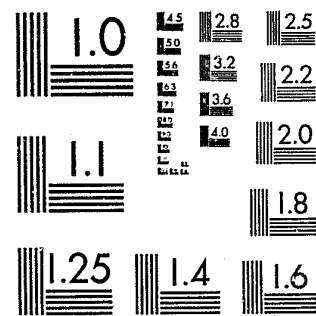


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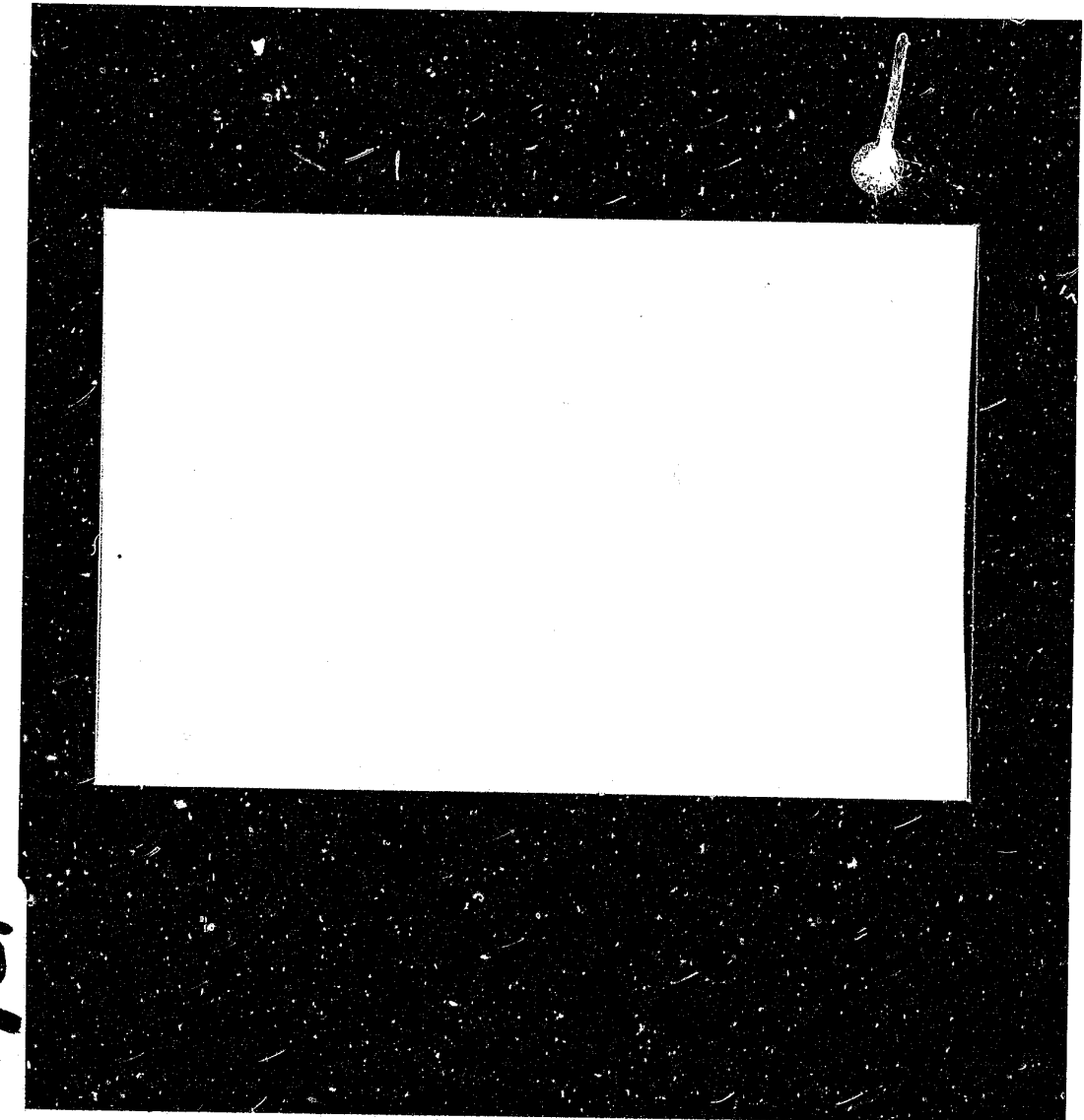
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Report



National Center for State Courts

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PHASE IV.

PERFORMANCE ASSESSMENT REPORTS

STATE JUDICIAL INFORMATION SYSTEMS PROJECT

A Publication of

National Center for State Courts
300 Newport Avenue
Williamsburg, VA 23185

1979

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Mr. Ellis D. Pettigrew
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Director of Data Processing,
Office of the Administrator
for the Courts,
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Lynn A. Jensen, Project Director
Carter C. Cowles, III, Deputy Project Director
Richard W. Delaplain, Staff Associate
Charles E. Ferrell, Jr., Staff Associate
J. Gregory Janowski, Staff Associate
Ray G. Speight, Staff Associate
Brenda A. Williams, Secretary

OTHER STAFF CONTRIBUTORS

Francis J. Taillefer, Project Director
Mary L. Clifford, Staff Associate
Betty J. White, Research Assistant

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This report was prepared by the SJIS project staff at the National Center for State Courts with assistance from members of both the Grants Review--Performance Assessment Subcommittee and the overall SJIS Committee of the Whole. Members of the subcommittee assisted in defining the objectives, setting the tone and specifying the format for the performance assessment process. The subcommittee consisted of the following:

Mr. John R. Fisher, Chairman (as of February 23, 1979)
Director, Administrative Office of the Courts, Delaware

Mr. Phillip B. Winberry, Chairman (through January 7, 1979)
Administrator for the Courts, Washington

Honorable C.R. Huie
Executive Secretary, Judicial Department, Arkansas

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Mr. Bert M. Montague
Director, Administrative Office of the Courts, North Carolina

Mr. David C. Osborne
Project Manager, Information Systems for the Supreme Court, Minnesota

Mr. Jan H. Shultz
Information Systems Officer, Administrative Office of the Courts, Alabama

In addition, each member of the SJIS Committee of the Whole contributed to the development of this document by participating in on-site assessment visits and by reviewing drafts of the assessment reports; their assistance is deeply appreciated.

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ACQUISITIONS

INTRODUCTION

The purpose of the State Judicial Information System (SJIS) Project Phase IV was to foster development of state judicial information systems in the participating states. In January 1978, the National Center for State Courts (NCSC) received a grant from the Law Enforcement Assistance Administration (LEAA) to provide management and coordination of this project on both the national and state levels.

An SJIS Advisory Committee, consisting of a representative from each of the 23 states participating in Phase IV, helped guide NCSC staff. A subset of this advisory committee, the SJIS Grants Review-Performance Assessment Subcommittee, was charged with evaluating technical and administrative aspects of the individual states' SJIS projects.

The evaluations conducted by this subcommittee were termed "performance assessments," and were oriented toward helping each participating SJIS state effectively accomplish its project objectives.

These assessments were carried out by twelve different four-person teams; each team having two members from the National Center's SJIS project staff and two from the SJIS Advisory Committee. Appointments to the assessment teams were made at the May 15, 1978 SJIS Advisory Committee meeting by the chairman, Mr. Larry Polansky. The focal point of each assessment was the team's on-site visit to the project state. These visits were conducted from June 1978 through February 1979.

The purposes of the performance assessments were:

- To evaluate the progress of the SJIS development in each state in relation to the defined objectives in the state's SJIS grant application.
- To assist the states in evaluating their own progress and in identifying and resolving any problems.
- To provide information to each SJIS state to assist its future SJIS development.
- To identify and transmit information helpful to the development efforts of other participating SJIS states.
- To ascertain the procedures that states can develop to ensure accuracy and completeness of SJIS data.
- To determine whether each state is providing data required by the OBTS and CCH programs.
- To assist LEAA in monitoring effectively the progress of each SJIS project.

Assessment Criteria

Twenty-three states participated in Phase IV; twelve were assessed. A state was assessed if it satisfied at least one of the following conditions:

- The state was a participant in Phase IV and had accomplished sufficient work under the current year's grant to make an assessment worthwhile.
- The state has been assessed less than once for each year of its grant.
- The state had an active grant and at least nine months had elapsed since the last assessment.

Under these guidelines the following 12 states were assessed: Alabama, Arkansas, Delaware, Florida, Hawaii, Louisiana, Michigan, Minnesota, New Jersey, Pennsylvania, Rhode Island, and Washington.

Assessment Procedure

Each performance assessment was divided into three stages: preparation, on-site visit, and report writing. In the preparation phase a questionnaire was mailed to the state being assessed, and the results evaluated. All available documentation was reviewed including grant paperwork, progress reports, workplans, annual reports, previous SJIS assessment reports, and correspondence. Finally, extensive discussions were held among the four assessment team members summarizing project documentation and highlighting questions to be asked during the on-site visit.

When the team arrived on-site, the assessment usually began with a review of the history of the project by the host State Court Administrator. Detailed discussions were later held with the state employees responsible for the technical aspects of the project. When the assessment team had a complete understanding of the project, they presented to the State Court Administrator their preliminary concerns, recommendations, and exemplary findings.

In the weeks that followed, an assessment report was drafted by National Center staff. The draft was reviewed and revised as necessary by the assessment team members, then sent to the assessed state for verification. The final version was subsequently sent to LEAA. This book groups together the final versions of all 12 assessment reports; it has been sent to all SJIS Phase IV participants and LEAA.

Performance Assessment Report Format

The performance assessment report provides an evaluation of the technical and administrative aspects of the 12 SJIS projects active in Phase IV. Attempts were made to keep the spirit, content, and format of each assessment report as parallel as possible; thus offering the reader a comparison between the 12 state systems. If circumstances required, some report sections were combined with others; or, if totally inapplicable, sections were eliminated.

The report format was the following:

SECTION I: PROJECT OVERVIEW

- A. Management Summary
- B. Organizational Structure and Processing
 - 1. Judiciary
 - 2. Data Processing
 - 3. SJIS Project
 - 4. SJIS Advisory Committee
 - 5. Other SJIS-related Groups
 - 6. Judicial Workloads
 - 7. Related Systems
- C. Project Description
 - 1. Background
 - 2. Functional
 - 3. Goals and Objectives
 - 4. Expected Impact

SECTION II: PROJECT ASSESSMENT

- A. Project Planning and Control
 - 1. Grant Summary
 - 2. Plans
 - 3. Current Status
 - 4. Control Methods
 - 5. User Participation
- B. System Description
 - 1. Processing Approach
 - 2. Data Collection, Preparation, and Verification
 - 3. Data Entry
 - 4. Application Software
 - 5. OBTS/CCH
 - 6. Security and Privacy
 - 7. Computer and Communications Configuration
 - 8. Documentation
 - 9. Implementation
 - 10. Maintenance

- C. Assessment Results
1. Concerns and Recommendations of the Assessment Team
 2. Exemplary Findings
 3. Conclusions

ALABAMA PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On October 10 and 11, 1978, a performance assessment was made of the Alabama State Judicial Information System (SJIS) Project. The assessment was conducted by:

Mr. Gunji Izumoto, Chief Legal Documents, Hawaii.

Mr. Stephen L. Ayers, III, Information Systems Director, Pennsylvania.

Mr. Carter C. Cowles, III, National Center for State Courts, SJIS Project.

Mr. Charles E. Ferrell, National Center for State Courts, SJIS Project.

The purpose of the assessment was to appraise the administrative and technical status of the Alabama SJIS Project relative to the requirements of the Alabama SJIS grant from LEAA and relative to good systems development practices and procedures. Emphasis was placed on the project's progress during Phase II of its development since an assessment of Alabama's Phase I activities was conducted on January 13, 1978.

The primary participants from the supreme court of Alabama and the administrative office of the courts (AOC) were:

Honorable C. C. Torbert, Jr., Chief Justice, Supreme Court of Alabama.

Mr. William A. Campbell, Senior Assistant Director, Administrative Office of the Courts.

Mr. Jan Shultz, Information Systems Officer, Administrative Office of the Courts.

The LEAA representative at this assessment was Mr. Al Breuel.

Mr. Dick Knighton and Mr. John O'Sullivan of the AOC staff were also interviewed by the assessment staff. Mr. Ruffin W. Blaycock, Director of the Alabama Criminal Justice Information Center (ACJIC), was also contacted.

A. Management Summary and Project History

The Alabama SJIS Project is currently in Phase II of its development efforts. Phase II began December 27, 1977, and is scheduled to end on April 17, 1979.

Phase I of Alabama's SJIS Project began on July 1, 1976, and concluded on December 26, 1977. Of tremendous impact and importance to Alabama's SJIS activities was the passage of Legislative Act No. 1205, Acts of Alabama, Regular Session 1975. This Act provided the descriptive detail to the structural framework established by prior constitutional amendment for a unified court system.

The Act created the administrative office of courts, and gave to it such responsibilities as preparing and submitting budget recommendations necessary for the maintenance and operation of the unified judicial system; the proper accounting for and depositing of all revenues generated by the uniform court cost and fee structure; conducting a statewide physical inventory for assumption of title of ownership and maintaining this equipment and furniture inventory in a productive, management-oriented fashion; providing for the development and maintenance of a comprehensive personnel system; and the development of a uniform traffic ticket system (and form) for use by each law enforcement agency in the state of Alabama. The Act also:

- Provided for state assumption of all compensation to all court personnel (including circuit clerks of court) and, in addition, made all full-time county employees serving the district and circuit courts (excluding circuit clerks who remain constitutional officers) state employees.
- Amended the jurisdictional limits of circuit courts, and established jurisdictional limits for the new district courts and those municipal courts that may be created by law. The primary jurisdictional provisions of the new district court include the establishment of a small claims division with

exclusive jurisdiction to hear claims that range between 0 and \$500; and in addition to its exclusive misdemeanor jurisdiction, the district court was given jurisdictional authority to accept pleas of guilty (concurrent with the circuit court) on all noncapital felony cases.

- Established statutory time frames for implementation of its provisions. January 16, 1977, was the date of implementation on which the staff of the administrative office of the courts could begin work toward the minimal and basic systems needed to cope with the new court structure and operational environment. Management information systems (MIS) in the areas of personnel, inventory, financial/accounting were of primary concern and effort, as was the statutory proviso of a uniform traffic ticket and complaint implementation.

An assessment of Alabama's SJIS Project (Phase I) was conducted in August, 1977, at the Kansas City SJIS Project Meeting. The overall goal of Phase I was to provide the administrative office of the courts with a detailed set of plans, procedures, forms, and other information necessary to define and model a fully integrated statewide judicial information system. The objectives of the project were as follows:

- Standardization of record-keeping functions.
- Identification of CCH/OBTS data elements.
- Improvement in the quantity and quality of statistical reports.
- Determination of whether or not it would be cost effective to provide MIS reports to small, rural courts.
- Integration of the automated court system located in Birmingham into SJIS.

The following tasks were accomplished during Phase I of Alabama's SJIS Project:

- Equipment was standardized on a statewide basis, and procedures for handling case filings and indexing records were implemented. Trial court process was standardized under the unified court system.
- A joint analysis by the SJIS project staff and the Alabama Criminal Justice Information Center (ACJIC) staff identified which CCH/OBTS data elements could reasonably be collected. A source form was designed and implemented in two counties for test purposes.

- A small claims reporting system was designed, programmed, and implemented statewide to provide caseload information.
- A district court reporting system was designed, programmed, and implemented statewide to obtain basic caseload data. The district court system was enlarged in a modular fashion to include the circuit court caseload data, thus replacing the manual system and combining all caseload from both limited and general jurisdiction courts.
- Data from each of the 75 courts were aggregated by court identification with monthly records stored in the database for each court.
- A revenue accounting system was programmed and implemented statewide.
- A feasibility study was conducted relating to the use of statistical reports from the presiding judge and clerks of court.
- A study and analysis was performed in the trial court administrator's office, the department of court management, and the ACJIC to analyze the CCH/OBTS data on felony cases and determine the compatibility of this data with the Alabama Criminal Justice Information Center system.

Phase II of the Alabama SJIS Project was approved on February 11, 1978. The overall objective of the SJIS Project in Phase II is to continue refining the caseload reporting systems and extend development efforts in the management information area.

At the time of this assessment Phase II of the project was on schedule according to the project workplan (which appears in Section II) except in the area of developing the appellate court's CCH reporting system. There have been mitigating circumstances that have caused the SJIS staff to reevaluate this area. The AOC has a highly capable staff who can, and will, resolve any problems that could be expected to arise in Phase II of the project.

B. Organizational Structure and Processing

1. Judiciary

a. Alabama State Court System. A new Judicial Article (Amendment No. 328) to the Alabama Constitution was ratified by the people of Alabama on December 18, 1973. This amendment established the

framework for a unified judicial system. Administrative authority was constitutionally fixed at the supreme court, with the chief justice of the supreme court as the administrative head of the judiciary. This unified framework consisted of a supreme court, a court of criminal appeals, a court of civil appeals, a trial court of general jurisdiction known as the circuit court, a trial court of limited jurisdiction known as the district court, a probate court, and such municipal courts as may be provided by law. The passage of Act No. 1205, 1975, provided the descriptive detail to establish the unified court system as described in the Judicial Article. The Alabama court system is summarized in Figure 1.

Figure 1
ALABAMA COURT SYSTEM

Court	Basic Jurisdiction (exclusive of writs)	Geographic Scope	Judges
Supreme Court	Exclusive appellate jurisdiction in actions involving title to or possession of land and in civil cases where the amount exceeds \$10,000; may review intermediate appellate court decision on a writ of certiorari.	Statewide; sits in Montgomery.	Chief justice, 8 associate justices.
Court of Criminal Appeals	Exclusive appellate jurisdiction over misdemeanors and felonies.	Statewide, sits in Montgomery.	Presiding judge, 4 associate judges.
Court of Civil Appeals	Exclusive appellate jurisdiction in domestic relations and suits at law where the amount in controversy does not exceed \$10,000; reviews administrative agency decisions (except those by the Public Service Commission).	Statewide; sits in Montgomery.	Presiding Judge, 2 associate judges.
Circuit Courts	Original criminal jurisdiction over felonies; exclusive original jurisdiction over misdemeanors and ordinance violations when lesser included offenses in felony charge or which arise from felony charge; original civil jurisdiction in matters over \$5,000; concurrent jurisdiction with district court in civil matters over \$500; appeals from district courts in civil, criminal, and juvenile matters and for ordinance violations except where appeal lies to other appellate courts. Commitment proceedings may be transferred from probate court.	38 circuits varying in size from 1 to 5 counties. Court in every county and at several locations in some counties. There are 74 sitting locations.	98 judges in 1975; 9 new judgeships created by 1975 Regular Session of Legislature. Total of 107 by November, 1976. At the present time there is a total of 109 judges.

Court	Basic Jurisdiction (exclusive of writs)	Geographic Scope	Judges
District Courts (1/16/77)	Concurrent jurisdiction with circuit court in civil matters where amount in controversy does not exceed \$5,000. Exclusive original jurisdiction of civil cases where amount in controversy does not exceed \$500; concurrent juvenile jurisdiction with circuit court. Exclusive original jurisdiction over misdemeanors; original concurrent jurisdiction to receive guilty pleas in non-capital felonies. Adoption proceedings may be transferred from probate court. Exclusive jurisdiction over preliminary hearings in felony cases.	Boundaries coterminous with county boundaries. 66 districts.	89 judges.
Municipal Courts (12/27/77)	Ordinance violations within police jurisdiction. Concurrent jurisdiction with district courts over violations of state law committed in police jurisdiction that may be ordinance violations.		
Probate Courts	Probate of wills; administration of estates; commitment of incompetents; adoption proceedings.	68 probate courts; one in each county and in Bessemer section of Jefferson County.	68 judges.

b. Administrative Office of the Courts. Act No. 1205, Acts of Alabama, created the administrative office of the courts (AOC). The AOC, as shown in Figure 2, and the administrative director, under the direction of the chief justice of the supreme court, is responsible for the following:

(1) The filing of reports, collection and compilation of statistical data and other information on the judicial and financial operation of the courts.

(2) Evaluating the practices and procedures of the courts, making recommendations concerning the number of judges and personnel needed for the administration of justice.

(3) Prescribing uniform administrative and business methods, systems, forms, and records to be used in the offices of the clerks and registers of courts.

(4) Preparing and submitting budget recommendations for the unified courts system, with the exception of the appellate courts.

(5) Analyzing, recommending, and assisting in the securing of physical accommodations for the unified judicial system.

(6) Procuring, distributing, and assigning all forms, books, equipment, and supplies for the unified judicial system.

(7) Making recommendations for the improvement of the operations of the unified court system.

(8) Preparing and submitting an annual report to the Chief justice.

(9) Assisting the chief justice in transfer and assignment of justices and judges for temporary and specialized duty.

(10) Assisting the judicial conference in its tasks.

(11) Promoting, carrying on and assisting in programs to aid in the continuing educations of justices, judges and other court personnel.

(12) Taking necessary steps in the collection of unpaid court costs, fines, and forfeitures.

(13) Serving as a liaison with the executive and legislative branches of government.

(14) Performing such additional duties as may be assigned by the chief justice.

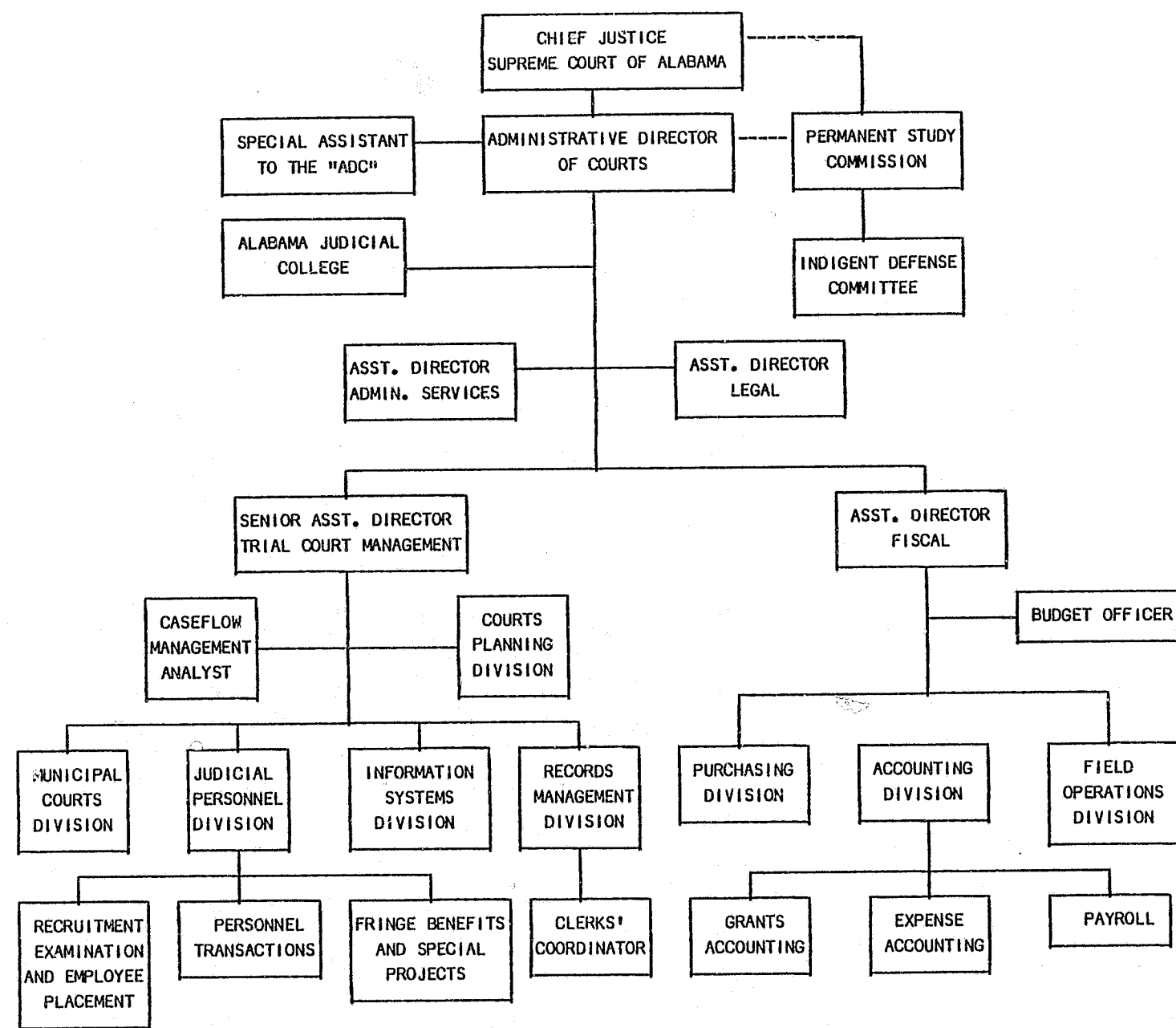


Figure 2

2. Data Processing

Computer facilities for the Alabama SJIS are provided by the Data Systems Management Division (DSMS), Department of Finance, and are primarily dedicated to the support of the criminal justice community.

Analytical and design work for SJIS are performed entirely by the SJIS Project staff. Programming and maintenance of systems are done by the staff via two terminals located in the information systems office of the AOC. The AOC has recently purchased, with state funds, a Univac Terminal System, which will be used primarily for data entry and systems development and the on-going operation and maintenance of certain applications.

3. SJIS Project

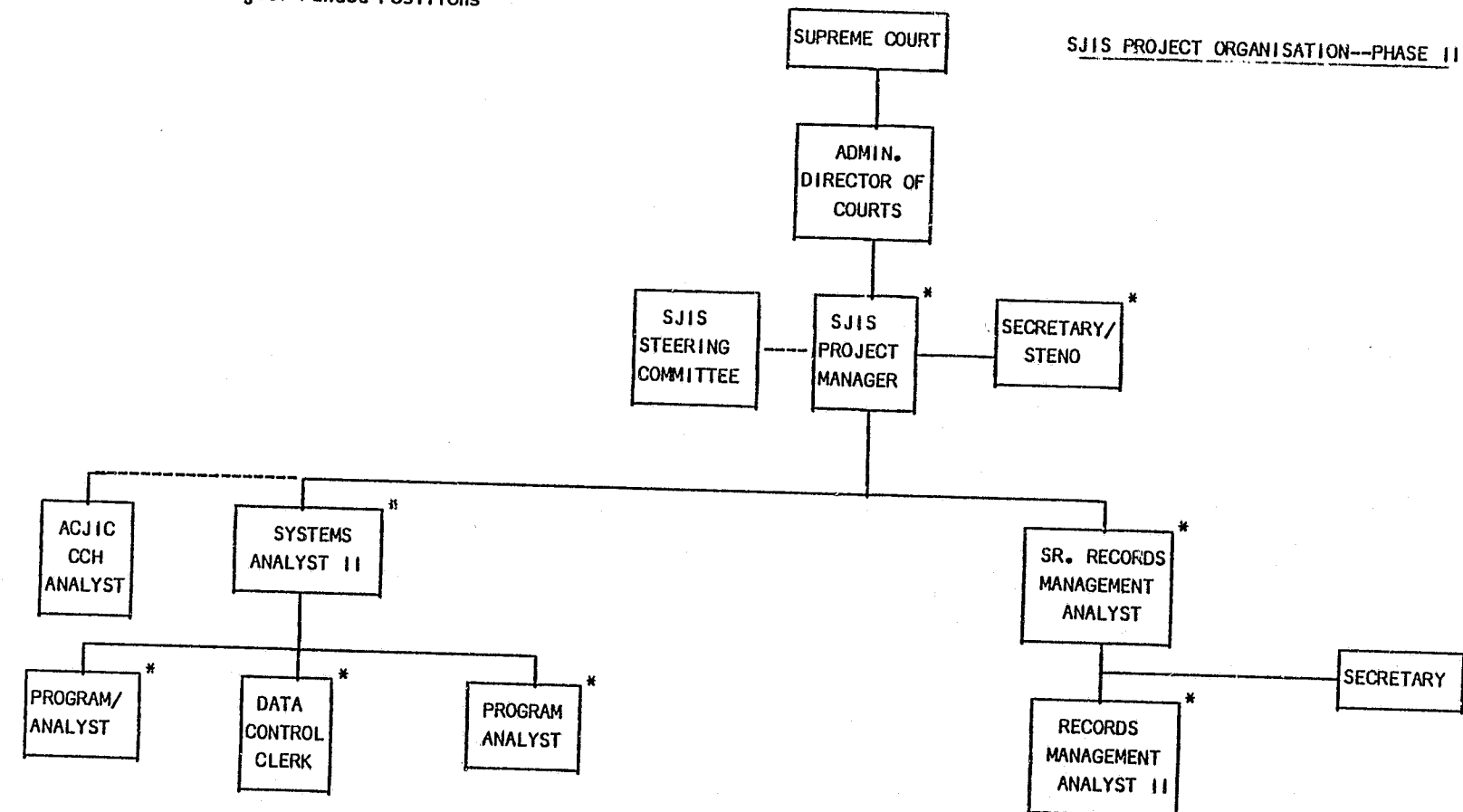
The SJIS Project organization (see Figure 3) is under the direct control of the administrative director of courts, with project management and responsibility delegated to the information systems officer. The specific elements of the organization are as follows:

- Project Manager (Information Systems Officer). This person devotes 100 percent of his time to ensure that resources are available in order to accomplish the specific objectives of the SJIS Project.
- Senior Records Management Analyst. This person has day-to-day responsibility for the supervision and direction of activities in the forms design effort for trial courts. He also has responsibility for the development of documentation for the appellate court study.
- Records Management Analyst. This person works directly under the supervision of the senior records management analyst. He is responsible for modeling paper and work flows for the various court functions analyzed and studied, and for the preliminary design of standardized forms for these model flows. He is also responsible for preliminary drafts of user manuals and instructions.
- Systems Analyst II. This individual has the day-to-day responsibility for computer-technology-related aspects of the project. He assists functional managers in determining their requirements for information, identifies system and subsystem interfaces, and conceptualizes the most practical, feasible, and cost-effective solution to information collection and

FIGURE 3

* Denotes Project Funded Positions

SJIS PROJECT ORGANISATION--PHASE II



manipulation problems. He has the responsibility for detailing the specifications of the computer solution and supervises and/or participates in the coding of the necessary computer programs. In addition, he has the primary responsibility for developing and coordinating the interface requirements between the state-level SJIS and the only automated trial court system in Alabama (Jefferson County - Birmingham).

- Programmer/Analyst (2). These two individuals are permanent programmer/analysts assigned to the project, performing detail design, coding testing, and documentation tasks as required. Both individuals are required full time to develop the new CCH and appellate systems, and to incorporate enhancements to the Management Information Systems (MIS) applications involving personnel, property, and fiscal matters.
- Data Control Clerk. This person is responsible for the logging of transaction reports from each county. She also performs on-line entry of data and data editing and correction on transaction edit lists.

The administrative office of the courts has budgeted all the above indicated positions that are presently grant funded (one programmer/analyst is now paid by the state) to be state funded at the conclusion of Phase II.

4. SJIS Advisory Committee

The SJIS Advisory Ad Hoc Steering Committee is made up of judges and clerks from all trial court levels, and also has representatives from the following criminal justice areas: District Attorney's Office, Department of Public Safety, Board of Pardons and Parole, Alabama Criminal Justice Information Center, and attorneys-at-law. This committee has reviewed the efforts and products of the project staff.

The Steering Committee has established a Forms Subcommittee, which meets on a monthly basis to review all new forms and/or revisions of old forms that will be used in the courts. This subcommittee is made up of actual users of the forms. Their knowledge of the working environment in which a prospective form will be used has been an invaluable resource.

5. Other SJIS-related Groups

The Alabama SJIS Project staff has involved the functional users of a prospective system during design and implementation efforts of the system.

The Users Committee meets once a month to review the specific requirements of the system, the input edits, and the output reports. The participation of the Users Committee has eliminated many of the bottlenecks and problems associated with systems development efforts.

6. Judicial Workloads

The latest verified statewide caseload figures available for the State of Alabama are from the 1977 Annual Report. They are shown in Figure 4.

Figure 4

STATEWIDE CASELOADSupreme Court of Alabama

Appeals brought forward	0
Appeals submitted	324
Appeals disposed of	324
Appeals pending	0
Petitions for writs of certiorari	
Pending preliminary consideration	292
Petitions granted	62
Petitions denied	230
Petitions dismissed	0
Petitions pending	0
Petitions awaiting resubmission	
after granting of writ of certiorari	76
Argued and resubmitted	34
Resubmitted on briefs	14
Pending (to be carried forward)	27

Court of Criminal Appeals

Filings	853
Beginning pending	671
Docket load	1,524
Dispositions	976
End pending	548

Court of Civil Appeals

Cases submitted	185
Cases decided	184
Cases dismissed	1
End pending	0

Circuit CourtCriminal Caseload:

Filings	
Indictments	17,533
Other	6,610
Total	24,143
Dispositions	
Jury trials	1,440
Bench trials	1,314
Guilty pleas	13,841
Nols/dismissals	6,915
Total	23,443

Civil Caseload:

Filings	23,539
Dispositions	25,191

Domestic Relations Caseload:

Filings	41,080
Dispositions	39,078

Juvenile Caseload:

Filings	10,764
Dispositions	9,371

Total Caseload:

Filings	99,526
Dispositions	97,083

District Court

	Category	Total Filings	Total Dispositions	Percentage of Filings Disposed	End Pending
	Criminal	92,528	72,020	77.8	+20,508
	Civil	36,713	32,327	88.1	+ 4,386
	Juvenile	13,423	10,683	79.6	+ 2,740
State	Small Claims	64,109	36,715	57.3	+27,394
Total	Traffic	179,604	147,001	81.9	+32,603
	Total	386,377	298,746	77.3	+87,631

7. Related Systems

The Alabama Criminal Justice Information Center (ACJIC) was established by law to collect, store, and disseminate information on persons charged by the state, county, and municipal criminal justices agencies. The ACJIC currently has all Comprehensive Data Systems (CDS) components operational and has implemented all Offender-Based State Corrections Information System (OBSCIS) modules. Future plans are to install terminals in all the district attorneys' offices in order to provide accurate caseload information.

In addition to being a statewide criminal justice information center, the ACJIC is also the Statistical Analysis Center (SAC) for the State of Alabama.

The AOC and ACJIC have an excellent working relationship.

The AOC provides data for the OBTS/CCH system at ACJIC. There are written agreements that provide safeguards to each agency regarding the storing, access, and dissemination of information.

Jefferson County, Alabama, (Birmingham) has implemented an automated trial court system. The SJIS staff and the Jefferson County data processing staff are developing interface requirements between the automated system in Birmingham and the SJIS system at the ACJIC.

C. Project Description

1. Background

Historically, the judicial branch of the Alabama government had operated in an environment devoid of any managerial organization, structure, and efficiency. It was not until 1971 that the Alabama legislature began to establish the framework for unified court structure. Subsequent passage of other judicial legislation and a constitutional amendment provided the descriptive detail and time frames for implementation of a unified judicial system. January 16, 1977, is the first date on which the staff began to implement the minimal and basic needs of the new court system.

The Alabama Phase I grant received approval in July, 1976, to begin the SJIS development. The objectives specified in Alabama's Phase I grant application were to accomplish the following:

- Standardize all court-related forms, records, and recordkeeping functions.
- Provide CCH/OBTS data elements on misdemeanors and civil cases.
- Improve the quantity and quality of statistical information available to the AOC and the Alabama CJIS through its SAC unit at ACJIC.
- Determine the feasibility and cost alternatives of providing MIS reports to those nonautomated rural circuit and district courts.
- Integrate the only automated trial court system (Birmingham) into a statewide SJIS and CJIS.

At the conclusion of Alabama's Phase I grant, the SJIS Project staff had collected and analyzed over 11,000 court-related forms, and developed approximately 200 standard forms that became the foundation of the standard forms and records system. The staff designed the CCH/OBTS reporting form that would provide the interface data with the ACJIC. Two systems were designed and implemented statewide to provide statistical information to the AOC and CJIS. They were the Small Claims Reporting System, which provided statistical caseload information; and the Caseload Reporting System, which provided statistical information on all case categories at the circuit and district court levels.

A Revenue Accounting System was designed and implemented statewide, which aggregates revenues generated by each court and provides statistical information to management. The SJIS Project staff conducted a feasibility study that concluded that statistical reports would be forwarded to all presiding judges and clerks of court. Extensive analysis of Alabama's only automated trial court system, in Birmingham, concluded that an interface of the Birmingham trial court system and the ACJIC system could be accomplished in the future.

The Phase II grant application for Alabama's SJIS efforts was written with the intent of refining and developing the systems and procedures specified in the Phase I grant. A detailed description of Alabama's Phase II grant is discussed in Section II, PROJECT ASSESSMENT, (A.1. Grant Summary) of this report.

2. Functional Description

At the time of this assessment the following systems were implemented:

Caseload Systems

- Caseload Reporting System.
- Criminal Case History (CCH) Reporting System
(at time of assessment, 55% of state implemented).

Resource Systems

- Personnel Applicant.
- Personnel Data System.
- Property Management.
- Revenue.
- Expense.
- Budget.
- Uniform Traffic Citation.
- Label Processing.

A description of each system is contained in Section II., PROJECT ASSESSMENT, (B. Systems Description).

3. Goals and Objectives, Phase II

The overall goal of the Alabama Phase II grant is to continue refining the caseload reporting systems and to extend development effort into other management information applications. The following specific objectives were identified in the Phase II grant application:

- Continue standardizing all court-related forms, records, and recordkeeping functions statewide.
- Design, develop, and implement a felony case disposition reporting system. Provide all CCH/OBTS data elements required by the ACJIC.
- Design, develop, and implement a caseload reporting system for the appellate courts.

- Expand and enhance the management information reporting, specifically in the area of personnel and finance.
- Provide complete documentation of all computer systems in a standard, uniform format.

4. Expected Impact

Implementation of SJIS has facilitated the implementation of the unified court system in the State of Alabama. The initial seed money provided by LEAA for SJIS was an invaluable resource that provided the impetus for the AOC to develop an SJIS.

Overall, the SJIS Project has provided to AOC staff invaluable management information that facilitated management's decision-making process during Alabama's court unification process.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Phase II of the Alabama SJIS Project began on December 27, 1977, and is scheduled to conclude on April 17, 1979. The overall goal for Phase II is to continue refining the caseload reporting systems and to extend development efforts in management information applications.

Specific objectives of Alabama's Phase II grant are as follows:

- Continue with the standardization of all court-related forms, records, and recordkeeping functions statewide. Specifically, forms for the appellate courts and forms for the criminal jurisdiction at the trial court level will be designed and implemented statewide. Improvements in records management processes will be developed and implemented statewide, to include calendaring procedures and manual workload/caseload management processes. These will ensure the availability of CCH/OBTS information and facilitate the data collection effort.
- Design, develop, and implement the felony Criminal Case History reporting system. The automated data processing will build upon the source data provided by the product achieved in Objective 2, Phase II, and therefore is a continuation of that effort. It will provide all CCH/OBTS data required by the ACJIC and interface with that agency. CCH and OBTS data elements to be collected are those mutually agreed upon by the courts and criminal justice agencies with a view toward availability and ease of collection.
- Design, develop, and implement a caseload reporting system for the appellate courts to include supplemental criminal interfacing with the ACJIC. This is not envisioned to be a

detailed case-oriented system, except in the criminal appeals area, which must provide case-specific (defendant-oriented) data to the Alabama Criminal Justice Information Center.

- Provide an increased data processing capability in the Management Information Systems applications to include personnel, fiscal, and property management applications. Certain of these systems need only to be optimized/augmented to satisfy new requirements that have evolved. In other areas, complete redesign is required to respond to increased management requirements.

- Provide complete documentation of all systems in a standard, uniform format. This will include the development of systems design and documentation standards to facilitate automated data processing management and transferability of systems software.

2. Plans

The SJIS Project staff has developed a written Project Plan Worksheet (see Figure 5) for each grant objective in their Phase II grant. At the time of this assessment the SJIS staff had not developed a long-range plan. They have formulated some vague plans to enhance and expand their existing systems. Areas of future development include the Supreme Court, juvenile courts, automation of local trial court operations, and enhancement of the fiscal and personnel systems to on-line systems.

3. Current Status

At the time of this assessment, the Alabama SJIS Project was progressing as scheduled in the Project Work Plan (Figure 5) except in the area of the Appellate Reporting System development. It is the assessment team's conclusion that the professional staff of Alabama's SJIS Project have delivered more than the grants specified, and that the slippage in schedule in the appellate reporting area will be corrected. The status of each system developed at the time of this assessment is as follows:

- Caseload Reporting System: This system is fully operational and documented. The system has been implemented in all the counties in the state. The SJIS staff, following the requirements analysis of the court of criminal appeals, determined that a more detailed caseload reporting system should be developed for the appellate courts. The criminal appellate court clerk was unable to participate in implementing the Caseload Reporting System, which has contributed to the schedule slippage mentioned earlier in this section.
- Criminal Case History (CCH) Reporting System: At the time of this assessment the SJIS staff were working in conjunction with the user to determine what output reports to produce from the system.

PROJECT PLAN WORKSHEET

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FIGURE 5

PROJECT PLAN WORKSHEET

PROJECT TITLE		COORDINATOR		SYSTEM		DATE PREPARED		PROJECT/PROPOSAL NO.	
OBJECTIVE 2: CRIMINAL CASE HISTORY (CCH) REPORTING SYSTEM		SYSTEM ANALYST		SUBSYSTEM		DATE APPROVED			
EVENT NUMBER	EVENT TITLE/DESCRIPTION	SCHEDULED	VE	ACTUAL	MANHOURS		COSTS		
		START DATE		END DATE	ESTIMATED	ACTUAL	ESTIMATED	ACTUAL	
2-1	Programming Edit/Update Function	1-3-78		4-28-78	560				
		2-1-78		6-1-78					
2-2	System Test	5-1-78		5-31-78	140				
		5-1-78		5-31-78					
2-3	Implementation - Region 1	6-1-78		8-31-78	980				
		6-1-78		6-30-78					
2-4	Implementation/System Evaluation	9-1-78		9-29-78	140				
		6-15-78		7-30-78					
2-5	Implement Statewide/By Circuit	10-2-78		1-31-79	1120				
		8-1-78							
2-6	Test and Validate CJIC Interface	6-12-78		6-30-78	140				
		6-15-78		7-15-78					
2-7	Test and Validate Jefferson County Interface	10-15-78		11-15-78	140				
2-8	Program Reports/Retrievals	8-1-78		12-15-78	140				
Mile-		5-31-78							
Stone 1	Completion of Event 2-2	5-1-78		5-31-78					
Mile-		9-29-78							
Stone 2	Completion of Event 2-4 and all earlier tasks	6-15-78		7-30-78					

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FIGURE 5

PROJECT PLAN WORKSHEET

PROJECT TITLE APPELLATE REPORTING SYSTEM		COORDINATOR:		SYSTEM:		DATE PREPARED:		PROJECT/PROPOSAL NO.:	
OBJECTIVE 3: DEVELOPMENT		SYSTEM ANALYST:		SUBSYSTEM:		DATE APPROVED:			
EVENT NUMBER	EVENT TITLE/DESCRIPTION	SCHEDULED VS ACTUAL		MANHOURS		COSTS			
		START DATE	END DATE	ESTIMATED	ACTUAL	ESTIMATED	ACTUAL		
3-1	Requirements Analysis	5-1-78	5-31-78	140					
3-2	Detail Design	6-1-78	6-30-78	140					
3-3	Programming Edit/Update Function	8-3-78	8-31-78	140					
3-4	System Test	9-1-78	9-29-78	80					
3-5	Implementation	10-2-78	11-30-78	40					
3-6	Evaluation	12-1-78	12-29-78	20					
3-7	Test and Validate CJIC Interface	10-11-78	10-29-78	40					
3-8	Program Reports/Retrievals	10-2-78	11-17-78	60					
Mile- Stone 1	Completion of Event 3-4 and all earlier tasks	9-29-78							
		9-29-78	9-29-78						

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FIGURE 5

PROJECT PLAN WORKSHEET

[illegible]

- The SJIS staff were developing the interface requirements for the automated system in Jefferson County (Birmingham). The CCH system had been implemented and was operational in approximately 55% of the counties at the time of this assessment. The CCH system had been documented according to the standards determined by the SJIS staff.
- Personnel Data System: This system was operational and documented at the time of this assessment.
- Personnel Applicant System: This system was operational and documented at the time of this assessment.
- Property Management System: This system was operational and documented at the time of this assessment.
- Revenue Accounting System: Fully operational at the time of this assessment. The system had not been documented in accordance with the standards set forth in the Phase II grant.
- Expense Accounting System: Operational but will be phased out when the General Ledger System is implemented. There is interim working documentation available, but no formal documentation.
- General Ledger System: This system will replace the Expense Accounting System when development work is completed. Formal documentation of the General Ledger System will be completed by the time the system becomes operational.
- Budget System: This system is operational and will interface with the General Ledger System when it is completed. At the time of this assessment, formal documentation was being completed.
- UTC System (Unit Traffic Citation): An operational system that will be redesigned in the near future. Working documentation was available at the time of this assessment.

