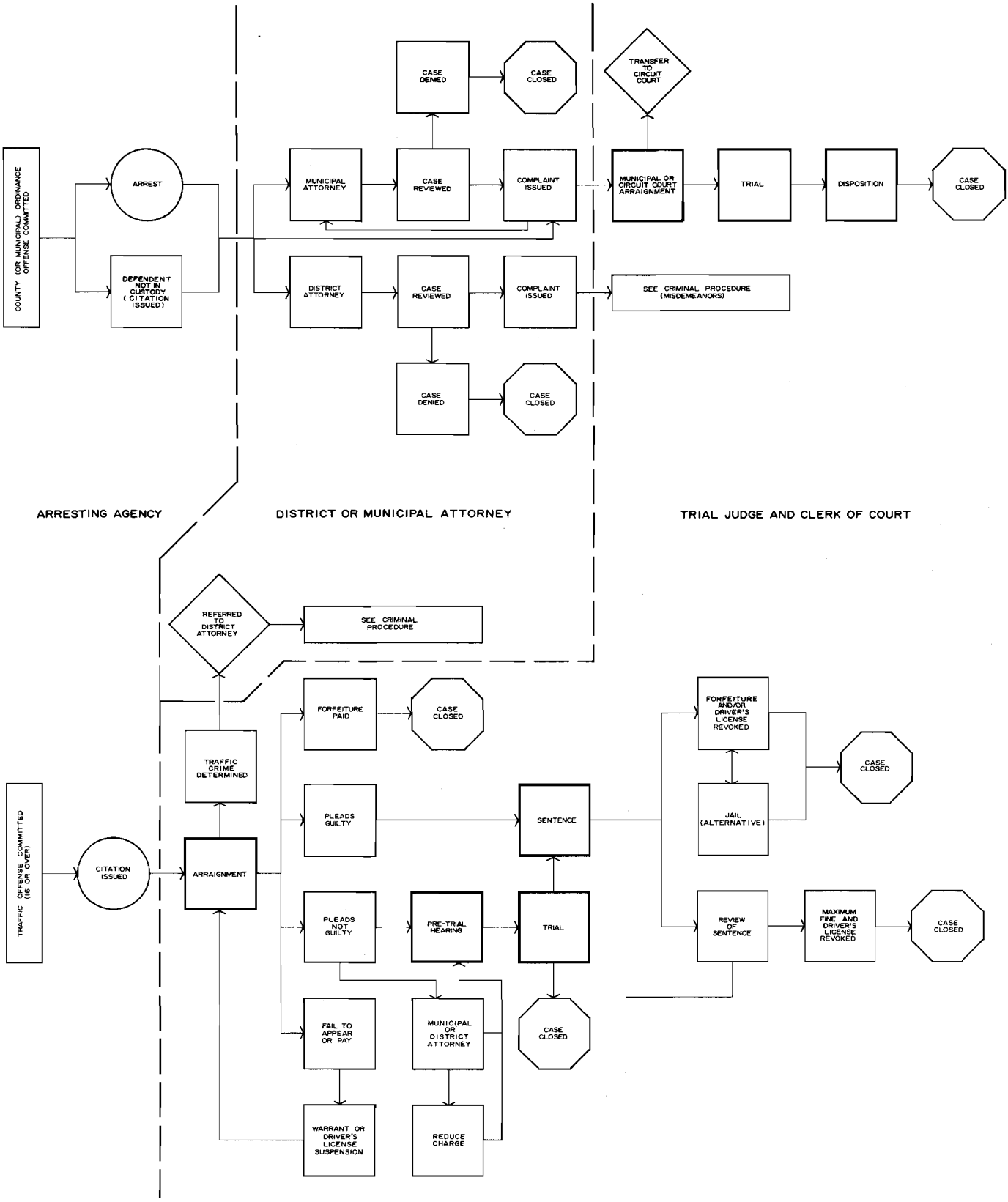
CRIMINAL JUSTICE PROCEDURAL TASKS

In the criminal justice process, there are several tasks which are manually burdensome, and which can, moreover, be readily adapted to some form of electronic data processing and transmittal: First among these tasks is the initial preparation, updating, and duplication of each case file. In addition, the retrieval of files is amenable to mechanization. Keeping track of each case as it proceeds through the process is another manual task which might better be accomplished with an electronic data processing and transmittal system. Keeping the many files current and accurate is a problem which must be addressed as a case proceeds through the process. Cumbersome case logs are now maintained and duplicate card files involving, in some counties, thousands of cards annually are manually kept up to date on the case action as a cross-index.

Another major manual task amenable to mechanization is the maintenance of an up-to-date case history on individual criminals. This is particularly important in cases involving adults with previous records. Case reports must be transmitted to state agencies monthly, and in some cases more often. The need for uniformity in data collection procedures and forms for reporting to state agencies, such as the Wisconsin Court Information System (WCIS), can better be addressed through uniform automated procedures. Retrieval from the case files or logs is still another manual task which may lend itself to an electronic data transmittal system. In some counties the manual accounting of fines—keeping track of fines received, who paid the fines, how much was paid, and for what reason—has become a major task which, if incorrectly accomplished, may result in needless court appearances, unfounded arrests, and even suits against the county by individuals wrongly accused of nonpayment. In particular, the recording of fines would be simplified by a data transmittal system.

Figure 6

CRIMINAL JUSTICE PROCEDURE FOR TRAFFIC AND ORDINANCE CASES IN CIRCUIT COURTS IN WISCONSIN



Source: SEWRPC.

Preparation of the court calendar is a time-consuming manual task amenable to mechanization. The seemingly simple task of assigning courtrooms and assistant district attorneys to handle the case load can become a major problem if up-do-date files are not readily available to the district attorney and other officers of the court. Simply knowing who has a case file in their possession and finding it becomes a time-consuming task. One district attorney in the Region indicated that he would have to mount a major manual review to be able to tell anyone how many open files or cases are in progress in his office at any one point in time.

Keeping track of witnesses in each case, scheduling their appearance, notifying them of their appearance, preparing subpoenas, and then redoing all these tasks when the case has been rescheduled in court can also be a major time-consuming element if manually accomplished. Attempts to locate a defendant on bail and issuing arrest warrants only to find out that the person is in jail in an adjacent county is also a problem which could be alleviated if common data sources were available to criminal justice agencies in adjacent counties. The above factors may contribute to delay in dealing with a court case, and costs to both the private individuals involved and the public can be large if the case is complicated or the courts are congested and the calendars must be continually adjusted.

THE USE OF ELECTRONIC DATA PROCESSING

A review of the criminal justice process used in the Region leads to the conclusion that mechanization of the massive data-handling tasks involved would be more efficient than the present manual system and would probably result in a savings of time and money. Electronic data processing and transmittal systems were initially designed to alleviate the burdensome task of manually filing, sorting, storing, retrieving, and duplicating data of all kinds. The advent of teleprocessing systems, in which cathode ray tube (CRT) units are utilized to immediately access and visually review and update or add to data files, diagrams, and charts, has made electronic data processing an even more valuable tool in massive and complicated data-handling tasks and, therefore, would appear to be readily adaptable to the criminal justice process. It has been suggested that many of the problems attendant to the criminal justice process could be alleviated by utilizing electronic data processing and teleprocessing equipment. Counties and other units and agencies of government that have converted such activities from manual processing to electronic data processing and teleprocessing contend not only that all aspects of the manual burden have been reduced substantially but that such reduction has resulted in the shifting of staff activity to more important tasks and a reduction in duplication, errors, and time to perform tasks.

Every case undergoing criminal justice procedures includes data which can be grouped into four major categories:

1. Information regarding the criminal incident or event, such as time, place, and nature of crime and injuries incurred.

2. Information on the defendant, including a detailed identification, prior convictions, aliases, other pending cases, and case status.

3. Information surrounding the case and its progress, such as data on the arrest and its circumstances, charges issued, court events or transactions with results (hearings, continuances, and trials)—including date, time, action taken—reason for action, party requesting action, disposition, and sentence.

4. Information on participants, such as victims and witnesses, police officers and special personnel involved, prosecutors and defense attorneys, judges, court reporters, and clerks.

As already indicated, there are presently two basic data-handling systems being utilized in the Region dealing with county criminal justice matters. All counties in the six-county area are still principally using a manual file and report system, although some are beginning to use computers as an aid in some specific functions. Milwaukee County has converted, or is in the process of converting, all criminal justice functions to a high-level data processing and teleprocessing system called "JUSTIS."

Two other electronic data processing systems that have been contemplated for use and have been discussed in the various county and state criminal justice agencies are called "PROMIS" and "MINI-PROMIS." PROMIS, which is the acronym for Prosecutors Management Information System, was designed by the public-supported Institute

for Law and Social Research (INSLAW) in Washington, D. C. to provide a semiautomated managerial and administrative tool to improve the overall operating efficiency of prosecutors' (district attorneys') office procedures, primarily in large agencies. PROMIS was designed to improve five basic tasks. The first of these is case accountability, including current status and all previous actions on a case by all parties or agencies concerned. Calendars and dockets can also be readily produced. Secondly, PROMIS provides the ability to more readily conduct analyses of all types of data collected and stored in the process. Office performance reports is the third major task which can be better performed utilizing PROMIS. The system provides statistical and summary reports on the various cases being processed in a prosecutor's office at any point in time. Fourthly, PROMIS enables a prosecutor to keep track of witnesses involved in all cases. In addition, the system can be utilized to produce subpoenas and service reports, as well as to create witness records. Finally, PROMIS utilizes a ranking program to identify cases that should receive high priority from the prosecutor.

PROMIS was designed to provide the aforegoing capability utilizing either manual procedures or a computer which can provide both machine-punched cards and printout materials. Advances in computer technology in the past five to seven years, particularly in the areas of teleprocessing and smaller and more powerful computers (so-called mini-computers) have resulted in the potential to offer smaller agency operations a high-level electronic data processing application at a relatively lower cost than previously possible.

MINI-PROMIS is a new system designed by INSLAW to take advantage of the new, more powerful but smaller electronic data processing systems and to accomplish not only the original PROMIS tasks but also an expanded more flexible package for criminal justice agencies. MINI-PROMIS is designed to track arrests, defendants, charges, cases, court events, and involved parties through the entire criminal justice process. The system, which at this writing was being utilized in a limited application to juvenile cases only in Marion County (Indianapolis), Indiana produces printed reports such as calendars, case status lists, witness lists, case aging reports, and work load reports. In addition to having an immediate response capability through on-line video CRT terminals, the system can generate special forms such as subpoenas, notifications, case jacket labels, disposition reporting forms, manual file cards, and other high-volume forms.

MINI-PROMIS provides on-line video-terminal access to the files on pending and closed cases in a variety of ways. Cases can be immediately visually accessed, for example, by case number, defendant name or identification number, witness name, police officer name or number, defense attorney, judge, prosecutor, and calendar date. A flexible statistical reporting package is included in MINI-PROMIS that provides for detailed tracking of defendants and cases through each step of the criminal process—from arrest to final disposition. The user can obtain statistics in numerous configurations. For example, he can track individual charges, such as a robbery, or groups of charges, such as all felonies or all violent crimes. The reports displayed can include frequency counts and percentages, attrition rates, dispositions, and time delays, along with a detailed accounting of reasons for all actions taken.

An inquiry package is included in MINI-PROMIS that retrieves case or defendant information based on the user's criteria. Cases or statistics meeting the user's request criteria can be printed in summary or in detail and in any format.

MINI-PROMIS is designed to store, process, and display information concerning the type of case, the offense and the arrest, scheduled events for the case, case events that have already taken place, minute (docket) entries for each case, assigned parties, witnesses and witness contacts, police officers involved, defendant descriptions and evaluations, case evaluations, charges and dispositions, sentences, and appeals. The following types of services—including the type of data which may be input or processed, printed out, and modified—are available on the MINI-PROMIS system to each involved criminal justice agency:

- Law Enforcement Agencies

  On-line access to pending and closed cases
  Early identification of defendants with multiple cases pending
  On-line booking information linkage
  Police officer scheduling for court appearances
  Witness management and assistance
  Tracking and accounting for arrest charges
  Property release assistance

Follow-up investigation monitoring
Listings of all pending cases for a police officer
Bench warrant lists
Lock-up and other jail accounting reports
Statistics from offense through final disposition

- Prosecutor (District Attorney)

On-line access to pending and closed cases
Printed calendars
Printed case status lists by attorney and case-age
Automatic generation of subpoenas and disposition notices
Automatic generation of special forms (complaints, labels)
Early identification of defendants with multiple cases pending
Witness assistance unit support
Policy evaluation and resource allocation assistance
Statistical reports from arrest through final disposition
Crime seriousness rating
Tracking of sentencing and bail decisions
Tracking of charges and discretionary reasons

- Judges and Clerk of Courts

On-line access to all pending and closed cases
Printed calendars for each event
Automatic generation of witness notifications, warrants, and other special forms
Assistance in identifying schedule conflicts
Report scheduling
Case-age and backlog monitoring
Statistics from offense through disposition
Bail and sentencing decision evaluation
Diversion and special program evaluation
Resource allocation by judge
Cross-referencing of multiple case numbers
Statistics by incident, charge, defendant, or case

- Correctional Institutions

On-line access to pending and closed cases
Early identification of probation and parole violators
List of defendants convicted and their sentences
Lists for monitoring defendant's bail, probation, or parole status
Lists of case assignments by probation or parole officer

MINI-PROMIS is a highly transferable system that allows the user to decide what data are to be collected. Any of the types of data listed above can be included, excluded, modified, or augmented with new data at the time the system is tailored for use in a particular jurisdiction.