4. Control Methods

Status reports are required by the project director to monitor a system's development progress. Control mechanisms are to consist of timetables for each deliverable task during a system's development process.

Documentation standards are in accordance with FIPS PUB 38, adjusted to suit Alabama's needs.

Systems maintenance and/or modification are requested in writing on a standard form. The request is scheduled and personnel are assigned as appropriate. If a modification to a system affects documentation previously written, a documentation specialist updates the appropriate area in the documentation (user's manual, program documentation).

5. User Participation

The Alabama SJIS Project staff has had thoroughly integrated user participation in development of their systems. Judges and clerks have worked extensively in developing standard forms that are used in the courts. The prospective users of a system participate in the system development process from start to finish.

B. Systems Description

1. Processing Approach

a. Overview. All the systems that have been developed are batch-oriented systems. These systems are run on a centralized computer, owned and operated by DSMD which is an agency under the Department of Finance. Data entry, program development, and maintenance of SJIS systems are accomplished by the SJIS staff via two terminals located in the administrative office of the courts.

b. Summary of Systems.

(1) Criminal Case History (CCH) Reporting System: The CCH system is designed to accumulate felony case history data from all district and circuit courts, and to provide the Alabama Criminal Justice Information Center (ACJIC) with CCH/OBTS data.

Input transactions are completed by the clerk's office in each county and mailed to the administrative office (AOC) on a weekly basis. All input forms are manually edited for obvious errors prior to data entry. When all errors have been corrected, data are entered to a transaction file at the DSMS via two CRT terminals located in the AOC. The input transactions are processed (batch basis) through an edit/update program.

The CCH Master File is updated with the valid transactions; invalid transactions are written to an error file and printed on an error transaction register. All errors are corrected, and the corrections are entered and processed through the edit/update program.

At the time of this assessment, the SJIS staff and users were in the process of developing output reports to be generated by the CCH Reporting System.

The Criminal Case History reporting system provides the ACJIC those Computerized Criminal History (CCH) and Offender Based Transaction Statistics (OBTS) elements necessary to maintain the court segment of the computerized criminal history file and the OBTS database. At the time of this assessment 55% of the counties had been implemented; statewide implementation is expected by the end of Phase II or December 1978.

(2) Caseload Reporting System: The Caseload Reporting System is designed to accumulate summary statistics on caseload information from all jurisdictions of circuit and district courts. Each court submits monthly totals of filings and dispositions to the administrative office of courts (AOC).

Approximately 200 input transactions are received monthly at the AOC. Each report is manually verified for accuracy prior to being entered to a file via CRT terminals. All transactions are validated with a hash total routine that is an aggregate of court number, date, and totals in the report. The transaction file is processed through a batch edit/update program that updates a master file with the valid transactions, and prints an error list of those invalid transactions for subsequent correction and reentry.

Reports are produced on a monthly basis for the Trial Courts Management Division, and quarterly reports are mailed to the circuit and district court judges. A description of each report produced from the Caseload Reporting System follows:

- Transaction Register/Error list: This listing represents all transactions processed during the edit/update cycle. Transactions that contain errors are flagged, and those transactions that are error-free are listed.

- District Detail Report: This table of all caseload reports from each district court illustrates year-to-date and monthly totals. The report is produced on a monthly basis for the Trial Court Management Division of AOC. A quarterly report with year-to-date and monthly totals is mailed to chief district court judges quarterly.
- Circuit Detail Report: The contents and frequency of generation of this report are the same as the District Detail Report, except that this report reflects circuit court statistics.
- Year-to-Date Summary: This report by judicial circuits illustrates the current month and year-to-date caseload for each district and circuit court, with a district and circuit court summary for each judicial circuit, and finally, a statewide summary. This report is produced monthly for the Trial Court Management Division of AOC, and on a quarterly basis disseminated to district and circuit court judges and clerks.

(3) Personnel Data System: The Personnel Data System is designed to maintain a master file of all personnel who are employed by the administrative office of courts (AOC). The primary objectives of the system are to identify each job position available and to provide personnel data on those individuals filling the positions. All input data are submitted on a standardized form (Personnel Action Form). These forms are submitted by the Personnel Division of the AOC on a bi-weekly basis to the data entry clerk of the systems division for data entry via two CRT terminals located in the AOC. All edit errors are corrected prior to processing output reports. Output reports are produced on a bi-weekly basis for use by AOC personnel. The following reports are produced:

- Personnel Master File Update: This listing represents the output results from the edit/update program. All valid records are updated to the Master File; invalid records are corrected and recycled through the edit/update process.
- Personnel Alpha List: This report provides a list of all personnel in alphabetical order by last name.
- Personnel Position Number List: This report provides a listing of all personnel records by position number sequence. Included in this listing are a subtotal of positions by organization and an overall total of full-time and part-time people. The report also provides a bi-weekly and annual payroll cost projection based on current personnel strength.

- Personnel Pay Rate Exception Report: This report provides a list of records for which the assigned pay grade and step differs from the standard state pay grade and step.
- Personnel Classification Code List: This listing provides a list of all records in job classifications sequence. Included in this listing are sub-totals for each classification code and a summary page depicting totals for all job classifications.
- Personnel Unit/Job Code List: This report provides a list of personnel assigned to a particular unit. In addition, a summary page depicts totals for all selected units.

The Personnel Data System is a batch system that is easily maintained. The system has been an invaluable resource of information for the AOC staff. This system, in the opinion of the assessment team, is an excellent candidate for transfer to other states.

(4) Personnel Applicant System: The Personnel Applicant System is designed to maintain a file of all applicants for employment within the Alabama Court System. A record of each applicant is created for each position for which the applicant applies. An Equal Employment Opportunity (EEO) record is created for each applicant and is used for statistical purposes. Applications are maintained on the Master File for one year. After one year the record is flagged inactive, and maintained on magnetic tape for two years.

Applications for positions are received by the AOC Personnel Division daily. The applications are manually graded, ranked, and edited prior to being entered to the system. Data entry of applicant forms occurs on an as-required basis. Data entry is performed at the AOC via two CRT terminals. Output reports produced by the Personnel Applicant System on an as-required basis are described as follows:

- Applicant Transaction/Error List: This report lists all transactions input to the system. Valid transactions are updated to the Master File and EEO file. Erroneous transactions are flagged; these errors are corrected and re-input to the edit/update program.
- Applicant Register: This report represents a register of active applicants in score sequence (high and low) who have applied for a particular job classification in a particular

county. This report is produced on an as-required basis and is used by the Personnel Division of AOC and local judges and/or clerks.

- Applicant Master File List: This report provides the Personnel Division a complete printout of all active applicants in name sequence by job code classification. This report is used by the Personnel Division for auditing and verification purposes.
- Applicant Change/Delete Transaction Register: This report lists all changes and deletes submitted by the AOC Personnel Division. The old record and updated record are listed to provide verification of the change to the record.

The Personnel Applicant System has provided the AOC Personnel Division and local court officials information that has been an invaluable resource in evaluating and selecting personnel for vacant positions in the courts. This system, in the opinion of the assessment team, is an excellent candidate for transfer to other states.

(5) Property Management System: The Property Management System is designed to maintain an inventory of all judicial equipment and furniture throughout the state with a dollar value of \$100 or more. It also maintains a historical file of items that have subsequently been transferred to other agencies or disposed of.

A standard input form is used to add, change, or delete an item from the master inventory file. All input items are prepared by the inventory control clerk, manually edited for obvious errors, and then submitted to the data entry section for input on a weekly basis. Data entry is performed at the AOC using two CRT terminals. The transactions are stored on a temporary disk file until processed through an edit/update program.

The Property Management System generates a variety of management reports on an as-required basis. Descriptions of each report are as follows:

- Inventory Transaction Register lists all valid transactions posted to the inventory master file. This listing is used by the property manager to validate all source entries and to provide an audit trail of entries.

- Inventory Error List is a report that lists all errors detected during edit/update processing. Fields within the record that are in error are flagged by asterisks. This listing is forwarded to the property manager, who corrects the errors on the listing. The listing is then returned to the data entry section, where the corrected entries are re-input from the Inventory Error List.
- Inventory List by Item Number provides a list of all items on the inventory master file by item number sequence.
- Inventory List by Location/Item Number is a listing of items by location code (circuit/county). This report contains an inventory of all items for a particular location and is used by the Property Management Division and local courts for inventory verification.
- Inventory List by Property Class/Location/ Item Number provides a list of all items in the inventory master file. The records are sequenced by property classification, location, and item number (major to minor).
- List of Disposed Inventory Items. This report provides a list of all disposed items on the inventory master file.

The Property Management System is an excellent candidate for transfer to other states. It is a simple system to maintain and operate, and provides management with information needed to manage judicial property throughout the state.

(6) Other Systems: At the time of this assessment, documentation for the following systems had not been completed. Brief descriptions of these systems are as follows:

- Revenue Accounting System: This system is designed to monitor the revenue collected from case disposition, by case type. The Fiscal Division receives a copy of a monthly revenue report (transmittals) from the state comptroller. The data from the report are keyed to punch cards by the Alabama Criminal Justice Information Center. The cards are then processed by the Revenue Accounting System, which produces year-to-date totals by court within each county. County summary and state totals are also produced. The Fiscal Accounting Section of the AOC is the primary user of the output reports.
- Expense Accounting System: This system is designed to monitor the expenses of the Alabama court system. Each court's expenses are maintained by the system and updated

monthly. The system produces current monthly expense reports and year-to-date summary totals by individual county. The Fiscal Accounting Section of the AOC utilizes the output products to monitor state-level and county-level expenditures.

- Uniform Traffic Control (UTC) System: This system provides for control of all Uniform Traffic Citations that are submitted to the district court clerk's office by law enforcement agencies. As tickets are submitted to the district clerk's office, they are reported via the UTC-3 form. As UTC-3s are received, transactions are entered into the UTC pending Master File. As traffic tickets are disposed through the Department of Public Safety, the corresponding pending master record is updated.
- Label System Description: The system consists of numerous address files. Changes are made to the address files monthly by the users (of each respective address file), who receive an updated listing of the file for their annotations in the subsequent month.

After the address files are updated, a number of printed-image files are created and stored on magnetic disk.

For actual label printing, the disk version of the label (address) file is selected to print using the Univac "/PRINT" command.

- Budget Accounting System: This system is designed to interface with the expense accounting file and produce budget reports and budget variance reports. The budget officer submits updates on a monthly basis for data entry and updating of the master file. Documentation for the budget accounting system will be completed by the end of Phase II of the project.

2. Application Software

All application software for Alabama's SJIS Project have been written in COBOL. At the time of this assessment the SJIS staff were not using a database management system for their SJIS files.

3. OBTS/CCH

OBTS and CCH data in Alabama are provided through the Alabama Criminal Justice Information Center (ACJIC). The SJIS Project, at the time of this assessment, was supplying CCH information and Alabama-defined OBTS data elements on felony cases to ACJIC in

approximately 55 percent of the counties. AOC staff indicate that by the end of Phase II (April, 1979) OBTS/CCH data reporting will be implemented statewide. The SJIS staff and the users are in the process of defining output report requirements that will be produced for the courts and the Statistical Analysis Center (SAC).

4. Security and Privacy

The Alabama SJIS system is designed to be reasonably secure against the following types of hazards:

- Hardware failure.
- Software modification.

In the event of hardware or software failure, the SJIS system files can be restored from magnetic tape files that are stored off-site. Transaction files, if lost or damaged, can be restored by re-entering the data from the source documents that are maintained in a locked safe at the AOC for a period of one year.

Only one SJIS system is protected below the "log-on (at a terminal) level" and this is the CCH Reporting System. Read and write passwords are required to access the CCH file. The access codes are strictly controlled and have been given to only three persons. Of concern to the assessment team was the fact that there is no control of who modifies programs. Access to the ACJIC is limited to only password log-on code, but these codes are frequently well known to ACJIC users outside the SJIS staff.

A written agreement exists between the ACJIC and the AOC that protects the control, access, and dissemination of judicial data.

5. Computer Configuration

SJIS is processed on a Univac 90/80 computer that is operated by the Data Systems Management Division (DSMD). The 90/80 has two megabytes of core storage, supports a 171 CRT terminal statewide, has twelve 1600/6250 tape drives and two 1400-line-per-minute printers. The operating system is VS-9 version 4.3. The 90/80 supports a database management system (DMS-90), COBOL, FORTRAN, SPSS, and other specialized software packages. There are currently two CRT terminals located in the AOC that are used for data entry and program

development. In March, 1979, the AOC will have installed a UTS 700 intelligent terminal system that includes five CRTs, a line printer, and processor with 128K bytes of memory. This system will provide greater support and independence for Alabama's SJIS project.

Discussion with the Director of the ACJIC and the SJIS staff gave the impression that the DSMD can continue to provide excellent computer support to SJIS for years to come.

6. Documentation

One of the objectives in Alabama's Phase II grant is to provide complete documentation of all systems in a standard, uniform format. The SJIS staff has used FIPS PUB 38 as a guideline in developing documentation standards. At the time of this assessment, documentation had been completed for the following systems:

- Caseload Reporting System.
- Computerized Criminal History (CCH) System.
- Personnel Data System.
- Personnel Appellate System.
- Property Management System.

The documentation that was available at the time of this assessment is well written and provides clear, concise examples for the user to follow. An outline of Alabama's documentation format is provided in Figure 6.

7. Implementation and Maintenance

Formal on-site training sessions are conducted by the SJIS staff and the Trial Court Management Division staff of the administrative office. The training sessions are followed by a minimum of two follow-up on-site refresher courses.

Each system is thoroughly tested and debugged prior to actual implementation on-site. When a new system is implemented the user will operate the old or manual system in parallel mode with the new automated system until such time as changeover to the automated system can take place.

Any modifications to an existing system (programs, reports, input forms) are requested in writing on a standard form. The request is scheduled and personnel are assigned as appropriate, and analysis of

FIGURE 6

STANDARD DOCUMENTATION FORMAT

SECTION 1

FUNCTIONAL REQUIREMENTS

- 1-1. Functional Office of Primary Responsibility (OPR) - Identify the OPR for which the system is being developed.
- *1-2. Objectives of the System - Describe the major objectives of the system and the specific functions the system must perform to satisfy the users' needs. Include a narrative description of products.
- *1-3. Performance Requirements - Specify the system performance requirements. As a minimum, the following items should be addressed.
 - 1-3-1. Frequency of Processing - Define processing frequency, e.g.; daily, weekly, monthly, etc.
 - 1-3-2. Timing - Describe the timing requirements of the system, e.g.; response time, update processing time.
 - 1-3-3. Data Validation - Describe the data validation requirements of the system, e.g.; batch totals, hash totals.
 - 1-3-4. Data Accuracy - Describe the data accuracy requirements of the system, e.g.; mathematical (whole dollars, # of decimal positions), logical, legal.
 - 1-3-5. Security and Privacy - Describe the overall security and privacy requirements of the system. If no specific requirements are imposed, state this fact.
 - 1-3-6. Constraints - Specify the development due dates and any other constraints upon the development/operation of the system.

* Denotes user involvement/coordination.

STANDARD DOCUMENTATION FORMAT

SECTION 2

GENERAL SYSTEM DESCRIPTION

- 2-1. General System Flow - Described the logical flow of the entire system to be accompanied with general system flowchart.
- 2-2. System Interfaces - Describe in detail each interface with other systems.
- *2-3. System Input Description - Describe each source input form. Include a sample of all input source forms.
- *2-4. System Output Description - Describe each system output product. Include print layouts or sample computer output listings.
- *2-5. Data Validation and Audit Plan - Describe in detail the procedure necessary to insure correct data input and manual audit procedures.
- 2-6. System Recovery - Describe in detail the procedure necessary to recover the system. Include back-up procedures and recovery/restart procedures. State requirements for retention of source data and who is responsible for retention.
- 2-7. System Estimates
 - 2-7-1. Data Entry Volume/Time - Provide the estimated data entry volume and time required to enter the data.
 - 2-7-2. Data Preparation Time - Provide the estimated data preparation time required by the user and by data entry.
 - 2-7-3. Data Processing Time - Provide estimated computer processing time.
 - 2-7-4. Resource Requirements - Describe the disk (tape) storage requirement to maintain all system files. Define Master File size at initialization time and the expected growth rate per year.
- 2-8. Hardware/Software Requirements - Provide a description of the hardware required to process the system, to include: type computer, storage media, and input device. Identify the language (compiler) and the operating system of the hardware.
- 2-9. System Test and Implementation Plan - Describe in detail the procedures for testing the system (to include all functions the system is designed to accomplish. Reference Section 1, paragraph 1-2 for system objectives).

SECTION 2

GENERAL SYSTEM DESCRIPTION (Con't)

Define the requirements for design, coordination, and implementation of any source data forms to be used for data entry to the system.

- 2-10. Development Plan - Provide a detail development plan to include all major objectives of the system development process to include requirements analysis, detail design, programming, documentation, system test, implementation, evaluation. This plan must include detailed events within stated major objectives to include scheduled start and completion dates.

*Denotes user involvement/coordination.

STANDARD DOCUMENTATION FORMAT

SECTION 3

DETAILED SYSTEM SPECIFICATIONS

- 3-1. Data Base File and Record Descriptions - Describe all Master Files created by the system. Provide record descriptions of all records maintained within each Master File. Utilize standard forms to document the data base files and record layouts. (Ref. Attachment 1)
- 3-2. Data Element Descriptions - Describe each data element utilized within the system to include: Data Name, Mnemonic ID, Data Description, Picture Clause, Usage, Source, and Codes and Edits. Utilize standard form. (Ref. Attachment 2)
- *3-3. Logical Edit Table - Describe, by using a decision logic table, the system edits provided for all input elements.

* Denotes user involvement/coordination.

STANDARD DOCUMENTATION FORMAT

SECTION 4

PROGRAM SPECIFICATIONS (Paragraphs 4-1 through 4-5 will be repeated for each program within the system.

- 4-1. Program Narrative - Describe the program in include: Program ID, Purpose of the Program, and Program Functions Performed.
- 4-2. Input Record Layouts - Describe each input file and record used by the program. Utilize standard file description and record description forms.
- 4-3. Visual Table of Contents (VTOC) and Modular Descriptions - Provide, by use of block diagram, the executive modules within the program to satisfy processing requirements. The block diagram will be accompanied by module descriptions to explain those processing steps outlined on the block diagrams.
- 4-4. Job Control List and Narrative - Provide a detail list of the JCL required to execute the program to include a narrative description of program functions performed under control of the JCL.
- 4-5. Maintenance Documentation - Describe in detail any program modifications required after the system is operational. Include any changes to files or records used by the program.

STANDARD DOCUMENTATION FORMAT

SECTION 5

OPERATIONAL SPECIFICATIONS

- *5-1. Data Collection Procedures - Describe the use of any source form to be used for data collection. Include instructions for filling out the source form. Provide sample source forms.
- *5-2. User Procedures
 - 5-2-1. Data Preparation - Describe the procedures for data preparation, e.g.; use of source forms, submission of source forms for data entry, due dates.
 - 5-2-2. Data Audit - Describe any audit/verification that must be accomplished prior to submitting source forms for data entry.
 - 5-2-3. Edit/Error Corrections - Describe edit/error correction procedures that must be accomplished by the user to correct rejected input data from the course forms.
 - 5-2-4. Data Processing Run Request - Describe the use of any local job request form required to request specific reports.
- 5-3. System Operations
 - 5-3-1. Data Entry Instructions - Describe in detail all data entry instructions required to input any source data to the system by Data Entry Clerk.
 - 5-3-2. Program/System Run Instructions - Provide instructions for the Data Entry Clerk to run edit/file maintenance, error correction, update, and report generator programs.
 - 5-3-3. Recovery Instructions - Describe in detail those steps necessary to recover all Master Files, data files, and work files required by the system.

*Denotes user involvement/coordination.

the request is undertaken. If a modification does take place, a documentation specialist updates the appropriate documentation (user's manual, system documentation).

C. Assessment Results

This section will review the current status of Alabama's Phase II SJIS Project efforts.

1. Concerns and Recommendations

The assessment team pinpointed the following concerns and recommendations:

a. Integrated Approach: Concerns were expressed with regard to the approach taken in systems development efforts. Alabama's systems development efforts have been accomplished on a reactive basis. This approach has resulted in the development of several small independent systems (i.e., revenue, expense, budget), which have become interim systems until resources become available to integrate these systems. An example is the General Ledger system that will replace the expense system.

The assessment team recommended that a more integrated approach in systems development efforts be implemented in the future.

b. Civil Appellate Development: Development efforts in the appellate courts had not progressed as anticipated. The assessment team did recognize, however, a mitigating circumstance, such as the need for a detailed caseload reporting system in lieu of a caseload summary reporting system. The SJIS staff will pursue development efforts in the appellate courts by concentrating their efforts on the Civil Appellate Court, which is receptive to developing a case reporting system.

The assessment team agreed with the SJIS staff that development efforts should be conducted at the civil appellate court. At such time as the civil appellate court system is implemented, the criminal appellate court would probably be capable of supporting development efforts.

c. Long Range Plan: Concerns were expressed with regard to the absence of written long-range plans for SJIS after Phase II of the Project.

The assessment team recommended that the AOC should formulate and document their long-range plans for SJIS.

2. Exemplary Findings

The following exemplary findings should be noted:

a. Staff Competence: The SJIS staff has kept pace with the changes that resulted from court unification efforts. Recognizing potential differences that result from short-range planning and ad hoc requests, the SJIS staff has produced products that have satisfied the needs of the courts. The administrative office has hired a professional staff who are knowledgeable in both courts and data processing. This staff competence will be a major factor in the continued successful development of Alabama's SJIS.

b. User Participation: The SJIS staff in their development efforts have done an excellent job of involving systems users. The Ad Hoc Steering Committee and its subcommittee are made up of individuals who are involved in the day-to-day operations of the courts and have played an important role in assisting the SJIS staff in systems development and implementation.

c. Technological Transfer: The Alabama SJIS staff has designed and implemented three systems that are excellent candidates for transfer to other states. These three systems are described in more detail in Section II.B.1.b. The three systems are as follows:

- Personnel Data.
- Personnel Applicant.
- Property Management.

3. Conclusions

Alabama's SJIS Project, in relation to the Phase II grant and good systems development practice and procedures, is in excellent condition. The project has produced quality systems in a timely manner that have satisfied the needs of the courts. The SJIS project staff have actively solicited and involved the users of the systems developed.

The administrative office of the courts has budgeted state funding to replace grant funding of the SJIS staff at the conclusion of Phase II.

The caliber of SJIS staff meet the highest professional standards, and in the assessment team's opinion will continue to develop and implement successful systems in the future.

The assessment team was very impressed with the active interest and participation in SJIS by the Chief Justice of the Supreme Court of Alabama. This interest is reflected in the dedication to duty of the SJIS staff and the AOC staff.

ARKANSAS PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On August 8 and 9, 1978, an assessment was made of the Arkansas State Judicial Information System (SJIS) project. The assessment was conducted by:

The Honorable Everett R. Richardson, of Florida.
Mr. Jan H. Schultz, of Alabama.
Mr. Carter C. Cowles, of the National Center for State Courts.
Mr. Charles E. Ferrell, of the National Center for State Courts.

The purpose of the assessment was to appraise the administrative and technical status of the project relative to the requirements of the Arkansas SJIS grant from the Law Enforcement Assistance Administration (LEAA) and relative to good systems development practices and procedures.

The primary participants from the Arkansas Judicial Department were the Honorable C. R. Huie, Executive Secretary; Mr. Jack Jarrett, Deputy Executive Secretary; and Mr. Jim Henderson, Chief, Analytical Services (and SJIS Project Manager).

The LEAA representative at this assessment was Mr. Al Breuel.

A. Management Summary

The Arkansas SJIS project is currently in Phase I, which began on October 1, 1977, and is scheduled to end on December 31, 1978. The purpose of the project is to develop and implement a judicial information system. Basically, development will be done in Phase I and implementation will be done in Phase II.

The system will accept case-oriented data and will provide management-oriented statistical reports and docket-type information at the supreme, circuit, chancery, and probate court levels. Data entry will be on-line at a central site within the Judicial Department, based on source documents received by mail from the local court jurisdictions. All reports will be printed at the central site and distributed manually.

The project is currently in the detail system design stage and is on schedule. The state has progressed through the initial stages (i.e., planning, requirements analysis, conceptual design, forms design, computer procurement) in generally exemplary fashion. There are, however, potential problems as the project moves into detail system design and programming. Most of these problems result from the failure to adequately staff the project.

In summary, prospects are good for successful development and implementation of the planned system if a full project staff is available.

This report is divided into two major sections. The first provides an overview of the project and the environment in which it is being undertaken. The second provides a more detailed description and evaluation of the project. This includes a description of the project planning and management control methodology, description of the system being developed, and summary of the assessment team's findings.

B. Organizational Structure and Processing

1. Judiciary

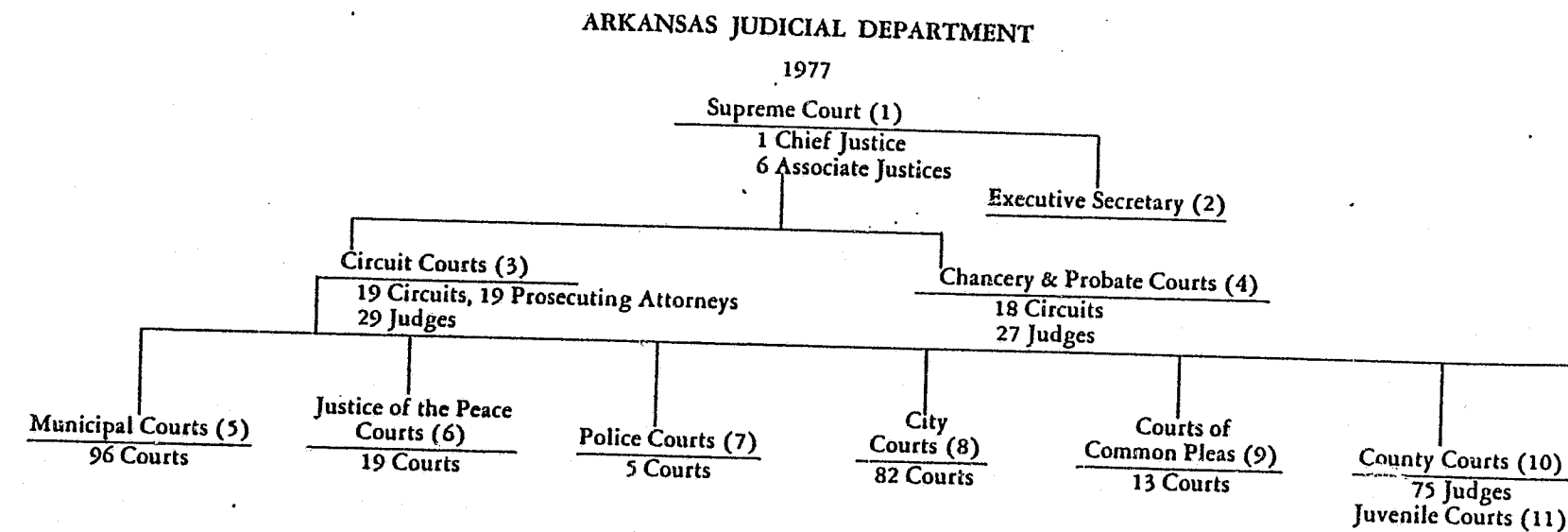
The Arkansas judiciary (see Figure 1) consists of a state supreme court, courts of general jurisdiction, courts of limited jurisdiction, and public defenders. There are separate courts of law and equity. Judges of courts of law are designated circuit judges and those of courts of equity are designated chancellors.

Judges are elected to the bench by the voters of their respective judicial circuits every four years. Chancellors are likewise elected by popular vote in their respective chancery circuits to terms of office of six years. Circuit judges generally preside over civil and criminal cases and hear appeals from courts of limited jurisdiction. Chancellors hear cases in chancery courts involving domestic relations matters, land disputes, reciprocal support actions, and other cases where equitable relief is sought. They also serve as judges in probate courts, hearing cases involving wills, guardianships, adoptions, mental commitments, and other such probate matters.

Appeals from circuit, chancery, and probate courts are taken directly to the Arkansas Supreme Court since there is no intermediate court of appeals in the Arkansas judicial system.

Arkansas also is served by courts of limited jurisdiction. Perhaps the most important of these courts are the municipal courts, which number 96 and are the only courts of limited jurisdiction requiring that the judge be an attorney (some county courts are, however, served by juvenile referees who are attorneys). Jurisdiction of a municipal court is generally countywide and extends to traffic matters, misdemeanor criminal cases, and civil cases when the amount of controversy does not exceed \$300. Appeals from courts of limited jurisdiction are to the circuit court.

Figure 1



8-III

- (1) Decides appeals from all Circuit, Chancery and Probate Courts.
- (2) Administrative duties in connection with all courts.
- (3) Courts of general jurisdiction. Hear civil and criminal cases. Also hear appeals from courts of limited jurisdiction.
- (4) Courts of equity. Hear cases involving land disputes, domestic relations, etc. Also have jurisdiction over probate matters and adoptions.
- (5) Courts of limited jurisdiction with county-wide authority. Hear criminal misdemeanor cases and civil cases when amount involved does not exceed \$300. Judge must be an attorney.
- (6) Courts of limited jurisdiction with township-wide authority. Same limitations as Municipal Courts except no requirement that judge have legal training. Subject jurisdiction same as municipal court.
- (7) Jurisdiction limited to municipality. No requirement of legal training.
- (8) These courts are held by mayors (or their designees) in cities of the second class (500-2,500 population) and incorporated towns (500 or less). Territorial jurisdiction limited to municipality. Subject jurisdiction same as municipal court. No requirement of legal training.
- (9) These courts have been established in various counties by special acts. They are presided over by the County Judge and have limited jurisdiction which varies with the acts creating them. They exist in the following counties: Ashley, Chicot, Crittenden, Cross, Desha, Drew, Garland, Lee, Lonoke, Madison, Mississippi, Nevada, Prairie. No requirement of legal training.
- (10) County-wide jurisdiction limited generally to juvenile and bastardy proceedings. Presided over by County Judge. No requirement of legal training.
- (11) Presided over by County Judge. No requirement of legal training. Many of these courts are, however, conducted by appointed referees who are attorneys.

Source: Judicial Department of Arkansas, 1976 Annual Report.

A partial unification of the court system occurred in 1965 when the General Assembly passed Act 496 in which the chief justice was designated the administrative director of the Judicial Department and administrative head of the entire court system. Act 496 also provided for the appointment of an Executive Secretary, by the chief justice and with the approval of the state judicial council, whose duties consist of assisting the chief justice in carrying out his administrative responsibilities.

One of the chief functions of the Arkansas Judicial Department is the collection, analysis, and publication of judicial statistics. The Judicial Department of Arkansas also conducts continuing judicial education programs for all levels of personnel in the state's court system through assistance from the Law Enforcement Assistance Administration and the Arkansas Public Safety Program.

2. Data Processing, SJIS Project, and Advisory Committee

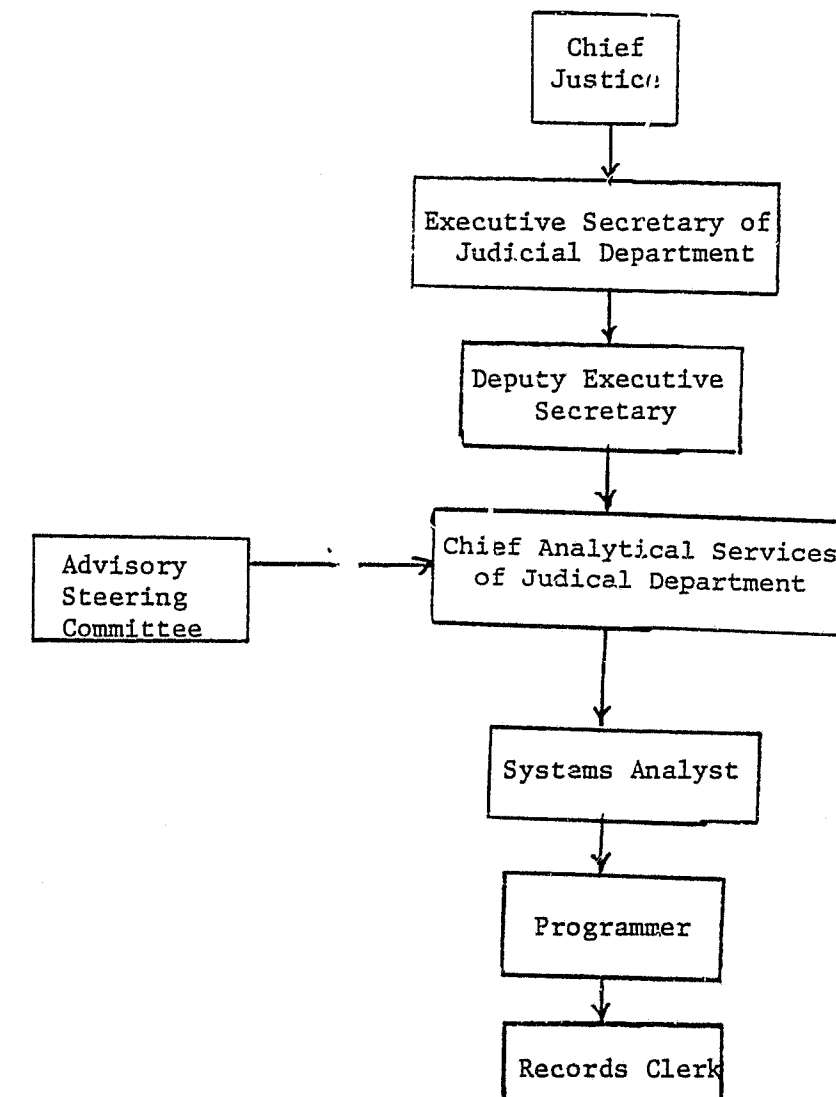
All data processing activities are performed within the SJIS project organizational structure. This includes system development and implementation, as well as computer operations on a dedicated minicomputer.

The SJIS project organization is shown in Figure 2. It is under the direct control of the Executive Secretary and Deputy Executive Secretary. The specific elements of the organization are:

- Chief of Analytical Services: This person, while not funded by the SJIS grant, serves as overall project manager. He is responsible for accomplishing the overall SJIS project goals and monitoring and directing all activities related to the project. The Chief of Analytical Services devotes 100% of his time to the project.
- SJIS Advisory Committee: This committee is composed of judges and clerks from the Arkansas judicial system. The committee's major functions are to review the products and proposals of the project staff, advise the staff, and make recommendations on the feasibility of implementing the various forms and procedures on a statewide basis. The committee also educates the Arkansas judicial system participants, primary judges, clerks, and prosecutors to ensure acceptance of the project statewide.
- Technical Staff: The SJIS staff will develop application software specifications, code and debug computer programs, perform system tests, develop user and operations procedures, and produce required documentation. The staff will also participate in computer hardware and software procurement and perform data collection, preparation, and entry. The current staff consists of a full-time systems analyst and a

Figure 2

PROJECT ORGANIZATION CHART



full-time records clerk. There are plans to hire a full-time programmer and obtain clerical personnel as required from the Judicial Department.

3. Other SJIS-Related Groups

The primary group that affects SJIS activities is the Judicial Planning Commission, which makes recommendations on judicial matters to the State Judicial Council and other organizations (e.g., Municipal Judges Association). The Commission is chaired by an Associate Justice and consists of other circuit and equity court judges. All applications for court-related funding must be approved by the Commission and, if approved, they are submitted to the State Planning Agency.

4. Judicial Workloads

In 1977 the approximate statewide case filings in general jurisdiction courts were:

Judicial circuits - 35,000
(Civil and criminal cases)

Chancery circuits - 29,000
(Chancery cases)

Chancery circuits - 10,000
(Probate cases)

Based on past history, a six percent annual growth rate is projected.

5. Related Systems

There are no current plans for direct interfaces between the Arkansas Judicial Information System (AJIS) and other automated systems. The Judicial Department is, however, investigating a possible interface with a county Prosecutor's Management Information System (PROMIS) since some of AJIS input data may be available through PROMIS, thereby reducing data coding and entry workloads. The AJIS will eventually provide OBTS/CCH data elements on computer-readable medium for input into automated systems outside the Judicial Department.

C. Project Description

1. Background

The Arkansas Judicial Department is charged by statute with administration of the nonjudicial business of the state court system. The office is directed to advise and assist the chief justice of the supreme court in order to better attend to the business of all state courts. Its specific statutory duties are as follows:

- Examine the administrative methods of the courts and make recommendations to the chief justice for their improvement.
- Examine the state of the dockets of the courts; secure information as to their needs for assistance, if any; prepare statistical data and reports of the business of the courts; and advise the chief justice to the end that proper action may be taken.
- Examine the statistical systems of the courts and make recommendations to the chief justice for a uniform system of judicial statistics.
- Examine the estimates of the courts of the state concerning appropriations, and develop recommendations for the chief justice.
- Collect, analyze, and report to the Chief Justice statistical and other data concerning the business of the courts.
- With the approval of the chief justice and at the request of the Judicial Council, the executive secretary acts as secretary of the Judicial Council and performs such duties as may be assigned to him.
- Attend to such other matters as may be assigned by the chief justice.

The executive secretary advises and assists clerks of trial courts in keeping records of their proceedings and makes related reports and recommendations to the supreme court, the trial judges, and the clerks of these courts. The clerks, officers, and employees of the courts must comply with all requests of the executive secretary for information and statistical data relating to the business of the courts and the expenditure of public funds for their maintenance and operation.

As the workload has increased over the years, it has become necessary to automate some of the recordkeeping and reporting functions. An automated system of limited capabilities is currently implemented, and the Arkansas SJIS will provide a significant expansion of these capabilities.

Inputs to the current system consist of aggregate summaries of the main case types processed in general jurisdiction courts around the state. These summary forms are completed by the local clerks and mailed to the Judicial Department on a quarterly basis. These quarterly reports are checked by staff members for possible errors by comparison with previous reports. The reports are then entered onto cards using the Arkansas Criminal Justice Information System (ACJIS) keypunch. After verification the cards are processed through the ACJIS remote terminal.

using three simple programs. These programs generate the statewide quarterly reports for circuit, chancery, and probate courts.

These reports produce only caseload totals and provide no information on individual case types. The quarterly reports are manually summed line-by-line to give the statistical information used in the Annual Report.

2. Functional

The AJIS will primarily involve the Supreme Court and courts of general jurisdiction, which include circuit (i.e., criminal, civil), chancery, and probate courts. Using monthly (or more frequent) mail submissions of data entered by local clerks on standardized forms, the new system will provide more extensive statistics and docket book data for use at the state and local levels. It will be operated on a dedicated minicomputer, and this will eliminate the need for processing through the Arkansas CJIS facility.

3. Goals and Objectives

The overall objective of the Arkansas SJIS project is to develop and implement an automated system that will provide statistics and docket book information to state and local elements of the Arkansas judiciary. During Phase I, this system is scheduled to be developed and tested, and the necessary computer hardware/software will be procured. During Phase II, the system is scheduled to be implemented in a model local jurisdiction. Implementation will then be expanded on a county-by-county basis.

The following list defines the specific objectives of the Arkansas SJIS project.

- To alleviate the problems associated with the inflow of data to the State Judicial Department. This task involves creating standardized court-related forms and records that will minimize clerical effort on the local court level.
- To provide management-oriented statistical reports.
- To provide data on criminal, civil, chancery, and probate cases.
- To provide both the amount and the quality of judicial information available to the Chief Justice and the Executive Secretary of the Judicial Department.
- To develop the most feasible methods of supplying management-oriented statistical reports to rural, non-automated circuits, chancery, and probate courts.

4. Expected Impact

The method of input of information to the Judicial Department will be greatly changed. Instead of sending only quarterly aggregate reports, the local court clerks will report, at given intervals, all cases filed since the last reporting period. They will also report all case dispositions occurring during the reporting period. These reports will be entered into the automated system database.

The judge may subsequently request by phone or letter a listing of those cases pending for a given county in his circuit prior to a term of court. Or he may request a list of only those cases that display certain characteristics, such as those over two years of age or those in which there has been no action for a certain period of time.

Implementation of the system will have the initial impact of upgrading the quality and timeliness of detailed caseload statistics. This information will allow for more efficient methods of managing the increasing volume of cases at the trial court level and will provide necessary data for planning and development of the entire court system at the state level.

This system will also have the capability of providing information on filings and dispositions to the Arkansas Criminal Justice Information Center, upon request, in order that they may complete their OBTS/CCH program.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Phase I of the Arkansas SJIS grant began on October 1, 1977, and was scheduled to end on September 30, 1978. The state received a no-cost grant extension to December 31, 1978. They hope to proceed into Phase II in January 1979.

Basically, Phase I called for development of the AJIS and for procurement of a dedicated minicomputer on which the system would be run. Implementation in a model circuit and then incrementally in the other circuits is planned for Phase II.

The grant specified the following Phase I activities: appoint Advisory Committee, develop detailed workplan, document current data collection system, determine user information requirements, analyze data input form requirements, recruit personnel, develop conceptual systems design, purchase or lease computer, develop AJIS software, test software, evaluate system, and evaluate project.

2. Plans

There is a detailed workplan that covers the following tasks:

- Requirements Analysis (Phase I)
 - Perform SJIS survey
 - Develop functional requirements
 - Analyze data requirements
- Computer Procurement (Phase I)
- Standardization of Forms (Phases I and II)
 - Design forms
 - Model/modify forms
 - Print and distribute forms

- System Development (Phase I)
 - Develop general system description
 - Develop detail system design
 - Develop and test computer programs
 - Test system
- System Implementation (Phase II)
 - Develop maintenance, user, and operations documentation
 - Perform training
 - Perform old-to-new-system changeover
 - Evaluate system
- Cost Analysis/Feasibility (Phase I)
 - Conduct preliminary feasibility study
 - Plan Phase II

The workplan is well defined and contains realistic schedules, assuming the project is fully staffed.

3. Current Status

Relative to the workplan, the project has progressed through the requirements analysis and computer procurement tasks, through the forms design in the standardization of forms tasks, and through the general system description in the system development task. This means that the project is currently in the detail system design part of system development, and this is consistent with the schedule set forth in the workplan.

In terms of the grant, all tasks through development of conceptual systems design have been completed with one notable exception--recruiting of personnel. The professional staff currently consists of the project manager and a systems analyst, and schedule slippage can be expected in the detail system design and programming activities if the two additional professional staff members (i.e., programmer and consultant) are not soon hired.

4. Control Methods

Other than the detailed workplan, no formal project control methods have been developed to ensure that the project is within schedule and technical constraints. Because of the size of the staff and the nature of the tasks, such controls have been unnecessary thus far in the project.

More precise control methodology is usually required during detail system design, programming, system testing, and implementation. Given the anticipated simplicity of AJIS and brevity of its computer programs, relatively unsophisticated control methodology (e.g., module design schedules, individual program completion schedules, system test plan) will probably suffice.

5. User Participation

Since the AJIS will produce quarterly and annual statistical reports like the current system and docket book data at the case level, there are two groups of system users. The first group consists of users of the current system, and they will continue to receive the statistical reports. The second group consists of those who will be direct recipients of docket book information. This group consists of the Chief Justice's staff. (Members of the Chief Justice's staff are, incidentally, also users of the statistical reports.)

Since the first group will continue to receive the same reports, it has been unnecessary to involve them extensively in system development and definition of information requirements. The second group, however, has been extensively involved in these activities.

The Advisory Committee consists of representatives of groups (i.e., circuit and chancery court judges and clerks) who are prospective users of docket book data, but the Committee and other prospective users have not been consulted extensively on output report content and formats. This should be rectified.