JUSTIS is an acronym for Justice Information System. It is an on-line, computer-based system which was initially designed to serve the criminal justice agencies of Milwaukee County, including the sheriff's department, the district attorney, the courts, the clerk of courts, and the correctional institutions. The system is, at this writing, being utilized by 35 community and multicommunity criminal justice operations in the United States in addition to Milwaukee County. JUSTIS is basically a series of video CRT terminals connected through a central computer to a common data base. JUSTIS was built upon the foundation of PROMIS and represents a significant extension of the capabilities of PROMIS. For example, the parent system (PROMIS) was broadened appreciably in the areas of data entry and inquiry capability.

In Milwaukee County, for example, data entered in a case file utilizing a CRT unit with in-put keyboard usually remain on-line for as long as the case is pending and for a minimum of 90 days after final disposition. The data are immediately available to appropriate persons in those criminal justice agencies involved in the case through inquiry on other CRT terminals. Printed copies of data displayed on the terminal are also available. In Milwaukee County, data are entered into the system on on-line terminals in the offices of the district attorney and the clerk of courts. The district attorney is responsible for entry of all data concerning offenses, arrests, defendants, and charges and of all witness/victim information needed for computer preparation of subpoenas and related notices. The office of the clerk of courts enters all case information concerning arraignments, continuances, dispositions, and sentences, as well as data necessary for the preparation of court calendars.

Output includes such working documents as complaints, court calendars, subpoenas, and judgment rolls that are produced daily; on-line

visual terminal displays that contain up-to-the-minute data on cases progressing through criminal procedures; and a wide variety of printed reports that are used for management and statistical purposes and periodic reporting to state criminal justice agencies.

The following types of services—including the type of data which can be input, accessed, modified, and printed out—are available through JUSTIS to each involved criminal justice agency:

- Law Enforcement Agencies

  On-line access to pending and closed cases
  Early identification of defendants with multiple cases pending
  On-line booking information linkage
  Police officer scheduling for court appearances
  Witness management and assistance
  Tracking and accounting for arrest charges
  Follow-up investigation monitoring
  Listings of all pending cases for a police officer
  Bench warrant lists
  Lock-up and other jail accounting reports
  Statistics from offense through final disposition
  Access to the state TIME (Terminal Information for Management of Enforcement) system in Madison
  TIME/JUSTIS wanted inquiries
  Prisoner population and census
  Officer subpoena recall

- Prosecutor (District Attorney)

  On-line access to pending and closed cases
  Printed calendars
  Printed case status lists by attorney and case-age
  Automatic generation of special forms (complaints, labels)
  Early identification of defendants with multiple cases pending
  Witness assistance unit support
  Policy evaluation and resource allocation assistance
  Statistical reports from arrest through final disposition
  Tracking of sentencing and bail decisions
  Tracking of charges and discretionary reasons
  Selected controlled generation of subpoenas
  Daily report of new cases issued
  Daily report of all cases disposed
  Daily report of all defendants awaiting trial in jail more than 30 days
  Weekly report of all cases assigned special prosecution teams such as career criminal, sensitive crime, and children court
  Individual prosecutor work load report

- Judges and Clerk of Courts

  On-line access to all pending and closed cases
  Printed calendars for each event
  Assistance in identifying schedule conflicts
  Report scheduling
  Case-age and backlog monitoring
  Statistics from filing through disposition
  Bail and sentencing decision evaluation
  Diversion and special program evaluation
  Resource allocation by judge
  Cross-reference of multiple case numbers
  Statistics by incident, charge, defendant, or case
  On-line minute records
  Monthly report of traffic cases not reported to the Wisconsin Department of Transportation
  Daily report of all potential duplicate defendant ID numbers
  Codes for prosecutors, judges, district attorney, and charges
  On-line preparation of the form which normally is found in the court case file on which is recorded the chronological event for every case

- Correctional Institutions

  On-line access to pending and closed cases
  Early identification of probation and parole violators
  List of defendants convicted and their sentences
  Lists monitoring a defendant's bail, probation, or parole status
  Lists of case assignments by probation or parole officer
  On-line preparation of both the booking card and the tier card for the jail
  Monthly reporting to the Department of Health and Social Services, Division of Correction of the Jail Register Report on magnetic tape
  Lists of all prisoners scheduled for release by date

Prisoner location report
Prisoner work detail assignment
Inquiry that divides prisoner status into 20 different categories such as detainer, felony, detainer misdemeanor, violation of probation, Huber employed, and Huber unemployed
Inquiry on prisoner population statistics by race, sex, and charges

Because the system was designed for and lends itself to all elements of the criminal justice process in Wisconsin, there is no reason why the system cannot be expanded to include data-handling problems of criminal and civil justice agencies that have not been initially addressed or that arise as individual users become more familiar with the system and its capabilities. Plans have been made to expand JUSTIS to include civil court cases such as alimony, paternity, and divorce cases, and to provide uniform reporting to state agencies, such as the Wisconsin Court Information System, through the use of magnetic media. To paraphrase a comment made by a Milwaukee assistant district attorney "JUSTIS is the first major helpful change in the criminal justice record-keeping process in Milwaukee County since the advent of the typewriter."

SECURING THE CASE FILES

Security of criminal justice data is of major concern to those persons involved in the criminal justice process. Consequently, one of the primary charges to the Commission when it was requested to undertake the preparation of this report was to address data security to the satisfaction of the various criminal justice agencies. Data security can be defined as the protection of data from accidental or intentional disclosure to unauthorized persons and from unauthorized modification. Data security can be achieved through computer hardware features, programmed routines, and manual procedures, as well as through the usual physical means of safeguarding the data environment with security personnel, locks, keys, and badges. The need for data security exists whether the information is in manila folders, on file cards, or in the data bank of an on-line communications-oriented system. Information lost or taken from a secured file may be equally damaging whether it is obtained from a manila folder, a file cabinet, a safe, or a terminal connected to a computer.

Much of the computer design effort in recent years—both in hardware systems and in programming—has been devoted to making it easier for the noncomputer-oriented individual to utilize a computer from a terminal. As access to information is extended outward to operating levels, however, security measures must correspondingly extend outward to control this access. The major challenge is to develop procedures and to identify and employ operational techniques that will help to safeguard private information, preventing its indiscriminate release or unauthorized modification.

No two agencies have either identical requirements for security or identical facilities for implementing their requirements. This precludes the development of a single standardized solution. But it also makes it more difficult for an intruder to develop a "cookbook" on how to breach a specific user's security system. Centralizing the base data also provides the potential for a higher level of security.

Hardware features, such as storage protection, recognition of interrupts, and separation of problem and control program status in the central processor, plus programming (software) features, such as password verification and label and date checking, exist in many systems today. By evaluating the applicability of these features and by knowing the requirements of the data processing application, the systems designer can help minimize potential problems by programming significantly more comprehensive security checks than were possible with manual systems. For example, the following security checks can be programmed:

1. Verification of both identification and authorization of the individual user and terminal, depending on the degree of security required, each time an attempt is made to access restricted data.

2. Immediate detection—on-line and in real time—of any accidental or intentional security breaches; identification of the time of the breach and the person responsible; and, if needed, cancellation of that program and/or disconnection of that terminal.

3. Maintenance of detailed records of all accesses to sensitive data files and, by subsequent computer analysis of user, terminal, location, level of authorization, and type of errors, measurement of the effectiveness of security techniques.

Based on the degree of security required, either the person, the terminal, or the program attempting

to access sensitive data must be identified so that the right to use the system or function can be verified and the user can be held accountable. For example, if everyone in a district attorney's offices may access a case file, the terminal need only be physically located and secure in the district attorney's offices. Then the only additional requirement is a means of uniquely identifying that terminal to the system or otherwise assuring the system that the output is directed to the correct terminal.

But if only one or two individuals among many people are authorized access—for example, to juvenile case files—there must be a means of ascertaining who is requesting access to those files. Once a determination is made as to which terminals are, in fact, in secure locations and which are not, the system's security identification procedures may be applied on that basis. The impacts on system availability is one reason why some systems containing sensitive data place primary reliance on user identification rather than on identification of the terminal or its location.

Identifying the Terminal User

There are three basic ways to identify a terminal user:

1. By something memorized. A legitimate user may be required to memorize a password or answer a prearranged set of questions. This technique requires no special hardware and is reasonably secure.

2. By something carried, such as a badge, card, or key. The badge would be inserted into the terminal badge reader, the key into the terminal itself.

3. By a personal physical characteristic. This might be the user's voice, which when transmitted to the computer would be compared with the stored "voice-print" for identification. This technique is under development and not yet commercially available.

Once the user is identified, the system must determine what he is authorized to do. He may be authorized to use some programs or functions, but not all. He may be authorized access to certain files, but not others. He may be permitted to read certain files, but not modify them. Therefore, a table identifying each user's authorizations is needed. On some systems, the authorization procedure will be quite simple. On others, it will be highly structured and complex. How simple or how complex depends on what capabilities the system provides and how selectively these capabilities are provided to various users.

Incorporation of a "lockword" along with programmed validation routines is one way used to protect data sets. On some systems, the terminal operator creates and maintains his own file. He writes a lockword on the entire file, or on a specific data set within that file. His file or data set cannot then be read by anyone who cannot enter the correct lockword(s), which the terminal user is free to change at any time. On other systems, instead of allowing the user to use any lockwords, and thereby assume his file authorization, the assignment, maintenance, and control of lockwords are all restricted to the systems security administrator—the person responsible for all data security measures, audits, and policing. With this centralized control, individual lockwords can be linked to a particular terminal user through his authorization record. In addition, the user's authority to read, write, change, or delete can be identified for each lockword-protected data set. These procedures, used singly or in combination, allow lockwords to be related back to:

1. An individual user.

2. A category of user.

3. An application program.

4. A terminal or terminal location.

5. Any combination of the above.

In many systems, lockword protection of entire files or data sets is adequate, either because the sensitive data are logically separate or because they can be separated to simplify both processing needs and security precautions. In other cases, where the segregation of sensitive data sets is not feasible, lockwords linked to the affected user authorization tables could be expanded to provide controls over:

1. Records within files or data sets.

2. Groups of records or record categories.

3. Individual fields.

4. Categories of fields (such categories could involve more than one file).

In this way, a selective and highly structured data security system may be developed based on the lockword approach.

The secure system must be able to identify all attempted violations—accidental or malicious. Any mismatch of user or terminal identification and password or lockword, any unauthorized request for processing or data requires some reaction by the system—at minimum, the recording of the attempt in a log. In some cases, the ringing of alarms, thereby immediately requesting a sheriff's deputy with drawn weapon, may be required.

Immediate action against violators may sometimes be required. But more often, a first violation need only be logged, since most users can be expected to make isolated mistakes. However, if a second mistake quickly follows— another attempt to enter an invalid code or access an unauthorized file— the system should immediately inform the local security officer. The terminal could be locked completely as soon as the second violation occurs, rejecting further information until the condition is corrected. The only person authorized to re-open the terminal should be the local security officer.

Through a detailed analysis of all the various audit logs, each security technique can be "fine-tuned" and/or files can be redesigned to further protect sensitive data to meet the installation's unique needs. For example, certain files may be found to have very high use. These should be examined and possibly segregated so that nonsensitive data can be processed more efficiently while protection of sensitive data is maintained. Low use might indicate that the file does not need to be on the system at all or that security procedures are so complex that users have found other ways (legal or otherwise) to obtain information.

Data transmission, like voice transmission, is susceptible to wiretapping. The eavesdropper does not originate any data on the communication line and usually must listen very patiently before finding any information of particular value to him. However, through wiretapping, examples of legitimate user sign-on and identification sequences could be obtained. The eavesdropper could then become an active impersonator of an authorized user if he had not only a compatible terminal, modem, and line, but also assurance that the impersonated user would neither be on the system at the time of the illegal entry attempt nor try to use the system during the break-in. To minimize the impersonation problem, the user can include in his sign-off procedure a "return-to-active-status" time. This causes the user's identification to be flagged as invalid during the interim. In addition to the physical precautions taken to secure the junction boxes and line terminations, both scramblers and cryptographic techniques can be used where data are considered extremely sensitive.

The central computing facility and its related tape/disk libraries and the data preparation area and supporting clerical control departments should be considered as one unit for security purposes. A secure data processing system may need physical safeguards at the computer center, and possibly at some terminal locations. It may need a security staff to keep intruders out, to ensure that tape or disk stores are locked, and to perform periodic inspections. Physical access to the computer room should be restricted to only those persons actually engaged in support of computer operations. At least one senior person per shift should be designated responsible and accountable for maintaining security precautions. Locked cabinets or vaults should be used to store sensitive data files, backup files, associated operating procedures, and documentation. The tape and disk librarian should maintain a log that records, at a minimum, exactly when and by whom sensitive material is removed and returned.

Lastly, but perhaps most importantly, maintenance of security demands competence, loyalty, and integrity from systems operators and machine room personnel. In addition, it requires continuing training for the staff, both in operating procedures and in security measures. The purpose of this training is to ensure that each individual recognizes his vital role in installation security and does not—through familiarity—become careless. No one, regardless of level of competence or job responsibility, should be able to circumvent the security procedures, logs, and audit trail. The control of employees of other departments, as well as outsiders, may require special precautions such as sign-in registers, badges, or special escorts. As computing systems and peripheral devices become increasingly more complex, the nature and variety of these outsiders expands significantly beyond those who traditionally participate in data processing. And usually these people are most deeply involved during times of crisis—a conversion or

a system malfunction—when the urge to bypass security in order to get the system operational is very great and must be resisted.

It is clear that security of criminal justice case files and individual file data can be adequately secured in a number of ways utilizing computer technology. Such security may well be better than that of any current manually operated system. Success in managing a secure installation is only possible through consistent and continuous adherence to the established security measures.

SUMMARY

It is apparent from a review of the available data on criminal case loads in the Region, current and forecast population levels, interviews with officers of the courts, and others directly involved with criminal justice, as well as from a review of the criminal justice process, that the record-keeping tasks required by the criminal justice process are massive and increasing. It is also apparent that almost all of the tasks directly related to record-keeping—that is, to the preparation of forms and reports—now performed manually can be readily adapted to electronic data processing and transmittal systems and techniques. Such adaptation will not only lessen the record-keeping work load but will lessen, and in many cases alleviate, duplication and error, which are major problems with the present manual process.

Electronic data processing and transmittal systems have been developed to address the major problems involved in processing criminal justice information. Such systems have been placed in use throughout the United States, and JUSTIS, utilized in Milwaukee County, was developed specifically as a tool in the criminal justice process in Wisconsin. In addition, electronic data processing, rather than being more vulnerable to misuse or loss than manual processing, can be made more secure than manual processing through the structure of the system and technological advances.

Chapter IV

ALTERNATIVE AND RECOMMENDED ELECTRONIC DATA PROCESSING AND TRANSMITTAL SYSTEMS FOR CRIMINAL JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN

INTRODUCTION

Chapter III of this report documented the need to convert criminal justice data file maintenance in southeastern Wisconsin from manual to electronic data processing and the need for uniform data collection and reporting procedures for various state agencies. This chapter explores the alternative means by which such conversion could be accomplished, and recommends the best means from among the alternatives, including the best software (program) system, the best hardware (computer equipment) system, and the best attendant institutional structure.

SOFTWARE SYSTEMS

Of the three electronic data processing software systems reviewed in Chapter III, it was determined that PROMIS was not a broad enough system in either the scope of the tasks performed or in the application of electronic data processing techniques. While it was determined that MINI-PROMIS has a great deal of potential, and perhaps more flexibility due to adaptability to several types of electronic data processing equipment, the system is not well proven. JUSTIS, on the other hand, is broader in the scope of tasks which can be performed, offers the advantage of being readily adaptable to Wisconsin criminal justice procedures, and is already operational in southeastern Wisconsin. The only drawback of JUSTIS is that, at present, it has been programmed to operate only on an IBM computer installation having the capacity to drive several teleprocessing terminal installations. Overall, however, and because of the advantages noted, JUSTIS was considered the best of the three software systems for utilization in southeastern Wisconsin.

HARDWARE SYSTEMS

A total of five electronic data processing and transmittal hardware system alternatives were evaluated by the Committee prior to selection of a recommended system, including:

1. The addition of the six outlying counties' criminal justice processing to the Milwaukee County JUSTIS, thereby utilizing Milwaukee County data processing equipment and operating capabilities, criminal justice data base, and link to the state TIME system. Any linkage to the state TIME system must have the approval of the Wisconsin Department of Justice, Criminal Investigation Division. Under this alternative, either Milwaukee County or the Southeast Wisconsin Criminal Justice Planning Council would be utilized to provide programming and administrative services support to any and all of the six county criminal justice agencies involved.

2. The establishment of a "stand alone" public criminal justice electronic data processing and teleprocessing operation for the sole purpose of programming and teleprocessing the criminal justice data for the six counties of Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha. This criminal justice data processing agency would be linked to Milwaukee County for access to that County's criminal justice data files, as well as to the state TIME system.

3. The provision of criminal justice data processing and teleprocessing services by the SEWRPC. The Commission's computer programming and machine capabilities would be used and the Commission's computer linked to Milwaukee County for access to criminal justice data files, as well as to the state TIME system.

4. The provision of criminal justice data processing and teleprocessing by a private electronic data processing service bureau which would also be linked to Milwaukee County for data file access and connection to the state TIME system.

5. The establishment of individual electronic data processing and teleprocessing system using JUSTIS in each of the six counties concerned.

These five alternate computer installations would be configured in basically three ways. Alternative 1 would be configured as shown in Figure 7, with each county linked to both Milwaukee's central electronic data processing system and the Milwaukee County data base file. Alternatives 2, 3, and 4 would each be configured as shown in Figure 8, with each county linked to the central processing unit (CPU) at the electronic data processing center and to the data base file in "residence" on the CPU, which would also link to Milwaukee County for access to the Milwaukee County data base file and to the state TIME system. Alternative 5 would be configured as shown in Figure 9, with each county being completely autonomous with its own CPU and data file.

Alternative 1—Use of Milwaukee System

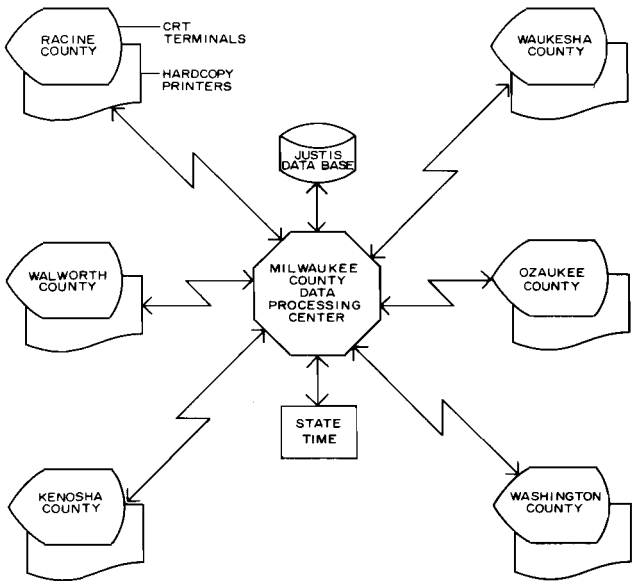
In exploring the possibilities of Alternative 1, it was necessary to first determine if indeed the Milwaukee County electronic data processing operation was capable of providing electronic data processing and remote terminal services to criminal justice agencies in all or several[1] of the other six counties in the Region. In interagency staff discussions of this matter, Mr. James F. Cox, Manager of Administrative Services, indicated that the possibility did indeed exist for such an arrangement as long as the SEWRPC or some other established computer-based agency could provide the day-to-day programming needs of the individual user agencies within the six-county operation. As already noted, the general configuration of this alternative is as depicted in Figure 7.

Milwaukee County currently has an IBM system 3032 CPU with sufficient capacity to accommodate six additional counties for JUSTIS applica-

[1] *It should be noted that while this report was being prepared, Ozaukee County formally indicated that it wished to explore a criminal justice electronic data processing system utilizing its own equipment and did not wish to be included in the Commission's exploration of joint systems.*

Figure 7

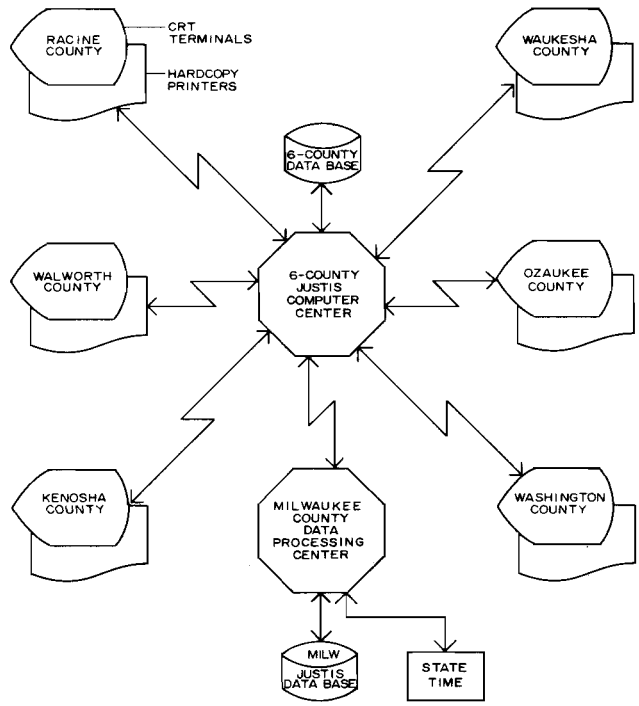
BASIC CONFIGURATION OF CRIMINAL JUSTICE ELECTRONIC DATA PROCESSING AND TRANSMITTAL SYSTEM FOR THE REGION AS ENVISIONED UNDER ALTERNATIVE 1



Source: SEWRPC.

Figure 8

BASIC CONFIGURATION OF CRIMINAL JUSTICE ELECTRONIC DATA PROCESSING AND TRANSMITTAL SYSTEM FOR THE REGION AS ENVISIONED UNDER ALTERNATIVES 2, 3, AND 4



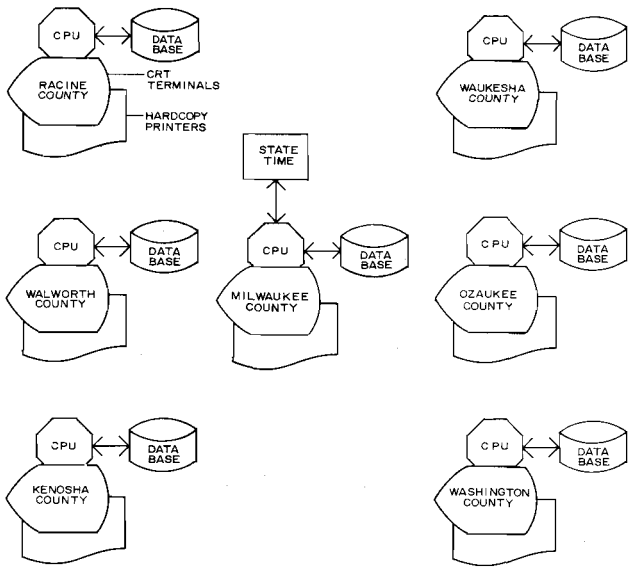
Source: SEWRPC.

tions. The county data processing department is currently operating 24 hours per day, seven days per week, with an average of over 97 percent network availability. As a backup to the system 3032, the County also has an IBM system 370 model 158 which can be activated to control the JUSTIS network in less than 30 minutes in case of a severe electrical or mechanical failure in the system 3032. To support the users of the network, a 24-hour-per-day "help desk" has been made operational and is manned by three people at all times. The help desk monitors all teleprocessing activity and responds to user problems in the areas of network availability or general system applications.

As previously indicated, Milwaukee County is now operating the JUSTIS software and is connected to the state TIME system. The software would have to be modified to provide various access arrangements for the six additional counties. There are basically two methods which would accomplish such modification: 1) modify the existing programs to run all counties, or 2) modify the programs to run the additional counties with interface to Milwaukee's separate system.

Figure 9

BASIC CONFIGURATION OF CRIMINAL JUSTICE ELECTRONIC DATA PROCESSING AND TRANSMITTAL SYSTEM FOR THE REGION AS ENVISIONED UNDER ALTERNATIVE 5



Source: SEWRPC.

Milwaukee County is extremely security conscious. For physical security the County has a closed circuit television monitoring system to control access to the data processing department. In addition, the CPU's are located in a separate locked room within the department. Special alarm buttons are strategically placed so that, in case of a break-in, a depressed button summons armed sheriff deputies. An onsite, 24-hour-per-day armed deputy can also be provided. Currently, the normal customer information control system (CICS) password security, operator, and terminal identifier is the only software security. A security software product which will interface to all the data files and application programs is planned for installation in 1980.