Another aspect of system usage is system input, and the court clerks will normally perform this function. While the input forms have been discussed with certain clerks, they have not had an opportunity to code data onto the forms on a "dry run" basis. This should be done.

In summary, the project staff has a good working relationship with most judges and clerks in the circuit and chancery district courts. All that must be done is to involve them in some of the system details as noted above.

B. System Description

1. Processing Approach

The AJIS will be processed on a centrally located Harris 1660 minicomputer with CRT terminals at various locations in the Judicial Department. Initially there will be at most three CRT terminals, and they will all be used for data entry. The Harris 1660 can accommodate any additional terminals that would be needed for more data entry stations and/or expansion of AJIS capabilities to include on-line query/response.

Input data will be keyed on-line to disk storage, and these data will be used to update the master files. The system will produce hard copy quarterly and annual statistical reports and on-demand docket information showing various user-specified groupings of case activity.

2. Data Collection, Preparation, and Verification

All data collection will be through two-part forms received from the local clerks. Each two-part form will contain the full data record for one court case. Each type of case will have its own form (civil, criminal, chancery, and probate). Each case type form will have two sections. One section will be completed when the case is filed. This section will then be torn off and mailed weekly (or bi-weekly, depending on local volume) to the Judicial Department. The other section will be completed when the case is terminated. It will then be transmitted by mail at regular intervals.

Since data entry will be done directly from these forms, no data preparation will be necessary. The records clerks will scan each form and manually correct any errors that they detect. In order to correct some errors, it may be necessary to contact the local clerk who submitted the form.

3. Data Entry

When a packet of these forms is received by the Judicial Department, the information will be input by a records clerk through CRT terminals. All data entry will be of an inquiry-response nature. Checks will be made as the data are entered for proper format and illegal data values. Also, a check will be made for duplicate or missing docket numbers as the data are entered. Any detected data errors will be rejected, and an error message will be displayed to indicate the nature of the error.

4. Application Software

a. Processing Modules. The function of AJIS will be to allow individual case information to be stored and retrieved in an automated manner. Edit checks will be performed on most of the data to ensure accuracy. These functions will be accomplished using three primary modules: Input/Update, Retrieval, and Active-to-Inactive Purge.

Input/Update will be the module that allows form entry using a CRT terminal screen that is formatted in the same manner as the input form. Input/Update will perform edit checks and allow for correction of previously entered cases. Data entry will occur in two parts: first, filing information; and second, termination data.

Retrieval will allow for retrieval and output (in hard copy) of user-specified data in a certain court case or in a group of similar cases. It will also provide the capability to generate summary statistical reports.

Active-to-Inactive Purge will search the files for cases terminated more than a certain length of time, remove those found from the active file, and place them in the historical file.

b. Inputs - Outputs. All input formats will be such that data entry is as straightforward as possible. The CRT screen formats will be made to appear as much like the forms as possible. Data entry will follow the same sequence as the physical sequence of data on the forms.

Case reporting will involve different output formats and data groupings from which the user can select those that correspond to his needs. Varied formats are necessary because not all information contained in each case is desired for printing the various types of listings. The main case listing types are:

- Listing by case type,
- Listing by docket number,
- Listing by defendant's name (criminal case only),
- Listing by age of case,
- Listing by circuit,
- Listing by county,
- Listing by judge.

Many of the above will require several formats. When listing by docket number, for example, full format display might be desired, or only the docket number and the data filed might be required.

The primary users of these case-orientated listings will be the staff of the Chief Justice, but there are others who will probably use this information (e.g., circuit and chancery court judges).

The summary types of statistical reports will be derived from the case input data by forming the appropriate data groupings and associated totals and subtotals. The reports will be generated with formats similar to the present quarterly and annual reports.

The quarterly statistical reports are distributed to all trial court jurisdictions and to the Supreme Court. The annual report goes to all courts, to the state legislature, to the University of Arkansas, and to various organizations outside the state (e.g., LEAA, the National Center for State Courts).

5. OBTS/CCH

OBTS and CCH requirements were considered in establishing the overall information requirements. There are not plans to produce OBTS/CCH output in Phase I, but it is possible that a limited capability may be implemented by the end of Phase II. There will eventually be a full OBTS/CCH capability.

The Judicial Department will not use OBTS/CCH data, but it will provide these data on a computer-readable medium for the Arkansas Criminal Justice/Highway Safety Information Center.

6. Security and Privacy

Because the AJIS will be run on a self-contained, dedicated system that will reside in a secure area, there should be a high level of security and privacy. Only systems people will have access to the computer area. A lock will be maintained on the door and all backup files will be kept in the Supreme Court of Arkansas' vault. All programs and data files will have built-in passwords and authorization codes.

All system software and data files will be backed up on magnetic tape. These tapes will then be stored in the Supreme Court of Arkansas' vault. When new data are entered into the files or files are updated, a backup file will be made at the end of the day. Backup disks or tapes kept in the SJIS project offices will be placed under lock when not specifically being used by a member of the SJIS staff. Once a week, another backup of data files will be made to replace the one contained in the Supreme Court vault. The old backup will then be recycled.

Both the Arkansas Department of Computer Services and the Arkansas State Police computer system can read any of the SJIS tape files in case of system failure. The Arkansas State Police has a near identical Harris system that gives additional backup capabilities in case of system failure or damage.

There are, however, two situations that could cause problems. First, adequate storage of source documents on criminal cases must be provided because these documents contain the defendant's name. This is a problem only if the documents are stored outside the secure computer area.

The second possible problem relates to the above discussion of OBTS/CCH. If these data are provided to agencies outside the Judicial Department, their planned usage should be clearly stated and acceptable to the Judicial Department. This will apparently be covered by legislation, but any additional safeguards that are appropriate should be implemented.

7. Computer and Communications Configurations

The AJIS will be run on a dedicated Harris 1660 minicomputer that is controlled by the Judicial Department. This computer has been purchased with SJIS funds, and it is configured as follows:

CONTINUED

1 OF 5

- 1 Model 1660 central processing unit (cpu) with 96,000 bytes of main memory.
- 2 Model 1675 key entry CRT terminal.
- 2 Model 1665 disk units with 12,000,000 bytes storage capacity per disk.
- 1 Model 1682 tape unit, 1,600 bits per inch.
- 1 Model 1652 chain printer, 300 lines per minute.
- REGAL data entry language processor.
- COBOL compiler.
- Extended Communications Operating System (ECOS).
- Key Entry Processing System (KEP).

This computer configuration is expandable to accommodate more peripheral devices. Any expansion would probably involve additional CRT terminals and/or more disk capacity. The Harris 1660 cpu can also be upgraded to provide more overall processing power if the need arises.

8. Documentation

In addition to the detailed workplan, the following documents have been produced:

Functional Requirements: This document contains background information on the Arkansas Judicial System and a section that describes existing methods and procedures. Other sections cover the new system, including proposed methods and procedures; summaries of improvements and impacts; functional performance and input/output requirements; file types and sizes; failure contingencies; operating environment requirements (including hardware/software and interfaces); and development plans.

Data Requirements: This documents the analysis of what data are necessary to satisfy the requirements of the judiciary. It includes data elements necessary for the generation of statistics used to help in management decisions. Each data element is documented according to the availability, ease of collection, and cost of collection.

General System Description: This document describes the data-base, general functions to be performed, input and output formats, data entry procedures, system recovery techniques, and implementation procedures.

This documentation generally conforms to FIPS PUB 38 and effectively describes the AJIS at a conceptual level.

The other document to be produced during Phase I is the Detail System Design, which covers system, database, and program design. It describes system and program functional and performance requirements, operating environment, and processing logic; program inputs and outputs; and database specifications. This document will also be based on FIPS PUB 38, and it is currently the primary SJIS project staff activity.

During Phase II, the following documents will be produced:

System Maintenance Manual: This is the Detail System Design updated to reflect any changes or improvements made to the system.

User Manual: The primary purpose of this manual will be to instruct the clerks on system operation and their role in it. Examples will be included on how to fill out and process all forms.

Operations Manual: This manual will provide computer operations personnel with a description of all the software and system operation procedures necessary to run and maintain the system.

9. Implementation

All implementation will be done in Phase II, and the general approach is to implement AJIS in a single county initially. The system will then be implemented on a county-by-county basis until the entire state is covered. This is a reasonable approach considering the varying levels of cooperation and acceptance that are inherently present in the local circuit and chancery courts.

10. Maintenance

Since maintenance requirements will arise in Phase II after system implementation, no maintenance activities have yet transpired.

C. Assessment Results

This section describes the reactions of the assessment committee to the Phase I Arkansas SJIS project and the prospects for ultimate satisfaction of the project goals and objectives.

1. Recommendations

a. Advisory Committee Meetings. This Committee has met only once thus far, and it is recommended that more frequent meetings be held to review appropriate design items (e.g., input and output formats) and the plans and status of programming, system test, and implementation activities.

b. Input Design Participation. It is recommended that judges and clerks in the local circuit and chancery courts be involved more heavily in the input design process (particularly forms design). They should be given an opportunity to work with the forms on a "dry run" basis to ensure maximum ease of use consistent with the needs of other system users (e.g., data entry personnel).

c. Report Format Reviews. In addition to the Advisory Committee review, all output report contents and formats should be reviewed with other prospective system users before detail system design is finalized.

d. Staff Additions. It is recommended that, at least, a programmer and, ideally, a consultant (i.e., programmer/analyst) be added to the project staff as soon as possible. The programmer would be a full-time employee; the consultant would be contracted for at most 120 mandays.

These personnel should be familiar with design and programming of on-line data entry, edit, and report generation programs; with system implementation; and with user, operator, and maintenance documentation. The assessment committee feels that these additions are essential in order for the project to remain on schedule.

e. System Design/Programming Progress. It is recommended that the detail system design be completed as soon as possible. If it is completed in early September 1978 as specified in the workplan, three months will remain for programming with almost one additional month for system testing and Phase II planning. While this is an extremely tight schedule, it can be accomplished if there is no slippage in completion of system design.

In such situations, there is a tendency to undertake system design and programming simultaneously. This should be done only with extreme caution, and it should involve only programs for which the design has been completed and which will be unaffected by parts of the system that are not yet designed.

f. Technical Report No. 17 Utilization. The project staff should consult Technical Report No. 17 (SJIS Phase II Final Report) from SEARCH Group, Inc. as a source for guidance in system development, implementation, and evaluation.

g. Project Controls. Project control methodology should be developed and utilized. This could include such tools as module design schedules, individual program completion schedules, and system test plans.

h. Implementation Priorities. It is recommended that the highest priorities for AJIS implementation be given to those local circuits with the most cooperative judges and clerks. The system is more likely to be successful in these circuits, and this can provide visible evidence of the system's usefulness to the circuits with less enthusiastic personnel.

i. Backup and Recovery Procedures. It is recommended that procedures be adopted to provide backup files, and recovery in the event of system failure, for all programs and data used during programming and system testing.

j. Data Security. Procedures should be developed to ensure against misuse of AJIS data (e.g., OBTS/CCH data) that is provided by the Judicial Department to other departments and to ensure adequate security for source input documents that contain a criminal defendant's name.

2. Exemplary Findings

a. Phase I Workplan. The workplan for the Phase I SJIS project is well developed, and the schedule is realistic if the additional staff members can be hired in the immediate future. Moreover, tentative Phase II plans are well conceived and should achieve the ultimate goal of statewide AJIS implementation.

b. Adherence to Schedule. The project is currently proceeding in accordance with the schedule shown in the Phase I workplan.

c. Legal Authority. The Chief Justice and Executive Secretary have the necessary legal authority to collect data from all courts of the state.

d. User Involvement. The direct users of docket-type data (i.e., members of the Chief Justice's staff) are involved in the system development process. Users of statistical reports are involved because they are receiving these same reports from the current system.

e. Computer Procurement. The computer hardware and software for AJIS development and implementation have been obtained, are suitable for the current workload, and are expandable to cover any anticipated increases in the workload.

f. Local Contacts. The SJIS project staff has an ongoing working relationship with all local judges, clerks, and other personnel who will be prospective users of the system.

g. Conceptual Documentation. All conceptual-level documentation (i.e., General System Description, Functional Requirements, Data Requirements) has been completed and is serving its intended purpose.

h. OBTS/CCH Support. OBTS/CCH data requirements are being considered as the AJIS is developed, and the AJIS will eventually support these requirements.

i. Advisory Committee. The Advisory Committee exists, is functioning, and consists of local judges and clerks who will be among the primary beneficiaries of the system. Since the other primary beneficiaries -- the Chief Justice's staff -- either work directly on the SJIS project or interface daily with the project staff, all prospective system users are involved in development and implementation of AJIS.

3. Conclusions

The AJIS is being designed explicitly to achieve the goals and objectives stated earlier in this report. It follows that, if the system becomes operational, these goals and objectives will, by definition, be satisfied.

This leads to the following question: Will the system become fully operational?

The answer evolves from the following basic considerations:

- The project is off to a good start in that there is an Advisory Committee, a working relationship with all prospective system users, a good conceptual foundation for the system, a dedicated computer that can handle the workload, and legal authority to achieve the project goals and objectives.
- The project urgently needs, at least, an additional programmer and, ideally, a consultant (i.e., programmer/analyst) with the relevant work experience.
- The project is entering the crucial detail system design and programming stages, and staff performance during the next four months will probably determine the timeliness with which the project can be completed and the quality of the resultant system.
- The net implication of these considerations is, therefore, that the project can be successfully completed if two well-qualified staff members are added in the immediate future.

DELAWARE PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On February 6 and 7, 1979, an assessment was made of the Delaware State Judicial Information System (SJIS) project. The assessment was conducted by:

Mr. Walter J. Kane, Court Administrator, Supreme Court of Rhode Island.
Mr. Edward R. Miller, Director of Data Processing, Connecticut.
Mr. Charles Ferrell, National Center for State Courts.
Mr. Greg Janowski, National Center for State Courts.

The purpose of this assessment was to appraise the administrative and technical status of the SJIS project relative to the requirements of the Delaware SJIS grant from the Law Enforcement Assistance Administration (LEAA) and relative to good systems development practices and procedures.

The primary participants from Delaware who were interviewed during the assessment were as follows:

Mr. John Fisher, Director, Administrative Office of the Courts (AOC).
Mr. Lowell Groundland, Assistant to the Director, AOC.
Mr. Don Roderick, Director, Statistical Analysis Center (SAC).
Mr. Larry Clark, SAC Systems Analyst.
Mr. Bob Slattery, SAC Systems Analyst.

The LEAA representative at this assessment was Mr. Al Breuel.

A. Management Summary

The Delaware SJIS project is currently in Phase I, which began May 9, 1978, and was scheduled to continue for 12 months, i.e., through May 8, 1979. A three month, no-cost extension has been requested to extend the grant through August 8, 1979.

The Delaware SJIS effort is unique and requires a full understanding of the inter-relationship between the systems development efforts of both the judiciary and the entire criminal justice community. In Delaware, there is a state-wide, multi-agency effort called the Delaware Justice Information System (DELJIS) to extend the capability of automated data processing to all criminal justice agencies. The bulk of DELJIS funding comes from the LEAA Comprehensive Data System (CDS) program. DELJIS will establish an automated interface among the state, metropolitan and local police departments, the attorney general's office, adult courts¹, family court, and both adult and juvenile correctional facilities. Hence, the SJIS project is a subset of the larger DELJIS effort. Both before and during the SJIS--Phase I efforts, two SAC systems analysts, funded through CDS, have been developing state-wide criminal applications for the family and adult courts. As a natural by-product of their analysis, the CDS analysts are also gathering information on the civil applications in both the family and adult courts.

The SJIS Project--Phase I has two major objectives. The first objective is to complete a requirements analysis, a conceptual design, and a detail systems design for the civil components of the state adult courts and the family court. This objective has been simplified by the simultaneous data gathering efforts of the SAC analysts. The second objective is to procure and install a minicomputer capable of supporting all the courts in both criminal and civil matters. The system will accept case-oriented data and will provide day-to-day operational support to the courts and management-oriented statistical information to the AOC. Data entry will be from remote on-line terminals and processing will be accomplished on the courts' minicomputer.

¹In Delaware the term adult courts is used to refer to the statewide network of the superior court, court of chancery, court of common pleas, municipal court and justice of the peace courts.

The clerks and court administrators will be able to access the data contained in the system via on-line inquiry and batch reports.

The DELJIS project is currently in the initial design stages. The DELJIS staff have successfully completed the requirements analysis and the conceptual design for the overall system and are currently finalizing the system's detail design specifications for criminal and civil matters in the adult and family courts.

The SJIS portion of the DELJIS project appears to be on-schedule. The development of the statewide civil system for the adult and family courts is in the detail design stage, and a Burroughs 1855 minicomputer is scheduled for delivery on or before June 30, 1979.

A potential problem exists that could have an impact upon the development of the SJIS component of the DELJIS project and its future operation. The data processing staff, i.e., two systems analysts, are not judicial employees but are under the direct authority of the director of the Statistical Analysis Center (SAC). A serious concern was expressed by the assessment team that if these two analysts were diverted or reassigned to a project other than SJIS, the development and future operation of the SJIS project would be severely affected.

In summary, the prospects appear good for the continued development and future implementation of the planned state court information system.

B. Organizational Structure and Processing

1. Judiciary

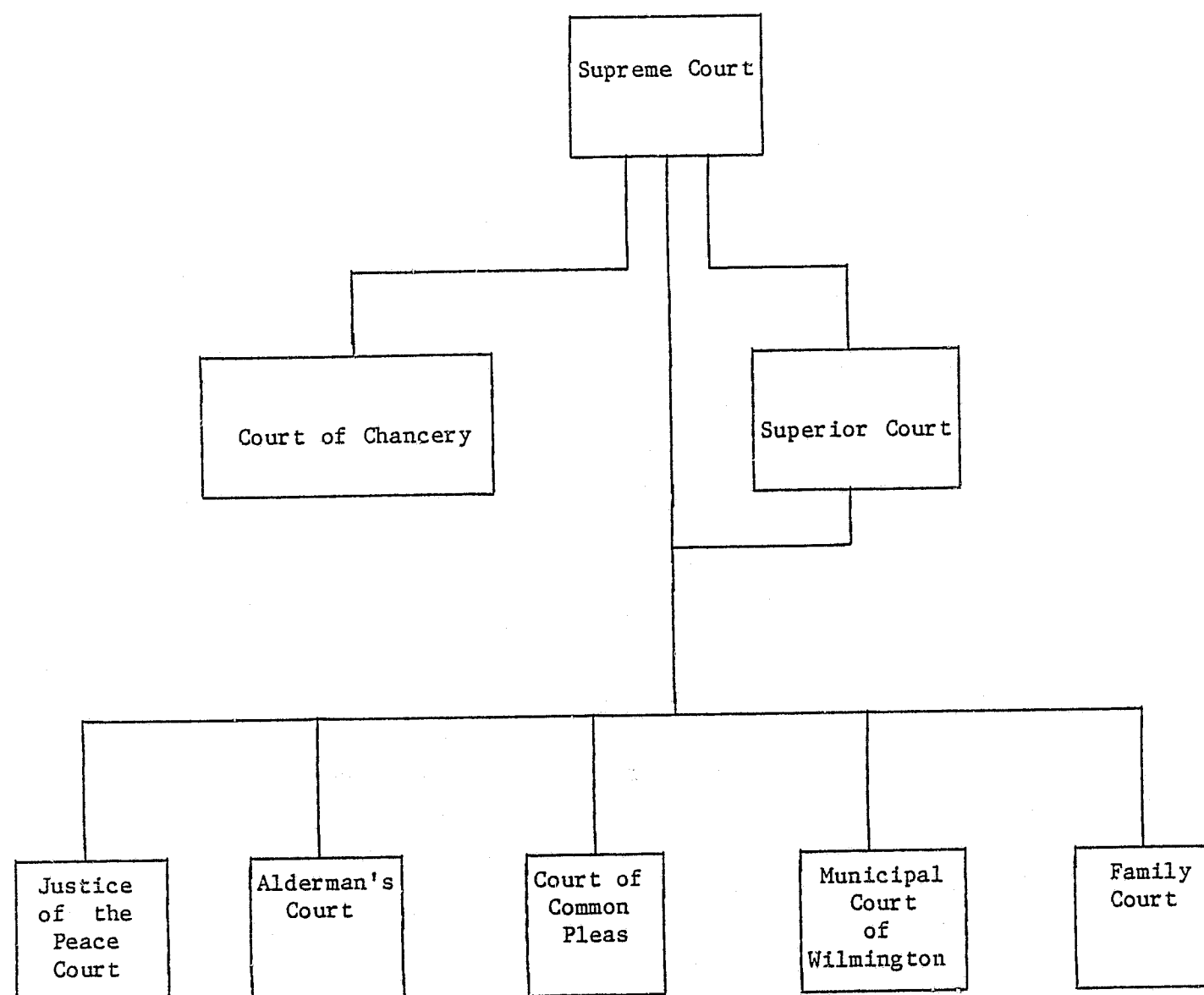
The Delaware constitution vests judicial power in a supreme court, a superior court, a court of chancery, justice of the peace courts, and other courts established by constitution. The family court, court of common pleas, and the Municipal Court of Wilmington are created by statute. The alderman's courts are established by the town charters of their respective towns. The routes of appeal for these courts are shown in Figure 1.

The Supreme Court of Delaware is the court of last resort and has original jurisdiction in extraordinary writs and appellate jurisdiction

Figure 1

DELAWARE COURT ORGANIZATION

Routes of Appeal



in criminal matters as specified by law as well as in all matters from the superior court and court of chancery. There is no intermediate appellate court in Delaware.

The superior court and the court of chancery are the courts of general jurisdiction. The superior court has original jurisdiction in civil cases at common law, all adult felonies, adoptions, and cases regarding termination of parental rights. The superior court has appellate jurisdiction in law cases appealed from the court of common pleas, and hears cases de novo from the alderman's courts, justice of the peace courts, municipal court, and the family court. The court of chancery has jurisdiction in all actions in equity; most litigation in the court consists of corporate matters and contractual disputes. Both the superior court and the court of chancery sit in all three counties of the state.

Delaware has five courts of limited or special jurisdiction. The family court has statewide jurisdiction in general juvenile matters, family disputes, and petitions for divorce and annulment. The court sits in all three Delaware counties. The court of common pleas has statewide jurisdiction in civil disputes involving less than \$5,000 and misdemeanors that do not involve drugs. The court sits in all three Delaware counties. Within the city of Wilmington, the court has civil jurisdiction only. The court of common pleas conducts preliminary hearings in felony cases outside Wilmington. The Municipal Court of Wilmington has jurisdiction within the city in traffic and municipal ordinance violations as well as misdemeanors and conducts preliminary hearings in felony cases. A violations division processes moving and parking violation citations. The justice of the peace courts have civil jurisdiction in cases involving less than \$1,500 and criminal jurisdiction over minor misdemeanors and nonfelonious motor vehicle cases. In New Castle County, some justice of the peace courts are limited by administrative decision to criminal and some to civil matters. The alderman's courts or mayor's courts have jurisdiction in minor misdemeanors and traffic violations as provided in local ordinances. Jurisdictions vary according to town charters, which must be approved by the state legislature.

The chief justice of the supreme court is the administrative head of all courts in the state and has general administrative and supervisory powers over all courts, as provided by the state constitution.

By law, the director of the administrative office of the courts (AOC) is appointed by and serves at the pleasure of the chief justice. Responsibilities assigned to the director include appointment of AOC personnel, assistance to the chief justice, supervision of administrative personnel in the courts, some budget preparation, collection of court statistical data, and preparation of the annual report. Data collection efforts are continually being updated under the direction of the AOC.

The state provides all funding for the supreme court, family court, court of common pleas, justice of the peace courts, and funds all expenses of the administrative office of the courts.

Expenses of the clerks' offices of the court of chancery and the superior court are paid by the county governments. All other expenses of the court of chancery and the superior court are funded by the state. The funding for the Municipal Court of Wilmington is provided by the city of Wilmington. Municipal governments fund all expenses of the alderman's courts.

The AOC prepares the budgets for the supreme court and the court of chancery. All other courts prepare their own budgets, which are submitted to the governor and to the legislature.

2. Data Processing

The AOC is responsible for research, evaluation, and the generation of management information reports, including the Annual Report of the Delaware Judiciary.

One of the objectives of the SJIS project is to establish an automated judicial data processing facility in Wilmington. Previously, data were recorded and compiled manually by the local clerks and in summary fashion by the staff of the AOC.

In Delaware, only the police, through the Criminal Law Uniform Enforcement System (CLUES), established in 1972, have received substantial benefits from automated data processing. Eight court sites have recently installed terminals for accessing CLUES and are just beginning to make use of the information stored in the existing criminal history and motor vehicles files.

The courts' computer system will interface with the State Division of Central Data Processing (CDP), which operates CLUES, and the State Bureau of Identification, which controls the state's criminal justice data communications network, to form a mutually cooperative criminal justice information system. Each of these three systems is expected to support the others and, in turn, be assisted by them in both developmental and operational needs.

The proposed judicial budget for 1980 requests additional funding for six data processing positions: two systems analysts, two computer operators, and two computer programmers.

3. SJIS Project

Figure 2 shows the organizational structure of the SJIS project. Mr. Lowell Groundland, the assistant to the director of the AOC, is also the SJIS project director. Mr. Groundland's responsibilities are divided; approximately one-half of his time is dedicated to the SJIS project, the remainder to assisting the director of the AOC. There are no other judicial staff assigned to the SJIS project. A statewide judicial information system will have difficulty succeeding without additional judicial staffing. If the judicial budget proposed for fiscal year 1980 is approved, six additional SJIS project staff will be assigned to the AOC as of July 1, 1979.

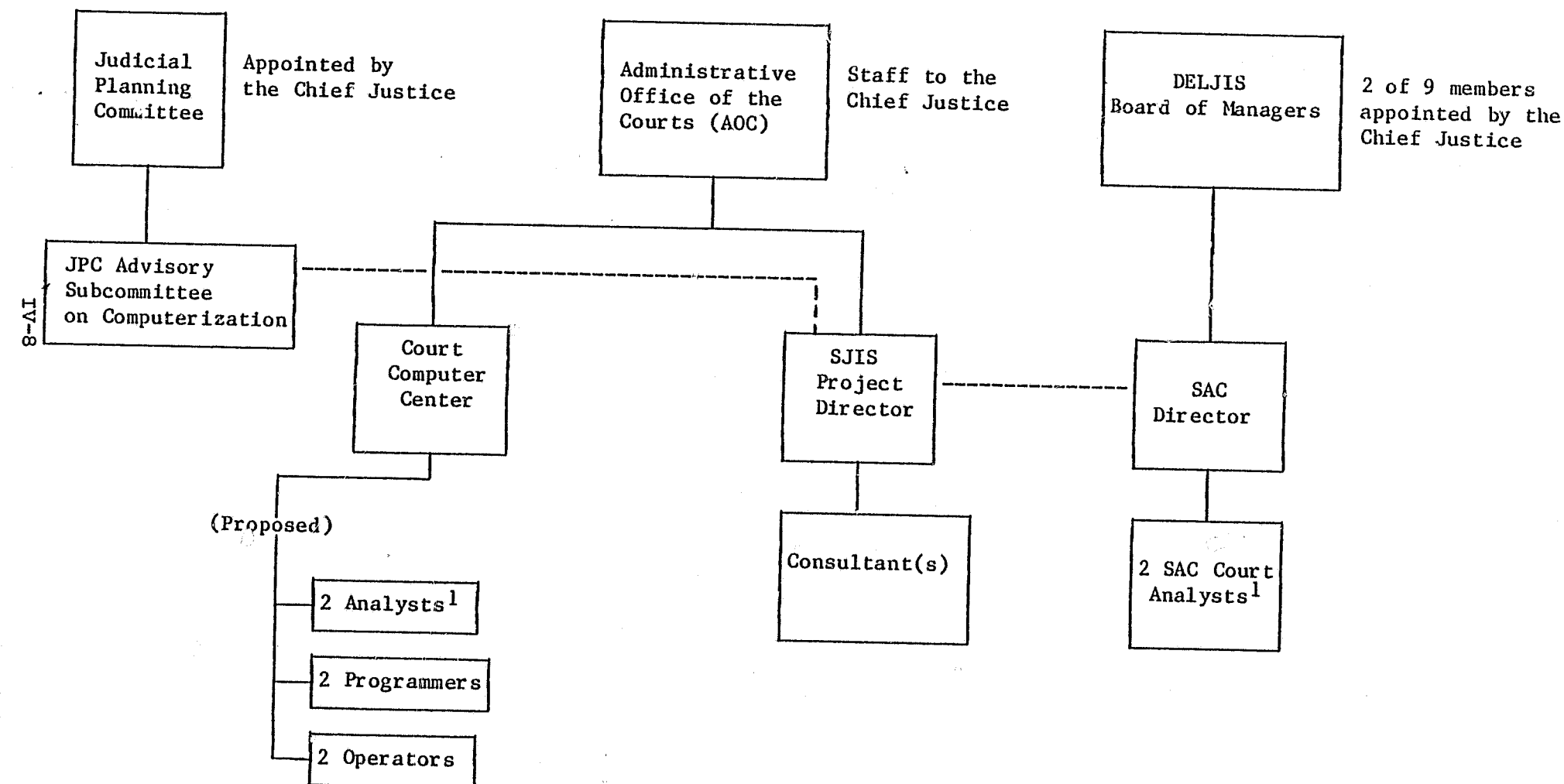
In Delaware, input to the SJIS project is not limited to the judiciary. Possibly because of Delaware's small size and a unique spirit of interagency cooperation, the Delaware SJIS project receives extensive developmental support from both the director and the staff of SAC who are also responsible for developing Delaware's CDS. The state prosecutor's office within the Department of Justice is an equal partner with the judiciary in the eventual benefits of SJIS. The prosecutors will be logical recipients of some of the data processed in the SJIS subsystems. In fact, the DELJIS project specifies an anticipated inter-agency exchange of data between all these criminal justice agencies.

4. SJIS Advisory Committee

The Judicial Planning Committee (JPC) oversees the overall development of Delaware's judicial growth. A subcommittee was formed to

Figure 2

DELAWARE SJIS PROJECT HIERARCHY



¹Two federally funded CDS analysts, who report to the SAC director, have been extensively involved in analyzing and specifying the family and adult court information requirements. Upon approval of the proposed increase in judicial funding by the legislature, the two SAC analysts will be funded by, and report to the AOC.

deal with issues involving judicial computerization, and serves as the advisory committee to the SJIS project. This JPC Advisory Subcommittee on Computerization provides a variety of valuable management input for the SJIS developmental efforts by having among its members the following:

- Associate judge, superior court.
- Chief judge, family court.
- Court administrator, court of common pleas.
- Attorney General.
- Court administrator, superior court.
- Director of operations, family court.
- Director, SAC.
- SAC Systems analyst, for family court.
- SAC Systems analyst, for adult court.
- Chief clerk, municipal court.
- Director of planning, JPC.
- Director, AOC.
- Director, SJIS project.

5. Other SJIS-Related Group

DELJIS is a comprehensive information system designed to complement the CLUES system being used by Delaware's law enforcement community. DELJIS will extend the capability of automated data processing to all of Delaware's criminal justice agencies.

The DELJIS advisory committee is responsible for setting the project's overall policy. This advisory committee, the DELJIS Board of Managers, consists of nine voting members and four nonvoting members. Two of the nine voting members are chosen by the chief justice, one to represent adult courts and one to represent juvenile courts. The courts are thereby guaranteed some input to the overall policy decisions of the DELJIS Board of Managers.

6. Judicial Workloads

Figure 3 was extracted from the 1977 Annual Report of the Delaware Judiciary. It represents the volume of annual caseload filings and shows an annual percent increase (or decrease) in filings for recent years.

7. Related Systems

Delaware's state judicial information system will be an integral part of a larger Delaware justice information system (DELJIS). SJIS will continually interface with other DELJIS components. Communication lines and planned exchanges of data are part of the overall SJIS/DELJIS scheme.

SJIS will access CLUES and CDS for available data.

Figure 3
JUDICIAL CASELOAD FILINGS

	<u>1972</u>	<u>1977</u>	<u>Annual Percent Change¹</u>
<u>Supreme Court</u>			
Criminal	79	111	5.7
Civil	139	251	8.9
<u>Court of Chancery</u>			
Civil	3762	368	(.4)
Miscellaneous	4652	292	(29.6)
Estates	3,147	2,752	(7.1)
<u>Superior Court</u>			
Criminal	3,275	4,097	4.0
Civil	5,128	3,824	(6.8)
<u>Family Court</u>			
Petitions	13,882	24,513	8.7
<u>Court of Common Pleas</u>			
Criminal	4,305	6,325	6.4
Civil	1,484	3,412	11.3
<u>Municipal Court</u>			
Criminal	6,984	9,540	5.4
Traffic	12,967	11,055	(3.5)
<u>Justice of the Peace Courts</u>			
Criminal	73,611	95,945	4.6
Civil	7,340	14,636	9.9
<u>Alderman's Courts</u>			
Cases	8,024	14,525	8.6

¹Parenthesis denotes negative.

²Represents 1975 data.

C. Project Description

1. Background

Over the past several years, Delaware's law enforcement agencies have made substantial progress in improving the handling and exchange of information concerning crime and criminals through the application of computer technology. This progress has resulted from the establishment of CLUES, which has proven very effective in providing certain operational and management data to police agencies statewide. The system, however, is limited in scope. It does not effectively serve other segments of the criminal justice community, i.e., courts and corrections.

In order to expand the automated information processing capabilities to all the criminal justice components, the DELJIS plan was developed. This plan called for an enhancement of CLUES and, from the courts' perspective, the development of an on-line system that would meet the overall objectives of a criminal justice information system. This on-line judicial system would also provide day-to-day operational support and management statistics to trial courts and, as a by-product, management information and summary statistics to the AOC. In addition, the judicial system would provide OBTS/CCH data elements to the state's Central Data Processing (CDP) facility.

2. Functional

The SJIS portion of DELJIS, funded by LEAA SJIS and CDS grants, contain four separate modules: the criminal and civil modules for both the family court and adult courts.

Building upon the requirements analysis that was completed by a team of systems analysts engaged in the Comprehensive Data System (CDS) project, the SAC systems analysts have completed the conceptual design and are finalizing the detail design that will lead to the programming of the adult courts and family court applications.

3. Goals and Objectives

The SJIS grant application submitted to LEAA specified four major objectives that Phase I project efforts would strive to accomplish. These objectives are the following:

- Completion of the requirements analysis for the adult and family courts.

- Installation of a minicomputer.
- Completion of the conceptual design for the adult and family courts.
- Completion of the detail systems design for the adult and family courts.

It is anticipated that developmental efforts within the adult courts will initially concentrate on the superior courts. Subsequent development will follow in the lower courts.

4. Expected Impact

Phase I of the SJIS project will result in the installation of a minicomputer and the initial implementation of modules for the superior and family courts. This action will have immediate and beneficial results in day-to-day judicial operations, and will help in the overall organization and planning activities of the courts. The expected benefits are as follows:

- Delaware has a 120-day speedy trial mandate from time of arrest to time of trial on felony and drug charges. A 30-day limit exists for misdemeanors. Data available from the judicial system will enable personnel to identify the problem areas that are causing slowdowns in case-processing and thus help the courts to meet deadlines.
- Overall improvement in caseload management is anticipated as a result of accurate and timely data being provided on offenders and cases. Better scheduling can be accomplished.
- Productive and innovative changes in procedures and policies may be based on data derived from the SJIS. SJIS data will be used in program evaluation, and will simplify modeling to determine the impact of any change on future system operations.
- Comprehensive workload statistics will be available to help better allocate current resources and plan for future resource requirements.
- The envisioned SJIS will eliminate redundant data gathering. The system will collect at one time all data required for court management needs as well as the data to be supplied for intra- and inter-state exchange.
- Comprehensive workload statistics will be available to better allocate current resources and to plan for future resource requirements

The DELJIS conceptual design document provides an extensive analysis of the impact of the implementation of DELJIS. Since the SJIS Project Phase I is an integral subset of DELJIS, the DELJIS conceptual design offers some insight into the tangible benefits expected from both the adult court and family court applications. The benefits stated in the DELJIS conceptual design are as follows:

- Statewide operational benefits to be accrued by the full implementation of DELJIS will total 64,087 man hours per year for the adult court. These projected man-hour reductions will be fully effective by 1981, and will equate to \$200,100 annually in reduced costs for the adult courts.
- The automation of record-keeping functions in the probation and legal services areas of the family court will reduce man hours by 29,205 in fiscal 1980. This equates approximately to a \$71,605 cost reduction per year for the family courts.

Although not a result of the SJIS project, there is one impact upon the future funding of SJIS which should be mentioned. It is possible LEAA may reduce the level of Phase II SJIS funding by \$60,000. This would impact future development of SJIS. This possible reduction in funding is a result of \$60,000 of Phase I funds being expended to assist in the development of a criminal subsystem that was funded through a CDS grant.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

In October, 1976, the Honorable Daniel L. Herrmann, Chief Justice of the Supreme Court of Delaware, requested that Delaware be accepted as a "participating state" in the SJIS program. Approval came shortly thereafter. In December, 1977, Delaware exercised its option as a participating state and applied for Phase I funding.

Phase I of the Delaware SJIS grant commenced on May 9, 1978, and was scheduled to end May 8, 1979. Delaware has asked for and probably will receive a no-cost, 90-day extension. A total of \$197,541 in federal funds was augmented by \$21,949 in state funds. Of this \$219,490 sum, \$156,355 (71.3%) was earmarked for purchase of equipment; \$60,000 (27.3%) for contractual services; and the remaining \$3,135 (1.4%) for travel.

The salary of the SJIS project director is state-funded, and the two SAC systems analysts are funded by a CDS grant administered by the Statistical Analysis Center.

2. Plans

The Phase I SJIS grant contained, in Appendix B, the "SJIS Program Operations Schedule." This schedule described 24 different tasks to be completed in 1978 and 1979. It was the only SJIS schedule seen during the assessment visit, and although it offered a sequence of major

efforts to be undertaken, Appendix B by itself did not provide sufficient detail from which one could successfully schedule and subsequently manage all the intricate details of a 12-month project.

The DELJIS conceptual design, written in 1977, better outlined the SJIS tasks and efforts than did the SJIS grant application.

3. Current Status

At the time of the assessment, the tasks outlined in the SJIS grant application appeared to be approximately on schedule.

4. Control Methods

The absence of updated schedules and workplans interfered with effective project control efforts by the judiciary. Because of the small size of the SJIS staff, the importance of control methodology may have been minimized. During system development a precise control methodology is required.

Consultants working on the civil module of the SJIS project are required to submit monthly progress reports to the project director.

One area notably deficient in control is the lack of direct authority by the judiciary to supervise the efforts of the two SAC systems analysts assigned to research the court's information requirements. Both of these analysts are currently funded by the CDS project; they report directly to Mr. Don Roderick, SAC Director, and not to the AOC.

From a management viewpoint, it is imperative that SJIS, in both the development and operational stages, be supported by personnel funded and controlled by the judiciary.

5. User Participation

The SJIS project staff are in monthly contact with the JPC Advisory Subcommittee on Computerization. This subcommittee is heavily staffed with members of the judicial community and is an excellent resource for the project. Local judges and clerks in all courts have also been involved in defining the system requirements.

B. System Description

1. Processing Approach

The SJIS subset of DELJIS will be processed on a Burroughs 1855 minicomputer dedicated to judicial applications and located in Wilmington.

The local courts will be connected to SJIS by a statewide telecommunications network operated by the AOC. Each court will have one or more CRT terminals for data input and access functions.

SJIS will be supported by massive on-line storage and retrieval capabilities, i.e., 524 KB of main memory, 4 KB of cache memory, 1 Mag tape unit, and a disk unit (130 MB). In addition, a 750 LPM printer will be used.

SJIS will access the CDP system for retrieval of data contained in the CLUES history files--records, warrants, etc. The telecommunication traffic between CLUES and SJIS will be one-way, to restrict access to judicial data. Transmission of data from SJIS to CLUES will be accomplished on a need-to-know basis only and will consist of OBTS/CCH data elements.

In addition to CLUES, the courts will also be able to access the Dover motor vehicle files as well as national and interstate records, i.e., National Crime Information Center and National Law Enforcement Teletype System. Civil case data will be available from the civil facts file.

2. Data Collection, Preparation, and Verification

The data entered will consist primarily of court docket information. Standardized codes or abbreviated entries will substantially reduce the amount of manual effort required. Terminals will be located in each court for collection, preparation, and verification of data entered into the system. Data will be collected at the source and transcribed locally from both standardized and non-standard court records via CRT screen formats.

The originating agency is responsible for maintaining the accuracy of the data it submits.

3. Data Entry

Data will be transferred from the local terminals via the state's leased telecommunications network to the judiciary's minicomputer as soon as it is captured. All criminal applications will be processed in an on-line environment. It is expected that the on-line update capability will also be extended to the civil application.

4. Application Software

When the system is fully operational, the courts will utilize 49 CRT terminals at 32 statewide locations to provide the clerks with visual data displays (with optional paper copy capabilities) for the following type of information:

- ID.
- Law enforcement formats (arrest, warrant, complaint).
- Adult court formats (summary, criminal and civil docket displays).
- Corrections formats.
- DMV formats.

Ad hoc and batch reports will be standard features available from the system for each individual court. The preparation of 23 existing reports will be automated and numerous additional state-level workload reports will also be generated. It is expected that these new computer reports will be produced both periodically, and on-request.

On-line query and input capabilities will be available at all court locations.

5. OBTS/CCH Data Elements

The court-related OBTS/CCH data elements will be collected by SJIS.

6. Security and Privacy

Data security and integrity of information contained in the courts' database will be provided in several ways:

- Edit routines are being developed.

- Authorized individuals will be required to enter appropriate identification and passwords before the system will allow access to any record(s).
- Individual data records and elements will be secured and accessed only by authorized individuals.
- Physical safeguards will be provided by terminal locks and by monitoring access to the court terminals, central minicomputer, and back-up files.

7. Computer and Communications Configurations

The Burroughs 1855 minicomputer purchased by the AOC will be located in the AOC's Wilmington computer center and be under the direct control of the AOC. The planned purchase and installation of 49 CRT terminals, which will connect the adult and family courts to the minicomputer, will permit clerks of court to control their own individual terminals.

After a competitive bidding process and evaluation of the proposals submitted, the hardware selected consisted of the following components:

- B1855 minicomputer
- 524 KB Memory
- Operator Display and Control
- Line Printer - 750 LPM and Control
- Disk/DDEC and Drive Control - 130.4 MB
- Magnetic Tape Unit and Control - 40 KB/1600 BPI
- Multi-Line Control
- Synchronous Adapter - 9600 BPS
- Asynchronous Direct Connect Adapter - 2400 BPS
- Synchronous Data Set Connect Adapters - 2400 BPS
- CRT/Display Terminal/Keyboard (TD831)

The hardware configuration is scheduled to be installed on or before June 30, 1979.

As part of the Burroughs proposal the following software packages were included:

- Master Control Program (MPC) operating system.
- Network Definition Language (NDL), controlling communications.
- Generalized Message Control System (GEMCOS).
- Data Base Management System II (DMS II).
- Report Writer (REPORTER).

All application programs will be written in COBOL.

8. Documentation

The following have been produced to support the development of SJIS:

- Requirements analysis document.
- Computer procurement document.
- Conceptual design document.

Each of these documents shows an extensive, well-organized effort. If the remainder of the SJIS tasks reflect equal quality, the entire project will easily succeed.

Work is progressing on the detail systems design document.

9. Implementation

Computer installation is scheduled on or before June 30, 1979; implementation of the first court applications is scheduled shortly after January 1, 1980.

C. Assessment Results

1. Concerns and Recommendations

a. The existing developmental staff (two SAC systems analysts) do not report to the AOC. The assessment team recommends that both of these analysts, who are currently responsible for defining the requirements of the adult and family courts, should be funded by, and report to, the AOC. In addition, this should also be true of any subsequent computer-related staff who are hired.

b. The PROMIS and/or Mini-PROMIS packages should be examined to determine their potential usefulness, if time and resources permit. This may result in a cost savings through technology transfer.

c. The AOC should be enabled to exercise greater control over the SJIS project. Adequate project control of the SJIS project can only be achieved by vesting the right to make policy decisions and the right to assign staff with the AOC. The assessment team recommends that ultimate control of the project be fully vested in the AOC.

d. A high-level user's committee of judicial managers can facilitate internal communications, coordination, and problem solving. The assessment team recommends the establishment of a courts user's advisory committee.

e. Delaware needs a standardized technique for numbering cases. This would greatly enhance case-tracking capabilities throughout the Delaware courts. The assessment team recommends that a methodology to accomplish this task be analyzed prior to finalizing the detail systems design.

f. Much time has passed since the initial conceptual design document was written in September, 1977. In the intervening months, a prototype manual model could have been used to verify, through first-hand user experience, the accuracy of the requirements analysis, the necessity for certain data elements, and the overall feasibility of the systems approach.

g. Without approval of the fiscal year 1980 judicial budget, judicial staff may not be available to continue the SJIS development efforts. The assessment team expresses concern over the future of SJIS if the judicial budget is not approved.

h. A project as extensive as a statewide judicial information system warrants a full-time project director. The assessment team recommends that a full-time staff person be assigned as project director.

2. Exemplary Findings

a. There appears to be an excellent level of cooperation between the various components of Delaware's criminal justice community. Delaware has succeeded in developing a unique, statewide, multi-agency approach to criminal justice information systems. Delaware's judiciary

will both offer and receive automated data transfers from the law enforcement agencies, the attorney general's office, and the department of corrections. This cooperation is enviable.

b. Delaware has spent much time and effort in the project's planning stages. This is evidenced by the extensive and well-prepared design documents. It is anticipated that this heavy investment in the early stages of SJIS will pay off as development progresses.

c. The two SAC analysts assigned to develop the court systems appear to be very highly qualified. Their previous systems experience provides the project with invaluable talent.

FLORIDA PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On October 3, 4, and 5, 1978, an assessment was made of the Florida State Judicial Information System (SJIS) project. The assessment was conducted by:

The Honorable Loren D. Hicks, Oregon

Mr. Bert M. Montague, North Carolina

Mr. Greg Janowski, National Center for State Courts

Mr. Ray Speight, National Center for State Courts

The purpose of this assessment was to appraise the administrative and technical status of the project relative to the requirements of the Florida SJIS grant from the Law Enforcement Assistance Administration (LEAA) and relative to good systems development practices and procedures.

The primary participants from Florida's Office of the State Court Administrator (OSCA) were as follows:

Mr. John Harkness, state court administrator

Mr. Frank Habershaw, deputy state court administrator

Ms. Kathy Shelander, director of information systems

The LEAA representative at this assessment was Mr. Arthur Fuldner.

A. Management Summary

Phase II of the Florida SJIS project was scheduled to conclude on December 31, 1978. A three-month, no-cost extension was recently approved to extend the grant through March 31, 1979. The primary purpose of the project was to test and implement a criminal caseflow module in the Second Judicial Circuit, and to develop the capability of processing statewide SJIS data elements.

The proposed criminal caseflow module will process transactions received from local jurisdictions. State-level SJIS reports will be printed at the data center in Tallahassee. Local jurisdictions will also generate reports.

Florida's SJIS project staff are currently testing and implementing a court-oriented adaptation of the Institute for Law and Social Research's Prosecutor's Management Information System (PROMIS). This court-oriented system is called JUSTIS. Although the project was involved in a time-consuming conversion from one computer processing facility to another, completion of the project objectives appears certain. OSCA recently obtained commitments from the legislative and executive branches of the state government to guarantee both future use of the state data center's facilities and state general revenue funding for the project.

B. Organizational Structure and Processing

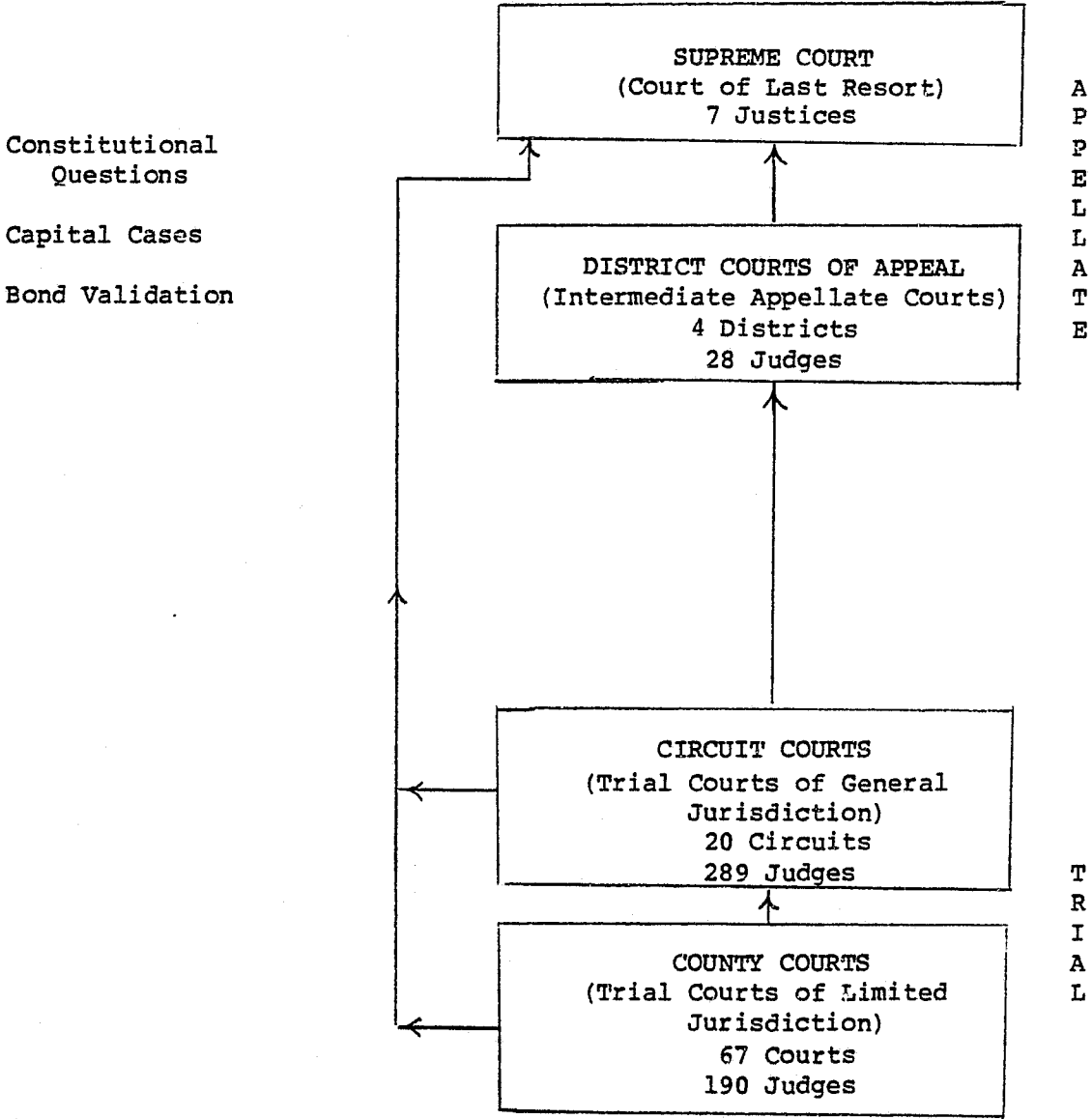
1. Judiciary

Figure 1 portrays the current structure of Florida's judiciary. The supreme court serves as the court of last resort. It sits at the capital, Tallahassee, and has statewide jurisdiction. There are seven justices on the supreme court, with the chief justice being elected by a majority of the members of the court. Five justices constitute a quorum, with the concurrence of four justices necessary for a decision. If a vacancy occurs, a judicial nominating commission selects three persons and submits their names to the governor, who must choose from among these three nominees in appointing a person to fill the vacancy.

The district courts of appeal are Florida's intermediate courts. There are four appellate districts. Court offices are located in Tallahassee, Lakeland, Miami, and West Palm Beach. Each court is composed of seven judges; a chief judge is chosen by a majority of judges of the courts. Three judges are required to hear each case, with the concurrence of two necessary for a decision. Vacancies in the district courts of appeal are filled by the same process as are supreme court vacancies. There are a total of 28 appellate judges.

Figure 1

FLORIDA JUDICIAL SYSTEM



The 20 circuit courts of Florida constitute the state's trial courts of general jurisdiction. Circuit judges are elected in nonpartisan elections for terms of 6 years. A chief judge for each circuit is chosen by a majority of the judges in the circuit. There are presently 289 circuit court judges in Florida.

The county courts are Florida's trial courts of limited jurisdiction. There is a county court in each of the 67 counties, the county boundaries serving as the territorial jurisdiction of each. County judges are elected in nonpartisan elections for terms of 4 years. Presently there are 190 county court judges in the state.

The chief justice of the supreme court is the chief administrative officer of the judicial system. To assist the chief justice in this capacity, a state court administrator (SCA) is appointed by the supreme court. The office of the state court administrator (OSCA) was created by a supreme court rule in July, 1972.

The chief judge in each district court is responsible for the administrative supervision of that court. In the circuit courts, the chief judge is responsible for the administrative supervision of all circuit and county courts in his circuit. In the county courts, chief judges, court clerks and trial court administrators, called executive assistants, share responsibility for court administration.

The total dollar expenditure for Florida's judicial operations during the 1977-78 fiscal year is expected to exceed \$83 million. This represents 1.6% of the total state expenditures and includes \$41 million for the state court system, \$28 million for the state attorney's staff, and \$14 million for the public defender's staff.

Judicial agencies that are fully state-funded include the supreme court, the state court administrator's office, the judicial council, and the Judicial Administrative Commission. The district courts of appeal are also state-funded. Circuit and county judges' salaries and official court reporters' salaries are paid by the state, as well as certain travel expenses for the circuit judges. The state also funds the salaries of circuit judges' secretaries.

2. Data Processing

Florida has a mixture of both rural and urban populations. Of the 67 counties in Florida, 12 are relatively urbanized and possess automated judicial information systems that handle approximately 85% of Florida's court caseload. The automated information systems report both circuit and county data. The remaining 55 counties have manual judicial information systems and collectively report the remaining 15% of the state's caseload. These manual information systems consist primarily of local data collection and analysis with some statewide summary reporting.

As provided by law, the supreme court has developed a uniform case reporting system, including a uniform means of reporting categories of cases, time required in the disposition of cases, and manner of disposition of cases.

OSCA is responsible for developing judicial information systems. Ms. Kathy Shelander, the director of information systems, reports directly to the state court administrator, Mr. John Harkness; she has a staff of 12 analysts and programmers.

Before October 1, 1978, the state's judicial data processing had been run by the Legislative Data Center (LDC) in Tallahassee. While the legislature was in session, however, processing of judicial system data received a low priority.

On October 1, 1978, processing of judicial data from Florida's second circuit began on the Judicial Management Information Center's (JMIC) IBM 370-145. JMIC is a state data center dedicated to the criminal justice community's data processing needs. It was formed by OSCA and the Department of Corrections--equal users of the facility.

At the time of the assessment, a contract specifying the responsibilities of OSCA and Corrections was in the final stages of review. This contract would establish a management committee, with OSCA representation, to establish operational policy for JMIC. Daily operations would be handled by the Department of General Services's Division of Electronic Data Processing; while the management committee would retain long-range planning and policy-setting functions.

3. SJIS Project

The project director for grant-related activities is the deputy state court administrator. He supervises all administrative requirements of project implementation.

The balance of the project is guided by the director of information systems, Ms. Kathy Shelander. Her responsibilities include the system's technical design and development, liaison with DP facilities and automated user offices, and the coordination of user training and system documentation efforts.

Liaison is maintained between the SJIS project staff and criminal justice agencies at the state and local levels.

4. SJIS Advisory Committee

A steering or advisory committee was to assist the state court administrator in the implementation of SJIS, and was supposed to consult with project staff regarding future development. This group was to be made up of representatives of the clerks association, local trial courts, and representatives of other agencies. The SJIS Advisory Committee, however, was not formally appointed. Tentative members of this committee, who are currently serving in an informal capacity, are as follows:

Dale Croy, second circuit state attorney's office chief investigator

Wayne Hanna, county clerk

Evelyn R. Flack, trial court judge

Everitt Richardson, chief circuit judge

Marjorie Moody, county court supervisor

Joy Gold, deputy clerk

Peggy Horvath, Florida Department of Criminal Law Enforcement

Rey Ferrari, Department of Corrections Bureau of Management Information Systems

5. Other SJIS-related Groups

Several organizational elements interface with the SJIS project; these are as follows:

- Second circuit users group--composed primarily of court clerks and administrators.
- Florida County Clerks Association--a statewide organization of the clerks of court.
- Offices of Florida's state attorneys, and Florida's public defenders.
- Florida's Department of Criminal Law Enforcement (FDCLE)--a police agency.
- Public Safety and Traffic Bureau--the Highway Patrol.

6. Judicial Workloads

Florida's supreme court reported a total of 2,623 dispositions in 1977 compared to 1,984 dispositions in 1973. This represents an average annual increase of 6.4%.

The district courts of appeal reported 10,647 dispositions in 1977 compared to 6,173 dispositions in 1973. This represents an average annual increase of 14.5%.

The trial courts, which consist of circuit courts and county courts, do not currently report data in a manner that allows a comparison of dispositions or filings over a period of time. On February 1, 1977, the method used to collect trial court caseload statistics was revised. This substantially changed the manner in which cases were counted, numbered, and filed. Total annual dispositions for the 20 circuit courts for 1977 were estimated to be 389,328.

On January 1, 1977, all municipal courts in the state of Florida were abolished. Their caseload, which consisted primarily of traffic cases, was transferred to the county court system. Consequently statistics for the county courts do not permit comparison with previous years. Total dispositions for the 67 county courts including criminal, civil, and traffic divisions for 1977 were estimated to be 2,214,943.

7. Related Systems

Several manual and automated systems interface with the state judicial information system. The most visible of these is the automated criminal justice module operating in the second judicial circuit. This system is an on-line, expanded version of INSLAW's PROMIS, called JUSTIS. Among other things, JUSTIS channels local information to the centralized SJIS database. JUSTIS is being used in the second judicial circuit as a pilot test to determine user needs, procedural feasibility, etc. JUSTIS is totally funded by the SJIS grant.

FDCLE is designated as Florida's OBTS/CCH data repository; no automated OBTS/CCH data are on file, however. At the time of the assessment, SJIS had 17,000 automated case records, all from the second circuit, which represent only 4% of the statewide criminal caseload. FDCLE was unable to accept the OBTS/CCH data from these 17,000 SJIS records because the conversion program(s) had not been written. In the future FDCLE will develop conversion capabilities.

OSCA plans to develop a statewide telecommunications network with the Department of Corrections and plans to share both the software and the lines for this network.

OSCA is currently working with Touche-Ross to develop a state legislative library module.

In future years JMIC will be able to interface, through either an automated or a manual process, with all local courts, corrections, probation, clerks associations, judges' associations, law enforcement agencies, police, public safety and traffic, public defenders and state attorneys.

Standardized manual input documents established by OSCA supply SJIS with its data. The five-ply state attorney intake worksheet/arrest ticket provides defendant- and arrest-related information. A court activity form provides additional input.

C. Project Description

1. Background

The Florida SJIS is a state-level, judicially controlled, computerized information system, designed to satisfy OSCA requirements for information about judicial proceedings, activities, and resources.

The Florida Supreme Court began its planning of SJIS with the preparation of a master plan in 1974. Figure 2 outlines the basic components of SJIS. These components were presented in the Phase II grant application and remain the cornerstone of all SJIS plans.

2. Functional Modules

Florida's SJIS concept will ultimately result in the implementation of eight operational modules comprising of approximately 23 subsystems. These modules are as follows:

- Accounting.
- Personnel.
- Internal audit.
- Library retrieval.
- Caseflow management.
- Information reporting.
- Program planning and budgeting.
- Modeling and simulation.

A ninth module, designated as the "Research and Development Module," was not intended to be an operational module per se. Instead, it was to include a number of projects or functions that would develop or enhance other modules. One of those projects is the SJIS development program.

Within the caseflow management module there is a criminal justice sub-module called JUSTIS. JUSTIS was transferred from Milwaukee and extensively modified by the SJIS staff to conform to Florida's SJIS requirements. JUSTIS is designed as a circuit or county system, operating in an on-line mode, providing instantaneous data entry, update, and access. The system provides designated screen formats to allow for the entry of data via CRT terminals, validates the data, and processes it. Similar designated screen formats are also available for data access. Reports, on both a scheduled and as-required basis, are produced providing judicial statistics, data for criminal caseflow monitoring, and other judicial management data. JUSTIS currently accepts case-related input from the criminal courts of general jurisdiction in the second circuit, including Leon, Wakulla,

Figure 2

FLORIDA'S STATE JUDICIAL INFORMATION SYSTEM
SUMMARY OF
SUBSYSTEMS AND MODULES

<p>ACCOUNTING SUBSYSTEM</p> <ul style="list-style-type: none"> - Payroll - Disbursements/Bookkeeping - Equipment and Facilities Management 	<p>PERSONNEL SUBSYSTEM</p> <ul style="list-style-type: none"> - Judicial Personnel Certification - Circuit Judge Assignment - State Judicial Personnel 	<p>INTERNAL AUDIT SUBSYSTEM</p> <ul style="list-style-type: none"> - Cost Center Analysis - Performance/Accounts Audit
<p>LIBRARY RETRIEVAL SUBSYSTEM</p> <ul style="list-style-type: none"> - Caselaw Search - Statute Search - Law Library Catalogue Search 	<p>CASEFLOW MANAGEMENT SUBSYSTEM</p> <ul style="list-style-type: none"> - Criminal - Civil - Juvenile - Appellate - Traffic 	<p>INFORMATION REPORTING SUBSYSTEM</p> <ul style="list-style-type: none"> - Regular Reporting - Special Reporting - Statistical Analysis
<p>PROGRAM PLANNING AND BUDGETING SYSTEM</p> <ul style="list-style-type: none"> - Program Monitoring - Program Audit/Evaluation - Program Cost-Benefit 	<p>RESEARCH AND DEVELOPMENT SUBSYSTEM</p> <ul style="list-style-type: none"> - General Systems Design - SJIS Development - Model Trial Court System Development - Records Management 	<p>MODELING AND SIMULATION SUBSYSTEM</p> <ul style="list-style-type: none"> - Modeling and Simulation Subsystem

Gadsden, Liberty, Jefferson, and Franklin counties. At the time of the assessment, JUSTIS was the most developed and certainly the most visible SJIS module.

3. Goals and Objectives

Florida's Phase II SJIS grant was used to fund the initial implementation stages of a statewide criminal module. The specific goals of Phase II were as follows:

- To design and test software that will provide for the collection, storage, and analysis of data for an SJIS database. These data are to be submitted from the JUSTIS system in the second circuit, and from one large automated local system, probably the Pinellas County system.
- To implement, on a pilot basis, the criminal caseflow module of SJIS (i.e., the JUSTIS system and the Pinellas system).
- To ensure that this criminal subsystem of SJIS is compatible with, and responsive to, the constraints/capabilities of all local jurisdictions, and also compatible with other criminal justice agencies at the state level.
- To guarantee that SJIS requirements do not place undue hardships or unreasonable expectations on local systems. This will be done by working with the Clerk's Association to develop standardized input forms.
- To collect, insofar as possible, OBTS/CCH data and to provide these data to the Florida Department of Criminal Law Enforcement (FDCLE).

4. Expected Impact

At the time of the assessment, the primary impact of the SJIS project was twofold. The SJIS staff had gained experience in adapting a single jurisdiction system, such as JUSTIS, into a more generically designed, multi-jurisdiction information reporting system. Local users also gained experience with the capabilities of JUSTIS. Specifics of these two primary impacts are the following:

- There is a sharp increase in the level of education and the experience of personnel in the judicial community.
- SJIS staff are developing a keen awareness of local problems.
- SJIS staff are learning the various interpretations of specific data elements as they are used in different locales.

- Staff are able to determine and respond to user needs by redirecting state resources.
- SJIS staff are defining those systems alternatives that are not acceptable in Florida and those alternatives that appear viable.
- SJIS staff are ascertaining user requirements for those jurisdictions not presently automated.
- SJIS staff are developing both quality control and audit procedures.

There are several other future benefits expected from the development of Florida's SJIS. When SJIS is fully implemented the list of benefits will include the following:

- OSCA will be better able to measure and evaluate court processes.
- The courts will be able to compare actual performance against stated goals and objectives.
- OSCA will be better able to analyze utilization of court resources.
- OSCA will be able to determine if courts are conforming to rules and policy.
- OSCA will be able to improve service to state agencies that need judicial information (e.g., FDCLE's need for disposition information; the Department of Corrections' need for pre-sentence investigation information; and the state attorney's office's need for workload information for budgetary projections.
- Judges will receive background information facilitating decisions on bail recommendations and sentences.
- Prosecutors will receive background case data, thus reducing the need for plea bargaining.
- Court administrators will receive information concerning manpower allocations, room assignments, etc.

One area of impact that the assessment team felt had not been adequately explored was the financial impact of SJIS. Other than the May, 1977, cost-benefit analysis of JUSTIS in the second circuit done by INSLAW and a feasibility analysis conducted by the University of Florida (1977), no current detailed cost-impact studies are available. OSCA cannot pinpoint total operating costs for JUSTIS; nor have the estimated operating costs of the proposed statewide SJIS been calculated.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Florida is in Phase II of its SJIS project. Florida did not receive the usual LEAA SJIS grants for either Phase I or Phase II. In the summer of 1975 the state received a special discretionary grant under the auspices of Project SEARCH. Those funds supported Phase I of the SJIS project. Below is a list of Phase I project accomplishments:

- Analyzed criminal case-related information requirements for the supreme court and other state-level criminal justice agencies.
- Developed general specifications for and evaluated the cost-benefit analysis of five major system alternatives.
- Pilot tested two alternatives for the collection of minimum data requirements.
- Completed a survey of potential problems that might be encountered by state and local agencies in their efforts to produce CCH, OBTS, and SJIS data elements.

On November 1, 1977, Florida began Phase II of its SJIS project. An LEAA discretionary grant (program #16.501) contributed \$199,809 of federal funds. Matching state funds provided \$22,201. The grant was scheduled to continue for 11 months.

Of the \$222,000 budgeted for Phase II, \$83,000 (37%) was planned for the professional services of seven DP technicians, 1.35 FTE clerks, and a secretary; \$6,000 (2.7%) for travel; and \$133,000 (60%) for equipment leasing, telecommunications, and CPU processing time.

2. Plans

As an appendix to the Phase II SJIS grant application, a detailed Phase II workplan was submitted to LEAA. Included in that workplan was a description of project tasks; a description of deliverables; and a task assignment schedule specifying beginning and ending dates and manpower estimates.

The assessment team felt the accomplishments specified in the workplans were too conservative. The realities of project staffing sometimes necessitate a conservative workplan. The team felt, however, that the Florida SJIS project could probably have been planned and consequently developed more rapidly.

With the renewed interest that has recently been expressed by state agencies and local trial courts, it is important that OSCA encourage the SJIS system to become visible and responsive as soon as possible. The faster the various modules can be properly implemented, the more active and the more confident the users of the system will become. Realistic, well-defined plans are an asset to any project. Every workplan, however, should contain an element of stretch to encourage staff to reach beyond normal standards of performance.

The assessment team felt that one element seemed to be lacking in the SJIS plans--financial planning. The JUSTIS system in the second circuit is, to a large extent, federally funded. Provisions have been made by the state to assume some of the operating costs that will be incurred when federal funding is withdrawn. Additional financial consideration should be given to those counties that have implemented JUSTIS and that realistically cannot afford to maintain an automated judicial information reporting system without federal or state aid.

3. Current Status

To determine the status of the project a review of the project's deliverables is provided:

	Status
- Documentation of the JUSTIS modifications	current
- Management reports	current
- Documentation of the career criminal module	postponed

- Updated users manual--inserts distributed as printed	current
- Documentation of problems and solutions in SJIS development	postponed until end of grant
- Research on automated subpoena issuances	postponed until end of grant
- On-line courtroom data entry/inquiry capability	postponed until end of grant
- User on-line entry/inquiry capability	postponed until end of grant
- On-line booking module	postponed until end of grant
- Archiving procedures	postponed until end of grant
- Long range statistics capability	postponed until end of grant
- Documentation of local system variances (master index of SJIS data elements and their various local users)	completed (8/78)
- JMJC management contract	current
- Management reports (descriptions and rationale)	postponed until end of grant
- Software for adding Pinellas to SJIS	current
- Quarterly reports to LEAA	current
- Final report to LEAA	current

4. Control Methods

Through a variety of charts and schedules, Ms. Shelander can track the status of each of the tasks involved in the SJIS project. These charts indicate the current status relative to the previously designed workplan, and represent Florida's SJIS project control.

5. User Participation

According to the Phase II workplan, an advisory committee was to provide high-level guidance for the project. It was never formally appointed, however. Various ad hoc committees have been used. In the second judicial circuit, where the majority of the JUSTIS activity is taking place, there is a very active and concerned user committee. Ms. Shelander has effectively nurtured this user involvement and has succeeded in building a strong viable relationship between the second circuit users and the SJIS staff in Tallahassee.

The Florida County Clerks Association has been an active group in assisting SJIS staff in both designing manual forms for data entry and in defining the requirements of local jurisdictions. The clerks association may be the most useful tool available to the SJIS staff in selling the proposed statewide SJIS package. The clerks association is currently working on revisions of the statewide data input format, and this type of assistance is invaluable.

B. System Description

1. Processing Approach

Since October 1, 1978, the JUSTIS system has been running on an IBM 370-145 computer operated by JMIC, a state-operated computer service agency. The JUSTIS system has 13 interactive terminals tied to the JMIC facility. These terminals are located in the OSCA office and in the local clerks' offices in the second judicial circuit. Eventual plans call for the SJIS system to interface with other computer systems associated with the criminal justice network, i.e., corrections, law enforcement, public safety and traffic, probation, etc.

2. Data Collection, Preparation, and Verification

Automated systems often rely on manual standardized input documents to collect data. OSCA has done an excellent job in designing and developing the state attorney intake worksheet/arrest ticket. A five-ply document, it replaces a multitude of other forms previously used by agencies when entering a defendant into the system. Studies show that since using the new arrest ticket, police officers' time spent completing paperwork on an arrest has been reduced from a maximum of 210 minutes to a maximum of 45 minutes.

The responsibility for data collection and preparation rests with the state attorney's office from the time the defendant is "picked up" until he/she appears in court. Thereafter, the responsibility for further data gathering lies with the clerks of court.

Data are checked for reasonableness by the clerk gathering it. Strong audit procedures reinforce the need for data accuracy.

3. Data Entry

Data entry consists of locally transcribing information from the standardized arrest tickets to CRT screens. As the data become available, they are entered on-line by the local clerks to the centralized JMIC facility.

For security and contractual reasons, data entry by the clerks is limited to the normal business hours, i.e., 9:00 a.m. to 5:00 p.m. weekdays. Except for weekends, the state attorney's staff is responsible for entering data within 24 hours of defendant arrest.

Extensive analysis was conducted to compare the data elements being captured by all 12 automated districts in Florida. Attempts are being made to guarantee that the JUSTIS system, and the eventual statewide SJIS system, will be compatible for storing and reporting required data on both the state and local levels.

4. Application Software

The JUSTIS system validates and edits incoming data.

Both state and local reports are generated by JUSTIS. Some examples of statewide reporting include:

- Jury utilization, by month.
- Jury statistics, by quarter.
- Offense and offender characteristics.
- Plea negotiations.
- Offense/disposition.
- Legislation impact assessment.
- Research request.

These reports are produced by JMIC on a periodic or as-requested basis. Copies of the reports are forwarded to OSCA, and where appropriate, mailed to the respective local clerks offices.

A partial list of the local reports generated by JUSTIS includes:

- Misdemeanor calendars (five-day, one-day, five-day priority, one-day priority, one-day sentencing).
- Felony calendars (one-day preliminary hearing, five-day trial, one-day trial, one-day sentencing).
- Workload reports (case monitoring by state attorneys, judges, public defenders, and private attorneys).
- Case status reports (at several stages during prosecution).
- Special reports (witness mailing labels/phone numbers, subpoena summary listing, statistical reports).

These local reports are generated as requested.

There are several on-line inquiry/response capabilities of the JUSTIS system. These capabilities are realized by the following screens:

- JUSTIS inquiry screen (defendant name search).
- Security clearance screen (operators require clearance before data entry).
- JUSTIS arraignment/continuance screen (all court events except disposition and sentencing)
- JUSTIS charge disposition screen (records disposition information).
- JUSTIS sentencing screen (records sentencing information).
- Case creation screen.

MARK IV is currently being used as a report writer for the SJIS system. The statistical package for the social sciences (SPSS) is used extensively with JUSTIS. The eventual statewide SJIS system will use both packages as an integral part of its design.

5. OBTS/CCH

Currently the automated capability of SJIS, i.e. JUSTIS, represents only 4% of Florida's criminal caseload. The potential exists, however, for SJIS to transfer to FDCLE, on machine-readable media, OBTS/CCH data. FDCLE, Florida's statistical analysis center (SAC), is responsible for maintaining the OBTS/CCH database.

In the future, it is expected that the programming effort required to permit the transfer of OBTS/CCH data will be undertaken by FDCLE.

Currently, no OBTS reports are produced by OSCA.

6. Security and Privacy. OSCA has taken extensive efforts to ensure both the security and privacy of SJIS. Access to the processing area is restricted to authorized personnel. Data entry is restricted by password authorization. A comprehensive management contract between the JMIC and OSCA has been developed governing operational procedures.

Strong audit capabilities have been built into the system permitting both automatic internal control and external analysis. Once a month, 10% of the cases in JUSTIS are randomly selected and checked for accuracy. The OSCA staff audits JUSTIS data against actual court records. When errors are determined during the audit, corrections are made to the files and action is taken to remedy the cause of the discrepancy.

7. Computer and Communications Configurations

JUSTIS is run on JMIC's IBM 370-145 main frame. OS/VS is used to operate the system on 1½ megabytes of core storage (an additional megabyte is on order from IBM); CICS is used to control the teleprocessing between the CPU, 13 remote video terminals, and 10 local printers.

The traditional hardware selection process was preempted by a \$600,000 vendor credit the state of Florida had accumulated as a result of previous transactions with IBM.

The Department of Corrections, which co-uses the JMIC facility, runs its system using IMS; while JUSTIS uses CICS. Since both IMS and CICS require vast amounts of core storage to operate, it is possible that as these two systems expand they could exceed the limitations of core, requiring either an expansion of core or the purchase of a larger computer.

8. Documentation

An extensive description of the system requirements can be found in the Final Report of Phase I submitted to LEAA.

A feasibility analysis comparing five proposed alternatives for collecting and reporting both state and local criminal justice information was done by the College of Business at Florida State University in Tallahassee.

Detailed workplans were submitted with the Phase I and Phase II grant applications to LEAA. These plans include tasks grouped by function, staff responsibility, expected start-up and end dates, and estimated manpower requirements.

A data requirements report was written by SEARCH Group, Inc. in the fall of 1977. It itemized 139 input data elements and 25 internally generated elements.

System specifications were also prepared by SEARCH Group, Inc. and include flowcharts, database descriptions, record layouts, program flowcharts, and transaction codes.

Similarly, systems documentation was written by SEARCH Group, Inc. in the fall of 1977. It was prepared in accordance with FIPS PUB-38 standards.

Codebooks, data dictionaries, and report layouts are available.

A Users Manual was also prepared by SEARCH Group, Inc. It includes background description, input procedures/requirements, and screen layouts/instructions. The Users Manual is continually up-dated and amended by OSCA staff.

User training is an ongoing effort undertaken by the SJIS staff. Field visits, seminars, phone conversations, publications, manuals, etc., are all part of an effort to make SJIS more functional via increased user awareness.

9. Implementation

The individual facets of the JUSTIS system are slowly being activated. Software, user training, and documentation are coordinated with the modification and implementation of JUSTIS capabilities. The transition is carefully supervised by OSCA to ensure user acceptability.

C. Assessment Results

This section describes the reactions of the assessment committee to the Phase II Florida SJIS Project and the prospects for ultimate satisfaction of the project goals and objectives.

1. Recommendations

a. Scheduled Rate of Task Completion. The accomplishments specified in Florida's long-range plans for a statewide SJIS are too conservative. The faster the scheduled system modules can be implemented, the more active the users will become.

b. Update Project Workplans. The SJIS master plan should be updated periodically. The master plan was developed approximately four years ago and has not been revised since.

c. Input Format Approval. A target date should be established for the approval of the data input form by the Florida Clerks Association.

d. Multiple Responsibilities. The SJIS project is scheduled to provide technical assistance to some of the local trial courts to assist them in developing their automated trial court information systems. It should be recognized that the provision of too much technical assistance by the SJIS staff could hamper the staff's ability to implement SJIS modules on schedule.

e. Cost Projection. Cost-benefit analyses should be conducted for each major decision of the SJIS project. The cost of developing JMIC; the full cost of operating JUSTIS; and the estimated cost of operating a statewide SJIS should be analyzed and recorded.

f. Steering Committee. The SJIS steering committee, which was never formally appointed, should now be activated. The interest is there now and the steering committee could provide good feedback to the SJIS project staff.

g. Core Storage. The Department of Corrections, which shares the JMIC facility, will be running on IMS; JUSTIS on CICS. As the number of terminals and the volume of transactions increase, JUSTIS may experience system degradation or excessive down-time. More core storage or a larger CPU may be necessary.

h. Financial Support for JUSTIS. When grant funding expires, financial consideration should be given to those counties that have implemented JUSTIS and that realistically cannot afford to maintain an automated judicial information reporting system without federal or state aid.

2. Exemplary Findings

a. Progress. A significant amount of progress was evident since the last assessment (i.e., December, 1975).

b. Plans. The SJIS staff have developed a concrete set of plans and milestones, which has proven invaluable in scheduling work efforts.

c. Bottoms Up. The statewide SJIS is being designed with a local, or bottoms up, approach. In view of the idiosyncrasies of local judicial systems, this is both necessary and astute.

d. Interfacing. Multi-agency involvement and cooperation will be fostered by the planned interface with other criminal justice agencies.

e. Dedicated Computer. The JMJC facility represents a significant improvement over the LDC processing facility.

f. Motivation. The SJIS project staff appear to have excellent motivation and direction.

g. General Revenue Funding. State funding has been procured for those SJIS staff who were originally hired and funded with grant monies.

h. Input Forms. Widespread operational efficiencies have been achieved with the arrest ticket designed by OSCA.

i. Security and Privacy. Strong audit and control procedures have been incorporated using both automated internal and manual external devices.

j. Active Users. From the chief justice down to the local clerks, a strong sense of user interest and enthusiasm has been demonstrated. This feeling continues to be nurtured and promoted by OSCA.

k. OBTS/CCH. Data are currently being collected and future design considerations will include OBTS/CCH elements.

HAWAII PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On June 26, 27, and 28, 1978, an assessment was made of the Hawaii State Judicial Information System (SJIS) Project--Phase II, herein called the Hawaii Judicial Information System (HAJIS). The assessment was conducted by:

- Mr. James M. Parkison of Missouri,
- The Honorable Arthur J. Simpson of New Jersey.
- Mr. Lynn A. Jensen of the National Center for State Courts.
- Mr. Francis J. Taillefer of the National Center for State Courts.

The purpose of the assessment was to appraise the administrative and technical status of the project relative to the requirements of the Hawaii SJIS grant from the Law Enforcement Assistance Administration (LEAA) and relative to good systems development practices and procedures.

The primary participants from the Judiciary of the state of Hawaii were:

- Mr. Lester E. Cingcade, Administrative Director of the Courts.
- Mr. Tom Okuda, Deputy Administrative Director of the Courts; and Director, Traffic Violations Bureau (TVB).
- Mr. Gunji Izumoto, Chief, Legal Documents Branch of the Administrative Office of the Courts.

The LEAA representative at this assessment was Mr. Donald A. Manson.

A. Management Survey

The HAJIS project is currently in Phase II, which began on November 15, 1976, and is scheduled to conclude on June 30, 1978. The project intends to implement a statewide, on-line, clerical and record-keeping system capable of addressing the information needs of all the courts (criminal, civil, family, and traffic). The system will accept case-related, on-line data from 33 CRT terminals statewide. Centralized data files will provide accurate and timely retrieval of information via both on-line inquiry and periodic batch reports.

The HAJIS project staff have completed the bulk of the system's design, some major development, and some major module testing and implementation. Only the implementation of the remaining modules of the system remains unfinished. The uncertainty of future funding for both the developmental and operational aspects of HAJIS has, however, slowed the implementation process.

The state government has not committed any future funding for either the development or operation of HAJIS. In February 1977, with continuing federal LEAA funding uncertain and the Phase II grant soon to be exhausted, the judiciary merged the HAJIS project with the Traffic Violations Information System (TRAVIS) project. As the name implies TRAVIS is designed to support the court system's Traffic Violation Bureau (TVB) caseload. Both HAJIS and TRAVIS are modular in nature and organized into functions, some of which are common to both projects.

The initial development cost of TRAVIS is being funded by a multi-year grant from the National Highway and Traffic Safety Administration (NHTSA). Subsequent development and on-going operating costs are paid for out of traffic court revenues. The decision to merge the HAJIS and TRAVIS projects was done primarily for financial reasons. Although the traffic court oriented TRAVIS system is technically a subsystem of the larger judiciary-wide HAJIS system, the hope is that the efforts to develop TRAVIS will provide another operational component of the overall system, thus stimulating later completion of HAJIS.

The expectation is that HAJIS will eventually be fully implemented.

As a natural byproduct of the merger, there has been a shift in state court system priorities for SJIS development. The shift is away from HAJIS direct expansion and toward the more heavily funded TRAVIS project.

In summary, funding for the HAJIS project has been exhausted and implementation of the statewide HAJIS system is being postponed until additional funding is secured.

This report is divided into two major sections. The first provides an overview of the SJIS/HAJIS project and the environment in which it is being undertaken. The second provides a more detailed description and evaluation of the project. This includes a description of the project planning and management control methodology, a description of the system being developed, and the assessment team's findings and recommendations.

B. Organizational Structure and Processing

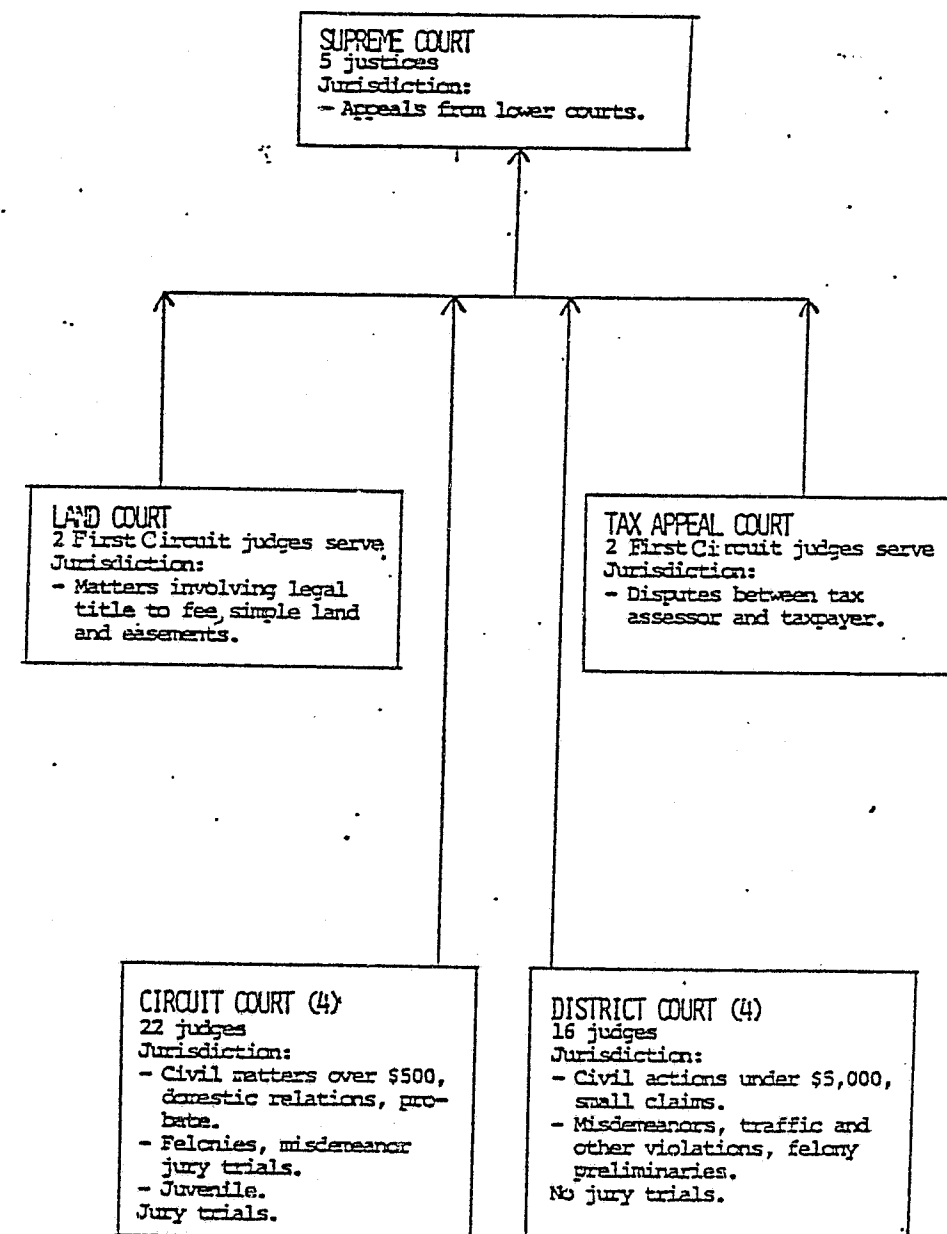
1. Judiciary

A diagram of Hawaii's court system is presented in Figure 1. There are three major courts in Hawaii: Supreme, Circuit and District. The supreme court and circuit courts are established in the Hawaii Constitution. The district court is established by statute. The statutes also establish a tax appeal court and a land court as special-jurisdiction forums.

The Hawaii Supreme Court is the court of last resort, and sits in Honolulu. It has appellate jurisdiction to hear and determine all matters properly brought before it on appeal from any other court or agency. The Supreme Court exercises ultimate administrative responsibility and rule-making power for all courts. There is no intermediate appellate court in Hawaii.

Figure 1

HAWAII COURT SYSTEM, 1976



+ Indicates route of appeal.

The circuit courts have exclusive jurisdiction in criminal felony cases; civil suits involving more than \$5,000; probate proceedings and determination of heirs; and cases involving marital actions, juveniles and other domestic matters within the family court division. Concurrent jurisdiction with the district courts is exercised in civil matters involving less than \$5,000 but more than \$500.

Each of the four judicial circuits in Hawaii has a district court which functions as a court of first instance with limited jurisdiction. District courts exercise exclusive jurisdiction in civil matters involving less than \$500; small claims cases; traffic and other violations; and criminal misdemeanors. They also conduct the initial criminal proceedings in felony cases that originate within their districts. All case decisions are rendered by judges; defendants desiring jury trials may have their cases transferred to the circuit court level. Hawaii's district courts are courts of record.

The land court is a statewide court of record based in Honolulu exercising exclusive original jurisdiction over the registration of land titles and easements.

The tax appeal court is another statewide court of record based in Honolulu, with original jurisdiction in all disputes between the tax assessor and taxpayer. The land court and tax appeal court share staff. The Hawaii Constitution names the Chief Justice of the Supreme Court as the administrative head of the courts, and authorizes the appointment of an administrative director by the Chief Justice. The administrative director assists and advises the Chief Justice concerning all administrative matters in the courts, collects statistics, prepares the judiciary's

annual report, and assists the Chief Justice in the preparation of the budget, the six-year program and financial plan, the variance reports, and any other reports requested by the legislature.