In interagency discussions with Milwaukee County data processing personnel regarding this alternative, it was determined that a team of three people would probably be required to maintain the system, work with and train the users, and solve the ongoing problems during an 18-month start-up period. The three people would be directed by a six-county users group which would be established to provide the team with initial, as well as ongoing, priorities. In configuring this alternative and preparing cost estimates, it was assumed that such a staff team would best be provided by an agency already involved in criminal justice planning and system efforts, such as Milwaukee County or the Southeast Wisconsin Criminal Justice Planning Council.[2] For purposes of costing this alternative, it was assumed that Milwaukee County would direct the installation of equipment and training of local staffs.

Table 5 presents an outline of an 18-month schedule for implementation and related costs of Alternative 1. Each county would have CRT terminals at various locations within the county criminal justice agencies or departments, as well as two or more matrix printers for hardcopy printout of statistics, tables, and forms. It is proposed that the Milwaukee County Data Processing Department purchase or lease all equipment, including terminals and printers, and hire all additional data processing personnel necessary to modify the programs and train the users. Figure 10 depicts

[2] *A private data processing service bureau could also provide such services, but costs related to such provision would be higher than those for a nonprofit agency.*

Table 5

DESCRIPTION OF MONTHLY WORK EFFORT AND ATTENDANT EQUIPMENT, SUPPLIES, AND PERSONNEL COSTS TO IMPLEMENT A JUSTIS DATA PROCESSING PROGRAM UTILIZING MILWAUKEE COUNTY'S COMPUTER CENTER

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
1	Hire JUSTIS manager and two programmers to work with Milwaukee County staff. Begin development of detailed implementation plan. Order supplies and office equipment. Rent 432-square-foot office at $6.67 per foot per year	40,320 (18 months office rent, 4,320; supplies, 30,000; office equipment, 6,000)	None in first month	--	6,850 (JUSTIS manager, 2,500; two programmers, 4,350)	2,050 (JUSTIS manager, 750; two programmers, 1,300)	49,220
2	Complete detailed implementation plan. Install CRT and printer for programmers use. Begin program adjustments	--	1,333	--	6,850	2,050	10,233
3	Continue program changes	--	1,333	--	6,850	2,050	10,233
4	Continue program changes and begin testing and staff training	--	1,333	--	6,850	2,050	10,233
5	Finish program testing and staff training. Begin working with first county selected for initial processing	--	1,333	--	6,850	2,050	10,233
6	Install terminal equipment at first county and work with individual users	--	6,666	--	6,850	2,050	15,566
7	Continue working with first county with some production work. Give salary increases (estimated)	--	6,666	--	7,535	2,260	16,461
8	Finish phase-in of first county. Begin working with second county	--	6,666	--	7,535	2,260	16,461
9	Install terminal equipment and add second county to the network. Work with new individual users	--	11,999	--	7,535	2,260	21,794

a typical equipment configuration within county criminal justice agencies. With respect to the implementation schedule set forth in Table 5 and the equipment configurations set forth in Figures 7 and 8, it should be noted that counties and local units of government may add police departments to the system earlier than indicated. This would require a change in the equipment configuration shown in Figure 10, but should not substantially change the total cost involved provided the total number of terminal devices allocated to each county remains the same. Each alternative in the report assumes a total of eight terminal devices per county. Should each county actually require all eight devices and add additional devices to serve local police departments, the cost could be substantially higher than estimated.

The purpose of this report is to establish the need for electronic data processing of criminal justice information at the county level and to explore alternative means of satisfying the identified need. It was assumed that local police departments would become an integral part of the teleprocessing system once the system is operational. It was also assumed that the costs associated with adding police departments to the network would be borne

Table 5 (continued)

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
10	Finish phase-in of second county. Begin working with third county	--	11,999	--	7,535	2,260	21,794
11	Install terminal equipment and add third county to the network. Work with new individual users	--	17,332	--	7,535	2,260	27,127
12	Finish phase-in of third county. Begin working with fourth county	--	17,332	--	7,535	2,260	27,127
13	Install terminal equipment and add fourth county to the network. Work with new individual users	--	22,665	--	7,535	2,260	32,460
14	Finish phase-in of fourth county. Begin working with fifth county	--	22,665	--	7,535	2,260	32,460
15	Install terminal equipment and add fifth county to the network. Work with new individual users	--	27,998	--	7,535	2,260	37,793
16	Finish phase-in of fifth county. Begin working with sixth county	--	27,998	--	7,535	2,260	37,793
17	Install terminal equipment and add sixth county to the network. Work with new individual users	--	33,332	--	7,535	2,260	43,127
18	Finish phase-in of sixth county. Begin planning police department hookups[a]	--	33,332	--	7,535	2,260	43,127
	Total	40,320	251,982	--	131,520	39,420	463,242
	Administrative Overhead Cost	--	--	--	--	--	85,470
	Total 18-Month Cost	--	--	--	--	--	548,712

[a] *As mentioned in the text, police departments may be added to the network earlier in the implementation schedule at local option.*

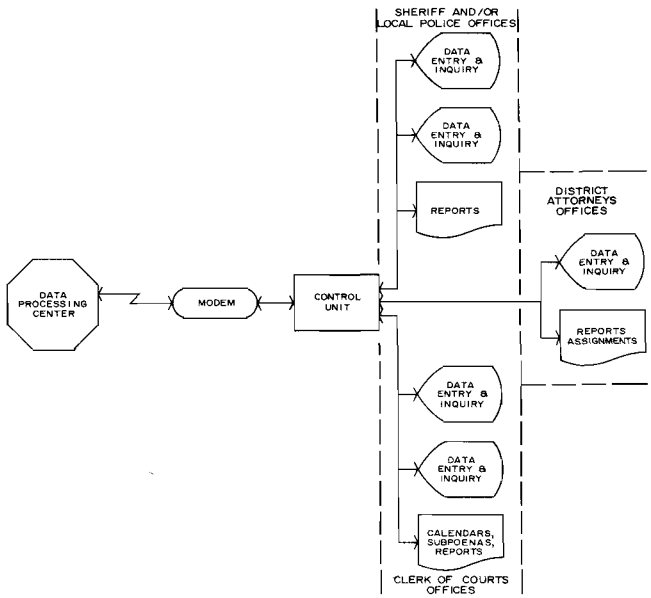
Source: SEWRPC.

by the individual municipalities. There are 41 full-time police departments in the six-county area: 2 in Kenosha County, 6 in Ozaukee County, 6 in Racine County, 10 in Walworth County, 3 in Washington County, and 14 in Waukesha County. All of these police departments, as set forth in Appendix D, could potentially connect to the teleprocessing system.

If Alternative 1 is selected, the local cost of the first 18-month operation would be shared equally among the counties. Of the $548,712 total initial cost, up to 58 percent may be eligible for federal and state grants, leaving $230,000 to be shared among the counties. In this way, each participating county would share equally the overhead and fixed-cost burden.

Figure 10

TYPICAL CONFIGURATION OF DATA PROCESSING EQUIPMENT AT COUNTY CRIMINAL JUSTICE AGENCIES AS PROPOSED UNDER ALTERNATIVES 1, 2, 3, AND 4



Source: SEWRPC.

Once a county is fully utilizing the system the annual cost would be based on the number of terminals or printers in the county times a fixed cost. Milwaukee County would charge each user a fixed cost per terminal unit installed. This fixed cost rate for 1980 is $8,000 per terminal unit per year and includes all terminal-related costs, as well as costs for the amount of computer time used, data storage, and Milwaukee County central support personnel. In addition to Milwaukee County charges, each county would be charged equally for the three support personnel required by each county. Should all six counties participate in this alternative, the annual cost per county would approximate $8,000 per terminal unit (recommended to be eight units per county) or $64,000 each per year plus approximately $29,400 for personnel plus a proportionate share of the $34,500 annual cost of supplies. It is estimated at this time that the total monthly cost of provision of the JUSTIS to all six counties through use of the Milwaukee County installation would be $49,500 in the nineteenth month. It should be noted that under this alternative the counties would simply be buying a package of service from Milwaukee County with no accrued equity in the package. Figure 11 depicts typical criminal justice agency operation in the Region, and shows how the CRT and printer terminals are used to conduct regular work tasks.

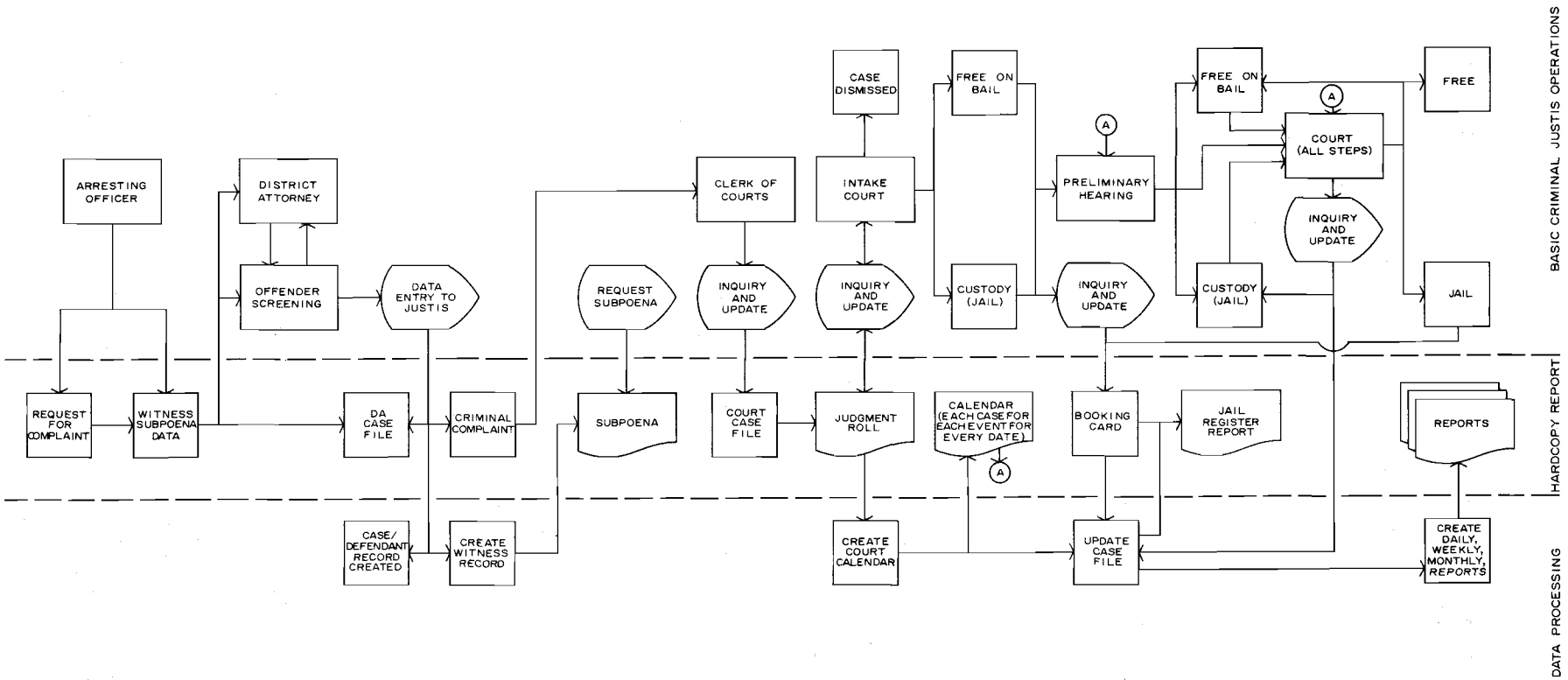
Alternative 2—Establishment of Separate Data Processing Center

Alternative 2 is configured as a separate and autonomous data processing center to process the criminal justice data through the JUSTIS for the six-county area of the Region with a terminal link to Milwaukee County for access to Milwaukee County criminal justice files and the state TIME system (see Figure 8). It is proposed that the data center be operated by a board comprised of policymaking representatives of each county involved. This policymaking board would perform the functions of the users group discussed under Alternative 1. The 18-month implementation schedule shown in Table 6 is similar to the schedule for Alternative 1, the primary difference being the provision of a data processing manager, a supervisor, three programmers, and a secretary. Approximately a 10-ton capacity air conditioning unit would be required for the 600-square-foot computer room. The air conditioning unit must be a special computer room unit which is designed to work with a raised floor and provide constant humidity control. It is anticipated that the one-time cost, as shown in Table 6, to equip the computer facility with the raised floor, special air-conditioning equipment, special wiring, and a security system would approximate $55,000. The ongoing rental cost for the area would approximate $36,000 over the 18-month start-up period, and the facility maintenance would approximate $8,250 for the same period.

The computer hardware necessary to run the JUSTIS application must be of sufficient size to provide good response time—not in excess of three seconds—to a potential 100 terminal network. This would require a computer system similar to the new IBM System 4341. Since the JUSTIS application is programmed for an IBM computer system and since it is the intention to have the six-county JUSTIS computer communicate with the Milwaukee County JUSTIS computer installation (also IBM), a System 4341 configuration would involve the following costs. The total hardware configuration for the central site would cost $644,000 to purchase. If purchased, the monthly maintenance charge would be $2,400. The equipment could be leased on the state and local govern-

Figure 11

TYPICAL CRIMINAL JUSTICE AGENCY OPERATIONS IN SOUTHEASTERN WISCONSIN UTILIZING JUSTIS



Source: SEWRPC.