2. Data Processing

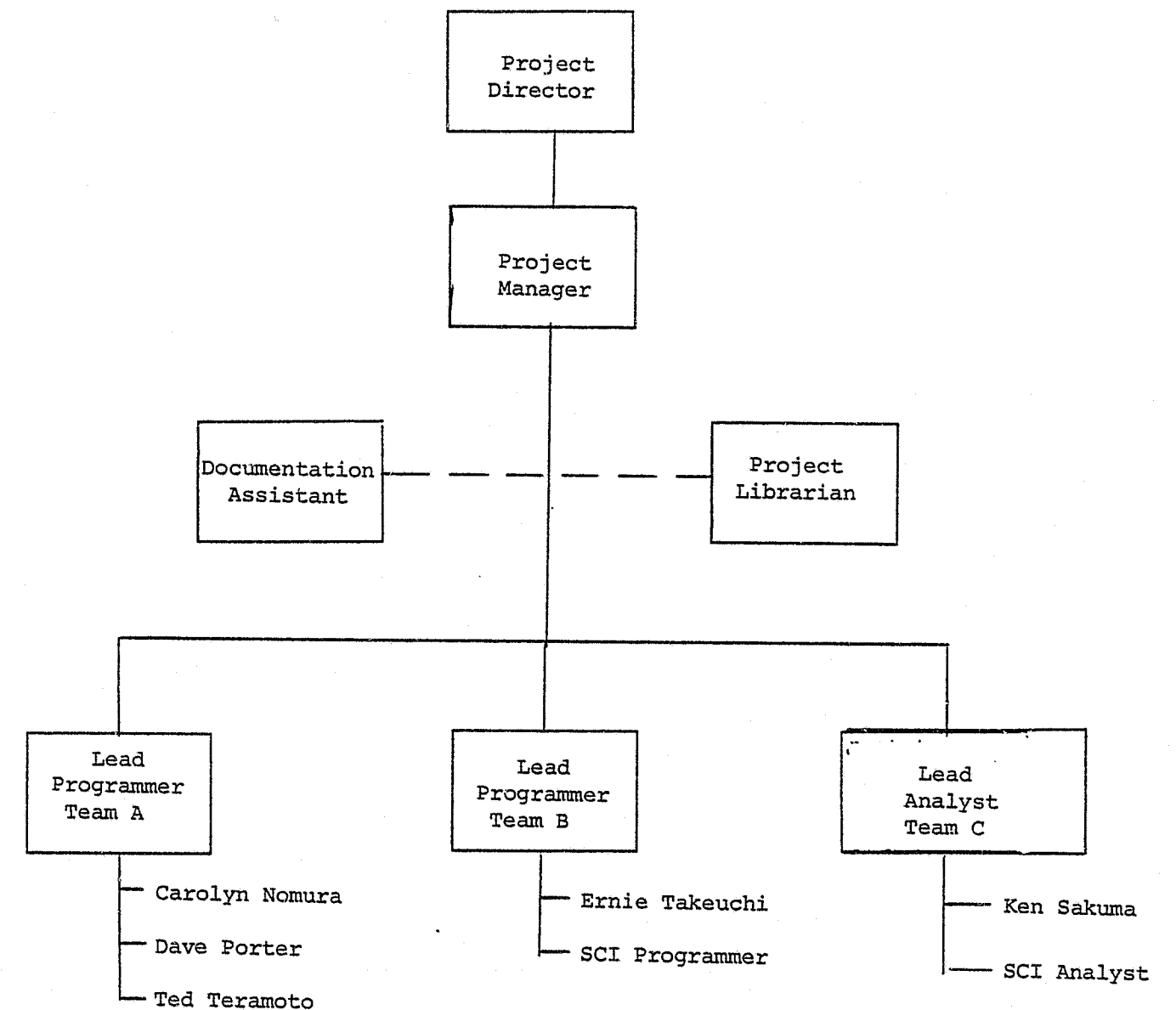
Much of the automated data processing (DP) done for the State of Hawaii is done by the Electronic Data Processing Division (EDPD) of the state's Department of Budget and Finance. The EDPD facility operates an IBM 370/158 in Honolulu which is shared by both executive and judicial state agencies.

HAJIS/TRAVIS is being designed to be implemented on the EDPD facility. In addition, a Burroughs B1700 minicomputer has been installed at the district court of the First Circuit to help process the TRAVIS workload. This minicomputer has the capability to connect with the EDPD IBM 370/158 to utilize the EDPD's processing power and large storage capacities. All TRAVIS reports will be printed at the district court, thereby assuring maximum security and confidentiality of information. DP jobs not requiring the power of the EDPD computer and not having state-wide impact will be processed on the Burroughs minicomputer.

3. SJIS Project

As a result of the merger of the HAJIS and TRAVIS projects, both share the services of the same project manager and project director. The ultimate responsibility for HAJIS/TRAVIS rests with the project director, who is the Administrative Director of the Courts, Mr. Lester Cingcade. Day-to-day operational responsibility for the project has been delegated to the project manager, Mr. Tom Okuda, the Deputy Administrative Director of the Courts. Mr. Okuda also serves as the Director of the TVB. Figure 2 portrays the administrative structure of the combined projects.

Figure 2
PROJECT HIERARCY--HAJIS/TRAVIS



4. SJIS Advisory Committee

The HAJIS Project Phase II application stated that the project staff would be able to receive suggestions from at least two formal sources--a Policy Committee and a Working Committee.

The Policy Committee is staffed by one associate justice, two circuit court judges, two district court judges, and three judicial administrators. This committee provides HAJIS with legal policy guidance and is responsible for providing both review and approval of the project as it progresses.

The Working Committee monitors the HAJIS project to ensure satisfaction of all the information requirements of each state agency impacted by the system. In addition, the members of the Working Committee provide the project team with first-hand knowledge of both the operating procedures in effect and the functions being performed by the staff in the various user offices. The members of the Working Committee are the following:

- 1 Administrative director of the courts,
- 1 Director, district courts,
- 1 Director, circuit courts,
- 1 Chief clerk, supreme court,
- 4 Chief clerks, circuit courts,
- 4 Chief clerks, district courts,
- 2 Calendar clerks, First Circuit court,
- 2 Calendar clerks, First District court,
- Various supervisors, circuit court,
- Various supervisors, district court,

- 1 Social worker, family court.
- 1 Social worker, adult probation.
- 1 Violations Bureau manager.
- 1 Research statistician.
- 1 EDPD Representative, Department of Budget and Finance.
- 1 Staff--systems analyst.

5. Other SJIS--related groups

The state-run EDP computer facility will process that portion of the judiciary's automated HAJIS workload not processed in batch mode by the Traffic Violations Bureau's Burroughs H1700 minicomputer.

A private consulting firm, Systems Consultants, Inc., was contracted during HAJIS' Phase II to prepare much of the systems software for HAJIS. Initiating work on March 1, 1977, the consultants completed by June 30, 1978 the following tasks:

- Development of computer programs (for HAJIS Support, Case Management, and Calendaring Functions).
- Database creation to support the above.
- Preparation of users manual to support the above.
- Teleprocessing network (user requirements and consultation).
- Organizational conversion of circuit court criminal recordkeeping operations to HAJIS.

6. Judicial Workloads

The statewide disposition of cases is shown in Figure 3.

7. Related Systems

The information system most closely related to the HAJIS project is TRAVIS. As a result of the merger of these two projects in February 1977,

Figure 3

HAWAII JUDICIAL WORKLOADS
(7/1/75--6/30/76)

<u>Type</u>	<u>Dispositions</u>
Supreme court	
Appeals	155
Other Cases	11
Other proceedings	354
Circuit courts	
Civil	16,005
Criminal	1,683
Traffic	751
Juvenile	6,865
Land court	46
Tax appeal court	58
District courts	
Civil	10,953
Criminal	41,290
Traffic	545,340

they have become interdependent in certain areas. The following list reflects whether the various functions of the completed HAJIS/TRAVIS system will be shared by both systems, or unique to only one:

<u>Function</u>	<u>Supported System</u>
- Case management	HAJIS
- Calendaring	HAJIS and TRAVIS
- Servicing (document issue/control)	HAJIS and TRAVIS
- Financial management	HAJIS and TRAVIS
- Management and statistical reporting	HAJIS and TRAVIS
- Citation management for TVB	TRAVIS

The only other automated information system operated by Hawaii's judiciary is a jury selection and payroll system. This system was in operation prior to Phase I of the HAJIS project.

C. Project Description

1. Background

Under the concept of ensuring equal justice to all, Hawaii's judiciary operates as one administrative unit on a statewide basis for all cases coming within its jurisdiction. By automating certain manual record-keeping operations, the judiciary hopes to improve maintenance of information associated with the court's caseload, improve access to, and communication of, that information for operational purposes, and generate statistical and management reports as a by-product of the operating system.

To accomplish these goals, the Judiciary applied, in 1974, for federal assistance. Since then it has received major grants from two sources: LEAA and NHTSA.

The HAJIS project resulted from the LEAA grant. HAJIS is a statewide computer system designed to satisfy the LEAA requirements for providing Offender

Based Transactions Statistics (OBTS) and Computerized Criminal History (CCH) information in support of LEAA's state level Comprehensive Data Systems (CDS) program. As well, HAJIS is designed to satisfy day-to-day operating needs of the entire court system. HAJIS, when fully operational, will keep case records current throughout the court system and will provide a statewide calendaring system.

The TRAVIS project resulted from the NHTSA grant. TRAVIS is to be a statewide computer system that satisfies both court system's TVB operational requirements and the need for traffic data transfer to the state's law enforcement agencies.

2. Functional

The major functions to be performed by HAJIS are described below. Each function, with the exception of management and statistical reporting, includes both on-line teleprocessing and batch programs. In general, the file maintenance and file inquiry subfunctions are performed by on-line teleprocessing programs, and document printing and volume reports are produced in batch mode.

-- Case management The case management function controls the collection, maintenance and dissemination of data directly related to individual cases. This function controls the entering of new case data from indictments, complaints, petitions, etc. New case data are used to build and store case records in the database. Case management also supports the entering of subsequent data relating to the case such as documents, appearances and dispositions, remote inquiry, and docketing and indexing of documents. Finally, the case management function provides for the purging of terminated cases and maintenance of case history data.

-- Calendaring The calendaring function provides assistance to court clerks in the scheduling of cases for court appearance and the production of physical calendars for use by persons in the courtroom. HAJIS permits inquiries into both calendar and case files in support of the calendaring process.

Each newly created calendar shell will be entered into the calendar file by a scheduling clerk as a blank record, with no cases being scheduled at that point - only a few data elements are entered. As dates are firmed up, the clerk will schedule the case onto an already created calendar segment in the appearance file. Appearance segments are created in the case/citation management functions to reflect the fact that a hearing will be necessary.

Prior to scheduling a case, the clerk will use the system to identify attorney scheduling conflicts, such as one of the attorneys having a prior commitment that precludes his presence in court at the correct time. As cases are scheduled, calendar identification and time data are also entered into the case management appearance record. The final calendar is printed with data derived from the calendar, appearance, and other case files.

-- Servicing The servicing function will provide automated processing and inquiry to court clerks responsible for preparing and controlling documents issued by the court for service upon individuals and organizations. System support will go initially for bench warrants and penal summons only, but will be designed for later expansion to other service documents. Issued bench warrants and penal summons service documents will be entered via CRT terminals, one-day turnaround for computer printed documents. Service, recall, expiration, and return transactions associated with each document also will be entered into

the system via CRT terminal. During operation, the servicing function will access the case file, the persons index file, and the servicing file itself.

-- Financial management The financial management function will automate the accounting and reporting of transactions for non-appropriated funds of the judiciary. These transactions include both receipts from operations (fines, fees, court costs, etc.) and fiduciary receipts (bail posted, ward payments, support payments, and other trust funds). The court system's financial management function will be based on a uniform chart of accounts, calling for automation of general ledger control accounts and subsidiary ledgers for various asset, liability, and trust accounts.

Financial transactions will be entered in the system via either remote CRT terminals or point of sale (POS) terminals. Account status information will be retrievable on-line, and will be augmented by batch processed monthly, quarterly, and annual financial and control reports.

-- Management and statistical reporting Relying on the other HAJIS functions for its data, this function accomplishes preparation of various management and summary reports to support overall administration of the court system. Contrasting this, reports from other HAJIS functions are operational support oriented, in that they are required almost immediately for the direct day-to-day operations of individual courts. Management and statistical reports help develop court policies by providing data for future planning and by generating data for management review to ensure court operations are efficiently executed.

Generated reports will focus on: determining the characteristics of the court system users, helping establish work unit standards, and identifying how much work the courts have processed and how much work can be expected in the future.

-- Traffic Violations Bureau (TVB) The Traffic Violations Bureau function maintains an inventory of citation books issued to and returned from law enforcement agencies, and provides computer system support to the Traffic Violations Bureau in maintaining traffic citations and violator history records. This function provides support in traffic violations calendarings activities and in producing delinquent notices, penal summons and other notices required by the Violation Bureau.

The major HAJIS functions described above are intended to serve the operations of all Hawaii courts. HAJIS subsystems, in turn, use major functions to accomplish specific tasks that support court operation. Each subsystem shares both major HAJIS functions and certain portions of the database. HAJIS subsystems and their subsumed court proceedings are:

- Civil Subsystem

- District court regular civil.
- District court small claims civil.
- Circuit court civil.
- Regular probate
- Small estates
- Small guardianship.
- Regular guardianship

- Special proceedings.
- Mechanics and materialsmen's liens.
- Penal Subsystem
 - Traffic and other violations not included in the Hawaii Traffic Violations Bureau subsystem.
 - District court criminal.
 - Circuit court criminal.
- Family Court Subsystem
 - Adoption.
 - Criminal.
 - Domestic relations.
 - Guardianship.
 - Paternity.
 - Reciprocal support.
 - Termination of paternal rights.
 - Miscellaneous.
- Traffic Violations Bureau Subsystem
 - Traffic moving violations.
 - Traffic parking violations.
 - Miscellaneous violations.
- Land Court and Tax Appeal Court Subsystem
 - Land court applications.
 - Land court consolidation.

- Tax appeals.
- Appellate Subsystem
 - Original and appeals cases.
- 3. Goals and Objectives

HAJIS is designed to bring and keep current all court system case records and to provide statewide calendaring on a current basis. The Phase II grant-stated goals of the HAJIS project are the following:

- To automate the routine clerical and administrative record-keeping functions of the court.
- To provide management information to facilitate the effective use of personnel, financial, and physical resources.
- To address information needs of all courts (criminal, civil, family, and traffic) on a statewide basis.
- To provide centralized data files permitting the accurate and timely retrieval of court information.
- To generate not only management information for court administration but also OBTS/CCH data for Hawaii's Comprehensive Data System (CDS).

The above five statements were mentioned as project goals in both the Phase I and Phase II HAJIS grants. It is to the credit of the HAJIS staff that the initial Phase I statement of the project's goals were sufficiently thought out to permit the goals to remain unchanged through both grant phases.

4. Expected Impact

By automating HAJIS it is anticipated that there will be an increase in personnel productivity and effectiveness by eliminating repetitive record-keeping functions and responsibilities. Delays and time lost by police witnesses, litigants, attorneys, judges, and jurors will be minimized through better planning and scheduling.

The development of an automated system will create a database usable both for day-to-day operational support to the courts and for long-term planning directed toward improving both the administration and use of limited judicial resources, thereby improving service to the public.

When fully operational, HAJIS will process data for the different case types passing through the courts. Organizationally, HAJIS will impact the operations/functions of the:

- Supreme court.
- Land court.
- Tax appeal court.
- Various criminal and civil divisions of the circuit court.
- Estate and guardianship branch of the First Circuit court.
- Documents branch of the First Circuit court.
- Fiscal branch of the First Circuit court.
- Family court divisions of the First Circuit court.
- Court services of the family court.
- Support payment section of the family court.
- Various criminal, civil and traffic divisions of the district courts.
- Fiscal branch of the district court.
- Traffic Violations Bureau.

The availability of current information on a statewide basis on all cases and calendars will result in many benefits, such as availability of case information to all court personnel, capability to monitor repeat moving violations offenders, immediate response from the TVB when a citizen cited fails to respond to traffic citation, rapid retrieval of criminal case status data to help determine whether court orders are being implemented, availability of data on sentencing and awards of damages to enhance consistency in both areas, and automatic resetting of proceedings on calendars.

When the HAJIS and TRAVIS projects merged in February 1977, the rate and direction of the project's development was altered. At the time of the merger, approximately three years of additional development effort remained before either of the two systems would become fully operational. Prior to the merger there were no plans for a prototype system that would pilot test subsystems in an operational court environment. Under the old plan, court users would have to wait until all programming was completed before receiving any HAJIS benefits. Now, developed subsystems are being made operational in one location prior to statewide transfer or subsystem enhancement. The merger was effected to permit, within the limited funding available, both development and implementation of a scaled-down system for selected case types, functions, and courts. As the lessons from the prototype systems are learned, the system software will be expanded to include additional case types, functions, and courts.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Hawaii's Phase II grant for the HAJIS project began on November 15, 1976, and continued for 20 months through June 30, 1978. Federal funding under LEAA's Improvement of Prosecution, Courts and Law Reform grant program provided \$200,000; matching state funds added \$34,798. Of the combined grant total \$62,813 (27%) was earmarked for personnel; \$150,000 (64%) for contractual expenditures, and \$21,985 (9%) for supplies and travel. Clearly, the major activity of Phase II, in terms of the allocation of grant dollars, was the contractual development of HAJIS software.

2. Plans

The Phase II grant called for implementation of the HAJIS system designed during Phase I. The HAJIS work efforts were initially divided into 11 tasks and two grant phases. During Phase I, the first six of these 11 tasks were completed as planned. These six tasks were:

- Task 1: Definition of scope.
- Task 2: Survey study.
- Task 3: System conceptual design.
- Task 4: Detail system design.
- Task 5: Implementation planning.
- Task 6: Computer center resource planning.

During Phase II the implementation of HAJIS was to be accomplished by means of completing the remaining five tasks, which were:

- Task 7: Teleprocessing (TP) and communications network and implementation.
 - . Terminal equipment acquisition.
 - . Host system preparation.
 - . Network preparation.
 - . TP communication test.
 - . TP network documentation.
 - . Working Committee review.
- Task 8: Database creation.
 - . Data collection.
 - . Data preparation.
 - . File loading
 - . Working Committee review.
- Task 9: Program development.
 - . Creation of program flows.
 - . Program coding.
 - . Software package modification.
 - . Program documentation.
 - . Working Committee review.
- Task 10: System integration and testing.
 - . Test-case creation.
 - . Database testing.
 - . Integration testing.
 - . Systems testing.
 - . Program corrections.

- . Documentation of test results.
- . Working Committee review.
- Task 11: Cutover, First Circuit Court.
 - . System user documentation.
 - . User training.
 - . Database coordination.
 - . Installation.
 - . Working Committee review.

The programming, testing, and implementation of HAJIS was to be conducted initially in the First Circuit, the island of Oahu, and subsequently, statewide to the other three neighbor island circuits. The plan is to first implement some activities in Honolulu and then later expand the proven, operational systems to the rest of the First Circuit. After that, statewide transfer will occur.

The HAJIS project work plan is quite realistic. The workplans are clearly stated and logically sequenced to help ensure timely completion of intermediate steps critical to the project's total development effort.

3. Current Status

The HAJIS project specifies the completion of 11 tasks; of these six were planned for and completed during Phase I. The status of the current project can best be determined by reviewing the status of tasks planned for completion during Phase II, as well as by reviewing the development status of the HAJIS/TRAVIS major functions and subsystems.

The status of the Phase II grant tasks (Tasks 7 - 11) is:

- Task 7: Teleprocessing (TP) and communications network and implementation.
The installation of the TP terminals is being delayed until future operational funding can be arranged. Site preparation, network design, and TP documentation have all been completed.

- Task 8: Database creation. The file structures for the HAJIS/TRAVIS major functions of Case Management, Calendaring, and Traffic Violations Bureau for the circuit court criminal case subsystem have been designed, programmed, and tested. Live data are being added to the files; some historical data have also been added.
- Task 9: Program development. All DP programs for the Case Management, Calendaring, and Traffic Violations Bureau functions for the circuit court criminal case subsystem have been written in accordance with the standards set forth in HAJIS' programmer's guide. Minor modifications to the programs continue, but the bulk of this task has been completed.

Completion of the Case Management, Calendaring, and Traffic Violations Bureau functions for circuit court criminal cases is very significant to HAJIS/TRAVIS implementation because they constitute a very substantial portion of the total operating workload of the entire court system. The remaining major functions still planned but not yet done are Servicing, Financial Management, and Management and Statistical Reporting. As well, subsystems remaining to be completed are Civil, Family Court, Land/Tax, Probate/Guardianship, and Appellate; these are planned for development and implementation in later HAJIS phases, as funding permits.

- Task 10: System integration and testing. This task has been completed for the Case Management, Calendaring, and Traffic Violations Bureau functions for the circuit court criminal case subsystem.
- Task 11: Cutover, First Circuit Court. Although plans have been established to properly perform this task, it remains the project's only uncompleted major milestone. Since future development and on-going maintenance funding of HAJIS is uncertain, no firm dates have been set for implementation, but it is proceeding and is expected to soon be fully implemented and operational.

4. Control Methods

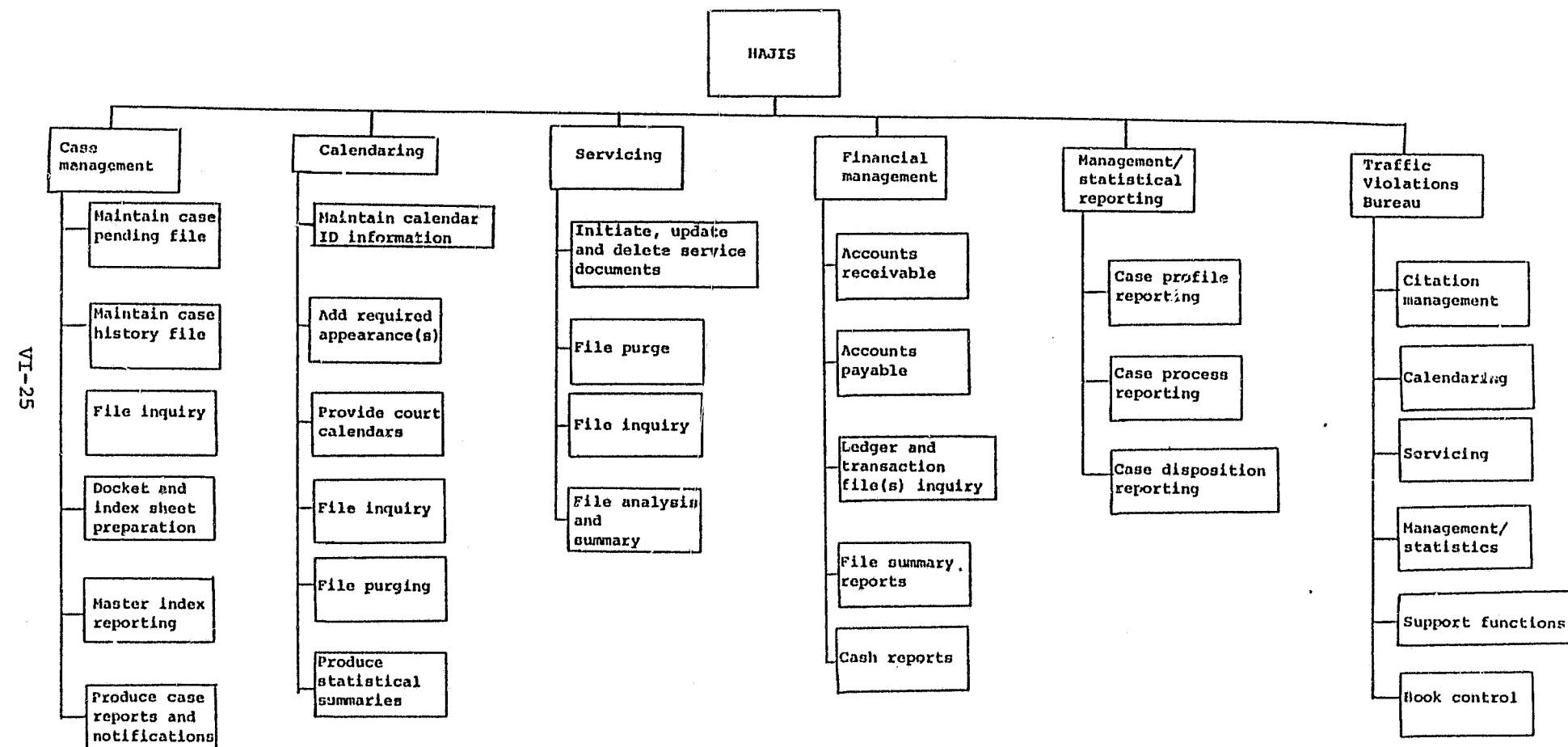
The HAJIS/TRAVIS project is an ambitious undertaking. To facilitate the management and control of the multi-year design and development, the six major system functions are organized into a logical hierarchical structure, (Case Management, Calendaring, Servicing, Financial Management, Management/Statistical Reporting, and TVB). Each of these functions is further sub-divided into lower level subfunctions which, in turn, are repeatedly sub-divided into smaller, more manageable modules. The design is top-down, with bottom-up implementation. Figure 4 is a high-level diagram of the major HAJIS/TRAVIS functions.

Day-to-day operational management is enhanced by the use of project workplans, worksheets, and schedules. Software development, quality control, and monitorship is exercised by the HAJIS project manager through the monthly progress reports submitted by the consultants responsible for developing the project software, as well as by direct HAJIS project staff assignment to, and interaction with, various consultant work products. The progress reports summarize recent activities, highlight problems, and provide HAJIS project management with information to permit timely intervention as needed.

The mechanism for formally reporting the overall progress of the project is a quarterly progress report and a final report. The quarterly reports contain a management level summary of the project's status, a summary of status by task, a project cost summary, a detailed task status, and findings and recommendations.

The final report, soon to be submitted, is intended to be a cumulation of an overall analysis of the quarterly reports, project reviews, and experiences from project initiation to completion. The document is to contain a summary of the original project's major achievements and what attributed to its success; the

Figure 4
HAJIS FUNCTIONAL HIERARCHY



project's major difficulties, their causes and solutions; and findings, conclusions, and recommendations for improvement during future development.

5. User Participation

A Policy Committee provides HAJIS with legal policy guidance and reviews and approves the project as it progresses.

A Working Committee monitors the HAJIS project to assure that the needs of each state agency affected by HAJIS will be satisfied.

A State Judicial Information System Subcommittee for Evaluation and Monitoring has been established to evaluate the following:

- Determination of data needs and capabilities.
- Policy decisions regarding data collection.
- System design techniques.
- Capability of supplying OBTS/CCH data.
- Effectiveness of data capture.

These committees attempt to reflect the opinions of the system users and help to insure both the responsiveness of HAJIS and its eventual acceptance by the judicial community.

B. System Description

1. Processing Approach

HAJIS is designed to be implemented on the EDPD's IBM 370/158 computer. When operational, the HAJIS system will require the use of several IBM 330 storage disks; the TP network will be controlled by IBM's CICS and an IBM 3705 communications controller. The 3705 is a programmable device that can be expanded to additional lines by making standard software changes and adding line bases and line sets. These modifications can be made in the field by IBM.

The state's remote terminal network includes leased lines to various locations on Oahu and to each of the other islands. These lines are connected to one of 33 IBM 3270 compatible video display units.

The EDPD computer center also communicates with 2 DEC PDP-11 computers operated by the State Department of Transportation.

The TRAVIS project has installed a Burroughs B1700 minicomputer at the District Court of the First Circuit. This minicomputer can interface with EDPD to utilize the processing power and large storage capacities of the IBM 370/158. The TRAVIS B1700 minicomputer also interfaces with computers of the City and County of Honolulu. This connection will enable the judiciary to electronically obtain data maintained on the City and County of Honolulu computers.

2. Data Collection, Preparation, and Verification

When the HAJIS/TRAVIS system is fully operational, the local court clerks will be responsible for capturing and entering, via CRTs, all case-related data.

3. Data Entry

Data will be entered on-line by the appropriate court clerks as soon as they are captured.

4. Application Software

The major application functions and subsystems, written in COBOL, have been described previously. Related system outputs will be available either through printed reports or display terminals. The reports will be printed both periodically and on-request. The users will be able to access the database, via on-line inquiry, only during "normal" working hours (i.e., 7 a.m. to midnight).

There will be separate input and output CRT screens and hard copy reports for case management, calendaring, and statistics/management information.

5. OBTS/CCH

HAJIS has the capability to maintain OBTS/CCH data elements as defined in Project SEARCH's Technical Report No. 4. At the time of the assessment neither the OBTS nor CCH automated reporting capabilities were yet operational. In the meantime, a five-ply transmittal form is used by the Statistical Analysis Center, Hawaii's OBTS/CCH data repository, to record and transfer OBTS/CCH information from the criminal justice community.

6. Security and Privacy

User terminals are physically located in areas under the direct control of the judiciary, and locked when not in use. System passwords and computer room passcards help restrict both electronic and physical access to the system. Logging routines are required for all changes to the database, and the use of any system transaction by a particular terminal can be password-protected.

No formal written agreement exists between the judiciary and the EDPD concerning HAJIS' use of EDPD facilities. In view of the expected strain that the HAJIS system will put on the EDPD system, a formal contract should be drawn up, specifying agency responsibilities and functions.

7. Computer and Communications Configuration

The EDPD computer environment consists of the following:

- 1 CPU, IBM 370/158-3 (3MB of storage).
- 12 Tape Drives, IBM 3420.
- 4 Line Printers, IBM 1403.
- 20 Disks, IBM 3330-1.
- 8 Disks, IBM 3330-11.
- 8 Disks, IBM 3350.

The hardware which will be used to support the judicial TP network consists of the following:

- 33 Video Display Terminals, IBM 3278.
- 12 Teletype Printers, IBM 3278.
- 4 Remote Control Units, IBM 3274.
- 18 4,800 BPS Modems.
- 2 9,600 BPS Modems.
- 1 Communications Controller, IBM 3705.

There are two computers associated with the HAJIS project, one of which is court-controlled. Basically, the on-line portion, which will contain most of the court applications and part of the TVB applications, will be processed on EDPD's IBM 370/158. The batch portion will be processed on the court-controlled Burroughs B1700. The Burroughs B1700 computer is operated as a remote job entry station to the host computer (EDPD's 370/158), as well as a batch, "stand-alone" processor. Gandalf data sets and telephone lines connect the Burroughs B1700 and the CRT terminals to the EDPD computers.

The 370/158 computer which will eventually process HAJIS/TRAVIS, is run using the IBM OS/MVT Operating System Release 21.8 in conjunction with HASP-II Version III. HASP controls the input and output of unit record data both locally and remotely (remote job entry equipment). The operating system includes several language translators, the linkage editor, and system utilities. In addition to various operating system software, the EDPD computer center supports other software packages that have been purchased or leased. HAJIS has been designed to utilize the following software packages during both development and implementation:

- (a) Customer Information Control System (CICS): CICS is a database/data communications control system that manages a remote terminal network and associated applications program. HAJIS will utilize CICS to implement applications programs that read and write data from remote terminal devices.
- (b) Adaptable Database System (ADABAS): ADABAS is a general purpose database management system that can be used to support a sophisticated on-line database. The major HAJIS/TRAVIS on-line files have been designed so that they will reside under control of ADABAS.
- (c) Panvalet: Panvalet is a software package that provides maintenance service in the use of source program libraries and load module

libraries. The use of Panvalet for test and production libraries is an EDPD standard and will be utilized by the judiciary.

- (d) Fast Dump Restore (FDR): The FDR software is an alternative to the OS utility and is used to backup data from disk to tape and to restore tape data to disk. FDR provides certain performance advantages when utilized in backup and recovery procedures; HAJIS is designed to utilize FDR.
- (e) Datamacs: Datamacs is a software package that can be used to automatically build test data files in an efficient and economic manner.
- (f) DYL-250: DYL-250 is a software package providing various utility functions such as test data generation and report generation.
- (g) CROSS-TABS: This is a statistical package, which is somewhat similar to SPSS.
- (h) COBOL/ASSEMBLER: Programming languages used to write applications software are COBOL and ASSEMBLER. COBOL/CICS is used for on-line maintenance and inquiry programming, while COBOL is used for purge routines and report generation, and ASSEMBLER is used for heavily used subroutines.

8. Documentation

The efforts to develop the HAJIS system have been documented very well, and the project staff is to be commended for enduring completion of all documentation as the project progressed. A requirements analysis, systems survey study, functional design (five volumes), detail design, programmer's guide, users guide, operations manual, and conversion plan have all been written in documented form. The system architecture includes a structured self-documenting program design which is supported by HIPO diagrams.

9. Implementation

The plans for implementation of HAJIS are complete; however, the system will not be fully operational in the near future, due to funding uncertainties. Since the merger of the HAJIS and TRAVIS projects, there has been a change in both the sources of fundings and the priority of systems development efforts. The majority of recent judicial systems development efforts have been directed towards the more long-term and well funded TRAVIS component.

10. Maintenance

Since the system is not yet operational, no detail plans have been formulated for maintaining the HAJIS/TRAVIS system. State funding for on-going maintenance of already developed and operational systems is expected, but funding for new development and implementation is uncertain. The intent of the state court administrator is to develop as practicable, within available funding.

C. Assessment Results

The following sections briefly summarize the significant findings and conclusions of the assessment team, and are the same as those passed along verably to AOC personnel at the time of the on-site assessment exit briefing.

1. Concerns and Recommendations

- (a) The most visible problem facing the HAJIS project is the expected lack of project funding after current grant monies are exhausted. HAJIS is on the threshold of full-scale implementation. Funding is needed both for on-going operation and full development of all parts of the system. The assessment team recommends that if funding can be obtained from any source(s), the well conceptualized and well developed HAJIS should be implemented according to current plans. State funding for on-going operations is being and should continue to be planned for and presented to the legislature.

CONTINUED

2 OF 5

- (b) Down-time caused by EDPD machine failure, multi-vender hardware configuration, data transmission difficulties, etc., have resulted in recurrent delays in systems testing. Nonetheless, the delay has been overcome and progress has been made on making parts of HAJIS ready for operation. Once HAJIS is funded to renew development and implementation, however, priority testing will again be vital. Efforts should be undertaken to guarantee quick turn-around of test materials from EDPD.
- (c) When HAJIS is implemented it will put a strain on the operating capabilities of the EDPD computer facility. To ensure that this impact will not have unexpectedly adverse effects on HAJIS, an agreement of responsibilities should be drawn up. This agreement should specify the duties, responsibilities, functions, priorities, etc., of the staff of both the EDPD facility and the judiciary.
- (d) The original Phase II contractual agreement for applications software development had to be scaled down to cover only the case management and calendaring functions for the circuit court criminal case subsystem (done for the First Circuit). The assessment team agrees with this scale-down because grant hopes were set too high for grant tasks 8 (Data base creation) and 9 (Program development). These are huge tasks and are most appropriately approached using modular, incremental development, as now adopted in AOC plans.
- (e) The development priority for HAJIS/TRAVIS is well planned: highest priority has gone toward implementing the criminal case subsystem (case management and calendaring) and the traffic case subsystem, with next lower priority going to development of the civil case subsystem, and then the Servicing, Statistical, and Financial functions and related subsystems.

2. Exemplary Findings

- (a) The HAJIS management and carryover staff had to cope with the dilemma of having to rely on EDPD facilities even though the EDPD staff lacked training on ACABAS and CICS, this was in addition to problems of departure of trained staff to higher-paying commercial firms, low servicing priority, and slow response from EDPD. The HAJIS management and staff are to be commended on their willingness to train the people who were supposed to be, literally, the technical experts supporting them. As well, they are to be commended on their perseverance in overcoming problems and forging ahead on development of HAJIS.
- (b) The HAJIS/TRAVIS system is an excellent modular design, which can be implemented incrementally, as funding permits. Further, documentation for work done to date is comprehensive, complete, and easy to follow.

3. Conclusion

If the uncertainties of funding for on-going system maintenance and new system development can be overcome, so that HAJIS/TRAVIS can be completed and made fully operational statewide, the Hawaii Judicial Branch and the State of Hawaii will have a CJIS which will meet their needs for years to come and of which they can be justifiably proud.

LOUISIANA PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On September 11 and 12, 1978, an assessment was made of the Phase II Louisiana State Judicial Information System (SJIS) Project. The assessment was conducted by:

- Mr. Robert Doss of Georgia,
- Mr. Robert Mitchell of Massachusetts,
- Mr. Carter Cowles of the National Center for State Courts, and
- Mr. Gregory Janowski of the National Center for State Courts.

The purpose of the assessment was to appraise the administrative and technical status of the SJIS project relative to the requirements of the Louisiana Phase II SJIS grant from LEAA and relative to good systems development practices and procedures.

The primary participants from the office of the Louisiana Supreme Court Judicial Administrator were:

- Mr. Eugene Murret, Judicial Administrator,
- Dr. Hugh Collins, Deputy Judicial Administrator (SJIS Project Administrator), and
- Mr. Roy Evans, Deputy Judicial Administrator.

The LEAA representative at this assessment was Mr. Al Breuel.

A. Management Summary

The Louisiana SJIS Project concluded Phase II on July 15, 1978. The purpose of the project was to design and implement a

centralized state-wide court management information system for the Louisiana general jurisdiction and appellate courts.

The system will accept case-related data and provide management-oriented statistical reports at the district and appellate court levels. Data entry will be primarily batch data submitted by mail on standardized reporting forms to the judicial administrator's office. One district has a Factual Automated Case Transaction System (FACTS) and input from this district will be provided to the judicial administrator's office on magnetic tape. All reports will be printed at the centralized state-run computer site and mailed to the respective jurisdictions.

Due to a variety of complex, restrictive factors which are discussed later, such as staff turnover and funding problems, the SJIS Phase II Project has not developed exactly as intended in the Phase II grant.

Some of these restricting factors still exist. Nonetheless, the staff of the judicial administrator's office have established plans for the effective completion of the SJIS tasks in the foreseeable future. Despite their previous problems, the staff and supporting agencies now seem quite competent to proceed in an orderly fashion toward the fulfillment of the Phase II objectives.

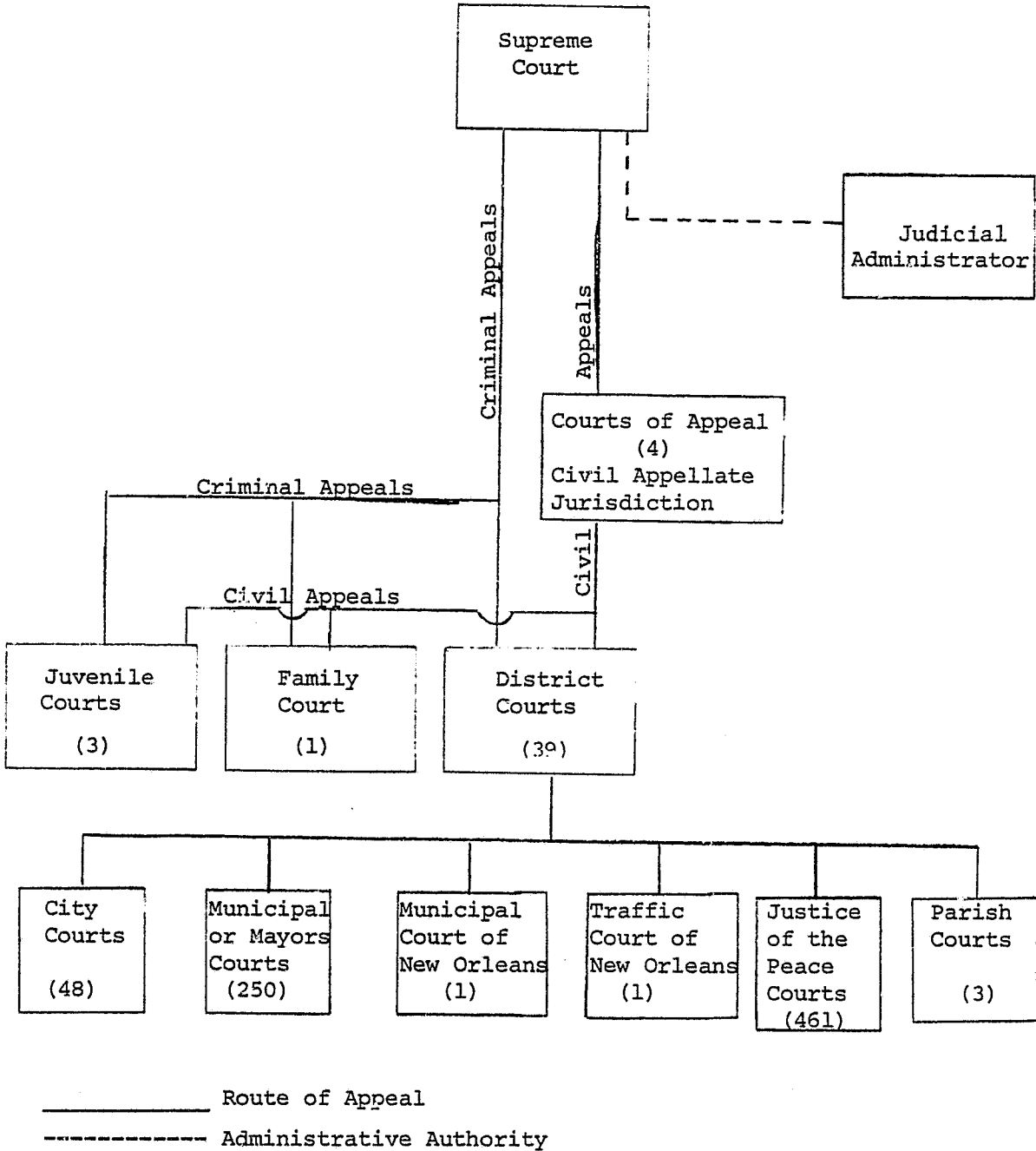
B. Organizational Structure and Processing

1. Judiciary

Figure 1 illustrates the structure of the Louisiana court system. It is composed of the supreme court, the courts of appeal, and nine different types of trial courts. The supreme court, courts of appeal, and district courts were established by constitution, with the other limited jurisdiction trial courts having statutory authorization.

The supreme court is the highest court of appellate jurisdiction in Louisiana. The court has final statewide jurisdiction over all civil and criminal cases. There is also an intermediate court of appeal that sits in four circuits throughout the state. The jurisdiction of this court of appeal is restricted to civil cases decided within the respective circuits.

Figure 1
LOUISIANA COURT ORGANIZATION



Source: National Center for State Courts, Louisiana State Court Organization Profile, State Court Organization Profile Series (American Bar Association, 1977).

The district courts are the trial courts of general jurisdiction. There are 39 districts with each district containing one, two, or three parishes. The district courts have original jurisdiction over all civil and criminal matters, all felony cases, as well as appellate jurisdiction over inferior trial courts. Appeals are heard de novo when they originate from municipal or mayor's courts, city courts (criminal cases only), justice of the peace courts, and the Traffic Court of New Orleans. Appeals are heard on the record in all cases from city courts and from the Municipal Court of New Orleans.

In addition to the district courts, there are eight other trial courts in the state with limited or special jurisdiction. There are 48 city courts throughout the state, exercising limited civil jurisdiction up to \$1,500 and concurrent criminal jurisdiction with the district courts in certain cases. Likewise, the two parish courts in the state have jurisdiction similar to the city courts. Exclusive original jurisdiction over all youth-related cases is vested in three juvenile courts, which also have jurisdiction over adults charged with crimes against juveniles. The Family Court of Baton Rouge has jurisdiction similar to the juvenile court, in addition to handling separation and divorce cases. The district court judges outside the 4 largest parishes serve as ex officio juvenile court judges in their respective districts.

The 461 justice of peace courts in Louisiana have concurrent jurisdiction with the district courts in all civil matters involving amounts less than \$300. The justices of the peace also have the authority to act as committing magistrates in certain criminal cases. The municipal or mayor's courts have jurisdiction over municipal ordinance violations, with 250 courts of this type in the state.

The Traffic Court of New Orleans has jurisdiction only in traffic cases which are municipal ordinance violations. The one Municipal Court of New Orleans has jurisdiction over municipal ordinance violations except traffic ordinances.

The chief justice is the chief administrative officer of the judicial system.

The Louisiana state constitution provides for a statewide administrative office of the courts. The director of this centralized judicial administrative office, called the judicial administrator, is appointed by the supreme court, and reports to the chief justice.

Chief judges are responsible for the administration of individual court units. There are no constitutional or statutory provisions for a court administrator of trial court units.

The state pays 24.3% of the cost of operating the judicial department. Only the supreme court and courts of appeal are fully state funded. The state also pays the salaries of juvenile court and district court judges, and supplements the salaries of city court judges, and judges of the Traffic Court of New Orleans and the Municipal Court of New Orleans. Clerks are paid out of fees and fines collected by the courts; the clerks' office expenses are paid with the surplus of the salary fund. Local governments are responsible for funding the remainder of the judiciary's operations.

All judges are elected by popular ballot to terms the length of which depends on the jurisdiction. The clerk of court for each parish is elected by popular ballot and serves a four-year term. Clerks of court for all other jurisdictions are appointed by the bench.

2. Data Processing

The responsibility for the development and operation of Louisiana information processing rests with the office of the judicial administrator. Its authority is derived from Louisiana's Supreme Court Rule XXII, which provides that . . .

"the Office of the Judicial Administrator examines administrative methods of the courts and makes recommendations for their improvement; collects and analyzes statistical data; sets up a uniform system of statistical reporting; prepares standard forms. . . . and attends to other matters assigned to it by the Supreme Court and the Judicial Council."

The judicial administrator relies on both internal and external resources to accomplish the data processing tasks. Staff of the office of the judicial administrator are involved with the in-house

development and operation of some of the systems, while other systems are written and run out-of-house by consultants and/or the staff of the state-run Louisiana Information Processing Agency (LIPA).

3. SJIS Project

The ultimate responsibility for the SJIS project rests with supreme court judicial administrator. Operational, day-to-day responsibility, belongs with the SJIS Project Director. The project director reports directly to the judicial administrator. A sizeable portion of the SJIS project was contracted out to private consultants. These consultants were responsible to the project director.

4. SJIS Advisory Committee

An eleven member Special Advisory Committee of the State Judicial Information System is an active agent in defining and clarifying the SJIS role. The judicial administrator receives the suggestions of the judges, lawyers, clerks, etc., who comprise this special advisory committee. Its members are drawn from the state supreme court, courts of appeal, district courts, juvenile courts, city courts, Louisiana Criminal Justice Information System (LCJIS), Department of Corrections, State Bar Association, State Police, Clerks of Court Association and District Attorneys' Association.

5. Other SJIS-related Groups

Until January 1, 1978, the Department of Public Safety's Louisiana Computer Information Center (LCIC) ran the more complex automated SJIS subsystems. Some programming and technical support was also provided by the staff of the Louisiana Criminal Justice Information System (LCJIS).

Since January 1, 1978, support for both systems development and operations has been provided by the Louisiana Information Processing Agency (LIPA).

Independent outside consultants were also used in designing SJIS.

6. Judicial Workloads

The 1977 Annual Report of the Judicial Council of the Supreme Court of Louisiana offered a review of the state's workloads from which Figure 2 was extracted.

7. Related Systems

Under the direction of the judicial administrator, two additional automated systems have been developed. Although they were not listed as part of the Phase II grant application, they were largely developed by SJIS staff during the grant period. These systems provide the courts with capacities that probably would not have been available without the SJIS grant. The systems are:

- City Court Statistics System: Provides annual summary data reflecting the caseloads and work efforts of the 48 reporting municipal judiciaries.
- Vouchers Payable System: Keeps track of the office expenditures and travel vouchers of district court judges. Twice every month reports are generated reflecting account balance, check registry, etc.

C. Project Description

1. Background

Under Article V of the Louisiana State Constitution, the chief justice is directly charged with administration of the courts in the state. Accurate, current information about the court system is a basic requirement for good administration. Judicial managers must have this information to carry out the administrative duties imposed on them by Article V.

Recognizing the need for timely and accurate judicial information as well as the constraints imposed upon his office by daily operational necessities, the judicial administrator requested federal assistance for the design and development of a judicial information reporting system.

In July 1974 Louisiana received approval for a Phase I SJIS grant from LEAA. The grant lasted two years. The Phase I work plan submitted to and approved by LEAA contained four specific target areas of project effort. These same four target areas were again cited in the Phase II grant as areas where the principal work efforts would be expended. The evolution from Phase I to Phase II for each of the four targeted work areas is outlined below:

Figure 2
Judicial Workloads

Type of Court	Total Filings 1977	Annual Rate of Increase
Supreme Court	2,435	17%
Courts of Appeal	2,405	10% ^b
District Courts	367,085	7½% ^a
Family and Juvenile Courts	26,217	5½% ^a
City and Parish Courts	570,909	7% ^b

^aBased on an average growth over 10 years.

^bBased on an average growth over 5 years.

- District Court Automated Information System originally scheduled in Phase I for development and testing in Lafayette Parish was, in the Phase II grant, re-named the Factual Automated Case Transaction System (FACTS) and implemented in 16th District (i.e. New Iberia) during Phase II.
- Courts of Appeal Reporting System (CARS), a Phase II work effort, evolved from a Phase I manual sampling system for appellate caseloads.
- Standardized Forms and Procedures, a Phase II effort, evolved from a more comprehensive standard (manual) recordkeeping system that was envisioned during Phase I.
- District Court Reporting System was the central focus of SJIS efforts in both phases. Phase II called for the implementation and enhancement of the statewide system designed in Phase I.

During Phase II three adverse factors affected the development of the project as originally planned. These factors were largely beyond the control of the SJIS project staff. The first of these dealt with the deliniation of responsibility for the actual processing of automated SJIS programs—primarily during the development and initial stages of operation of the District Court Reporting System. The staff of the judicial administrator did not obtain a firm commitment from LCIC, the Department of Public Safety's data processing agency, as to when and by whom certain services would be performed.

The processing of District Court Reporting System programs on the LCIC computer received a low priority. To complicate matters, in November, 1977, an LCIC operator error destroyed automated SJIS history files that were accumulated over the previous year. The decision was made to abandon LCIC's UNIVAC 1100 and convert the District Court Reporting System to run on one of LIPA's Honeywell 6000's.

The second adverse condition besetting SJIS development stemmed from recent funding problems. An internal difference of opinion between the judicial and executive branches of the state government caused the cessation of all SJIS developmental funding in July 1978.

The third inhibiting factor was the loss of the SJIS project director in the middle of Phase II.

None of these three problems, either individually or in total, was insurmountable. However, they did have some adverse affect on the project.

2. Functional

There were four facets of the Louisiana SJIS project as enumerated in the Phase II grant application. A listing of these four follows:

- The District Court Reporting System will provide monthly, quarterly, and annual statistics and management reports to the district judges and clerks and to the judicial administrator's office;
- Standardized Forms and Procedures will standardize the input forms used by district clerks in submitting data to the District Court Reporting System;
- The Factual Automated Case Transaction System (FACTS) will permit on-line entry and retrieval of criminal and juvenile case data in one district; and
- The Courts of Appeal Reporting System (CARS) will track cases in the four Courts of Appeals.

3. Goals and Objectives

The overall objective of the Louisiana SJIS Project was to develop and implement an automated data processing system that would provide statewide statistical and management information on general jurisdiction and intermediate appellate courts for use by the judicial administrator's office and by other state and local components of the Louisiana Judiciary.

Phase II objectives were specified in the Phase II SJIS grant application submitted to LEAA. Phase II objectives were primarily concerned with the refinement and completion of the systems development efforts begun in Phase I. These Phase II objectives were to:

- Complete statewide implementation of, evaluate and enhance the District Court Reporting System;
- Develop and test a set of simplified, standardized forms and procedures used in state-wide data collection;

- Assist the district court in Orleans Parish in specifying requirements and developing an automated case transaction system and, if feasible, to test data transfer from that system to the District Court Reporting System via machine readable media instead of printed forms; and

- Complete the design and implementation of a case reporting system for the appellate courts.

4. Expected Impact

Successful completion of the Phase II goals and objectives outlined above, i.e., the implementation of a centralized statewide court management information system, will have as its primary impact the assisting of the state's judicial leadership in making management, administrative, policy and planning decisions concerning the general jurisdiction and appellate courts in Louisiana. Logically, there were numerous secondary impacts as the system develops. These secondary impacts include the:

- Evaluation and realignment of judicial assignments;
- Allocation of manpower;
- Standardization of sentencing;
- A more uniform flow through of data;
- The ability to provide case tracking for the appellate courts; and
- The provision of statistical and management information at the local level.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

The Phase II SJIS grant from LEAA followed immediately the expiration of the Phase I grant period. Phase II commenced on July 15, 1976, and continued for 24 months. Federal funds for Phase II totaled \$200,000; non-federal funds added \$22,222 to the budget of the project.

A project manager and an administrative assistant were funded out of the grant budget. The grant application proposed the following expenditures during the two year project:

- Personnel	\$ 63,800
- Fringe Benefits	6,384
- Travel	10,400
- Equipment	16,020
- Supplies	48,600
- Contractual	65,000
- Office Re-configuration	5,000
- Indirect Charges (10% Personnel & Fringe)	<u>7,018</u>
	\$222,222

Of the total budget specified in the grant, it was anticipated that \$121,518 (54.5%) would be spent for the development of the District Court Reporting System; \$41,088 (18.5%) would be spent on the development of the Standardized Forms and Procedures; and, \$59,616 (26.9%) on the development of the Courts of Appeal Reporting System (CARS).

No funds were originally allocated for the fourth major project task, i.e., the Factual Automated Case Transaction System (FACTS), since its funding and implementation were to be handled through the district attorney's office in the 16th Judicial District. However, some of the SJIS funds were expended for the development of FACTS: these SJIS expenditures eventually totalled \$30,000.

2. Plans

The Phase II grant application enumerated several tasks to be accomplished in each of the four major areas of development. Accompanying each task was a brief narrative and estimated start-up and completion date. These tasks are listed below:

- The District Court Reporting System: To complete the statewide implementation of, to evaluate, and to enhance the system developed in Phase I. The specifics included:
 - Complete statewide implementation;
 - Enhance report usage instruction;
 - Determine necessary system enhancements;
 - Complete system enhancements; and
 - Implement the system.
- Standardized Forms and Procedures: To develop and test a set of standardized and simplified forms and procedures for state-wide data collection. The specific tasks included:
 - Prepare RFP;
 - Survey forms and procedures;
 - Design standardized forms;
 - Institute user training;

- Test forms and procedures; and
- Evaluate the system.
- Factual Automated Case Transaction System (FACTS): To assist the district court in Orleans Parish in specifying requirements and developing an automated system and, if feasible, to test data transfer from that system to the state-wide District Court Reporting System via machine readable media instead of printed forms. The tasks were:
 - Prepare a workplan; and
 - Test data transfer.
- Courts of Appeal Reporting System (CARS): To complete the design, to develop software for, and to implement a case reporting system for the appellate courts. The workplan specified the following tasks:
 - Design and development software;
 - Institute user training;
 - Test the appellate module;
 - Refine the appellate module;
 - Develop user training; and
 - District test.

The above mentioned tasks reflect a schedule of the project's major milestones. It is also a concise management summary of the project's work efforts.

A more extensive breakdown of the tasks to be performed was required of the independent contractors who did most of the actual development and implementation work.

The District Court Reporting System was almost completely developed by the end of Phase I; pertinent Phase II work plans included a detailed implementation timetable. The remaining three Phase II tasks were performed by outside contractors: Standardized Forms and Procedures by Public Systems, Inc; CARS by Stochastic Systems Research Corp.; and, FACTS by the Criminal Justice Institute. Each vendor developed detailed work plans to support its endeavors.

3. Current Status

At the time of the assessment, the current status of SJIS project was best determined by examining each of the four major tasks and by examining the status of the specific project sub-tasks previously outlined in Section II.A.2.

- District Court Reporting System: Was fully operational on LCIC's UNIVAC 1100, but has been undergoing conversion to a Honeywell 6000 since early 1978. As a result, only half the reports slated for production were being generated at the time the assessment was conducted. During this hardware conversion, data collection was purposely restricted to every tenth case to reduce the impact on the local clerks and to lower operating costs. Several small, rural jurisdictions have not begun reporting data. No enhancements have been added to the system.

Systems development and implementation were significantly affected when files containing a years worth of history were lost in November, 1977. Partly to regain momentum and partly to help instruct the local clerks on report usage, a public relations effort was begun, utilizing seminars, newsletters, and personal discussions. Also, conversion to the LIPA Honeywell computer should provide more satisfactory data processing services.

- Standardized Forms and Procedures: The Phase II grant proposed the review, and subsequent re-design, of the forms used by trial court clerks to manually submit data to the District Court Reporting System. Upon completion of the review, it was decided that the existing input documents and procedures adequately met their intended purpose and no changes were needed.
- Factual Automated Case Transaction System (FACTS): The Phase II efforts intended to test the capability of transferring data, via machine readable media, from the local trial court to the District Court Reporting System. FACTS was originally scheduled to be installed in Orleans Parish, it was later decided that the system would be implemented in the 16th District, i.e., New Iberia. This task was partially (i.e., 17%) funded through SJIS.

Other than the change in districts, FACTS has fully met, from a Phase II perspective, its intended objectives. Although this system provides only criminal and juvenile information to the District Court Reporting System, it does conform to the original objectives in that

the information is on machine readable media and, as a side benefit, it also contains OBTS/CCH data which is submitted directly from the district to LCJIS.

- Courts of Appeal Reporting System (CARS): CARS is scheduled to be fully operational in early October 1978. There were no known bugs in the system. CARS is documented in accordance with FIPS--PUB 38.

There were two additional systems developed during the Phase II grant period. Although neither of these was scheduled as part of the original Phase II SJIS grant, both systems were partially developed by SJIS personnel. These systems are:

- City Court Statistical System: Input is entered monthly and reports are generated annually reflecting the relative caseload volumes of the 48 cities reporting. The reports are used internally by the office of the judicial administrator to compile statistical data on the performance of the respective jurisdictions and to generate periodic reports.
- Vouchers Payable System: Based on data supplied by the judges and the court clerks, reports are generated semi-monthly and include verification of input, list of checks, check register, and an ongoing account of expenses for the respective judges and judicial jurisdictions.

4. Control Methods

Three of the four tasks scheduled for development during the SJIS Project Phase II were developed externally by software consultants, i.e., Standardized Forms and Procedures, CARS, and FACTS. Official instructions and conditions for vendors submitting proposals contained the following caveat:

Vendors will set forth a plan for accomplishing each separate task and objective specified. Offerors should submit a time-phased task performance chart indicating the timing over each month of the contract work period for each stated task and each subtask as identified by him under the stated task/objectives. Scheduling and control of the individual tasks were thus provided.

For the fourth task being developed, i.e., District Court Reporting System, major milestones were set up and provided a good

degree of control. However, since funding for systems development was reduced, the judicial administrator has had to rely on developmental services being performed at no charge by LIPA. There was no leverage in this situation; tasks are difficult to schedule and control.

5. User Participation

There are two primary groups of users of the SJIS system: local judges and administrative personnel, and the centralized staff in the office of the judicial administrator. Both groups were heavily involved in the design of the SJIS systems, but this involvement was not always on a formal, scheduled basis. The SJIS Advisory Committee has, from a user's viewpoint, provided, on an ad hoc basis, some input and feedback for developmental efforts. The centralized judicial administrator's staff was naturally involved with the development of the project on a daily basis.

The SJIS Advisory Committee should have met regularly and at significant checkpoints in the development process.

B. System Description

The Louisiana SJIS Project Phase II encompasses five largely independent systems. Each system will be reviewed individually.

1. Systems Description--District Court Reporting System and Standardized Forms and Procedures

The District Court Reporting System provides both managerial and statistical data on the state and district level for criminal, civil, and juvenile cases. The system uses specially developed standardized reporting forms to record raw data.

a. Processing Approach. The District Court Reporting System is being converted from a centralized LCIC UNIVAC 1100 to run on a centralized Honeywell 6000 operated by LIPA. FACTS provides input data on magnetic tapes from the 16th District; the Standardized Forms and Procedures supply source data from the non-automated jurisdictions. In the future output files will be passed to LCJIS to allow for the automated transfer of OBTS/CCH data elements.

b. Data Collection, Preparation, and Verification. Every month the district court clerks prepare and submit a specially designed three-part standardized reporting form containing pertinent facts covering every tenth criminal, civil, and juvenile case in their respective jurisdictions. These forms are mailed to the office of the judicial administrator. Originally, data from every case was collected. During the system conversion process the court clerks were asked to report data only on case numbers ending in zero, thereby reducing the impact of the clerks' data collection task.

Each case uses the multi-part standardized reporting form. One section is completed at commencement, one when the case is put on the calendar, and one when the case is terminated. The commencement, calendar, and termination parts are mailed in as soon as each part has been completed. The last copy is retained by the court clerk for his records.

When the completed parts of the standardized forms are received by the judicial administrator's office, they are logged in and sorted by type of case, i.e., criminal, civil or juvenile. Some verification of case numbers is done visually by office staff. Complete data validation is done in an editing program. The capacity to make corrections to the file exists but has not yet been formally documented.

c. Data Entry. After the standardized reporting forms have been sorted and batched by staff of the judicial administrator, they are then hand carried to the LIPA office where they are keypunched and transmitted to the Honeywell 6000 (currently at Baton Rouge) for entry and update. The file is updated monthly.

The projected yearly volume of the standardized reporting forms after full implementation is summarized as follows:

	<u>Civil</u>	<u>Criminal</u>	<u>Juvenile</u>
Commencement Copy	120,000	105,000	40,000
Calendar Copy	100,000	100,000	-
Termination Copy	<u>90,000</u>	<u>105,000</u>	<u>40,000</u>
TOTAL	310,000	310,000	80,000

There is one notable exception in this procedure. The 16th Judicial District does not use the standardized forms for data collection or data entry, but rather transmits its case data on magnetic tape. The tape contains the information normally found on the standardized forms used by other district clerks.

d. Application Software. The data files are updated monthly. Hard copy reports are generated at LIPA and then mailed from the office of the judicial administrator monthly, quarterly, and annually. The report content is primarily statistical and is designed to be used by the local district administrative officer and by the centralized office of the judicial administrator. Reports include:

- Transaction error listing,
- Open Case listing and summary,
- Caseflow summary,
- Civil dispositions and summary,
- Criminal dispositions and summary,
- Juvenile dispositions,
- Criminal sentences,
- Juvenile referrals,
- Time analysis of terminated cases, and
- Time analysis by type of trial.

e. OBTS/CCH. No OBTS/CCH data are currently generated by the District Court Reporting system. In Louisiana, the office of the attorney general, i.e., LCJIS, has been the traditional recipient and supplier of OBTS/CCH data.

f. Security and Privacy. Since the system will run on a computer owned and operated by a state service bureau, there is a problem of data privacy. There is less control over access and utilization of data when updating and reporting on someone else's computer facilities. Guidelines for both the proper establishment of

backup procedures and for controlling data access should be established by the judicial administrator's staff. The details of the formal contract between the staff and LIPA should include specifics concerning security and privacy. LIPA is aware of the problem and believes it can be avoided. A possible solution might be to blot out defendant name on the standardized reporting forms that are being sent to LIPA. This would conform to the federal regulations which require that defendant name not be associated with case details in situations where the records might become public.

The storage of standardized reporting source documents could cause difficulty in the future. The source documents, all containing defendant name, are stored in a basement facility which lacks adequate security devices.

LIPA has two Honeywell 6000's in Louisiana. This backup capability could alleviate future processing bottlenecks and potential problems caused by down-time.

g. Computer and Communications Configurations. The Louisiana SJIS will be run on a dedicated Honeywell 6000 computer that is controlled by LIPA, a multi-agency state service bureau. LIPA was selected as the host processing facility because it offered the largest variety of support and operational services. The system operates under a GCOS operating system, and SJIS programs are written in ANSI COBOL.

A management contract has not been finalized between the judicial administrator and LIPA. Specific contractual obligations must be outlined, i.e., how, when, and by whom certain functions should be performed. This could alleviate future problems.

h. Documentation. A requirements analysis and user's manual have been written; other documentation is incomplete. None of the following can be found in adequate states of preparedness: cost-benefit analysis, conceptual design, detail systems design, operations manual, test plans, or training plans. It should be noted, however, that the office of the judicial administrator is cognizant of these shortcomings, and in recent memorandum has scheduled steps to offset them.

i. Implementation. The District Court Reporting System is in a transition phase. Although it was initially fully operational on a UNIVAC 1100, the system is now partially operational while in the process of conversion to a Honeywell 6000. This conversion is being done by state data processing personnel. Because the system has been "down" for several months, some credibility has been lost and the staff have made plans for an extensive public relations and communications effort to overcome the loss of momentum that the system originally had.

j. Maintenance. Once the system becomes fully operational, and once the necessary documentation is produced, the maintenance of the system should not require extensive personnel. The data processing specialist on the staff of the office of the judicial administrator should be able to handle any modifications and enhancements to the system. However, formal procedures which would provide for these efforts have not been outlined. This should be done.

2. System Description--Courts of Appeals Reporting System (CARS)

CARS provides state-level statistical and managerial data on the civil appeals of the four Courts of Appeal.

a. Processing Approach. CARS will be run on a dedicated WANG 2200 minicomputer housed in the office of the judicial administrator in New Orleans.

b. Data Collection, Preparation, and Verification. Pre-printed forms are completed by the clerks of the four appellate courts and mailed to the office of the judicial administrator monthly. The receipt of the data is logged in, and entered via a CRT screen. Screen entry allows the operator to visually verify and correct the data before its entry into the system.

c. Data Entry. The data are entered in batches, usually on a monthly basis, or as needed.

d. Application Software. At the time the assessment was conducted i.e., September 1978, CARS was not fully operational. However, when operational, CARS will consist of editing, file update and report writing routines. The implementation of the CARS system is presently scheduled for mid-October, 1978. Once fully implemented, the reports will be produced on a monthly basis. There are no planned

on-line query or response capabilities in the system. Output will include the following:

- Appellate Court Report - Time analysis,
- Appellate Court Report - Caseflow,
- Appellate Court Report - Caseload per judge,
- Appellate Court Report - Activity,
- Appellate Court Report - Rehearings,
- Appellate Court Report - Dispositions,
- District Judge Report - Caseflow,
- District Judge Report - Activity,
- District Judge Report - Dispositions,
- District Judge Report - Delinquent listing,
- Court Reporters' Report - Hours of testimony,
- Court Reporters' Report - Undelivered transcripts,
- Court Reporters' Report - Caseflow, and
- Source of Appeals - All cases processed between given dates.

e. OBTS/CCH. There are no current plans to enter or extract OBTS/CCH data elements from the CARS system.

f. Security and Privacy. The information stored in the CARS system is public information; consequently, privacy questions are not an issue in this system. The office of the judicial administrator acknowledged, and intends to correct, the problem of having backup tapes physically located in the same room as the original history files.

g. Computer and Communications Configurations. The CARS system ran on a dedicated WANG 2200. The programs were written in BASIC; and the diskettes used for storage were capable of holding 1/2 million bytes of numeric data. The WANG minicomputer itself has 16 thousand bytes of storage in the main memory.

The initial decision to utilize the in-house WANG 2200 minicomputer for the CARS system was based on cost effectiveness. The office of the judicial administrator owned the minicomputer, and other existing applications did not utilize the hardware to its full capacity.

h. Documentation. CARS was fully documented, and the documentation conformed to FIPS-38 standards. There was a requirements analysis, a conceptual design, a detail systems design, a users' manual, an operations manual, a test plan and a plan, for training users.

i. Implementation. Implementation is scheduled for October 1978. One major task remains, i.e., file conversion.

j. Maintenance. Because of the extensive systems and programming documentation available, and because of the detailed effort that was involved in the design of CARS, when CARS becomes fully operational it should be readily maintained and enhanced through the efforts of the data processing personnel in the office of the judicial administrator. Formalized plans should be prepared to include the recording of both the anticipated and the unanticipated system changes that inevitably occur after the implementation of a new system.

3. Systems Description--Factual Automated Case Transaction System (FACTS)

FACTS will provide judicial management information and statistics in the 16th District for criminal and juvenile cases. In addition it will input data on magnetic tape to the statewide District Court Reporting System.

The Phase II grant application specified that the capability of transferring data from FACTS to the District Court Reporting System would be explored and tested. The operational aspects of the FACTS system are the responsibility of the district attorney in the 16th Judicial District. Since FACTS was not a statewide system, it was not considered to be an integral part of the SJIS project. Consequently, the assessment team was primarily concerned with the automated data transfer capability from FACTS to the District Court Reporting System.

In view of the apparent cost effectiveness of the hardware and in view of the way in which the programs and reports have been received by the district attorney's office in the 16th Judicial District, several other judicial jurisdictions in Louisiana are currently examining the FACTS system to determine its suitability for their particular offices.

a. Processing Approach. FACTS is run on a dedicated NOVA 3/12 minicomputer. Each month FACTS generates an output tape which is sent to LIPA where pertinent data are extracted, reformatted, and entered into the District Court Reporting System. The data conversion is run on a Honeywell 6000.

b. Data Collection, Preparation and Verification. The clerks in the district attorney's office in the 16th District are responsible for collecting, preparing, and verifying all criminal and juvenile case data submitted to the FACTS system.

c. Data Entry. The data are entered when acquired via a CRT.

d. Application Software. FACTS is capable of generating 47 different reports on request. The reports are used primarily by the district attorney's office in the 16th District. Information is readily retrievable on all cases and can be viewed on the CRT screen; hard copy reports are available. Information concerning defendants, charges, witnesses, sureties, motions, scheduling, dispositions, and appeals is available through the use of a defendant name or court case number.

e. OBTS/CCH. Copies of the FACTS output files are sent directly to the LCJIS which is responsible for collecting Louisiana OBTS/CCH data. FACTS provides court-related OBTS/CCH data for both criminal and juvenile cases.

f. Security and Privacy. The operational aspects of the FACTS system were not reviewed in sufficient detail to comment extensively. However, if OBTS/CCH data are provided to outside agencies, their planned usage of this data should be clearly stated and acceptable to the district attorney's office and the district court.

g. Computer and Communications Configurations. FACTS is run on a dedicated NOVA 3/12 minicomputer. The NOVA 3/12 has 64K bytes of core storage and is supported by two disks, each having 10 M bytes.

The system is written in BLIS/COBOL. The attractiveness of FACTS is further enhanced by the cost effectiveness of the hardware on which it operates. The data reformatting and conversion routines which permit the transfer of data to the District Court Reporting System are run on a Honeywell 6000.

h. Documentation. Systems overview, conceptual design, systems description, database design, report layouts, operating system description, system costs, and users' manual are available.

i. Implementation. The system is fully operational.

j. Maintenance. All maintenance is conducted either in-house by the staff of the 16th Judicial District, or by the original vendor.

4. Systems Description--Vouchers Payable System

Although the Vouchers Payable System was not included as an element of the Phase II SJIS workplan, it was largely developed and is maintained by SJIS personnel, and runs on the WANG 2200 which was upgraded with SJIS funds. It enhances the operations of the office of the judicial administrator, and seems a good use of SJIS funds.

The Vouchers Payable System keeps track of the office expenditures and travel vouchers of district court judges and clerks.

a. Processing Approach. The Vouchers Payable System is run on the judicial administrator's dedicated minicomputer (see CARS system description).

b. Data Collection, Preparation, and Verification. Office and travel expense statements are prepared and submitted by mail by the district and appellate court clerks on pre-designed expense summary forms. The data represent expenses incurred during the previous accounting period. The forms are sent to the office of the judicial administrator bi-weekly. The payee signs the forms certifying their accuracy and content. The judicial administrator counter-signs the form. Copies of invoices, bills, or supporting explanations are attached.

c. Data Entry. The completed expense vouchers are mailed to the office of the judicial administrator whenever it is convenient, usually twice a month. The data are batched and entered twice a month onto the CRT connected to the WANG 2200 mini-processor.

d. Application Software. The input is validated and corrected on the CRT screen or through internal editing routines. Reports are generated semi-monthly, including verification listings, check printing, check register, and account summaries. The checks are mailed to the payee; all other reports are used in-house by the staff.

e. OBTS/CCH. Not applicable.

f. Security and Privacy. Backup files are kept in the same room where the original files are housed. The staff of the judicial administrator recognized this as a security problem and have promised that corrective measures will be taken in the near future. Unissued blank bank checks are kept under lock and key in the accounting office.

g. Computer and Communications Configuration. See CARS system description.

h. Documentation. Systems documentation is unavailable. In a recent memorandum Louisiana SJIS staff acknowledged this shortcoming and scheduled steps to correct it.

i. Implementation. The system is fully operational.

j. Maintenance. The absence of documentation notwithstanding, the maintenance of the system should be an easily manageable task, performed by the staff of the judicial administrator.

5. Systems Description--City Courts Statistics System

The City Court Statistics System was not in the original Phase II SJIS workplan; however, the system was largely developed and maintained by SJIS personnel, and it runs on the WANG 2200 which was upgraded with SJIS funds. It enhances the operations of the judicial administrator's office, and it seems a good use of SJIS funds.

a. Processing Approach. The City Court Statistics System is run on the dedicated WANG 2200 minicomputer (see CARS system description).

b. Data Collection, Preparation, and Verification. Every month the clerks in 48 city courts throughout the state prepare data concerning the number of civil, criminal, traffic, and juvenile cases filed and terminated. These documents are mailed to the office of the judicial administrator where they are logged in, checked and stored for later data entry.

c. Data Entry. The batched data are keypunched during slack work periods throughout the year via the WANG's CRT, in preparation for the system update which is done annually. The data are stored on diskettes for future use.

d. Application software. The data are scanned visually for content, then entered. There are no programmed edit capabilities. Consequently the output of the system has a questionable degree of accuracy. When the system is run, six reports are produced. These six reports are:

- Cases pending by month in each of the cities;
- Cases processed in civil, criminal, traffic, and juvenile in each of the cities;
- Criminal cases processed, including state misdemeanors and ordinance violations filed and terminated, by city;
- Traffic cases processed;
- A percentage breakdown of workload based on terminations of civil, criminal, traffic, and juvenile cases, by city; and
- Juvenile cases processed, including delinquency, neglect, special processing, city and state traffic violations, by city.

These reports are used in-house for manpower assignment and statistical purposes such as annual reports and summary of activities. There are no query/response capabilities in this system.

e. OBTS/CCH. Not applicable.

f. Security and Privacy. Backup files are kept in the same physical location as original files. This problem will be addressed by the staff of the judicial administrator in the near future. Because the files contain no names or case numbers, there are no privacy considerations.

g. Computer and Communications Configurations. See CARS systems description.

h. Documentation. The staff of the office of the Judicial administrator acknowledged that the documentation for the City Courts Statistical System is seriously lacking and should command a relatively high priority for future work efforts. In view of the relatively limited scope of the processing, the actual documentation needed to support this system would probably be quite small. However, it is recommended that efforts be undertaken to complete and maintain the documentation.

i. Implementation. The system is fully operational.

j. Maintenance. The system is currently operational. There are no known program bugs. The absence of documentation notwithstanding, maintenance should be a manageable task.

C. Assessment Results

1. Concerns and Recommendations

a. Service Bureau Contract. The actual processing of the District Court Reporting System is done on state service bureau hardware. A management contract should be finalized containing specific items, including the frequency and timeliness with which LIPA will perform judicial developmental and operational processing; the functions and responsibilities to be handled by LIPA, e.g., data entry, validation and correction, programming support, system maintenance; processing location, e.g., Baton Rouge or New Orleans; responsibilities of the judicial staff, e.g., data delivery, performance standards, general operating procedures, etc.; primary and backup data storage.

b. Operational Environment. Not running the District Court Reporting System on a dedicated in-house computer poses certain problems. These problems are the following: data or file loss; operational degradation caused by a large number of users; low priority in the operations queue.

c. Advisory Committee Meetings. Although an excellent and natural rapport exists between the users of the system and the judicial administrator's staff, the formal SJIS Advisory Committee was not used extensively nor on a regularly scheduled basis during the design and

development phases of the SJIS Project. This advisory committee should meet regularly and at significant checkpoints in the project, i.e., at the conclusion of the systems planning study, requirements analysis, systems specifications, implementation, etc.

d. Fiscal Funding. Since January 1, 1978, the SJIS Project has had no official development funding. No change is seen in the immediate future in this policy. Although the authority and responsibility for effecting a change in this policy is beyond the scope of the office of the judicial administrator, the lack of this funding clearly affects the ability of the staff to implement Phase II goals in a timely fashion and properly maintain SJIS in the future.

e. Developmental Environment. The Louisiana SJIS staff has limited manpower. Despite the level of individual in-house expertise available for systems development and maintenance, a staff this small cannot be expected to develop and maintain an SJIS system of this magnitude. Because of the recent cessation of funding for judicial data processing development, the judicial administrator has found it necessary to rely on various state data processing agencies for free programming, systems development, and maintenance efforts. This means that there is minimal control over the quality and scheduling of design activities.

f. System Status. At the time this assessment was conducted, the District Court Reporting System was not fully converted to the hardware on which it was scheduled to run and the Appellate Court Reporting System was not fully implemented. Full conversion of the District Court Reporting System and complete operational status of CARS should be given a high priority.

g. Systems Security. Automated backup files do not currently exist for the District Court Reporting System. In addition, the backup files for all systems using the WANG minicomputer are physically located in the same room as the original files. This should be corrected.

h. Systems Privacy. Since the District Court Reporting System carries information with case level details, including defendant name, and since this system utilizes a computer processing facility outside

the jurisdiction of the judicial administrator's office, privacy problems may develop. Procedures should be established to restrict access to sensitive judicial data and possibly to fully remove defendant name from the input documents being sent to LIPA.

i. Systems Documentation. The judicial administrator's staff has offered specific plans for completion of the documentation. These efforts should be continued until all systems have been fully documented.

j. Systems Maintenance. Formal procedures should be established for systems maintenance and changes.

2. Exemplary Findings.

a. Utilization of Existing Resources. Considerable cost savings have been realized by continually using an existing minicomputer. The WANG 2200 existed prior to the SJIS project and has been utilized at least three different times by SJIS personnel in the development and operation of new systems. CARS, the City Statistical System, and the Vouchers Payable System have all been implemented and operated on the WANG system. In addition, plans are being made to utilize the WANG system as a word processing center, thus further expanding services while spreading overhead costs.

b. Positive Attitude. The Louisiana SJIS staff has been thinking ahead toward the expansion of several components of the system in order to increase both the quantity and quality of data received from the clerks. More extensive financial data have been requested to facilitate a statewide financial reporting system. More data are being requested from the clerks of court to upgrade the sophistication of the system in a manner that would be most useful to the clerks. At the instigation of the office of the judicial administrator, several judicial districts throughout the state were examining the FACTS system to determine its potential usefulness and to consider it for possible adoption in their respective districts. The staff is looking to establish a Computer Aided Transcription (CATS) program. In general, the staff has a positive and forward looking attitude, with the emphasis on the resolution of problems and continuing progress.

c. Organizational Benefits. The entire judicial system in Louisiana, from the supreme court down to the city courts, is beginning to feel the effects of the SJIS project. This affects the allocation of judicial manpower, and provides the judicial department and the supreme court with a better understanding of district, appellate and city court activities.

d. Improved Data Validation. Significant strides have been made in the improvement of data validation and error correction procedures associated with the District Court Reporting System since the last SJIS assessment. This trend should continue to insure system credibility.

e. Phase II Workplan. Most of the objectives specified in the original Phase II SJIS workplan have been met. According to a September 1, 1978, workplan, all of the SJIS project objectives will be met in the near future.

f. Data Input Enhanced. FACTS has been very successful in providing all data (i.e., specifics from 100% of the cases) to the District Court Reporting System on machine readable media. This is being done at no additional cost to the judicial administrator. Manual reporting systems only provide a 10% case sample, and presently incur a cost of \$1.50 per civil case submitted; this fee is paid by the judicial administrator to the clerks of the court. Future utilization of FACTS by other jurisdictions could mean significant cost savings for the judicial administrator. In addition, expanded use of FACTS will provide greater data capture, i.e., 100% of the cases would be reported on rather than every tenth case.

g. Improvement Despite Obstacles. Since the previous assessment there has been tremendous improvement in the status of the SJIS project. This has occurred despite obstacles over which the judicial administrator's staff had no control. For example: 1) the project director resigned; 2) there was a significant loss of data; 3) it was necessary to convert from one computer system to another; 4) and financial funding from the governor's office was lost.

h. Project Continuity. Despite staff turnover, the project has been able to maintain a strong degree of continuity and the new staff seems quite capable of successfully completing the project and fully implementing the SJIS system.

MICHIGAN PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On November 14, 15, and 16, 1978, an assessment of the Michigan State Judicial Information System (SJIS) project was conducted. The assessment was conducted by:

Dr. Hugh Collins, Supreme Court of Louisiana
Mr. Douglas Somerlot, Supreme Court of Ohio
Mr. Charles Ferrell, National Center for State Courts
Mr. Richard Delaplain, National Center for State Courts

The purpose of the assessment was to appraise the administrative and technical status of the project relative to the requirements of the Michigan SJIS grant from the Law Enforcement Assistance Administration (LEAA) and relative to good systems development practices and procedures.

The primary participants from the Michigan Court of Appeals and the administrative office of the courts (AOC) were as follows:

Michigan Court of Appeals
Honorable Robert J. Danhof, Chief Judge
Mr. Ronald L. Dzierbicki, Chief Clerk
Mr. James Maher, Assistant Clerk
Mr. Hank Hensen, Systems Analyst

Administrative Office of the Courts
Mr. Einar Bohlin, State Court Administrator
Mr. Richard G. Wilhelm, Executive Director, Judicial
Data Center

The Honorable T. John Lesinski, formerly the chief judge of the Michigan Court of Appeals, was also interviewed during the assessment.

The LEAA representative at this assessment was Mr. Arthur Fuldner.

A. Management Summary

The Michigan SJIS project is currently in Phase II, which began on March 7, 1978, and is scheduled to end on March 7, 1979. The overall goal of the SJIS project is to develop an automated appellate court system that will provide basic management and statistical reports as by-products of automated record-keeping functions.

Phase I of the Michigan SJIS project began in June, 1976, after initial development efforts had been undertaken in conjunction with the Judicial Data Center (JDC) and court of appeals in 1975.

The major goals for Phase I of the SJIS project were as follows:

- To implement an on-line system for the entry and retrieval of case information in the court of appeals.
- To organize the records of the caseload to facilitate its management by: (1) generating case status reports, (2) facilitating the review of caseloads for scheduling, and (3) identifying cases past due for event updating.
- To determine the related requirements of the supreme court with regard to the appellate system.
- To provide information to other criminal justice agencies.

The JDC was established in 1971, within the office of the state court administrator, to provide data processing facilities for all state courts. The JDC provided one analyst/programmer and two contract programmers to develop the application software for the court of appeals system. Detail design specifications were the responsibility of the court of appeals. Progress during Phase I of the project was impacted because the JDC lacked sufficient resources to accommodate the needs of the court of appeals, which resulted in the court of appeals taking over responsibility for systems development at the end of Phase I. The JDC

continued to provide computer support but was not involved in the software development for the system. The change in responsibilities between the JDC and court of appeals was mutually agreed upon by the two agencies.

Phase II of the Michigan SJIS project began on March 7, 1978 and is scheduled to end on March 7, 1979. The overall goals of Phase II are as follows:

- To integrate the appellate court system with the lower trial court systems.
- To develop microfilm technology for computer produced and traditional source documents in the court of appeals.
- To reduce clerical tasks through the use of word processing technology.
- To provide increased management information and reports for the appellate courts.

The project has hired a systems analyst to supervise two contract programmers and develop software for the appellate court system. Word processing equipment has been purchased and was being tested at the time of this assessment. Computer output microfiche (COM) are generated on a weekly basis for all closed and pending case indexes.

B. Organizational Structure and Processing

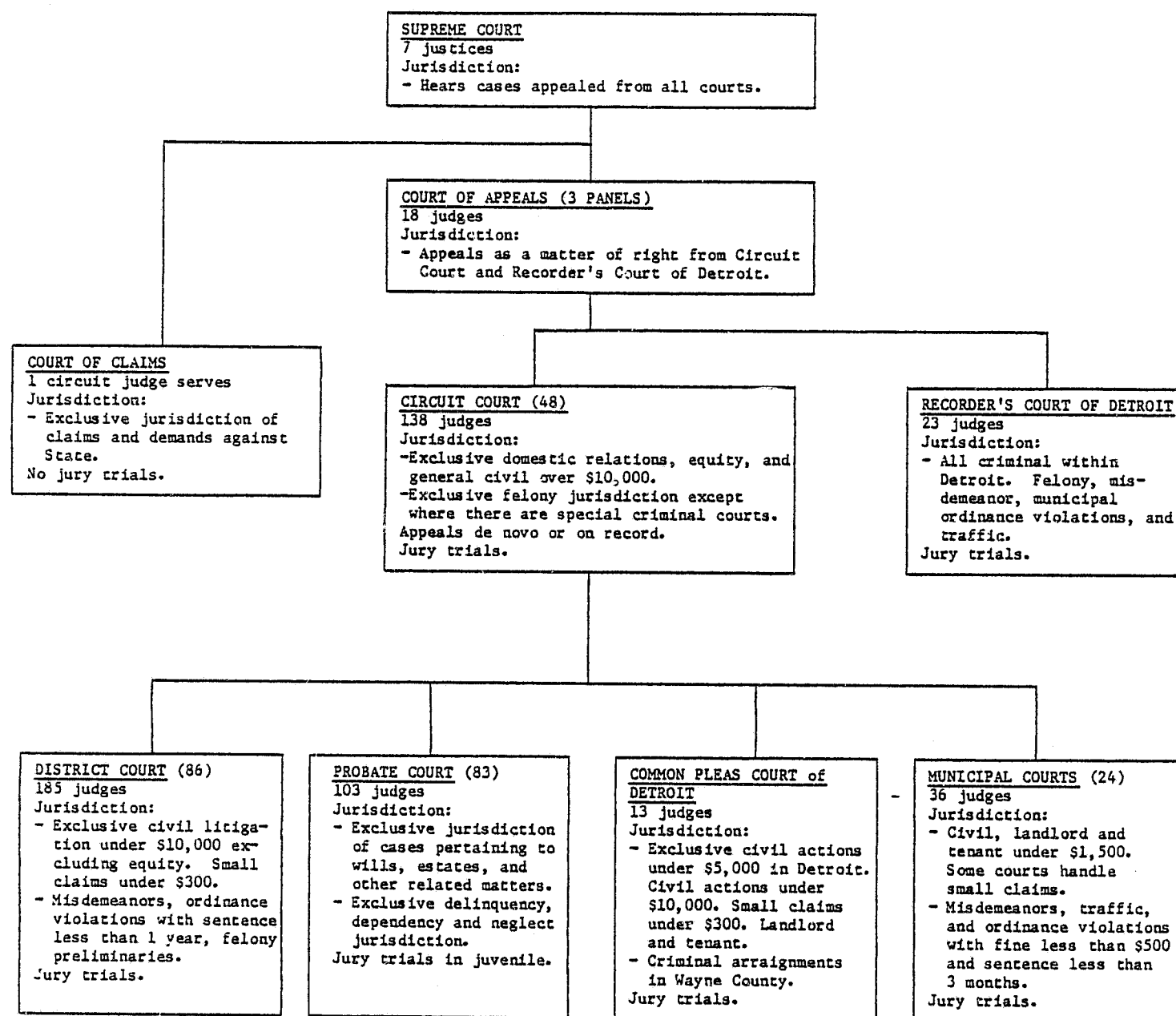
1. Judiciary

The Michigan court system description has been extracted from the pamphlet--One Court of Justice, Michigan Supreme Court, 1975. Figure 1 illustrates an organizational structure of the Michigan court system.

Supreme Court

The Michigan Supreme Court is the highest court of appeals in the state. The supreme court consists of the chief justice and six associate justices. Each justice is elected on a nonpartisan ballot to an eight-year term of office. Constitutionally the supreme court has superintending control over all courts in the state and is also responsible for establishing practice and procedures in all courts.

Figure 1
MICHIGAN COURT SYSTEM, 1976



Indicates route of appeal.

Source: National Court Statistics Project, NCSC.

Court of Appeals

The Michigan Court of Appeals is an intermediate appellate court. Practice and procedures are established by the supreme court and jurisdiction is established by state law. Judges are elected to a six-year term of office from districts that are established by the state legislature. The chief judge is selected by the court of appeals judges every three years. The court of appeals hears cases in four locations within the state.

Circuit Court

The circuit courts are the general jurisdiction courts in Michigan. The state is divided into judicial circuits and judges are elected from within a circuit to a term of six years. The circuit court has original jurisdiction in all civil cases involving \$10,000 or more, all felony cases, and serious misdemeanors and also hears cases appealed from the district courts. The circuit court has superintending control over inferior courts within the respective judicial circuits; this control is subject to final superintending powers of the supreme court.