Table 6

DESCRIPTION OF MONTHLY WORK EFFORT AND ATTENDANT EQUIPMENT, SUPPLIES, AND PERSONNEL COSTS TO IMPLEMENT A JUSTIS DATA PROCESSING PROGRAM UTILIZING A "STAND ALONE" CRIMINAL JUSTICE COMPUTER CENTER

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
1	Hire a JUSTIS manager and a secretary to create this newly formed data center; prepare facility for computer; obtain office equipment for facility	126,500 (facility rent, 2,000; facility preparation, 55,000; office equipment, 35,000; supplies, 34,500)	--	--	3,250 (JUSTIS manager, 2,500; secretary, 750)	1,000 (JUSTIS manager, 750; secretary, 250)	130,750
2	Hire a systems analyst and two programmers, begin learning about JUSTIS, and continue to enhance implementation plan. Add a systems programmer to begin generation of operating environment	2,000	--	--	11,445 (3,250 plus systems analyst, 2,230; two programmers, 3,850; systems programmer, 2,115)	3,455 (1,000 plus systems analyst, 670; two programmers, 1,150; systems programmer, 635)	16,900
3	Rent test time to begin building an operating system. Procure the JUSTIS programs	2,000	--	Test time, 1,000	11,445	3,455	17,900
4	Continue testing and program changes	2,000	--	1,000	11,445	3,455	17,900
5	Prepare to install new computer; continue testing	2,000	--	1,000	11,445	3,455	17,900
6	Install computer; install systems programs and JUSTIS programs; hire two operators	2,000	Computer, 18,561	Software, 2,400	13,345 (11,445 plus two operators, 1,900)	4,055 (3,455 plus two operators, 600)	40,361
7	Install first county remote hardware and begin testing programs; establish operating procedures	2,000	20,247	2,400	13,345	4,055	42,047
8	Continue testing first county; begin preparing for 24-hour operation; increment supplies and staff 10 percent	2,000	20,247	2,400	14,680	4,460	43,787
9	Hire four new operators and begin 24-hour operation. First county should be on-line now	2,000	20,247	2,400	18,910	5,730	49,287

ment lease plan for $18,561 per month. The state and local government lease plan is recommended because it allows for cancellation of the lease for fiscal reasons, higher monthly accruals toward purchase, and higher accrual limits. In addition to the computer equipment, the central site would require four telephone modems (electrical interface mechanisms between computer and telephone lines) to control the communication lines. These modems are lease-only and would cost $112 each per month. The software required for this configuration would cost approximately $2,400 per month. It should be noted that all of the above costs are estimates only and are based upon IBM's current 1979 price list.

For each county connected to the system, it is anticipated that each sheriff's office would have two CRT units and one matrix printer, each district attorney's office would have one CRT

Table 6 (continued)

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
10	Install terminal equipment and add second county to the network	2,000	21,790	2,400	18,910	5,730	50,830
11	Install terminal equipment and add third county to the network	2,000	23,466	2,400	18,910	5,730	52,506
12	Install terminal equipment and add fourth county to the network	2,000	25,019	2,400	18,910	5,730	54,059
13	Install terminal equipment and add fifth county to the network	2,000	26,705	2,400	18,910	5,730	55,745
14	Install terminal equipment and add sixth county to the network	2,000	28,258	2,400	18,910	5,730	57,298
15	Monitor and fine-tune the six-county network; finalize preparations to connect with Milwaukee County	2,000	28,258	2,400	18,910	5,730	57,298
16	Connect network to Milwaukee County	2,000	28,559	2,400	18,910	5,730	57,599
17	Monitor and tune network; finalize preparations to connect with State of Wisconsin (TIME)	2,000	28,559	2,400	18,910	5,730	57,599
18	Connect network to State of Wisconsin; begin plans to add police departments to network[a]	2,000	28,850	2,400	18,910	5,730	57,890
	Total	160,500	318,766	34,200	279,500	84,690	877,656
	Administrative Overhead Cost	--	--	--	--	--	182,095
	Total Cost	--	--	--	--	--	1,059,751

[a] *As outlined under Alternative 1, police departments may be added to the network earlier in the implementation schedule at local option.*

Source: SEWRPC.

unit and one matrix printer, and each clerk of courts office would have two CRT units and a line printer—a total of eight terminal units. The above equipment could be purchased for $42,200 per county plus maintenance costs. The equipment could also be leased on the state and local government lease plan for $1,250 per month. In addition, each county would require a telephone modem at a cost of $112 per month. Should one or more of the counties require an additional CRT unit, another type of control unit would be required which would add $9,755 to the purchase price and $76 to the monthly maintenance costs, or $240 to the state and local government lease cost. Also, each county would be charged approximately $50 per month for a leased telephone line to the CPU site. The CPU site is configured to accommodate six counties plus Milwaukee County with multi-connections of terminals from four telephone lines into the CPU site.

It is anticipated that the CPU site will require one key punch machine, a forms decollator, and a burster, as well as regular office equipment, such as desks, chairs, tables, file cabinets, magnetic tape cabinets, and fireproof vaults. Supplies for the JUSTIS application for an 18-month period would cost approximately $34,500. The one-time cost of office furniture and equipment would total approximately $35,000.

Operation of the CPU site would require a data processing manager, a systems analyst, three programmers, six computer operators, and a clerk-secretary at a total personnel cost of about $364,200 for an 18-month initial operations period. General operation of the central computer site would require administrative personnel and equipment to prepare payroll, billing, accounts receivable, the general ledger, state and federal accounting, and telephone service. It is expected that these administrative costs would approximate 50 percent of salary budget, or approximately $182,100 for the 18-month initial operation period for a total $1,059,751 for the 18-month period. During the 18-month period, the total costs would be apportioned among the counties involved. At the end of the start-up period each county would pay for its use of the system based on a fixed rate times the number of hours of use at the CPU. The ongoing costs for each participating county would vary depending upon the number of terminals installed at each county and the transaction volume of each county. It is proposed that each county pay the total costs of the terminal equipment and a percentage of the central site costs based upon transaction volume as measured by computer job accounting methods. It is estimated that the total monthly cost for the provision of JUSTIS in the nineteenth month pursuant to this alternative would be $73,100.

One of the advantages of this alternative, as well as of Alternative 3, is that the counties would accrue equity in the CPU and other equipment being purchased or leased, thereby realizing a value at the end of an established period.

Alternative 3—Use of SEWRPC Data Processing Center

Alternative 3, like Alternative 2, would require a facility physically separated but linked to the Milwaukee County computer-based JUSTIS and state TIME system (see Figure 8). Unlike Alternative 2, however, Alternative 3 can be accommodated utilizing the Commission's data processing facility. Initially, the Commission's current IBM System 370 Model 148 could be utilized to accommodate criminal justice applications in two of the potential six counties concerned, including terminals. As additional counties request connection to the multicounty JUSTIS network configuration, including access to Milwaukee County data files, the Commission would have to install an IBM System 4341, which would have sufficient CPU capacity to accommodate the JUSTIS applications for all six counties plus the SEWRPC county and community teleprocessing applications currently on the system 370. The system 370 would be used for all "batch" processing, and would provide a short-term backup computer in the event the system 4341 failed for any reason. All terminals would have access to either system. For security purposes, magnetic card security access facilities for computer room doors would be provided; thus, only security-cleared personnel with cards would be allowed to enter the data processing facility. In addition, security programs and "lockword" programs would be utilized to secure terminals and files within the data processing facility, as well as at remote county locations.

The Commission's data processing staff would provide programming services to individual JUSTIS agencies or departments in each county. It is anticipated that one additional programmer and one computer operator would be required at the time of initiating the JUSTIS program for the first two counties. A total of two additional programmers and four additional computer operators would be required to fully implement a six-county JUSTIS application. A six-county users group would be established to set priorities throughout the initial and ongoing phases of the work.

As shown in Table 7, the cost over the initial 18-month start up period of computer hardware, including terminals and printers installed in the various county criminal justice agency offices, would total $665,709. Building and personnel costs would be less than those under Alternative 2 because of the use of existing Commission facilities and staff. Supply costs would be approximately the same as those under the other alternatives. Also, as in other alternatives, administrative overhead costs would approximate 50 percent of the salaries budget. All costs would be apportioned as in Alternative 2. It is estimated that the monthly cost to the six counties of provision of JUSTIS in the nineteenth month of operation, utilizing the Commission data processing capabilities and following full installation of the systems in the six counties, would total approximately $53,620.

An advantage of this alternative, as well as of Alternatives 1 and 4, is that the counties could take advantage of a large system already in place. A disadvantage is that it could not be implemented until January 1, 1983, unless additional office space is provided to the Commission in the Old Courthouse by Waukesha County.

Alternative 4—Use of Private Data Processing Center

Unlike Alternatives 1, 2, and 3, which would utilize nonprofit government organizations to implement the scheduled work tasks, Alternative 4 would utilize a private data processing service bureau to provide all applications of JUSTIS in the Region, including the link to the Milwaukee County JUSTIS for use of criminal justice data files and the state TIME system. Such a configuration (depicted in Figure 8) would require at least the same CPU and ancillary equipment capabilities as required under Alternative 3. A security system such as that described herein would also be required to ensure only legitimate access to data files. Basically, the counties either as a group or individually would contract for a "package" of service from a local service bureau capable of providing such service. Figure 10 depicts a typical configuration of equipment within county agency offices.

In preparing estimates for this alternative, a local private service bureau was contacted to obtain representative costs for comparative purposes. Table 8 is a schedule of work tasks and costs for the 18-month start-up period for this alternative. As shown, the total cost during the initial 18-month period is estimated at $998,686, assuming all six counties become involved. This initial cost would be apportioned among the counties equally. It is estimated that the monthly cost of such service in the nineteenth month would total $101,800. The ongoing cost would assumably be apportioned among the counties in a manner similar to the apportionment scheme described under Alternatives 2 and 3.

The disadvantage of this alternative is that, like Alternative 1, the counties would accrue no equity in the system. A further disadvantage of this alternative is that the provision of security becomes more difficult since all of the data involved would reside in a nongovernmental computer system. The advantages of utilizing a private service bureau is that only those services desired at any point in time would be requested and therefore charged. A private service bureau could also be used to periodically supplement or provide backup to other central or remote operations.

Alternative 5—Six Individual JUSTIS Systems

The last alternative explored involves each county undertaking its own JUSTIS application. Table 9 is a summary status of the computer capability of each county in the Region, as well as of the Commission's computer capability. In reviewing ways in which each county could provide a full JUSTIS package with computer links to each of the other counties, it was determined that such an effort could not be justified because of maintenance problems and costs entailed. In fact, the costs of equipment necessary for one county to communicate with only the adjacent counties would probably be prohibitive.

It would be feasible for each county to install a "stand alone" system, whereby Washington and Waukesha Counties would implement JUSTIS and Kenosha, Ozaukee, Racine, and Walworth Counties would implement MINI-PROMIS. Only Racine County does not presently have some computer capability to implement a teleprocessing (CRT) network in county criminal justice agencies. To implement the individual stand alone alternative as configured in Figure 9 would, however, require some changes to each county's electronic data processing capability. Table 10 sets forth the basic changes that would be required in computer capability along with attendant staff and supply costs anticipated to implement JUSTIS or MINI-PROMIS in each county.

It should be noted that such implementation would not provide the same level of capability provided by the other alternatives in terms of intercounty links and links to the State TIME system and backup capacity in case of system failure. It should also be noted that the costs provided in Table 10 are based on information received in interviews with the several county data processing staffs and on Commission staff assumptions where specific information was unavailable. During the interviews, it was determined that each county has its unique method of procuring data processing equipment. It was difficult to ascertain certain ongoing costs related to JUSTIS or MINI-PROMIS since none of the counties have undertaken a project of this magnitude. Also, Ozaukee County was not contacted for the information used to construct Table 10 since the County had previously declined to participate in the work of the Committee. In order to provide comparable costs, the Commission staff supplemented certain of the data provided during the interviews.

Table 7

DESCRIPTION OF MONTHLY WORK EFFORT AND ATTENDANT EQUIPMENT, SUPPLIES, AND PERSONNEL COSTS TO IMPLEMENT A JUSTIS DATA PROCESSING PROGRAM UTILIZING THE REGIONAL PLANNING COMMISSION COMPUTER CAPABILITIES

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
1	Hire one senior programmer to work with existing Commission programmer; begin learning all aspects of the system and begin to construct detailed implementation plan; order necessary supplies	72,000 (supplies for first 18 months, 34,500; office equipment, 10,000; security system, 27,500)	--	--	2,500 (JUSTIS programmer, 1,925; SEWRPC programmer, 575)	750 (JUSTIS programmer, 575; SEWRPC programmer, 175)	75,250
2	Hire second senior programmer to work with the JUSTIS team; continue learning the system and complete the detailed implementation plan	--	--	--	4,813 (two JUSTIS programmers, 3,850; SEWRPC programmer, 963)	1,437 (two JUSTIS programmers, 1,150; SEWRPC programmer, 287)	6,250
3	Acquire the actual computer programs and begin installation on the system 370 model 148	--	--	675	4,813	1,437	6,925
4	Continue conversion and installation of the computer programs; begin testing of the programs in the Commission's environment	--	--	675	4,813	1,437	6,925
5	Finish program testing and begin working with the first county selected for initial processing; involve manager of computer operations	--	--	675	5,582	1,668	7,925
6	Install terminal equipment at the first county and work with the users; the network will not be available 24 hours a day yet so this month and next month will be a phase-in period	--	1,786	900	5,582	1,668	9,936
7	Continue phasing first county into the system	--	1,786	900	5,582	1,668	11,728
8	Hire four computer operators, train them, and begin running 24 hours per day, seven days per week; start final phase-in of the first county; provide for county salary adjustments	--	20,247	1,650	10,385 (four operators, 4,240; salary adjustments, 6,145)	3,104 (four operators, 1,270; salary adjustments, 1,834)	35,386
9	Complete first county operation; shake down new hardware and software, monitor total operating environment; begin working with the second county	--	20,247	1,650	10,385	3,104	35,386

Table 7 (continued)

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
10	Install terminal equipment and add second county to the network; work with the new users in the operation of the system; begin working with the third county	--	21,790	1,650	10,385	3,104	36,929
11	Install terminal equipment and add third county to the network; work with new users in the operation of the system; begin working with the fourth county	--	23,466	1,650	10,385	3,104	38,605
12	Install terminal equipment and add fourth county to the network	--	25,019	1,650	10,385	3,104	40,158
13	Install terminal equipment and add fifth county to the network	--	26,705	1,650	10,385	3,104	41,844
14	Install terminal equipment and add sixth county to the network	--	28,258	1,650	10,385	3,104	43,397
15	Monitor and fine-tune the six-county network; finalize preparations to connect with Milwaukee County	--	28,258	1,650	10,385	3,104	43,397
16	Connect network to Milwaukee County	--	28,559	1,650	10,385	3,104	43,698
17	Monitor network and finalize preparations to connect with the State of Wisconsin	--	28,559	1,650	10,385	3,104	43,698
18	Connect network to the State of Wisconsin; begin plans to add police departments to the network[a]	--	28,860	1,650	10,385	3,104	43,999
	Total	72,000	283,540	21,975	147,920	44,209	569,644
	Administrative Overhead Cost	--	--	--	--	--	96,065
	Total Cost	--	--	--	--	--	665,709

[a] *As outlined under Alternative No. 1, police departments may be added to the network earlier in the implementation schedule at local option.*

Source: SEWRPC.

Table 8

DESCRIPTION OF MONTHLY WORK EFFORT AND ATTENDANT EQUIPMENT, SUPPLIES, AND PERSONNEL COSTS TO IMPLEMENT A JUSTIS DATA PROCESSING PROGRAM UTILIZING THE DATA PROCESSING CAPABILITIES OF A PRIVATE SERVICE BUREAU

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
1	Hire JUSTIS manager and two programmers to work with Milwaukee County staff; begin development of detailed implementation plan; order supplies and office equipment	Supplies, 34,500	--	--	6,850 (JUSTIS manager, 2,500; two programmers, 4,350)	2,050 (JUSTIS manager, 750; two programmers, 1,300)	43,400
2	Complete detailed implementation plan; begin program adjustments	--	--	1,000	6,850	2,050	9,900
3	Continue program changes	--	--	1,000	6,850	2,050	9,900
4	Continue program changes and begin testing and staff training	--	--	1,000	6,850	2,050	9,900
5	Finish program testing and staff training; begin working with first county selected for initial processing	--	--	1,000	6,850	2,050	9,900
6	Install terminal equipment at first county and work with individual users; bring in operation staff	--	11,286	--	12,550	3,750	27,586
7	Continue working with first county with some production work	--	11,286	--	12,550	3,750	27,586
8	Finish phase-in of first county; begin working with second county	--	11,286	--	12,550	3,750	27,586
9	Install terminal equipment and add second county to the network; work with new individual users	--	22,572	--	12,550	3,750	38,872
10	Install terminal equipment and add third county to the network; work with new individual users	--	33,858	--	12,550	3,750	50,158
11	Install terminal equipment and add fourth county to the network; work with new individual users	--	45,144	--	12,550	3,750	61,444
12	Finish phase-in of fourth county; begin working with fifth county; tune existing network	--	45,144	--	12,550	3,750	61,444

Table 8 (continued)

Month	Work Effort Description	Costs (1979 dollars)					
		Rent and Office Supplies	Computer and Terminal Equipment	Computer Software and Testing	Personnel		Total
					Base	Fringes	
13	Install terminal equipment and add fifth county to the network; work with new individual users	--	56,430	--	12,550	3,750	72,730
14	Install terminal equipment and add sixth county to the network; work with new individual users	--	67,716	--	12,550	3,750	84,016
15	Monitor and fine-tune the six-county network; finalize preparations to connect with Milwaukee County	--	67,716	--	12,550	3,750	84,016
16	Connect network to Milwaukee County	--	67,716	--	12,550	3,750	84,016
17	Monitor and tune network and finalize preparations to connect with State of Wisconsin (TIME)	--	67,716	--	12,550	3,750	84,016
18	Connect network to State of Wisconsin; begin plans to add police departments to the network[a]	--	67,716	--	12,550	3,750	84,016
	Total	34,500	575,586	4,000	197,400	59,000	870,486
	Administrative Overhead Cost	--	--	--	--	--	128,200
	Total Cost	--	--	--	--	--	998,686

[a] *As outlined under Alternative No. 1, police departments may be added to the network earlier in the implementation schedule at local option.*

Source: SEWRPC.

Table 9

STATUS OF COMPUTER CAPABILITY IN EACH COUNTY IN THE SOUTHEASTERN WISCONSIN REGION: AUGUST 1979

County	Type of Computer System	Shared System	CPU Memory (size in million bytes)	Disk (size in million bytes)	Currently Involved in Teleprocessing
Kenosha	Univac 90/30	yes[a]	0.162	164	yes
Milwaukee	IBM 3032 and	no	6.000	9,200	yes
	IBM 370/158	no	4.000		
Ozaukee	IBM 3	no	N/A	N/A	yes
Racine	Honeywell 64/20	no	0.128	200	no[b]
Walworth.	IBM 3 15/D	no	0.256	160	yes
Washington . . .	IBM 370/148[c]	yes[d]	2.000	2,500	yes
Waukesha	IBM 370/148[c]	yes[d]	2.000	2,500	yes
SEWRPC.	IBM 370/148	yes[e]	2.000	2,500	yes

NOTE: N/A indicates data not available.

[a] *Shared with City of Kenosha and Kenosha Water Utility.*

[b] *Teleprocessing is planned for 1980.*

[c] *SEWRPC computer installed in SEWRPC's offices.*

[d] *Through telephone link to SEWRPC CPU.*

[e] *Shared with Washington and Waukesha Counties, as well as with the Cities of Brookfield, Muskego, and Waukesha.*

Source: SEWRPC.

In any review of the information set forth in Table 10, the following comments should be considered:

1. Kenosha County data processing staff provided purchase costs of additional main CPU memory and disk storage which was converted to an estimated monthly rental charge. The CRT and printer costs were provided as monthly costs by the County. The cost for programmers and machine operators was calculated following the method outlined under Alternatives 1 through 4. The cost of computer time was calculated based upon the estimated usage of the Commission's System 370/148 and the current established hourly rate. The ongoing costs for maintenance and continued usage for Kenosha County were not available.

2. Since Ozaukee County did not provide input data, the Commission staff made assumptions concerning the necessary incremental hardware requirements. Rental prices were assumed based on similar installations in other counties and the terminal equipment was assumed to be IBM 3270-type equipment. Computer time costs are based upon charges for equivalent usage on the Commission's System 370/148 at the current hourly charge.

3. Racine County data processing staff provided the monthly cost of incrementing main CPU memory and disk storage. Because the Racine County staff has no familiarity with teleprocessing, the CRT and printer units were listed showing IBM 3270-type terminals even though Racine County has Honeywell equipment. Computer time costs are based upon equivalent usage on the Commission's System 370/148 at the current hourly charge.

4. Walworth County data processing staff provided purchase costs for main CPU memory,

disk storage, CRT control, CRT units, and printers. To provide comparable costs, IBM rental prices were assumed even though the County only purchases and does not always use IBM equipment. This list only includes two additional machine operators since the County currently runs 20 hours per day, five days per week. Computer time costs are based upon equivalent usage on the Commission's System 370/148 at the current hourly charge.

It should be reiterated that included in the costs set forth in Table 10 is the cost to each county with an in-house computer of increasing the data processing staff to provide a 24-hour, seven-day-per-week computer capability as required by the criminal justice agencies in each county. Because these costs could not be derived directly, best estimates were provided of the cost of each county's unique data processing equipment configuration, staffing, and continuing charges. Even with the assumed changes, however, the individual counties would not have the same capability to interact with adjacent counties as afforded by the combined systems offered by Alternatives 1 through 4, nor would four of the counties be able to implement JUSTIS. While taking advantage of relatively small systems already installed in each county, this alternative does not take advantage of those larger systems which presently have both the basic computer and staff capability to provide a more comprehensive package for implementing JUSTIS in the Region.

COMPARISON OF ALTERNATIVES

Table 11 provides a cost comparison of Alternatives 1 through 5 based on the data previously discussed and presented in Tables 5, 6, 7 and 8, along with the costs of the foregoing list of changes required to upgrade each county's existing data processing capabilities to apply JUSTIS or MINI-PROMIS under Alternative 5.

As shown in Table 11, initiating the JUSTIS program would cost the least under Alternative 1 by a considerable margin over any of the other alternatives. Based on this fact alone, Alternative 1 should be the alternative selected for implementation. Alternative 1 also provides the advantage of utilizing a large, in-place computer currently and readily available to assimilate the task involved in this proposal. Also, Alternative 1 would require only one data base file, thereby reducing confusion which may arise in multiple data base file systems.

Alternative 2 is the most costly alternative to initially implement, primarily because it requires the establishment of an entirely new and autonomous computer center. It should also be noted, however, that the continuing costs are also very high under this alternative, again due to the fact that an autonomous agency is being established and because it was assumed that the new data processing center would only be utilized to facilitate centralized JUSTIS operations. A potential advantage of this alternative would be that, once established, the data processing center could be utilized to provide other types of data processing services to other county and local government agencies in southeastern Wisconsin.

Alternative 3 provides for the second lowest cost alternative both in terms of initial and continuing costs. The advantages included under this alternative are basically the same as those for Alternative 1 with the exception that one additional base file would be required for the six-county area link to the Milwaukee County base file. The potential disadvantage of this alternative is that the Commission has not yet installed the large computer necessary to link JUSTIS to all six counties, and, therefore, could not immediately serve all six counties. It should again be noted that unless additional office space in the Old Courthouse is provided to the Commission by Waukesha County, this alternative could not be fully implemented until January 1, 1983.

Alternative 4 offers the third lowest start-up cost and the highest continuing cost of all five alternatives. This is due primarily to the large overhead cost charge of a private service bureau. The advantage of this alternative is that the service bureau computer installation is currently available to provide the services described herein and would probably be large enough to provide any backup in case of main CPU failure.

Alternative 5 has the fourth lowest start-up and continuing costs. This alternative would require each county to individually provide its own system. The multisystem advantages lost under this alternative include intercounty links for purposes of file access, centralized data processing staffing, and combined supply purchase and computer maintenance, all of which would be less expensive in combination than individually provided.