Courts of Limited Jurisdiction

District courts were established by legislative act in 1968 and became courts of record in 1973. Judges are elected to a six-year term of office. District courts have exclusive jurisdiction in all civil cases involving \$10,000 or less, misdemeanors where punishment does not exceed one year, traffic cases, arraignments, preliminary hearings, and the setting and acceptance of bail.

Probate Courts

A probate court is located in each county of the state except where four counties have consolidated to form two probate court districts. The number of judges allotted to a county depends upon the population of that county, with each district (county) having at least one probate judge. Judges are elected to a six-year term of office. The probate court supervises the probating of wills and the administration of

estates and trusts. It is also the juvenile court, handling cases of children under the age of 17 who are delinquent, neglected, or abandoned.

Special Courts

The court of claims, the recorder's court, and the common pleas court are located in the city of Detroit. These special courts will remain in existence until abolished by the legislature.

The court of claims has jurisdiction limited to hearing claims of \$100 or more against the state of Michigan. Michigan granted consent to be sued and established the court of claims to handle these matters.

The recorder's court has jurisdiction in all criminal cases arising within the city of Detroit. It also maintains a traffic and ordinance division.

The common pleas court has exclusive jurisdiction in all civil matters not exceeding \$5,000 and concurrent jurisdiction with Wayne County Circuit Court in civil cases.

2. Data Processing

Computer facilities for the Michigan SJIS project are provided by the Judicial Data Center (JDC), which became operational within the office of the state court administrator in 1973. The JDC provides data processing support for the state courts, and will ultimately provide support to all Michigan courts.

Analytical and programming tasks for the SJIS project are now accomplished by the SJIS project staff of the court of appeals.

3. SJIS Project

The SJIS project organization is under the direct control of the chief clerk of the court of appeals, with project management responsibility delegated to an assistant clerk. Under the direct supervision of the assistant clerk, i.e., project director, are a systems analyst and two contract programmers.

The court of appeals has appropriated sufficient funds to absorb personnel (two programmers) and ongoing operating costs when SJIS grant funds are expended.

4. SJIS Advisory Committee

During Phase I of the SJIS project, an advisory committee was established that was composed of the chief judge, the chief clerk of the court of appeals, and the project director. This committee establishes the guidelines and policies related to the development of the SJIS project.

5. Other SJIS-Related Groups

During Phase I of the Michigan SJIS project a user committee was established to review the progress of the project. This committee was dissolved as a result of the delays encountered during Phase I of the project. At the time of this assessment, the users committee has not been reactivated. There are plans to reactivate the committee in the near future.

6. Judicial Workloads

The latest verified caseload figures available for Michigan's court system are shown in Appendix A.

7. Related Systems

The Judicial Data Center (JDC) was established by the Supreme Court of Michigan to provide computer services to the courts within the state of Michigan. The following systems have been implemented by the JDC:

- Basic Michigan Court System (BMCS): BMCS is designed to provide on-line services to the larger circuit courts. BMCS maintains criminal case records and provides the current status of each case and caseflow management information.
- Case Information Control System (CICS): CICS is designed to work in conjunction with BMCS to provide caseload information on a monthly basis to judges and court administrators.
- Probate Court Advanced System: This system is designed to provide the court, administrative, and clerical personnel with comprehensive and timely information through terminals located

in each court. The system provides the courts with the following services: case indexing, calendaring, scheduling, and exception reporting.

- Traffic and Ordinance System (TOS): TOS operates specifically for the Detroit Traffic Court. The system is designed to print notices and status reports for administrative management personnel. TOS also interfaces with the secretary of state's computer for on-line access to driver's history files.
- District Court Advanced System (DCS): This system processes traffic and ordinance violations. It is an on-line system that allows access to driver's history records from the secretary of state's computer files. On-line inquiry and update functions and the production of notices are integral parts of this system.

- Case Activity Reporting System (CARS):

Probate Courts: The CARS system is designed to monitor the inventories and accounts filed by fiduciaries in the probate courts, and to provide reports of significant events that may require follow-up by the judge or registrar.

Circuit and District Courts: The CARS system monitors significant events throughout the life of each case. The system provides the basic case processing and administrative reports needed by the trial courts.¹

C. Project Description

1. Background

Phase I of the Michigan SJIS project began in June of 1976. The overall goal of the SJIS project was to continue the design and implementation efforts that were started in 1975 by the court of appeals and JDC. As mentioned in an earlier section of this report, delays caused considerable slippage in the project schedules during Phase I.

Phase II of the Michigan SJIS project is designed to continue the efforts initiated during Phase I in order to develop an automated appellate court system that will automate all record-keeping functions, and provide management information and statistics that will facilitate the day-to-day operations of the Michigan Court of Appeals.

¹State of Michigan, State Court Administrative Office, What are the Systems?, June 1977, pp. 2-12.

2. Functional

At the time of this assessment, the index/update module of the appellate court system was operational. Approximately 35,000 closed cases and 4,000 pending cases had been entered into the system and were available for inquiry purposes.

A unique feature of the appellate system was the integration of computer output microfiche and word processing technology. Case indexes are produced on microfiche on a weekly basis to reflect the current closed and pending cases. The word processing system will interface with the appellate database to produce orders, case calls, and motion dockets.

3. Goals and Objectives

The overall goal and objective of the SJIS project is to develop and implement a comprehensive appellate court management information system. More specific objectives of the project are as follows:

- Integrate the appellate court system with the automated trial court systems operating on the JDC computer.
- Extend the appellate court system to the supreme court, where possible.
- Determine the requirements of other criminal justice components and provide these agencies with data applicable to the appellate court system.
- Provide early identification of trends and patterns in appellate cases.
- Develop program personnel and financial subsystems for the court of appeals.
- Develop the use of microfilm technology.
- Reduce repetitive clerical tasks through the use of word processing technology.

4. Expected Impact

The initial seed money provided by LEAA for SJIS was an invaluable resource that provided funds for the continued development of the appellate court system. The Michigan SJIS project has suffered numerous delays that will impact the accomplishment of specific objectives of the Phase I and Phase II grants.

One of the specific objectives of the Phase II grant has been the integration of the appellate court system with the lower trial court systems operating on the JDC computers. At the time of this assessment, it was the opinion of the assessment team and the SJIS project staff that the integration of the appellate court system with the lower trial systems would not be accomplished. There are two major reasons for which the attainment of this objective is unlikely:

- Michigan's SJIS project staff felt that the modules of the automated lower trial court systems were of little value to the appellate court system; therefore, the design and programming of the appellate court system were accomplished wholly independent of the automated lower trial court systems and without regard to interfacing and integrating the appellate system with the automated lower trial court systems.
- The communications software for the appellate court system is not compatible with the communications software used for the lower trial court systems; this incompatibility of software prevents a direct interface between the appellate system and the lower trial court systems.

The appellate court system, as well as the automated trial court systems that are operated on the JDC computers, have suffered degradation in response times provided to the users. This problem could pose some serious problems to all the on-line users at the JDC in the future. The director of the JDC stated that a study is being conducted to determine whether or not to upgrade the existing computer to a larger system or to purchase minicomputers and establish a distributed network of minicomputers. The problem of degradation in response time will be resolved in the near future according to JDC personnel.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Phase II of the Michigan SJIS project began on March 7, 1978, and is scheduled to end on March 7, 1979. Phase II of the SJIS project calls for the continued development of a comprehensive management information system for the appellate courts in the state of Michigan.

The Phase II grant specified the following Phase II activities:

- Integrate the appellate system with trial court systems developed at the Judicial Data Center.
- Extend the appellate court system to the supreme court with additional developments as required.
- Identify needs of other agencies for information from appellate courts and develop techniques for providing such information.
- Provide increased management information to appellate courts.
- Plan and develop adequate microfilm technology.
- Reduce repetitive clerical tasks through word processing technology.

2. Plans

The SJIS project director has developed an overall workplan that projects the month of completion for each objective. The workplan does not provide specific milestone completion dates in order to determine the relative status of accomplishing a specific objective. State funding has been appropriated to take over two grant-funded positions (two programmers) and data processing operating costs when federal funds are expended.

3. Current Status

The SJIS project has progressed as well as could be expected considering the delays encountered during Phase I of the project. Software development, testing, and implementation were ongoing activities at the time of this assessment. As mentioned earlier in this report, the generation of computer output microfiche of closed and pending case indexes was operational. Word processing equipment had been installed and was undergoing systems tests at the time of this assessment.

4. Control Methods

A letter of understanding that was mutually agreed upon between the Michigan Court of Appeals and the Michigan Judicial Data Center establishes specific responsibilities for each agency with regard to software development, computer support, security of data files, and cost accounting procedures.

A serious problem exists, however, in that there are no formal guidelines or a requirement for system documentation. The only documentation available to describe or provide information relating to a specific application program is a machine compilation listing of each program. The assessment team felt this lack of overall system documentation could present serious ramifications if the system analyst and/or programmers were to seek employment elsewhere than the court of appeals.

5. User Participation

During Phase I of the project a formal users committee was established to provide advice for initial design efforts of the system. When the project suffered delays during Phase I, the clerk of the court deactivated this committee. At the time of this assessment the committee had not been reactivated. The assessment team felt that the committee should be reactivated as soon as possible before the system design and implementation efforts progress much further.

B. System Description

1. Processing Approach

The appellate court system operates on one of two Burroughs 4700 computers. Computer support for the system is provided by the Michigan

Judicial Data Center (JDC), an agency within the state court administrator's office. The JDC was established in 1971 to provide computer and technical support to the state courts. The appellate court system is an on-line system with terminals located in the four appellate court locations. When the appellate system is fully implemented, it will support 22 active CRT terminals, and provide printed reports to each appellate court location.

2. Data Collection, Preparation, and Verification

Case filings are accepted at any office of the clerk by mail or by personal delivery. Initial case information is entered via a CRT terminal located in each appellate court office. Additional information is entered at such time the filing has been perfected and the original case from the lower trial courts is delivered to the appellate court. Information entered is automatically edited for format structure and validity, and subsequent periodic manual verification by a clerical supervisor constitutes an additional verification process.

3. Data Entry

All data entry for the appellate court system is in an on-line mode. Data are entered on a daily basis. Access to the database is accomplished through appellate court case number, trial court case number, trial court judge number, attorney number, or party name using SOUNDEX methodology.

4. Application Software

At the time of this assessment approximately 20% of all application programs had been developed. The assessment team felt that development of management information and statistical reports should have been given more priority in order to provide judges and clerical staff information that would facilitate the day-to-day operation of the courts of appeal.

All programs are and will be written in COBOL.

5. OBTS/CCH

At the time of this assessment there were no plans to provide OBTS or CCH transactions to other criminal justice related agencies.

6. Security and Privacy

The Michigan SJIS system is designed to be reasonably secure against the following types of hazards:

- Physical entry to premises.
- Hardware failure.
- Software modification.

Passkeys are required for entry into the various rooms (computer, tape library, etc.) at the JDC. In the event of hardware or software failure, the SJIS system files can be restored from magnetic tape files. Transaction files, if lost or damaged, can be restored from transaction log tapes or by re-entering the data from source documents.

Passwords are required to gain access to the SJIS files. Access is limited to designated appellate court personnel. All updates or additions to the database are logged by individual password codes. Inquiries are also logged by the system to identify the individual accessing the database.

7. Computer and Communications Configuration

SJIS is processed on one of two Burroughs 4700 computers that are operated by the Judicial Data Center, an agency within the administrative office of the courts. The 4700's each contain 524 K bytes of main memory, and support approximately 184 interactive devices (terminals and remote printers). The Burroughs computers operate under Master Control Program V (MCPV), utilizing Network Definition Language (NDL) as their communications software. The Burroughs 4700 supports COBOL, FORTRAN, and other specialized software packages.

8. Documentation

The assessment team was concerned about the lack of systems design documentation and program documentation. The assessment team stressed the importance of documentation to the SJIS project staff during this assessment.

The project staff has developed a well written user's manual that is used for training purposes.

9. Implementation

Each module of the SJIS system is thoroughly tested and debugged prior to actual implementation on-site. When a new or revised module is

implemented, the user will operate under the old or manual system in a parallel mode with the new or revised module until such time as changeover to the new or revised system can take place.

Formal on-site training sessions are conducted by the SJIS project staff. The training sessions are supplemented by a written user's manual.

Modifications to an existing module are not documented by the programming staff. The assessment team stressed the importance of maintaining a written record of changes to programs and modules for continuity purposes.

C. Assessment Results

This section will review the current status of concerns and recommendations made by the assessment team and will describe the reactions of the assessment team to the Phase II Michigan SJIS project efforts in terms of the prospects for ultimate satisfaction of the project goals and objectives.

1. Concerns of the Assessment Team

a. The appellate court system was designed to be independent of the lower trial court systems. It should be noted that the appellate system was started at a time when the JDC resources were (and still are) committed to the development of trial court systems. It is unfortunate that the appellate system and trial court systems cannot be integrated in order to eliminate redundancy in data capture and utilization. The assessment team's concern relates to the unlikely prospect that the Michigan SJIS system will become an integrated statewide judicial information system in the near future.

b. The assessment team was concerned with the lack of systems and program documentation. The absence of detail design specifications, program specifications, and program documentation could be detrimental to the continued developmental efforts and future existence of the appellate court system if the technical staff were to seek employment elsewhere than the court of appeals.

c. The users committee was deactivated during Phase I of the project, and had not been reactivated at the time of this assessment.

The assessment team expressed concern that the users committee had not been reactivated in order to review the input and output products being developed.

d. The primary goal to be achieved by the appellate court system is to store all closed and current cases filed in the appellate courts in the state of Michigan. The assessment team expressed concern that too low a priority has been given to developing management information reports that could facilitate the management and operation of the appellate court offices. There were no plans for the SJIS project to develop a case scheduling module or a statistical reporting module.

2. Recommendations of the Assessment Team

a. Integration of Systems. The assessment team recommends that an analysis of the appellate court system and automated lower trial court systems be conducted to determine the most feasible method(s) of integrating these systems.

b. Documentation. The assessment team recommends that a guideline for documentation of the system and application programs be developed and implemented immediately. Documentation of a system and associated programs are ongoing tasks and should be treated as such.

c. Users Committee Reactivated. The users committee should be reactivated as soon as possible before development of the system proceeds much further. The users of the system have to work with the system on a day-to-day basis and their expertise can provide invaluable information that could enhance the design and eventual operation of the system.

d. Management Information Reporting. The assessment team recommends that more emphasis be given to the development of management and statistical reports that could facilitate the management and operation of the courts of appeal in Michigan.

3. Exemplary Findings

a. Computer Output Microfiche(COM). The SJIS project staff has done an excellent job in integrating COM capabilities with the appellate court system. This capability will prove to be a very cost effective method of producing output reports and indexes.

b. Word Processing. The SJIS project staff will establish an interface with word processing equipment and the appellate court

system that will result in a reduction of repetitive clerical tasks.

4. Conclusions

Michigan's SJIS project has suffered from severe slippages in relation to the Phase I and Phase II grant specified timetables. The project probably will not attain all the objectives specified in the Phase I and Phase II grants by the scheduled conclusion of the SJIS project in March, 1979, because of the delays encountered during Phase I and Phase II.

Since the time of the assessment visit to Michigan, the SJIS project has made significant strides in satisfying several of the assessment teams' concerns. The appellate system, as of May, 1979, has been enhanced to provide the users with management information reports, the computer output microfiche and word processing interfaces have been implemented, and the users committee has been reactivated.

MICHIGAN SUPREME COURT
Court of last resort
7 justices
January 1, 1976 - December 31, 1976

	Beginning pending	Filed	Disposed	End pending
Cases:				
Appeals	143	70 ^a	87	126
Total appeals ^b	143	70 ^a	87	126
Other cases:				
Original proceedings	(c)	(c)	(c)	(c)
Requests to appeal:				
Applications	253	975	834	394
Total other cases	253	975	834	394
Total cases	396	1,045	921	520

Boldface headings indicate the classifications used by the NCSP.

^a70 appeals were granted from the total 1,045 cases filed in 1976. The denied appeals appear as requests to appeal.

^bCourt indicates that "approximately 99 percent of all appeals to the Michigan Supreme Court are discretionary. Appeals of right exist only for certain State Bar Grievance Board cases and for judicial disciplinary cases. The few appeals of right are accounted for in this report as if they were applications for discretionary appeals."

^cThere is approximately one case per month, on an average, that is handled as an original proceeding, according to the information obtained from the clerk's office.

Source: Unpublished document titled: "Status Report, Part I: Number of Cases in Each Stage," provided by clerk of the supreme court. Document gives calendar year data for 1974, 1975, and 1976. Statistics are from the unpublished data except that totals have been computed where necessary, and revisions have been made during verification by the clerk of the supreme court.

TAKEN FROM NATIONAL COURT STATISTICS PROJECT

MICHIGAN COURT OF APPEALS
Intermediate appellate court
3 panels, 18 judges
January 1, 1976 - December 31, 1976

	Beginning pending	Filed	Disposed	End pending
Cases:				
Appeals:				
Civil	1,119	1,096	1,001	1,274
Criminal	2,396	1,911	2,398	2,699
Total appeals	3,515	3,007	3,399	3,973
Other cases:				
Original proceedings:				
Habeas corpus	3	11	10	4
Mandamus	9	83	74	18
Superintending control	18	118	105	31
Total	30	212	189	53
Requests to appeal:				
Civil application	159	666	558	257
Civil application (delayed)	61	61	50	72
Criminal application	90	229	228	31
Criminal application (delayed)	252	369	350	281
Total	562	1,325	1,186	641
Total other cases	592	1,537	1,375	734
Total cases	4,107	4,544	4,774	4,707
Other proceedings:				
Rehearing requests:				
Motions for rehearing	—	180	180	—
Motions for rehearing of opinion	—	173	173	—
Total	—	353	353	—
Other matters:				
Motion to dismiss or affirm	—	768	768	—
Miscellaneous motions	—	4,550	4,550	—
Guilty plea submission on merits	—	192	192	—
Total	—	5,510	5,510	—
Total other proceedings	—	5,863	5,863	—

Boldface headings indicate the classifications used by the NCSP.
— = Not applicable.

Source: State Court Administrator, Annual Report-1976-77 (Lansing, Michigan: 1977). Report contains calendar year data for court of appeals. Statistics are from the annual report except that totals have been computed where necessary, and additions have been made during verification by the state court administrative office.

MICHIGAN COURT OF CLAIMS
Court of general jurisdiction^a
1 circuit judge serves
July 1, 1975 - June 30, 1976

	Beginning pending	Filed	Disposed	End pending
Civil^b:				
Administrative	301 ^c	441	356	386
Appeals ^d	0	546	145	401
Total civil	301	987	501	787
Grand total	301	987	501	787

Boldface headings indicate the classifications used by the NCSP.

^aData for this court are included in the general jurisdiction courts since circuit judges serve. Effective 1/1/79, the jurisdiction of the court of claims will be assigned to the 30th Judicial Circuit.

^bCivil cases are counted with the filing of a petition or complaint.

^cBeginning pending figure for 1976 does not equal the end pending figure for 1975.

^dThese are appeals under the Vietnam Era Bonus Section Act.

Source: State Court Administrator, Annual Report 1975-76 (Lansing, Michigan). Statistics are from the annual report except that totals have been computed where necessary.

MICHIGAN CIRCUIT COURTS
Court of general jurisdiction
48 circuits, 138 judges
July 1, 1975 - June 30, 1976

	Beginning ^a pending	Filed	Disposed	End pending
Civil^b:				
Auto tort	20,847	10,472	10,147	21,172
Domestic relations:				
Divorce	46,613	60,591	59,529	47,675
Other civil:				
Other general civil	38,478	55,302	49,791	43,989
Appeals	430	559	481	508
Total civil	106,368	126,924	119,948	113,344
Criminal^c:				
Felony:				
Criminal ^d	10,811	25,821	24,962	11,670
Appeals	548	605	613	540
Total criminal	11,359	26,426	25,575	12,210
Grand total	117,727	153,350	145,523	125,554

Boldface headings indicate the classifications used by the NCSP.

NE = This classification is not handled in this court.

-- = Not applicable.

^aBeginning pending figures for 1976 do not equal end pending figures for 1975.

^bCivil cases are counted with the filing of a petition or complaint.

^cThe criminal unit of count is the number of defendants on the information, indictment, or complaint.

^dThis category includes some high misdemeanors which are punishable by more than one year in prison.

Source: State Court Administrator, Annual Report 1975-76 (Lansing, Michigan: 1976). Statistics are from the annual report except that totals have been computed where necessary.

RECORDER'S COURT OF DETROIT, MICHIGAN
Court of general jurisdiction
1 court, 23 judges
January 1, 1976 - December 31, 1976

	Beginning pending	Filed	Disposed	End pending
Criminal^a:				
Felony ^b	4,592	13,005	10,959	6,417 ^c
Misdemeanor:				
Misdemeanor Division	N/A	8,240	6,870	N/A
Traffic and Ordinance Division misdemeanors	2,563	7,045	6,439	3,169
Total	2,563 ^d	15,285	13,309	3,169 ^d
Ordinance violations	N/A	850,388	N/A	N/A
Felony preliminary:				
Traffic and Ordinance Division felonies	130	54	55	129
Total criminal	7,285 ^d	878,732	24,268 ^d	9,715 ^d

Boldface headings indicate the classifications used by the NCSP.
N/A = This case type is handled by the court, but the data are unavailable.

- ^aThe criminal unit of count is the number of defendants on the information, indictment, or complaint.
^bThe felony category includes a few high misdemeanors.
^cChange in pending does not equal the difference between filings and dispositions.
^dNot all categories of cases were available for inclusion in total.

Source: Recorder's Court of the City of Detroit, Michigan, 1976 Annual Report (Detroit, Michigan). Statistics are from the annual report except that totals have been computed where necessary, and additions have been made during verification by the state court administrative office.

MICHIGAN DISTRICT COURTS
Court of limited jurisdiction
86 courts, 185 judges
July 1, 1975 - June 30, 1976

	Beginning pending	Filed	Disposed	End pending
Civil^a:				
Law:				
Civil	38,810	95,906	93,133	41,583
Small claims	9,642	42,752	42,940	9,454
Property rights:				
Landlord summary	3,313	34,088	33,035	4,366
Total civil	51,765	172,746	169,108	55,403
Criminal^b:				
Traffic	191,874	1,291,319	1,277,551 ^c	205,642
Other criminal:				
Non-traffic ^d	67,246	231,787	228,547 ^c	70,486
Total criminal	259,120	1,523,106	1,506,098 ^c	276,128
Grand total	310,885	1,695,852	1,675,206	331,531

Boldface headings indicate the classifications used by the NCSP.

- ^aCivil cases are counted with the filing of a petition or complaint.
^bThe criminal unit of count is the number of defendants on the information, indictment, or complaint.
^cFor criminal dispositions, 644,061 traffic cases and 17,082 non-traffic cases were disposed by the Traffic Bureau.
^dNon-traffic cases include misdemeanors, ordinance violations, and preliminary hearings.

Source: State Court Administrator, Annual Report 1975-76 (Lansing, Michigan: 1976). Statistics are from the annual report except that totals have been computed where necessary.

MICHIGAN MUNICIPAL COURTS^a
Court of limited jurisdiction
24 courts, 36 judges
July 1, 1975 - June 30, 1976

	Beginning pending	Filed	Disposed	End pending
Civil^b:				
Law:				
Civil	1,999	13,005	12,646	2,358
Small claims	4	441	434	11
Property rights:				
Landlord summary	494	3,144	2,969	669
Total civil	2,497	16,590	16,049	3,038
Criminal^c:				
Traffic	88,452	188,679	142,277 ^d	134,854
Other criminal:				
Non-traffic ^e	23,953	40,689	39,253 ^d	25,389
Total criminal	112,405	229,368	181,530^d	160,243
Grand total	114,902	245,958	197,579	163,281

Boldface headings indicate the classifications used by the NCSP.

^aThere were no data reported for the courts in Grosse Pointe and Wyoming.

^bCivil cases are counted with the filing of a petition or complaint.

^cThe criminal unit of count is the number of defendants on the information, indictment, or complaint.

^dOf the criminal dispositions, 99,457 traffic cases and 18,618 non-traffic cases were disposed by the Traffic Bureau.

^eNon-traffic cases include misdemeanors and ordinance violations.

Source: State Court Administrator, Annual Report 1975-76 (Lansing, Michigan: 1976). Statistics are from the annual report except that totals have been computed where necessary.

MICHIGAN PROBATE COURTS
Court of limited jurisdiction
83 courts, 103 judges
July 1, 1975 - June 30, 1976

	Beginning ^a pending	Filed	Disposed	End pending
Civil^b:				
Domestic relations:				
Adoptions	N/A	5,503	5,190	N/A
Marriages	N/A	4,530	4,532	N/A
Miscellaneous ^c	60	10,075	9,963	172
Total	60^d	20,108	19,685	172^d
Probate:				
Decedent's estates	180,721	30,963	34,270	177,414
Guardianships	103,392	9,892	8,455	104,829
Total	284,113	40,855	42,725	282,243
Mental health				
Mental commitments and restorations	2,450	6,748	3,679	5,519
Total civil	286,623^d	67,711	66,089	287,934^d
Juvenile:				
Delinquency ^e	N/A	21,074	18,156	N/A
Dependency and neglect:				
Neglect/abuse	N/A	4,549	4,779	N/A
Total juvenile	N/A	25,623	22,935	N/A
Grand total	286,623^d	93,334	89,024	287,934^d

Boldface headings indicate the classifications used by the NCSP.

N/A = This case type is handled by the court, but the data are unavailable.

^aBeginning pending figures for 1976 were computed from filings, dispositions, and end pendencies.

^bCivil cases are counted with the filing of a petition or complaint.

^cCondemnation, paternity, name change, and other are grouped under the single heading of miscellaneous.

^dTotal domestic relations, total civil, and grand total figures do not include pending cases for adoptions or marriages.

^eDelinquency includes status offense cases.

Source: State Court Administrator, Annual Report 1975-76 (Lansing, Michigan: 1976). Statistics are from the annual report except that totals have been computed where necessary.

DETROIT COURT OF COMMON PLEAS, MICHIGAN
 Court of limited jurisdiction
 1 court, 13 judges
 July 1, 1975 - June 30, 1976

	Beginning pending	Filed	Disposed	End pending
Civil:				
Law:				
Regular:				
Principal	X	53,917	56,685	X
Garnishment	X	83,603	76,513	X
Total	X	137,520	133,198	X
Small claims:				
Principal	X	1,997	1,951	X
Garnishment	X	468	452	X
Total	X	2,465	2,403	X
Property rights:				
Rent cases	N/A	30,641	X	N/A
Land contract	N/A	912	X	N/A
Jury cases	N/A	35	X	N/A
Total	N/A	31,588	29,576	N/A
Total civil	18,612 ^b	171,573	165,177	25,691 ^a
Grand total	18,612 ^b	171,573	165,177	25,691 ^a

Boldface headings indicate the classifications used by the NCSP.

N/A = This case type is handled by the court, but the data are unavailable.

X = The data for this case type are known to be included in the total but were not available by category.

^apending totals do not include data for property rights cases.

Source: State Court Administrator, Annual Report 1975-76 (Lansing, Michigan: 1976).
 Statistics are from the annual report except that totals have been computed where necessary.

MINNESOTA PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On August 22 and 23, 1978, a performance assessment was made of the Minnesota State Judicial Information System (SJIS) Project. The assessment was conducted by:

Mr. C. Ray Judice, State Court Administrator,
Texas.

Mr. Garland R. Goff, Management Information
Systems Officer, Office of the State Court
Administrator, Montana.

Mr. Richard W. Delaplain, National Center for
State Courts - SJIS Project.

Mr. Ray G. Speight, National Center for State
Courts - SJIS Project.

The LEAA representative at this assessment was Mr.
Arthur Fuldner.

The purpose of the assessment was to appraise the administrative and technical status of the project relative to good systems development practices and procedures. Emphasis was placed on the project's progress during Phase II of its development, but the assessment covers the period from June, 1976, when the first performance assessment was conducted.

Minnesota's SJIS assessment team hired an outside consultant to review some portions of Minnesota's Phase II SJIS Project work. Specifically, work conducted with Phase II grant funds regarding the analysis of financial and personnel reporting standards for the state was assessed by an independent management analyst, Mr. Gerald B. Kuban. Minnesota contracted with the National Center for State Courts' North Central Regional Office to perform this grant-funded work. Since this SJIS assessment is being conducted under the auspices of the National Center's SJIS Project, Mr. Kuban was retained to assess the work done under this contract to avoid any conflict of interest that might arise were the National Center's SJIS Project staff involved in an assessment of work done by a National Center's regional office staff. Mr. Kuban's assessment report is attached to this report as Appendix A.

The primary participants from the office of the state court administrator of the Minnesota Supreme Court were: Mr. Laurence C. Harmon, State Court Administrator; Mr. James Rebo, Director, Information Systems; and Mr. David Osborne, Project Manager, Information Systems. The courts' current programming consultant from Analysts International, Inc., Mr. Roger O'Daniel, was interviewed by the assessment team. Mr. Don Love, Director of the Criminal Justice Reporting System for Minnesota's Department of Public Safety (Bureau of Criminal Apprehension) was also contacted.

A. Management Summary

The Minnesota SJIS Project is currently in Phase II of its development efforts. Phase II began October 1, 1977, and was scheduled to end on September 30, 1978. A no cost extension of the project until June 30, 1979, has been granted by LEAA.

During Phase I of Minnesota's SJIS Project (which was scheduled to begin on October 1, 1974, and end September 30, 1976, but was extended to September 30, 1977) Minnesota chose to enter into a contract with Arthur Young and Company to provide the court with a requirements analysis, conceptual design, detailed system design, programming specifications, and supervision over the programming efforts. Actual programming was to be done under contract with the Minnesota Information Systems Division (ISD), which is Minnesota's state-level centralized data processing facility.

ISD is an executive branch agency. By the end of Phase I, the original SJIS grant specified that Minnesota would have designed, documented, programmed, pilot tested in several counties, and been well on the way to statewide implementation of a state judicial information system. Minnesota's SJIS was to process, on a batch basis, transaction-oriented data regarding civil, probate, and family case types. Juvenile, conciliation, small claims, traffic, and misdemeanor case data would continue to be reported on an aggregate basis.

Transaction-oriented reporting for criminal cases (felonies and gross misdemeanors) has been in effect since 1973. This reporting system is based on forms submitted by clerks of courts to the Minnesota Criminal Justice Reporting System (CJRS), which is operated by the Minnesota Department of Public Safety's Bureau of Criminal Apprehension (BCA). The courts' CJRS data are then edited and entered (via both batch and on-line modes) by BCA personnel into automated files maintained by ISD and controlled by BCA. Criminal case pending reports are produced from the SJIS database from machine-readable transaction information fed periodically from BCA into the SJIS database. BCA collects data pertaining to transactions it deems significant, specifically those transactions which affect charges on a criminal case or result in disposition of the case. SJIS is designed to record all transactions on a case. This major difference in philosophy reflects the difference in the two systems. BCA's CJRS system is designed to compile OBTS and CCH information. SJIS is designed to be a management information system for the courts. Data entered into CJRS by court clerks provide the judiciary's portion of OBTS and CCH to Minnesota's OBTS and CCH systems, which are operated and controlled by BCA. State-level court administration has had very little to do with the plans for or development of the CJRS reporting system.

On June 24 and 25, 1976, a Phase I assessment was conducted by an SJIS Project assessment team. This assessment team's report indicated:

"At the time of the SJIS assessment visit, the requirements analysis and conceptual and detail design had been completed; however, programming has not begun. The Supreme Court plans to utilize the Information Systems Division data

processing personnel for programming and processing. It is anticipated that the system will be completed by January 1, 1977."

Minnesota's Phase II grant, which began October 1, 1977, was written with two basic assumptions in mind. First, it was known at the time the Phase II grant application was written that a new state court administrator (SCA) would be appointed shortly to replace the SCA who had written the Phase II grant application. Hence, the grant was intentionally vague in terms of work products to be produced so as to provide the new SCA with some latitude in setting priorities for work to be done under the Phase II grant. Second, at the time the Phase II grant application was written, it was assumed that the design provided by Arthur Young and Company, and the programming provided by ISD, would be implemented during Phase I of the project so that SJIS efforts during Phase II would be directed at expanding and fine tuning the basic SJIS developed during Phase I. The primary emphasis stated in the Phase II grant application was for work to be completed on financial and personnel accounting procedures and reporting systems. Expansion and fine tuning of the assumed existent SJIS was to be a minimal portion of grant work to be completed during Phase II.

ISD began programming Minnesota's SJIS some time in late 1976. ISD mandated that the system be programmed to function on its version of the TOTAL database. Therefore, the program specifications from Arthur Young (which were for a batch oriented stand alone system) were modified by ISD to allow storage and retrieval (in batch mode) from the TOTAL database. In January of 1977, the current SCA was appointed. In the spring of 1977, ISD reported that programming was completed on the SJIS programs. Pilot testing of the input forms was conducted in several counties, but it is unknown whether or not any data were ever actually entered into the ISD database. Arthur Young completed its contract (following ISD certification) in the spring of 1977. By late spring, 1977, the court was left with a supposedly completed system, but without any in-house staff to manage the system. The SCA's office had no personnel available to provide training and liaison for clerks of court, or to provide ongoing, technical liaison with ISD.

In mid 1977, Mr. James Rebo was hired as Director of Information Systems, with overall responsibility for manual and automated statewide and trial court information systems. Specifically, he was responsible for implementing and administering what was thought to be a semi-operational SJIS. This position was partially funded by SJIS funds during the last six months of Phase I and the first six months of Phase II. It has subsequently been funded by the state. In August, 1977, Mr. David Osborne was hired as the Project Manager, Information Systems for the Supreme Court. This is a state-funded position. Mr. Rebo, with the assistance of Mr. Osborne, was to be responsible for implementation, expansion, and fine tuning of the SJIS package developed during Phase I of Minnesota's efforts.

Following Mr. Rebo's and Mr. Osborne's arrivals, they requested documentation from ISD as to what programs were completed, along with the normal data processing documentation (including programming listings) that ISD was expected to have. ISD was quite reluctant to provide program listings, but eventually did. Examples of test output reports were requested from ISD and the SJIS staff were informed that the output programs would not function.

At approximately this same time (mid 1977), analysis by SCA personnel indicated that the volume of input documents, which would be received from a fully operational SJIS, would be approximately fifteen times the number estimated by Arthur Young and Company. The original estimate had been approximately 26,000 transactions per year. The revised estimate was just over 400,000 transactions per year.

At the start of the Phase II grant period (October, 1977), SCA personnel were faced with a number of problems which caused them to reassess plans to implement the SJIS that was designed during Phase I. These problems included: a fifteen-fold increase in the estimated volume of transactions to be processed by the system; a lack of adequate system documentation; non-functional output report programs; and the inability to provide timely access to the database because of the system's being designed to operate in batch mode.

In addition to these procedural problems, there were basic system design problems discovered in the proposed SJIS. Included were the following problems:

- The proposed SJIS could not contain history information on a case; the latest entry on a case overlaid (wrote over) the earlier entries to a case.
- The master file, which controls access to the database, was designed in such a way as to make it almost impossible to update.
- The system's batch-oriented design precluded its use in a flexible and timely fashion.

In short, SCA personnel were faced with an apparently inadequately designed and non-operational system.

With the latitude provided in the Phase II grant, emphasis was shifted from personnel and financial systems to essentially reworking the entire SJIS system. This reworking would entail redesigning the database to provide for historical records for each case, creating an easily updated master file; redesigning output reports; redesigning input forms; and designing the system to allow on-line entry and retrieval of case records (which would require programming to access and utilize the front end teleprocessing capabilities available through the IDS's statewide network). It was decided that emphasis would be placed on ease of on-line data entry and data validity checks, and only secondarily on on-line access to management information. Two positions specified in the Phase II grant, a personnel director and a financial director, were eliminated in favor of using this money to contract with the National Center for State Courts' North Central Regional Office to provide analytical services and system design work regarding personnel and financial accounting procedures and standards. The elimination of these positions provided approximately thirty-nine thousand dollars, which was allocated to the contract with the National Center for State Courts. The remaining grant funds were allocated to work on rewriting the SJIS modules.

A local consultant firm, Analysts International, Inc., of Minneapolis, was retained by the court to rewrite all the programs necessary to provide for on-line input and access to SJIS records. Each output report program was rewritten in COBOL. ISD's TOTAL database could

support a commercially available report writer known as SOCRATES; however, the manner in which ISD structured the generation of the SJIS databases made usage of SOCRATES unfeasible. Approximately \$80,000 of Phase II SJIS funds were allocated to consultant services for the modification of Phase I system design, and to accomplish all necessary programming.

During the past year, the SJIS Project Manager, in conjunction with the consultant, has produced a new detailed design document, and programming has been completed, tested, and implemented to support on-line data entry and limited inquiry capabilities for civil, probate, and family case types. The transaction reporting forms utilized by the clerks of court have been redesigned, and extensive training has taken place in all of the 87 counties serviced by the SJIS system. Six data entry operators and two SJIS field representatives (who provide ongoing training and liaison with the district courts) have been hired with state funds. The on-line SJIS has been pilot tested in several counties and, effective August 1, 1978, all courts were reporting civil, probate, and family case type information on the SJIS transaction forms. Modified SJIS output reports can be produced, but because of the limited volume of data (cases) in the database at the time of this assessment, they are not expected to be fully operational (in terms of routine production and distribution) until the end of 1978 or early 1979.

Major impacts of the decision to develop an on-line action-oriented SJIS have included: a basic change in local court reporting procedures from monthly aggregate statistical reports to reporting on every transaction on each case; the need for additional staff in the SCA's office (data entry operators and field representatives); and the ability of the SCA to provide more accurate and timely caseflow statistics for state- and local-level judicial administration purposes.

Criminal case data from the CJRS is provided to SJIS by BCA on a monthly tape basis. At the time of this assessment, there were still some bugs to be worked out regarding SJIS's ability to read BCA's tape formats. However, these problems were deemed to be minimal.

Continued expansion of SJIS to handle all case types, including the assumption of the judicial segment of the CJRS criminal case reporting system, is anticipated. This will allow the SCA to receive and edit criminal case data and to store it in SJIS files. Data for CCH and OBTS will then be provided to BCA via tape. It will be essentially the reverse of the current situation in that the judiciary will own and operate the criminal case reporting system (as a module of SJIS) and provide data to BCA rather than receive data from BCA. It is anticipated that this plan will aid in solving some of the data validity and timeliness of reporting problems that have occurred when BCA dealt directly with the clerks of court.

The Minnesota SJIS effort has suffered very serious time delays in implementing its SJIS project because of the reasons discussed above. At the end of Phase II (ignoring the extension to June of 1979), the project is approximately at the developmental stage that should have been reached by the end of Phase I. It is the consensus of the assessment team that staff from the SCA's office has done an outstanding job of salvaging a project that was obviously in serious trouble. The amount of work completed during Phase II of Minnesota's SJIS effort, and the professional manner in which it was accomplished, indicate that one of the biggest problems facing the Minnesota SJIS has been solved. The state court administrator's office now has on board highly capable staff who can, and have, planned and implemented a successful SJIS operation. In many respects, the system implemented is in its infancy; however, the assessment team is confident that staff on hand, along with additional staff being sought, will be able to continue to expand and fine tune Minnesota's SJIS operation. From discussions held during the assessment, it appears that legislative and other funding sources in Minnesota are quite supportive of the SJIS effort and have indicated that they will continue to support the SJIS effort when Phase II funding runs out. In addition, they have indicated a willingness to support expansion of the current SJIS in accordance with plans which have already been developed by SJIS Project staff.

Specific recommendations regarding Minnesota's continued SJIS efforts are presented beginning on page 48 of this report.

B. Organizational Structure and Processing

1. Judiciary

The Minnesota Judiciary is described as follows in the 1976-77 Minnesota State Court Report:

THE MINNESOTA STATE COURT SYSTEM

The Minnesota state court system has streamlined its organizational structure in recent years to increase the quality of judicial work as well as the efficiency with which justice is dispensed.

Minnesota now has three basic types of courts. The Supreme Court is the highest court--the court of last resort--to which appeals from lower court decisions are taken. The remaining two levels of courts, the district and the county courts, comprise the trial courts of the state and handle the vast bulk of the judicial business.

The district court is the court of general civil and criminal jurisdiction. The state is divided into 10 judicial districts, each of which is served by three or more district court judges.

In counties other than Hennepin (Minneapolis and suburbs) and Ramsey (St. Paul and suburbs), the district court exercises concurrent jurisdiction with the county courts in the following areas: (a) proceedings for the administration of trusts or estates or actions relating thereto; (b) proceedings for dissolution of marriage, annulments, and separate maintenance, or actions relating thereto; (c) proceedings under the Reciprocal Enforcement of Support Act; (d) proceedings to quiet title to real estate and real estate mortgage foreclosure actions. The district court has exclusive jurisdiction over the foregoing classes of cases in Hennepin and Ramsey Counties.

District Courts

Although the district courts have original jurisdiction in all criminal cases, in practice heretofore they have limited their jurisdiction to gross misdemeanors and felonies. Under the Court Reorganization Act of 1977 a judge of either the county or district court may hear any kind of case to which the Chief Judge of the district may assign him or her. In addition to their primary trial responsibilities, the district courts hear appeals from decisions reached in the county courts. The district court is empowered to review final decisions of certain administrative agencies under rules set forth in Minnesota's Administrative Procedure Act.

A family court division of the district court is created by statute for the second (Ramsey County) and fourth (Hennepin County) judicial districts. In the second judicial district, the judge of family court is appointed by that district's chief judge from among the district court judges, and usually serves a one-year term. In the fourth judicial district, the family court is presided over by a district court judge selected by the chief judge for a term not exceeding two years. The family court judge may not serve consecutive terms.

A probate court is established in each county, and except in Hennepin and Ramsey Counties, the probate court is a division of the county court. In Hennepin and Ramsey Counties a separate probate court exists. Article VI of the Minnesota Constitution was amended in 1971 so that the probate court is no longer a constitutional court.

The juvenile court judge in Ramsey and Hennepin Counties is a judge of the district court. In Hennepin County, the juvenile court judge is designated 'District Court Judge--Juvenile Court Division' on the general election ballot. In all other counties of the state, the probate court is also the juvenile court.

County Courts

Except in Hennepin and Ramsey Counties (described above) the county courts in the remaining 85 counties consist of four divisions: probate, family, civil and criminal. Each county must establish a conciliation court within the civil division and may establish a traffic and ordinance violations bureau within the criminal division.

The family court division determines cases and proceedings arising under the juvenile court act and all cases within the jurisdiction of the court arising out of or affecting the family relationship, including the civil commitment of persons under chapter 253A of Minnesota Statutes.

The probate division determines cases and proceedings relating to the administration of estates of a deceased person and of persons under guardianship. The civil and criminal divisions determine all cases within the jurisdiction of the county court not vested in another division.

Conciliation courts may determine all civil claims, wherein the amount in controversy does not exceed \$1,000, by simple and informal procedure and without a jury trial. An individual claimant may appear pro se (by himself) to file a complaint or counterclaim on forms provided by the court.

Municipal Courts

Municipal Courts in all counties other than Hennepin and Ramsey were abolished under the County Court Act of 1971.

The Municipal Courts of Ramsey and Hennepin Counties are created under chapter 488A of Minnesota Statutes. Their jurisdiction in a civil action is limited to cases wherein the amount in controversy does not exceed \$6,000. These courts have jurisdiction to hear

charges of violations of the criminal laws of the state constituting misdemeanors, ordinances, charter provisions, rules and regulations of any subdivision of government, including the Metropolitan Airport Commission. Other limitations on the jurisdiction of these courts are set forth in the statute creating them.

Administration of the Courts

In order to provide for the efficient administration of justice, the chief justice of the state supreme court supervises and coordinates the work of the courts of the state. He exercises general supervisory powers with respect to the fiscal affairs of the courts, personnel, acts as chief representative of the court system and liaison with other government branches, and supervises the administrative operations of the courts. The Chief Justice also considers all recommendations of the state court administrator relating to the assignment of judges, and issues directives to judges in order to facilitate the efficient disposition of court business. The state court administrator is appointed by the supreme court and serves at the pleasure of the court. The responsibilities of the state court administrator include: examination of administrative methods employed in the courts, caseload management for all courts, statistical collection and analysis, budget preparation and fiscal management, monitoring of dockets and caseloads, recommendations to the legislature for the improvement of the judicial system, submitting of annual report of activities of court administrator's office, administration of uniform requirements for court budget and information system and preparation and administration of uniform standards relating to court personnel. These administrative duties are carried out through the professional staff of the state court administrator's office and through the ten district court administrators, who provide administrative services to the district and county courts within their judicial districts. ¹

¹Supreme Court of Minnesota, Minnesota State Court Report 1976-77, p. 19.