CONCLUDING RECOMMENDATIONS

From a review of the foregoing information regarding each alternative, Alternatives 1, 3,

Table 10

ESTIMATED COST OF INCREMENTAL HARDWARE AND PERSONNEL REQUIRED TO IMPLEMENT JUSTIS OR MINI-PROMIS ON STAND ALONE COUNTY COMPUTER SYSTEMS

County	Initial 18-Month Costs	One-Year Continuing Costs
KENOSHA		
Increment memory 64,000 bytes	$ 7,200	$ 4,800
Increment disk by 174 million bytes	14,400	9,600
Add five CRT units	9,000	9,000
Add three printers	6,120	6,120
Hire programmer	45,000	30,000
Hire three machine operators	45,000	45,000
Computer time	40,500	24,300
Supplies	5,600	5,600
Subtotal	$ 172,820	$134,420
OZAUKEE COUNTY		
Increment memory 256,000 bytes	$ 21,600	$ 14,400
Increment disk 387 million bytes	15,840	10,560
Increment CRT control unit	4,200	4,200
Add five CRT units	4,320	4,320
Add three printers	11,590	11,590
Hire programmer	45,000	30,000
Hire three machine operators	45,000	45,000
Computer time	37,800	21,600
Supplies	4,800	4,800
Subtotal	$ 190,150	$146,470
RACINE		
Increment memory 256,000 bytes	$ 28,800	$ 19,200
Increment disk 400 million bytes	23,400	15,600
Add five CRT units	4,320	4,320
Add three printers	11,590	11,590
Hire programmer	45,000	30,000
Hire three machine operators	45,000	45,000
Add CRT control unit	4,200	4,200
Computer time	43,200	27,200
Supplies	6,200	6,200
Subtotal	$ 211,710	$163,110
WALWORTH COUNTY		
Increment memory 256,000 bytes	$ 21,600	$ 14,400
Increment disk 387 million bytes	15,800	10,560
Add CRT control unit	4,200	4,200
Add five CRT units	4,320	4,320
Add three printers	11,590	11,590
Hire programmer	45,000	30,000
Hire two machine operators	30,000	30,000
Computer time	32,400	16,200
Supplies	3,700	3,700
Subtotal	$ 168,610	124,970
WASHINGTON (SEWRPC CPU)		
Increment disk 147 million bytes	$ 3,045	$ 3,045
Estimated CPU usage (6 hours per month at $225)	24,300	16,200
Add terminal equipment (assume 3276 CTL unit, five CRT's, three printers)	18,060	18,060
Standard connect charge	1,200	1,200
Add two modems	2,700	2,700
Add telephone line	600	600
Hire two programmers (½ to Waukesha County)	45,000	30,000
Hire three machine operators (½ to Waukesha County)	22,500	22,500
Supplies	3,640	3,640
Subtotal	$ 121,045	$ 97,945
WAUKESHA (SEWRPC CPU)		
Increment disk 413 million bytes	$ 8,555	$ 8,555
Estimated CPU usage (18 hours per month at $225) (Assume 6 hours 1st 6 months, 18 hours after)	56,700	48,600
Add terminal equipment (assume 3276 control unit, five CRTs, three printers)	18,060	18,060
Standard connect charge	1,200	1,200
Add two modems	2,700	2,700
Add telephone line	600	600
Hire two programmers (½ to Washington County)	45,000	30,000
Hire three operators (½ to Washington County)	22,500	22,500
Supplies	10,340	10,340
Subtotal	$ 165,655	$142,555
Total six-county costs	$1,029,990	$809,470

Source: SEWRPC.

Table 11

COMPARISON OF START-UP AND CONTINUING COSTS OF IMPLEMENTING JUSTIS IN THE SIX-COUNTY AREA UNDER FIVE ALTERNATIVES IN 1979, 1980, AND 1981

Task	Alternative 1			Alternative 2			Alternative 3			Alternative 4			Alternative 5		
	Total Cost	Total Monthly Cost	Monthly Average Cost per County	Total Cost	Total Monthly Cost	Monthly[b] Average Cost per County	Total Cost	Total Monthly Cost	Monthly[b] Average Cost per County	Total Cost	Total Monthly Cost	Monthly[b] Average Cost per County	Total Cost	Total Monthly Cost	Monthly[b] Average Cost per County
18-Month Start-up Cost. . .	$548,712	$30,484	$5,081	$1,059,751	$58,875	$ 9,813	$665,709	$36,984	$6,164	$ 998,686	$55,483	$ 9,247	$1,029,990	$57,221	$ 9,537
Initial[a] Annual Continuing Cost.	594,000	49,500	8,250	877,200	73,100	12,183	643,440	53,620	8,937	1,140,492	95,041	15,840	809,470	67,455	11,243

[a] *First-year funding after start-up period.*

[b] *Actual cost would be based on proportionate share of total case load.*

Source: SEWRPC.

and 5 would appear to be worthy of further evaluation. Alternatives 1 and 3 offer the advantage of a centralized computer system with highly trained staff, with Alternative 1 having the additional advantage of requiring only one data base file. Both alternatives would be relatively easy for the counties to implement because implementation would not disrupt the existing data processing operations in a county. Alternative 5, on the other hand, is not only more expensive but does not provide for the centralized system, nor does it provide for a uniform system throughout the Region since JUSTIS could not be individually applied in four of the six counties. Also, the implementation of Alternative 5 may be initially disruptive to and a burden on existing data processing operations within at least those four counties with in-house data processing hardware.

If Milwaukee County would agree to undertake the JUSTIS application for the six counties as outlined under Alternative 1, including the provision of programming and administrative support, Alternative 1 would be the recommended alternative. If, however, Milwaukee County would not undertake the local programming and administrative operations as outlined, it is recommended that the six counties pursue Alternative 3, utilizing the Regional Planning Commission's data processing capability.

Potential funding for the implementation of Alternative 1 is shown in Table 12. As shown, it is anticipated that the Law Enforcement Assistance Administration (LEAA) utilizing Law Enforcement Research and Development Project Grant funds will provide $220,000 for the 18-month start-up period. There is also the possibility that approximately $99,000 will be provided by the State through the Wisconsin Council on Criminal Justice (WCCJ) if this recommended system is implemented in 1979. If such federal and state funding can indeed be secured, the start-up cost to the counties can be lowered substantially to an average of a little more than $2,000 per month per county. There is presently discussion at the federal level to fund continuing electronic data processing-related criminal justice systems. For purposes of comparison, however, and without a substantiated continuous federal funding program, it is anticipated that only the State will provide funding for the initial year of a continuing program.

A potential funding arrangement for implementation of Alternative 3 is set forth in Table 13. The same level of federal and state funding as provided in support of Alternative 1 is assumed.

Table 14 shows the cost to each county under Alternatives 1 and 3. Only the anticipated local costs are spread. It should be noted that each alternative has its own method for distributing the cost to each county. Alternative 1 equally distributes the local costs to the counties based upon Milwaukee County's policy of uniform charges per each teleprocessing terminal unit. Alternative 3 distributes the local cost among the six counties based upon each county's percent of the total case load.

Table 12

PROPOSED DISTRIBUTION OF INITIAL IMPLEMENTATION COST FOR APPLICATION OF JUSTIS UTILIZING MILWAUKEE COUNTY DATA PROCESSING CENTER

Funding Source	Start-up Application (18 months)		First-Year Continuing Application (12 months)	
	Cost	Percent	Cost	Percent
Law Enforcement Assistance Administration (LEAA)[a]	$220,000	40	$ --	--
Wisconsin Council on Criminal Justice (WCCJ)[b]	98,712	18	107,000	18
Six Counties	230,000	42	487,000	82
Total	$548,712	100	$594,000	100

[a] *Utilizing Law Enforcement Research and Development Project Grants.*

[b] *Utilizing funds earmarked for use in system expansion in Region IV.*

Source: SEWRPC.

Table 13

PROPOSED DISTRIBUTION OF INITIAL IMPLEMENTATION COST FOR APPLICATION OF JUSTIS UTILIZING THE COMMISSION DATA PROCESSING CENTER

Funding Source	Start-up Application (18 months)		First-Year Continuing Application (12 months)	
	Cost	Percent	Cost	Percent
Law Enforcement Assistance Administration (LEAA)[a]	$220,000	33.1	$ --	--
Wisconsin Council on Criminal Justice (WCCJ)[b]	98,712	14.8	107,000	16.6
Six Counties[c]	346,997	52.1	536,440	83.4
Total	$665,709	100.0	$643,440	100.0

[a] *Utilizing Law Enforcement Research and Development Project Grants.*

[b] *Utilizing funds earmarked for use in system expansion in Region IV.*

[c] *Milwaukee County does not contribute funds to the six-county processing center since the sharing of information between the Milwaukee County processing center and the six-county processing center was deemed to be of equal value.*

Source: SEWRPC.

Table 14

COMPARISON OF THE PROPOSED DISTRIBUTION OF INITIAL AND CONTINUING COSTS ASSOCIATED WITH ALTERNATIVES 1 AND 3

County	Start-up Application (18 months)		First-Year Continuing Application (12 months)	
	Alternative 1[a]	Alternative 3[b]	Alternative 1[a]	Alternative 3[b]
Kenosha	$ 38,334	$ 56,196	$ 81,167	$ 86,876
Ozaukee	38,334	48,868	81,167	75,547
Racine.	38,334	63,199	81,167	97,702
Walworth.	38,334	37,757	81,167	58,370
Washington	38,334	37,118	81,167	57,383
Waukesha.	38,334	103,859	81,167	160,562
Total[c]	$230,004	$346,997	$487,002	$536,440

[a] *Based upon Milwaukee County method of charging—equal to all users.*

[b] *Based upon Commission method of charging—proportionate to county case load.*

[c] *Milwaukee County does not contribute funds to the six-county processing center since the sharing of information between the Milwaukee County processing center and the six-county processing center was deemed to be of equal value.*

Source: SEWRPC.

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Chapter V

SUMMARY

At the request of the Southeast Wisconsin Criminal Justice Planning Council, the Southeastern Wisconsin Regional Planning Commission undertook the preparation of this community assistance planning report to identify the need for, and alternative means of, electronic data processing of criminal justice information in the six-county area encompassed within the Council's jurisdiction. The six counties include Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha. To assist the Commission staff in the preparation of this report, a Technical Coordinating and Advisory Committee was created, the membership of which is set forth in Appendix A.

In identifying the need for electronic data processing of criminal justice information in the six counties, the existing case load of each county and the manual procedures for handling the case load were studied. The study indicated that the criminal case load in the six counties and the concomitant work load involved in the criminal justice process have been rapidly increasing over the last decade. Up to five agencies are normally involved in the processing of a criminal case, including the arresting agency, the district attorney, the clerk of courts, the court judges, state correctional institutions, and possibly, the state court of appeals. Each case file created at the time of arrest is manually expanded at each step in the criminal justice process and, as the case proceeds from agency to agency, the file is usually duplicated. It is estimated that an average case file contains about 170 individual entries. The existing manual procedure of duplicating and updating the case files is both time consuming and costly. As the number of cases increases, the number of people involved in the manual process and the time to manually store and retrieve information also increases.

Several of the tasks related to the criminal justice process can be readily adapted to some form of electronic data processing. Initial preparation of each case file, maintenance of an up-to-date case history, preparation of uniform case reports for state agencies, surveillance of fines owed and paid, preparation of court calendars, scheduling of witnesses, preparation of subpoenas, and issuance of warrants are all time-consuming manual tasks which can be more quickly accomplished through the use of electronic data processing.

All counties in the six-county area are presently using principally a manual file and reporting system to accomplish the above tasks, although some counties are beginning to use computers as an aid in performing some of the tasks. Milwaukee County, on the other hand, has converted, or is in the process of converting, all criminal justice-related record-keeping functions to a relatively sophisticated system called "JUSTIS." JUSTIS is an acronym for justice information system. It is an on-line computer- based system designed to serve the criminal justice agencies of Milwaukee County, including the sheriff's department, the district attorney, the clerk of courts, the courts, and the correctional institutions. In reviewing existing computer software to address automation of the criminal justice process in the six counties, it was determined that JUSTIS could be expanded to address the common needs of the six counties. Other alternative software systems were considered for potential implementation in the six-county area but were discarded in favor of JUSTIS, which is already in place in Milwaukee County and can handle all record-keeping elements of the criminal justice process in southeastern Wisconsin.

In addition to evaluating computer software, five separate electronic data processing hardware systems were evaluated for possible implementation in the six counties, including:

1. The addition of the six outlying counties to the Milwaukee County JUSTIS system, thereby utilizing Milwaukee County data processing equipment and operating capabilities, criminal justice data base, and link to the state TIME system.

2. The establishment of a "stand alone" public criminal justice electronic data processing operation for the sole purpose of programming and teleprocessing the criminal justice data for the six counties.

3. The provision of criminal justice data processing services to the six counties by the Southeastern Wisconsin Regional Planning Commission.

4. The provision of criminal justice data processing services to the six counties by a private service bureau.

5. The establishment of an individual electronic data processing system utilizing JUSTIS in each of the six counties.

In evaluating the above alternatives, it was necessary to determine feasibility, as well as attendant probable initial and ongoing implementation costs, for the six counties. Alternatives 1 through 4 all proved to be feasible and to offer several benefits often realized in the shared computer environment, such as intercounty links for purposes of file access, centralized data processing staff support, common computer software, quantity purchasing, and tight security control. Alternative 5 would not provide the same continuity as the other alternatives and could potentially leave the criminal justice data processing procedure in each county as it currently exists. Ranking the alternatives according to the estimated 18-month start-up costs results in the following rank order:

Alternative	Estimated 18-Month Start-Up Costs
1. Service by Milwaukee County	$ 548,712
2. Service by SEWRPC	665,709
3. Service by private service bureau	998,686
4. Individual county operations	1,029,990
5. New computer center	1,059,751

Ranking the alternatives according to ongoing annual costs results in the following rank order:

Alternative	Annual Costs
1. Service by Milwaukee County	$ 594,000
2. Service by SEWRPC	643,440
3. Individual county operation	809,470
4. New computer center	877,200
5. Service by private service bureau	1,140,492

The identified principal advantages and disadvantages of the five alternatives considered are as follows:

Alternative 1—Service by Milwaukee County

Advantages

1. Large inplace computer center
2. Familiarity with JUSTIS software
3. Common data base file
4. Existing link to TIME network
5. Least cost

Disadvantages

1. No commitment at this time from Milwaukee County to provide programming services and user training.
2. No equity in computer hardware

Alternative 2—New Computer Center

Advantages

1. Common data base for six counties with a link to Milwaukee County data
2. Equity in computer hardware
3. Potential to provide other services
4. Costs of operation assessed based upon county case load

Disadvantages

1. Most costly alternative to implement
2. Added personnel requirements
3. More complex administration problems
4. Too costly to provide adequate backup system in case of system failure

Alternative 3—Services by the Southeastern Wisconsin Regional Planning Commission

Advantages

1. Common data base for six counties with a link to Milwaukee County data and to TIME network
2. Extensive data processing experience
3. Second lowest cost alternative
4. Equity in computer hardware
5. Costs of operation assessed based upon county case load
6. Existing terminal network in place to two of the six counties (Washington and Waukesha)

Disadvantages

1. Unless Waukesha County provides additional space in the Old Courthouse, implementation beyond two counties could not begin until January 1983

Alternative 4—Services by a Private Service Bureau

Advantages

1. Common data base for six counties with a link to Milwaukee County data
2. Extensive data processing experience
3. Costs of operation assessed based upon county case load

Disadvantages

1. The provision of security becomes more difficult since all of the data would reside in a nongovernmental computer system
2. Most costly alternative beyond implementation
3. No equity in computer hardware

Alternative 5—Individual County Operations

Advantages

1. Less administrative problems since each operation would be an extension of a current data processing operation

Disadvantages

1. No common data base or link to any other county
2. No uniform computer software, making uniform state reporting more difficult
3. Costly to implement
4. Initially disruptive to and a burden on existing data processing operations
5. Too costly for each county to provide an adequate backup system in case of main system failure

In view of the initial ongoing costs and the advantages and disadvantages attendant to each alternative, and particularly the advantages attendant to provision of a common data base and a shared computer environment, Alternative 1 is the hardware alternative recommended by the Committee. This recommendation is conditioned upon Milwaukee County providing the necessary programming services and user training.

In conclusion, it is apparent from a review of the criminal justice process in the six counties that the record-keeping tasks required by the process are massive and increasing. It is also apparent that almost all of the tasks directly related to record-keeping and now performed manually can be readily adapted to the JUSTIS electronic data processing system. Such adaptation will lessen the record-keeping work load and alleviate needless duplication of effort and potential for errors inherent in the present manual process. The extension of the advantages of the Milwaukee County JUSTIS to the outlying six counties through the Milwaukee County data processing center would result in a uniform system of criminal justice processing and reporting throughout the seven counties of southeastern Wisconsin. Such an extension of the Milwaukee County JUSTIS is both practical and feasible and would provide the outlying counties with access to years of extensive experience in automating the criminal justice process in a Wisconsin municipality.

It should be noted that, to a certain extent, the findings and recommendations set forth in this report are tentative, being based upon a necessarily limited study and, more importantly, limited review by the Technical Coordinating and Advisory Committee established to direct the study on which the report is based. The nature of the study was such as to require that certain assumptions be made concerning such important matters as the responsibilities of the data processing center; the number of teleprocessing terminals required within each county; the attendant costs of implementation; and, importantly, the basis for the allocation of costs among the participating counties, as well as the availability of state and federal funding for implementation. Accordingly, it must be recognized that these and other aspects of any implementation effort should be subject to negotiation between the participating units and agencies of government. Such negotiations could indeed affect the cost effectiveness and, therefore, rank ordering of the alternatives explored, at least with respect to the highest ranked two alternatives.

Each individual county must make its own decision to implement the recommended alternative. Implementation of the recommendations contained in this report would be a significant undertaking with far-reaching impacts on the criminal justice system of not only the Region, but, because of the fact that the Region contains almost 40 percent of the State's population, of the entire State. Implementation of the recommendations of this report would ultimately benefit the citizens of the Region and of the State not only by reducing the cost of the massive data processing effort entailed in the administration of the criminal justice system, but by enhancing the effectiveness and response of that system to the needs of modern society. The Technical Coordinating and Advisory Committee respectfully urges each county board to address the needs identified in this report.

APPENDICES

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Appendix A

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON ELECTRONIC DATA TRANSMITTAL SYSTEMS FOR CRIMINAL JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN

George C. Berteau Chairman	Chairman, Southeastern Wisconsin Regional Planning Commission
John W. Ernst Secretary	Administrative & Information Services Manager, Southeastern Wisconsin Regional Planning Commission
John C. Ahlgrimm	Chief Judge, First Judicial District, Racine County
LaMarr Q. Billups	Executive Assistant, Wisconsin Council on Criminal Justice
Warren D. Braun	State Senator, 11th District
Thomas Buntrock	Chief, Mequon Police Department
James Carvino	Chief, Racine Police Department
Jerome A. Clements	Data Processing Manager, City of Kenosha
Fredrick A. Fink, Jr.	District Attorney, Washington County Courthouse
Joan T. Kessler	U. S. Attorney, Eastern District of Wisconsin
Raymond J. Klink	Sheriff, Waukesha County
Karen Knab	Deputy Director of State Courts, Wisconsin Supreme Court
John Landa	District Attorney, Kenosha County
Peggy L. Mackelfresh	Clerk of Courts, Walworth County
Louis A. Metz, III	Judicial Information Systems Coordinator, Milwaukee County
Ferdinand J. Meyer	Planning Analyst/Coordinator, Metropolitan Milwaukee Criminal Justice Council
Frank Reimer	Chief, Germantown Police Department
Harold Wollenzien	Chief Judge, Third Judicial District, Waukesha County

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Appendix B

WISCONSIN COUNCIL ON CRIMINAL JUSTICE

Lee Sherman Dreyfus ..... Governor, State of Wisconsin, Chairman, Wisconsin Council on Criminal Justice

Sarah Ettenheim ..... Associate Professor, UW-Milwaukee; Second Vice-Chairman, Wisconsin Council on Criminal Justice

David Steingraber ..... First Vice-Chairman, Wisconsin Council on Criminal Justice, Chief, Middleton Police Department

Paul Swain ..... Governor's Liaison with Wisconsin Council on Criminal Justice

EXECUTIVE COMMITTEE

David Steingraber, Chairman ..... First Vice-Chairman, Wisconsin Council on Criminal Justice; Chief, Middleton Police Department

Sarah Ettenheim, Vice-Chairman ..... Associate Professor, UW-Milwaukee; Second Vice-Chairman, Wisconsin Council on Criminal Justice

William Baily, Jr. ..... Coordinator of Operations, United Migrant Opportunities Services, Milwaukee

Thomas H. Barland ..... Judge, Branch I, City of Eau Claire

Lloyd A. Barbee ..... Attorney at Law, Milwaukee

Bruce Beilfuss ..... Chief Justice, Wisconsin Supreme Court

Richard Bussler ..... Milwaukee County Board

Frederick Fink ..... Judge, Wood County Circuit Court, Branch 2

Robert E. Gilliam ..... Captain, Beloit Fire Department

Warren Grady ..... Judge, Ozaukee Circuit Court, Branch 2

Erwin Heinzelmann ..... Executive Director, Wisconsin Correctional Service

James Jansen ..... Coordinator, Police Science Department, Milwaukee Area Technical College

Ben Johnson ..... President, Milwaukee Common Council

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Appendix C

SOUTHEAST WISCONSIN CRIMINAL JUSTICE PLANNING COUNCIL

Donald Andersen . . . . . Chairperson, Regional Director of Catholic Social Services
John C. Ahlgrimm . . . . . Chief Judge, First Judicial District, Racine County
Clarice Baldwin . . . . . Juvenile Court, Kenosha County
Gloria Wall Bicha . . . . . Board of Education, Racine County
Jean Esser . . . . . Mequon City Council, Ozaukee County
Frederick Fink . . . . . District Attorney, Washington County
John Landa . . . . . District Attorney, Kenosha County
Donald Mayew . . . . . Attorney at Law, Kenosha County
Francis J. Pitts . . . . . Commissioner, Kenosha County, Southeastern Wisconsin Regional Planning Commission
Richard Rettke . . . . . Citizen, Waukesha County
John Reiff . . . . . Captain, Sheriff's Department, Walworth County
Gerald Sonquist . . . . . Sheriff, Kenosha County
John Sweeney . . . . . Chief of Police, Walworth County
Geraldine Wuerslin . . . . . Waukesha City Council, Waukesha County

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Appendix D

FULL-TIME POLICE DEPARTMENTS IN THE SIX COUNTIES SERVED BY THE SOUTHEAST WISCONSIN CRIMINAL JUSTICE COUNCIL

KENOSHA COUNTY

Kenosha Police Department
812 - 56th Street
Kenosha, Wisconsin 53140

Twin Lakes Police Department
108 Main Street
Twin Lakes, Wisconsin 53181

RACINE COUNTY

Burlington Police Department
208 E. Jefferson Street
Burlington, Wisconsin 53105

Caledonia Police Department
6900 Nicholson Road
Racine, Wisconsin 53108

Mt. Pleasant Police Department
6200 Durand Avenue
Racine, Wisconsin 53406

Racine Police Department
730 Center Street
Racine, Wisconsin 53403

Sturtevant Police Department
2846 Wisconsin Street
Sturtevant, Wisconsin 53177

Union Grove Police Department
1015 State Street
Union Grove, Wisconsin 53182

OZAUKEE COUNTY

Cedarburg Police Department
W63 N589 Hanover Avenue
Cedarburg, Wisconsin 53012

Grafton Police Department
1421 - 13th Avenue
Grafton, Wisconsin 53024

Mequon Police Department
11333 N. Cedarburg Road
Mequon, Wisconsin 53092

Port Washington Police Department
100 W. Grand Avenue
Port Washington, Wisconsin 53074

Saukville Police Department
177 S. Main Street
Saukville, Wisconsin 53080

Thiensville Police Department
250 Elm Street
Thiensville, Wisconsin 53092

WASHINGTON COUNTY

Germantown Police Department
W161 N11629 Church Avenue
Germantown, Wisconsin 53022

Hartford Police Department
109 N. Main Street
Hartford, Wisconsin 53027

West Bend Police Department
325 N. Eighth Street
West Bend, Wisconsin 53095

WALWORTH COUNTY

Town of Delavan Police Department
Town Hall Road
Delavan, Wisconsin 53115

Delavan Police Department
123 S. Second Street
Delavan, Wisconsin 53115

Village of East Troy Police Department
2106 Church Street
East Troy, Wisconsin 53120

Township of East Troy Police Department
P. O. Box 664
East Troy, Wisconsin 53120

Elkhorn Police Department
9 S. Broad Street
Elkhorn, Wisconsin 53121

Village of Fontana Police Department
Village Hall
Fontana, Wisconsin 53125

Lake Geneva Police Department
623 Main Street
Lake Geneva, Wisconsin 53147

Village of Walworth Police Department
200 N. Main Street
Walworth, Wisconsin 53184

Whitewater Police Department
312 W. Whitewater Street
Whitewater, Wisconsin 53190

Williams Bay Police Department
65 W. Geneva Street
Williams Bay, Wisconsin 53191

WAUKESHA COUNTY

Delafield Police Department
Menomonee Falls Police Department
Delafield, Wisconsin 53018

Menomonee Falls Police Department
W156 N8480 Pilgrim Road
Menomonee Falls, Wisconsin 53051

New Berlin Police Department
17165 W. Glendale Drive
New Berlin, Wisconsin 53151

Village of Oconomowoc Police Department
35328 Pabst Road
Oconomowoc, Wisconsin 53066

Waukesha Police Department
130 Delafield Street
Waukesha, Wisconsin 53186

Butler Police Department
13600 W. Juneau Boulevard
Elm Grove, Wisconsin 53122

Village of Elm Grove Police Department
13600 W. Juneau Boulevard
Elm Grove, Wisconsin 53122

City of Oconomowoc Police Department
174 E. Wisconsin Avenue
Oconomowoc, Wisconsin 53066

Pewaukee Police Department
150 Park Avenue
Pewaukee, Wisconsin 53072

City of Brookfield Police Department
2000 N. Calhoun Road
Brookfield, Wisconsin 53005

Village of Chenequa Police Department
Route 1, Box 64
Hartland, Wisconsin 53092

Village of Hartland Police Department
209 Cottonwood Avenue
Hartland, Wisconsin 53029

Muskego Police Department
S76 W17878 Janesville Road
Muskego, Wisconsin 53150

Town of Summit Police Department
2911 N. Dousman Road
Oconomowoc, Wisconsin 53066