(Figures 1 and 2 provide organizational charts of the supreme court and the Minnesota state court system, respectively.)

2. Data Processing

Computer facilities for the Minnesota SJIS are provided by Minnesota's Information System Division (ISD), which is the state centralized data processing facility operated by the executive branch of government. Analytical and design work are done by the SJIS Project staff with the assistance of outside consultants. Actual programming is done by outside consultants. Maintenance of the SJIS data base is provided by ISD with the assistance of outside consultants. On-line access to the SJIS database is provided via a statewide teleprocessing network, which is operated by ISD. The nonconversational version of TP EXEC that SJIS uses is operated by ISD, but under the control of the Minnesota Department of Public Safety's Bureau of Criminal Apprehension (BCA). There are no current plans for the state court administrator's office to acquire its own computer facilities.

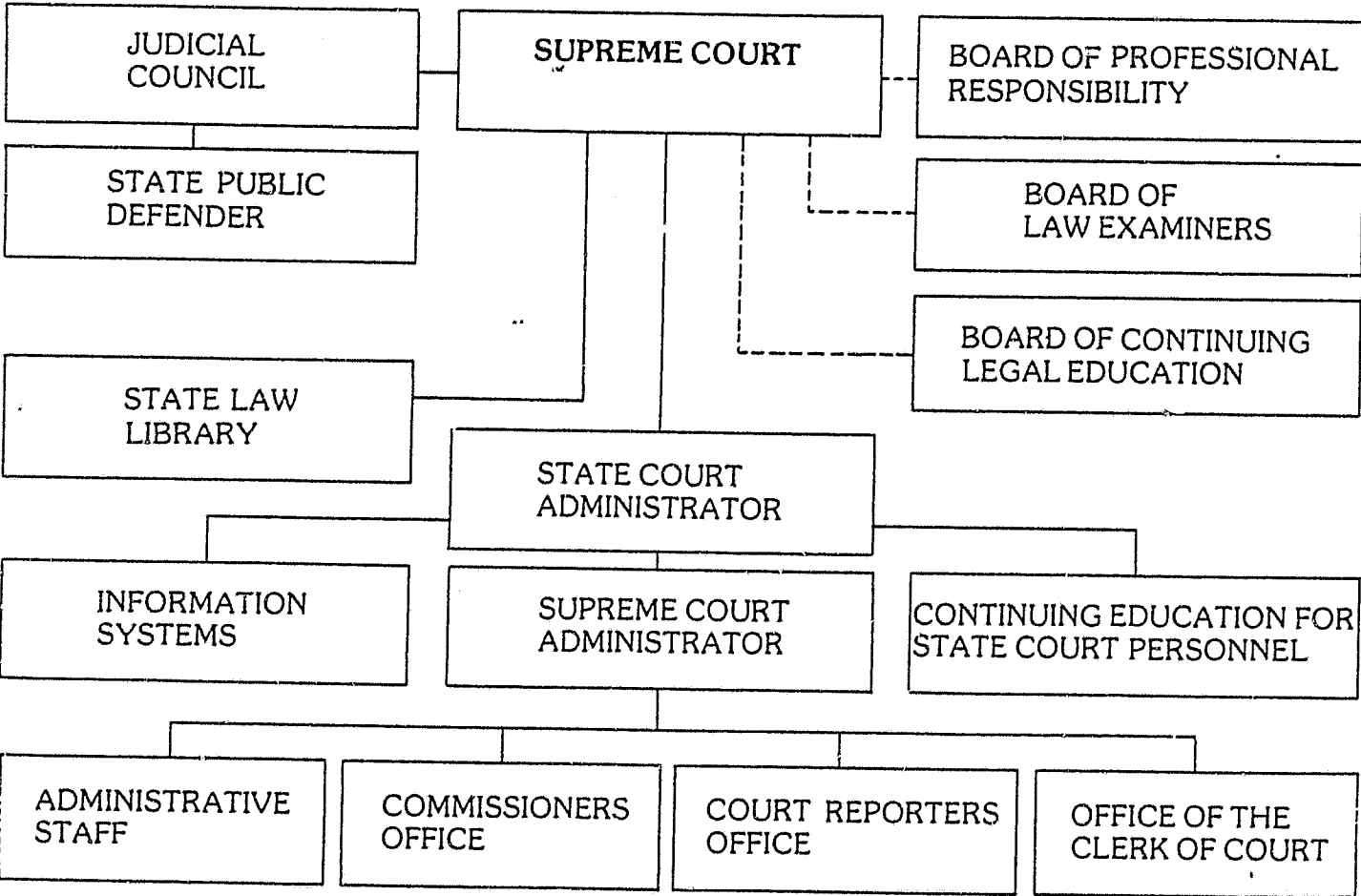
3. SJIS Project

The SJIS Project organization is shown in Figure 3. The project is under the direct control of the state court administrator and the deputy state court administrator, who serves as the director of the courts' information system. The SJIS Project is one component of this information system, along with two other projects being conducted to establish weighted caseloads and to provide records management assistance to local courts. The specific elements of the organization are as follows:

- Director Information System: This person has overall responsibility for the development of management information systems for the Minnesota judiciary. He is responsible for management of the SJIS Project, the Weighted Caseload Project, and the Records Management Project. These three projects work together to develop management information for the state court administrator, supreme court, and district trial court administration.

Figure 1

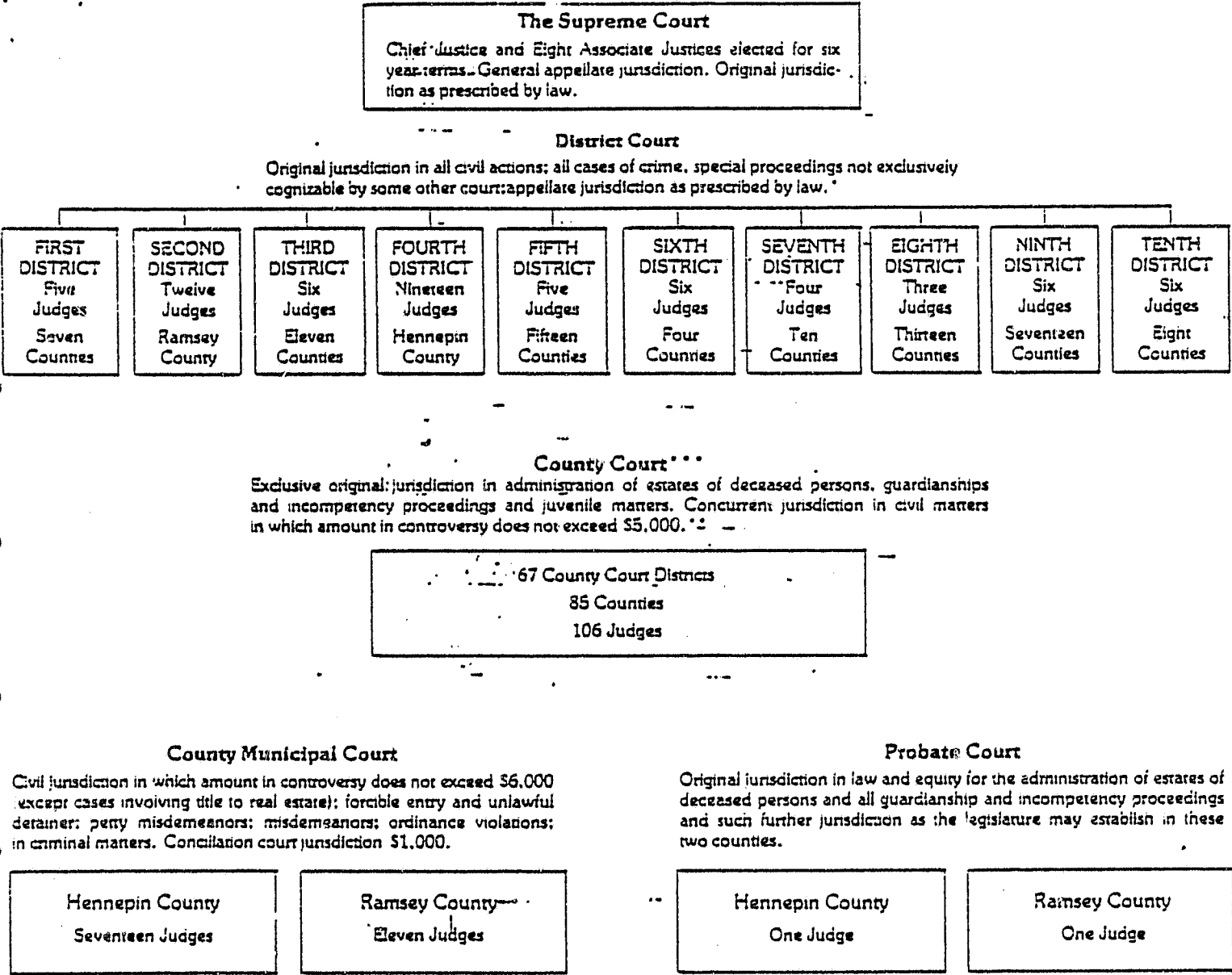
Supreme Court Organization Chart



The Board on Judicial Standards is an independent agency funded by state appropriations. The Supreme Court promulgates rules of procedure for the Board. Recommendations for disciplinary action are made to The Supreme Court. Judicial and attorney members of the Board are appointed by their respective associations; lay members are appointed by the Governor.

Figure 2

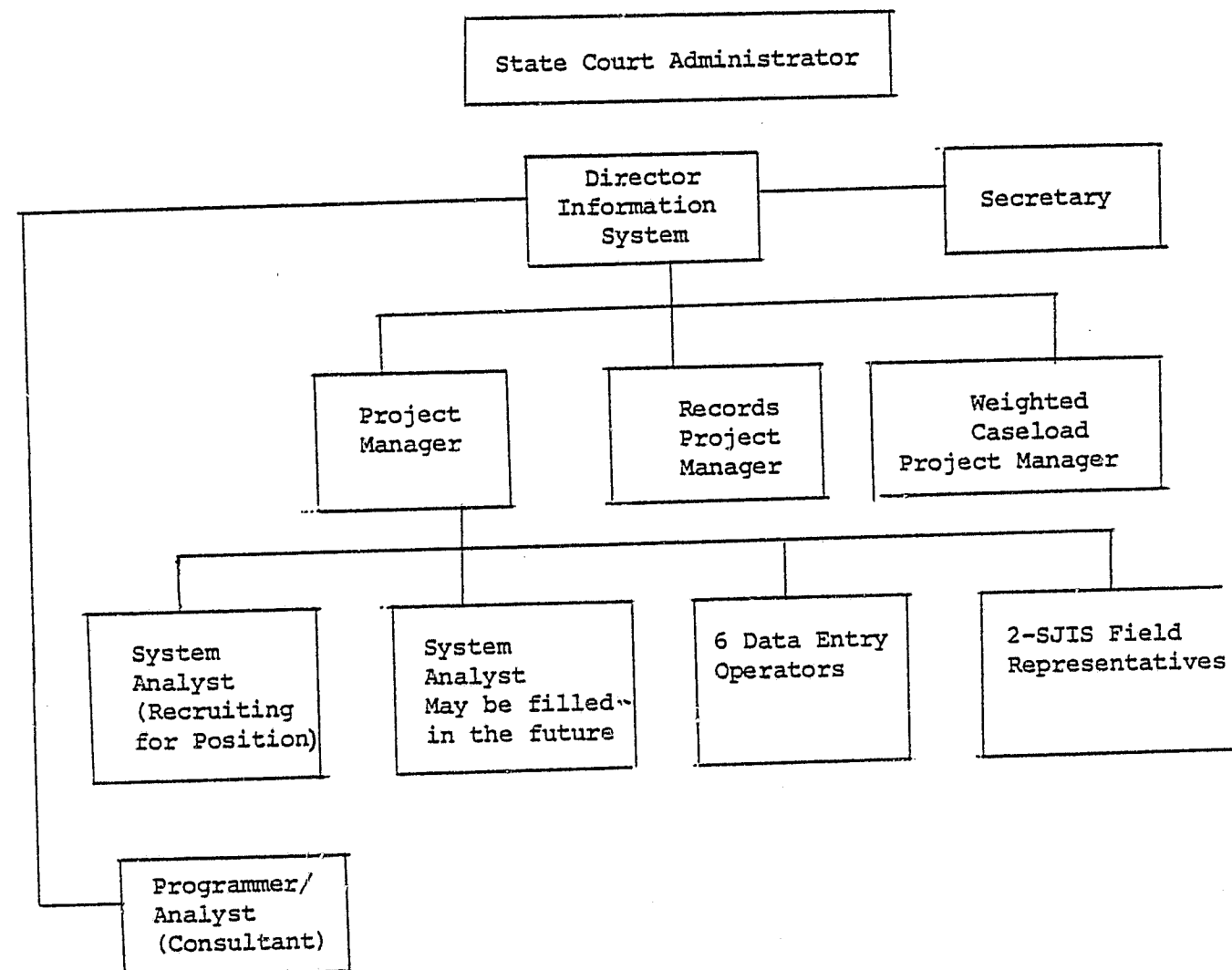
MINNESOTA STATE COURT SYSTEM



* Also Juvenile Court jurisdiction in the Second and Fourth Districts.
** Criminal jurisdiction over misdemeanors, petty misdemeanors, violations of ordinance, charter provision, rule or regulation. Appellate jurisdiction as prescribed by law. Conciliation court jurisdiction to \$1000.
*** In all counties except Hennepin and Ramsey, a county court was created incorporating the Probate and Municipal Courts and adding some concurrent jurisdiction with the District Court.

Figure 3

Minnesota SJIS Organization Chart



Liaison with ISD and BCA is maintained by the Director of Information Systems, the SJIS Project Manager and the Consultant Programmer/Analyst.

- Project Manager Information Systems: This person is responsible for the day-to-day operation of the existing SJIS as well as coordinating all plans and design work for expansion of the existing system. He will also perform the duties of a systems analyst as defined below.

- Systems Analyst(s). Recruiting for this position is currently underway. This person will be responsible for the detail design work needed for planned expansion of the existing SJIS as well as design work for management information reports. It is planned that a second systems analyst will be added to the staff at some time in the future.

- SJIS Field Representatives (2): These people provide ongoing liaison with the local trial courts for the purposes of training and assistance in error correction on input forms. It is planned that when the SJIS is fully expanded to receive data on all case types from all courts, two additional field representatives will be added to the staff.

- Data Entry Operators (6): These people perform the on-line entry of data from the transaction reports received from the local courts. It is anticipated that when the SJIS is fully expanded, as many as ten additional data entry operators will be added to the staff. These people are responsible for data editing and error correction.

- Technical Services: Technical services such as programming and data base modifications are performed by an outside consultant firm.

All of the above indicated staff are physically located within the state court administrator's office. For the foreseeable future, it is planned that all data entry and verification will take place within this centralized location.

4. SJIS Advisory Committee

During Phase I of Minnesota's SJIS Project, an advisory committee (composed of local judges and clerks of court) was used to work with staff of the state court administrator's office and consultants from Arthur Young and Company in the development of the conceptual design of Minnesota's SJIS. A formal advisory committee has not been used during Phase II of this project. Decisions affecting SJIS during Phase II have been informally

discussed with the Council of Chief Judges (the chief judges from each of the state's ten judicial districts) and the district court administrators. During Phase II of the project, there has been no formal mechanism for soliciting user input to system design or output report content.

5. Judicial Workloads

The latest verified caseload figures available for Minnesota's court system are from calendar year 1976:

Figure 4.

1976 Caseload Figures

	<u>Beginning</u> <u>Pending</u>	<u>Filed</u>	<u>Disposed</u>	<u>End</u> <u>Pending</u>
<u>District Courts</u>				
Civil	8,261	21,643	21,234	8,666 ^c
Criminal	1,763	8,919	8,634	2,043 ^c
Juvenile	--data not available for juvenile--			
Total	10,024	30,562	29,868	10,709 ^c
<u>County Courts</u>				
Civil ^a	14,624	64,934	63,165	16,460 ^c
Probate	28,007	9,281	9,524	27,800 ^c
Criminal	60,779	92,068	69,118	85,572 ^c
Juvenile	6,635	37,423	36,126	8,234
Total	110,045	203,706	177,833	138,066 ^c
<u>Municipal Courts</u>				
Civil	1,066	13,129	13,028	987 ^c
Criminal ^b	8,962	99,142	95,853	12,251
Total	10,028	112,271	108,881	13,238 ^c
<u>Conciliation Courts</u>				
Small Claims	4,346	37,934	39,446	2,834
Total	4,346	37,934	39,446	2,834
STATE TOTALS	134,443	384,473	356,128	164,847 ^c

^aIncludes law, small claims, and domestic relations cases.

^bIncludes traffic cases.

^cChange in pending does not equal the difference between filings dispositions. Figures are as reported in 1976 annual report.

6. Related Systems

The Minnesota Department of Public Safety's Bureau of Criminal Apprehension (BCA) designed and has operated on OBTS/CCH system called the Minnesota Criminal Justice Reporting System (CJRS) since 1972. CJRS collects arrest, charge, and court processing data from the appropriate segments of the criminal justice system. CJRS can track adult offenders who are charged with felonies or gross misdemeanors. It provides updated criminal history files and produces monthly, quarterly, and yearly Uniform Crime Reports.

The court's role in the CJRS system begins when a copy of the Arrest Entry Form, filled out by the arresting agency, is received as an arrested subject appears before the court. The court will then file a Judicial Proceeding Entry Form describing the nature of the proceeding. This form is filed with BCA each time there is a court proceeding that does not result in a termination and sentence. After all court procedures and actions are completed and sentencing has been done, the court completes a second portion of the form, Judicial Sentencing. This system also includes procedures for update and correction of errors. The CJRS system is run on one of three IBM 370/158s at the Information Systems Division (ISD). SJIS is run on the same computer.

The data and information collected by the CJRS system is used to produce an annual report and provide OBTS data to the state's Statistical Analysis Center, which is an executive branch agency. CJRS criminal case data is spooled to the SJIS system where it will be processed to produce the reports required by the state court administrator, including an age of pending cases report for all active cases.

At the time of this assessment, tapes from BCA were being received, but the SJIS staff was encountering difficulties in reading the tape formats. It is anticipated that these minor tape formatting problems will be resolved shortly. Future plans for the expanded SJIS call for the CJRS forms to be modified and all data to be

sent to the state court administrator's office for data verification, error correction, and data entry. Information necessary to update BCA's CCH and OBTS files would be provided as a by-product of the SJIS data entry. Figure 5 depicts the current processing relationship between SJIS and CJRS. Entry to both systems is now done on an on-line basis rather than via keypunching.

C. Project Description

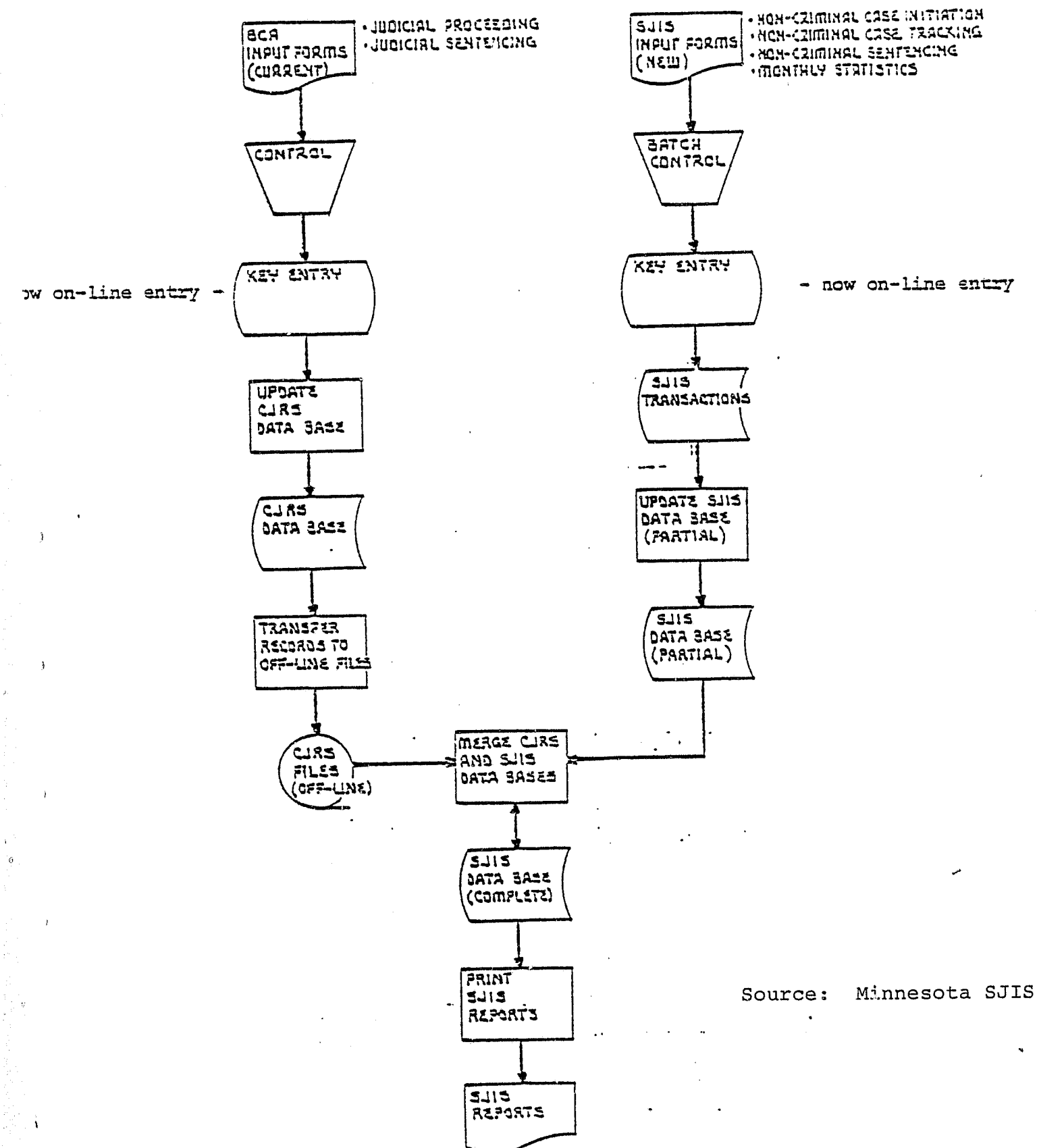
1. Background

The Minnesota state court administrator has collected summary caseload data from local courts since 1964 under statutory authority. (The specific duties of the SCA have been delineated earlier in this report.) The data were first processed manually. For the last eight years aggregate district court data have been processed by a computer owned and operated by the state's Information Systems Division. Aggregate county court data has been processed by computer since 1974. This computer processing consisted of data manipulation and report generation based on month-end summary reports submitted by the individual clerks of court.

An OBTS system was developed under the direction of the Bureau of Criminal Apprehension, a law enforcement agency, and has been operational as a computerized system since 1972. Clerks of court report critical events that occur during court processing of felonies and gross misdemeanors, beginning with the filing of the indictment or complaint. This OBTS system (which is known as the Criminal Justice Reporting System and was described earlier in this report) maintains records on all charges by state statute number and the sentences for all criminal case defendants. It is the basis of the BCA's Computerized Criminal History files.

In 1974 the state court administrator's office initiated Phase I of its SJIS Project. A consultant group was hired to conduct a requirements analysis and to provide all system design documents and program specifications. Programming was to be done by the state's Information Systems Division. According to the

Figure 5
PROCESSING RELATIONSHIP BETWEEN CJRS AND SJIS



Source: Minnesota SJIS

CONTINUED

3 OF 5

Phase I grant application, this batch system was to serve the dual goals of providing greater managerial control over the state's courts while at the same time minimizing the increase in overall clerical workload. Specifically, a database was to be established that would enable the state court administrator to periodically produce:

- disposition statistics,
- case trend analysis,
- speedy trial information,
- projection statistics for budget and new judgeship purposes,
- pre-trial release information,
- jury management data,
- judge transfer information,
- change of venue data,
- case scheduling and docket aids, and
- planning data for state planning purposes.

Reports containing this information were to have been distributed to persons listed on a particular report's predetermined distribution list.

The system was to be designed to benefit courts at all levels. The design would initially collect data at the district and county court levels and transmit this data to the supreme court. A state-wide uniform case numbering system was recommended to simplify this procedure. The resulting database was to be utilized to provide periodic inquiry and special reports as well as form the basis for the development of additional systems such as financial and personnel information systems.

The Phase II grant application for Minnesota's continued SJIS effort was written on the assumption that work scheduled for Phase I would be completed on time. As was discussed in some detail in section 2 of this report (Management Summary), system development and implementation did not occur during Phase I. The SJIS that is operational in Minnesota was essentially developed during Phase II of the project.

2. Functional

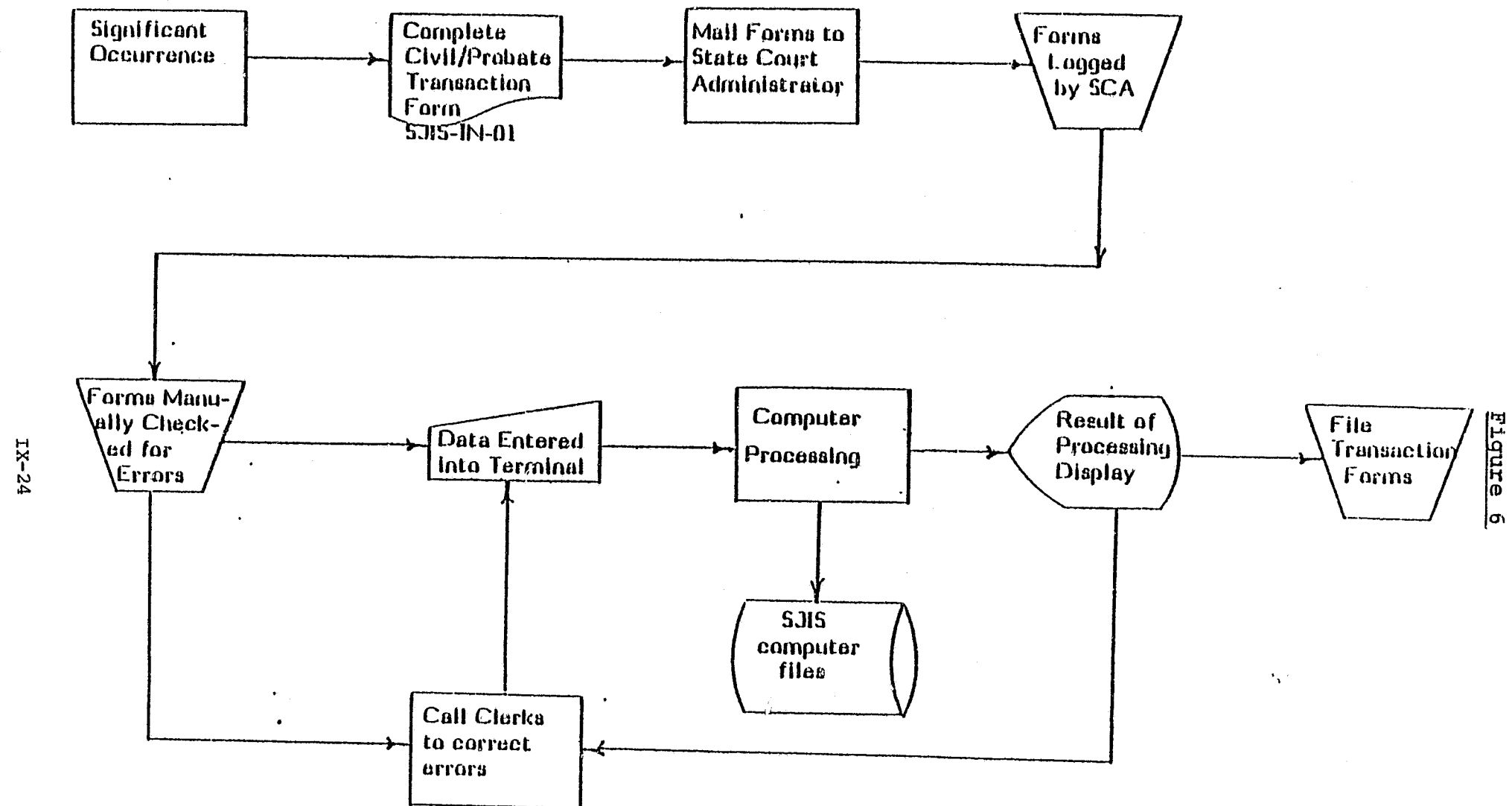
At the time of this assessment, the SJIS modules that process civil, probate, and family case transactions were fully implemented in all district and county courts. Criminal case reporting is still

accomplished via the Bureau of Criminal Apprehension's CJRS system. Limited data on criminal cases are fed into the SJIS database from machine readable tapes provided to SJIS by BCA. Juvenile and conciliation (small claims) case types are entered into the SJIS database from monthly aggregate reports provided by clerks of court. Minor criminal cases (specifically traffic cases) are also reported on an aggregate basis. Future plans call for the inclusion of conciliation cases in the SJIS on-line transaction system. It has not been decided whether juvenile and traffic cases will be changed from their current aggregate reporting status.

All district and county courts mail transaction report forms for civil, probate, and family cases to the state court administrator's office on a daily basis. These forms indicate what transactions took place for each case processed by the court. There is one form completed for each transaction in each case. Once the forms are received, data entry operators review the forms for obvious errors and contact the appropriate clerks if errors are detected. The clerk who filled out the form is listed on each transaction report form. Following this initial data validation, data from the forms are entered on-line into SJIS via CRTs located within the state court administrator's office. (See Figure 6.) The current Minnesota SJIS has placed heavy emphasis on on-line entry and editing of data. The on-line query ability provided by the system is currently of limited utility. Sixteen additional CRT terminals have been funded, and most of them will be placed in the offices of the district court administrators to facilitate their review of specific cases or courts. Their initial inquiry capability will be restricted to accessing all of the records associated with one case (if they have the case number) or accessing all of the transactions that were reported for one court on one day. This limited on-line query ability is supplemented by a series of monthly batch output reports, which will be distributed to SJIS staff, SCA staff, district trial court administrators, and others.

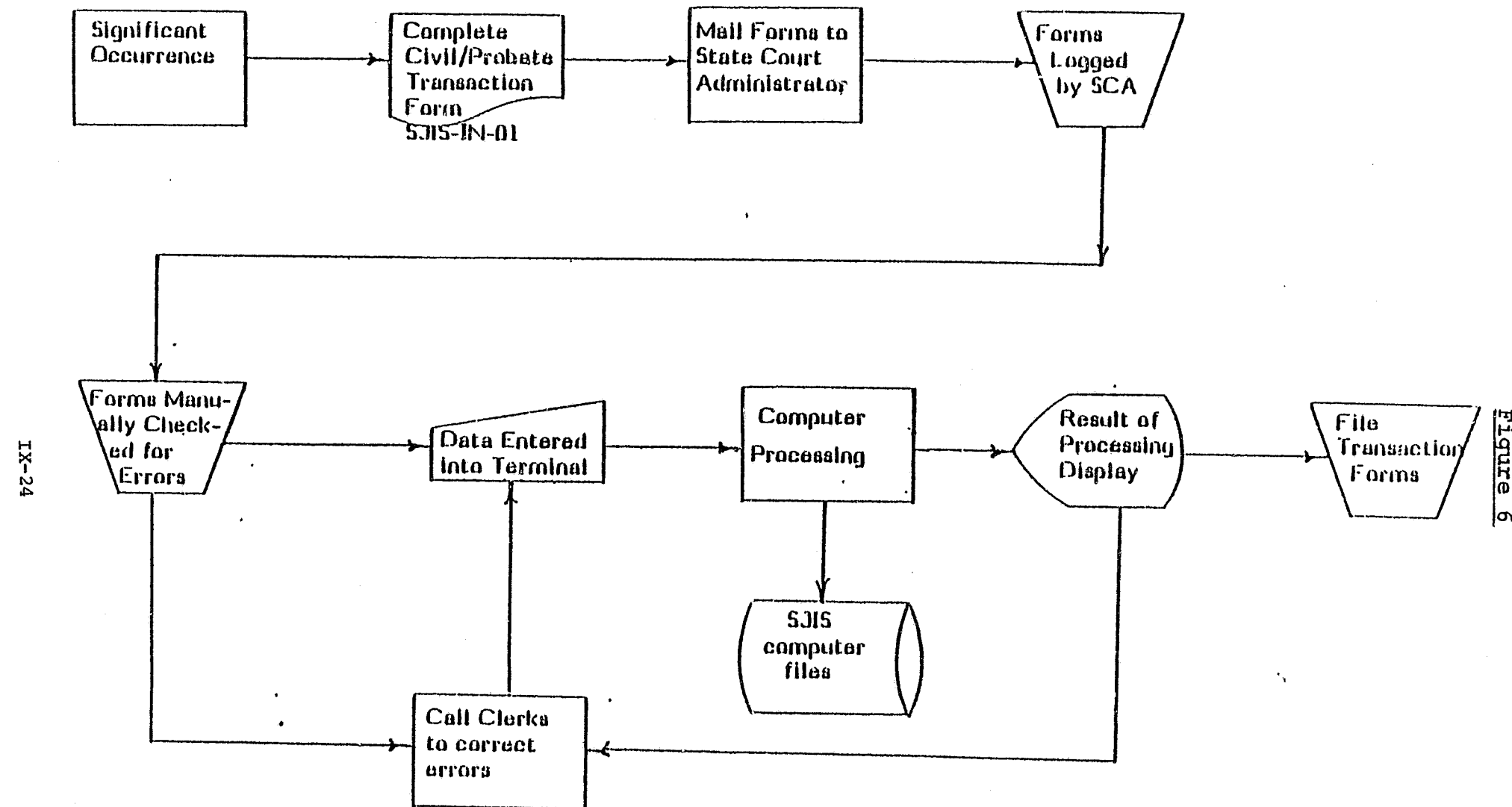
Output reports produced by the system are designed to be primarily of value to state-level court administration and district trial court administrators rather than to local judges and clerks of court. Another set of batch output reports are designed to monitor data entry operator activity and to

SYSTEM FLOW DIAGRAM



Source: Minnesota SJIS Terminal Operator's Manual.

SYSTEM FLOW DIAGRAM



IX-24

Figure 6

Source: Minnesota SJIS Terminal Operator's Manual.

identify courts where additional clerk training may be required.

The current Minnesota SJIS is oriented towards facilitating data entry and providing state-level management information. Plans for an expanded SJIS include additions and modifications to the system to provide more timely and useful data to the local trial courts.

3. Goals and Objectives

The overall goal of the Minnesota SJIS is to provide accurate and timely information about the work of the Minnesota courts to those who need it, including, but not limited to, the supreme court; local courts; local criminal justice agencies; state criminal justice agencies; and state justice planning agencies, including the legislature. Specific objectives of the Minnesota SJIS Project are defined by the following list for Phase I efforts:

- to provide management-oriented statistical reports,
- to promote increased specificity regarding criminal offense and civil case types,
- to identify prosecutor negotiations in criminal negotiations, and
- the collection of workload data to aid personnel in local and state-level court administration.

Goals and objectives identified in the Phase II grant application are summarized as follows:

The primary goal of this project is to introduce management tools in the financial and personnel areas of the Minnesota court system in order to improve the base of information upon which policy decisions are made at the state and local levels.

Within this general goal, the following specific results to be achieved were identified:

- Devise a method to provide accurate, timely information about existing personnel staffing patterns and compensation packages in local courts on a

continuous basis so that responses to queries can be made at the time of the requests rather than six months later.

- Establish a uniform personnel classification system for court personnel which can serve as a guideline for local courts and can provide a framework for a personnel system in the event of state funding.
- Provide guidelines for the determination of desirable non-judicial staffing patterns which can be applied by local courts to assess staff strength.
- Provide data to assess compliance with affirmative action program.
- Provide and store data on the training needs of non-judicial personnel.
- Collect the data necessary to establish a system to determine judges' needs objectively.
- Establish a uniform chart of accounts for local courts so that data can be collected and reported on a uniform basis.
- Devise a method for local courts to collect the financial data as part of their daily routine.
- Devise forms and procedures for local courts to report the financial data to the state court administrator.
- Design reports to convey the financial status of the courts to the legislature.

With regard to the SJIS system, the grant specifies the following goals and objectives:

- In accordance with the recommendation of the SJIS assessment team (in 1976), an information system director will be hired to protect the interests of the court in dealing with the state Information Systems

Division and to provide technical expertise to ensure correct maintenance and modification of the present SJIS system.

- The court will expand the computer database to include data relevant to a systematic determination of judicial staffing needs for civil and criminal courts.
- The court will explore and, where feasible, implement system modifications which will provide local courts with additional management information concerning their caseloads.
- The information system director will continue to train and monitor the reporting efforts of local courts so that data entered into the database is accurate and complete.

4. Expected Impact

The initial impact of SJIS has been to alter the means of reporting data to the state court administrator's office. Clerks had been reporting data on a monthly aggregate basis, but are now reporting civil, probate, and family case data on a case-by-case, transaction-by-transaction basis. Juvenile, conciliation (small claims), and traffic cases are still reported in the aggregate mode. The impact of changing from aggregate to case-by-case transaction reporting has been lessened by the fact that clerks were accustomed to providing this type of reporting for all major criminal cases via the Bureau of Criminal Apprehension's CJRS system.

Another initial impact has been the staffing requirements imposed on the state court administrator's office. Two professional positions and six data entry operator positions have been added to the state court administrator's staff to operate the existing SJIS. Responsibility for quality control and data validity has shifted from the clerks of court to the staff in the state court administrator's office.

Implementation of the system has had the impact of upgrading the quality and timeliness of detailed caseload statistics. These detailed caseload statistics were previously unavailable for either state

or local-level court administration. This information will allow for more efficient methods of managing the volume of cases at the trial court level and provide necessary data for planning and development of the entire court system at the state level.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Phase II of the Minnesota SJIS Project began on October 1, 1977, and was scheduled to end September 30, 1978. A no-cost extension of the project until June 30, 1979, was granted by LEAA in August of 1978. Phase II called for the development of management information tools in the areas of financial and personnel management for the state's courts. A portion of the Phase II funds were to be used to support the SJIS operations developed in Phase I and some modifications and additions to the Phase I SJIS were anticipated. The specific goals and objectives of the Phase II grant have been listed earlier in this report in Section I.D.3 (Goals and Objectives).

The Phase II grant specified the following Phase II activities: hiring additional personnel (information system director, personnel director, financial director); preparation of a detailed workplan; preparation of questionnaires regarding current financial and personnel procedures in the local courts; continued training and monitoring of local court reporting personnel; development of a survey instrument to identify additional SJIS data requirements of local courts; development of model personnel and financial reporting systems, including appropriate reporting methodology; programming modifications to the weighted caseload system; pilot testing of financial and personnel reporting systems; and continued training activities for all users of SJIS.

2. Plans

As described in Section A of this report (Management Summary), the Minnesota SJIS Project has not progressed according to the plans specified in the Phase I grant. Therefore, the plans which were specified in the Phase II grant have been altered accordingly. During Phase I, a requirements analysis report and conceptual design document were produced by Arthur Young and Company. While the existing SJIS system has been extensively modified (most specifically in the area of data entry), it still conforms roughly to the designs provided during Phase I.

The detailed workplan that was to be produced 90 days after the initiation of Phase II was not produced. Rather, a summary workplan was produced as a part of the first Phase II quarterly progress report required by LEAA. This one-page workplan is attached as Figure 7 entitled "SJIS Implementation Workplan".

This workplan is the result of the state's decision to integrate three separate projects which are currently underway. As stated in the quarterly progress report that covered progress to 9/30/77,

"The most important occurrence has been the decision to integrate the activities of what had been originally set as three separate projects. These projects are: the implementation of the State Judicial Information System (SJIS), which is being funded by an LEAA discretionary grant; the Court Records Management Study, which was funded with 1976 block grant money; and the Weighted Caseload System Project, which was funded with 1977 block grant money."

According to this quarterly report, the reasons for integrating these projects included: the interrelationship of all of the projects in that they were all efforts to develop analytical tools to enable the proper conceptualization of the voluminous management data to be collected by SJIS; and the ability to pool manpower available from the three projects to provide analytical resources and liaison with all 87 counties in Minnesota.

A second major decision for the project was also identified in this quarterly report. Following substantial field work in the local trial courts to review clerical input and SJIS transaction definitions, most of the remaining SJIS design problems were resolved. As a result of these field work activities, the decision had been made that the SJIS design should be upgraded to on-line mode.

SJIS IMPLEMENTATION WORKPLAN

[illegible]

The advantages of this design enhancement were described in the following manner:

- It is contemplated that the field data collection effort to be experienced in the implementation of SJIS will be very difficult. The coordination, training, liaison, and communications effort that will have to take place in the offices of 87 apprehensive clerks should prove to be a formidable undertaking. Therefore, it is thought that the limited resources available to us should be concentrated to the maximum extent feasible on this liaison effort, necessitating relative ease in the interaction with the computer system. It is felt that having an on-line record creation and update capability will provide us with the interactive ease with the computer that is needed.
- Even though on-line data entry activities will take place under the auspices of state court administration in St. Paul using manual transaction forms prepared and submitted by the clerks, we will have the advantage of being a part of the presently operational Justice Information System teleprocessing network being operated by the Minnesota Department of Public Safety. This will permit us to place CRTs in all of the district administration offices throughout the state, enabling on-line record inquiry for purposes of assignment and caseload management. The funding for the CRTs, along with their associated TP communications costs, has already been appropriated by the legislature. Also, being on the state justice teleprocessing network will enable inquiry access to all the other justice-related applications which are presently operational on the network.
- Being in on-line mode on the state network will serve as a solid foundation for the building of information system applications that will be of greater operations management use to the trial courts. The present SJIS design is primarily for the purpose of providing management information statistics to the supreme court, state court administration, district trial court administrators, and the legislature. SJIS will now have greater enhancement potential for the development of information systems products that will directly support the recordkeeping and caseload management functions of the local trial court administrations.

- Generally, being in on-line update mode will be conducive to the maintenance of case tracking files that should be of far greater accuracy and timeliness.

During the reporting period, in response to the decision to enhance SJIS to on-line mode, we have already completed the documentation of the necessary detailed design specifications. Further, in cooperation with the Minnesota Information Systems Division (ISD), we are in the process of awarding a contract to a private contractor to write the additional application programs necessary for the system enhancement pursuant to the specifications. Taking this approach, we anticipate remaining on schedule as delineated in the SJIS implementation workplan which is illustrated in the LAC request attached to this progress report. (See Figure 7.) According to our current workplan we anticipate having limited statistical products representing caseload activity throughout the state, some time during late autumn of 1978. Because at least one year from the point where the last county commences its transaction submissions is needed to properly build a complete SJIS database, complete statistical products from SJIS should be produced during the fall of 1979.

At the time of this assessment, the Phase II project appears to be operating roughly on schedule in accordance with the workplan discussed above and shown earlier in this report in Figure 7.

3. Current Status

In accordance with the designs provided in Phase I of the project and the workplan for Phase II (as discussed above), the project has progressed through the requirements analysis, conceptual design, forms design, detailed systems design, programming, testing and implementation phases of the SJIS efforts. The emphasis on financial and personnel systems development that was the "primary goal" of the Phase II grant application has been reduced. Approximately \$39,000 of the grant's \$220,000 total has been allocated to personnel and financial systems work. This work is being done by the National Center for State Courts' North Central Regional Office in St. Paul, Minnesota. Since the assessment of Minnesota's Phase II efforts is being conducted under the auspices of the National Center for State Courts' SJIS Project, an outside consultant was retained to provide an assessment

of the financial and personnel system work done under Minnesota's Phase II grant. His independent assessment is attached as an Appendix to this report.

As stated in the management summary section of this report, the Minnesota SJIS project is currently at the developmental stage that was to have been reached at the end of Phase I. Hence, the project is approximately two years behind schedule. While this is obviously a serious slippage, it is the assessment team's conclusion that the professional staff of Minnesota's SJIS Project has done an outstanding job of salvaging an inherited project that was in serious trouble. The Minnesota SJIS Project is operational in all district and county courts throughout the state (although the aggregate reporting system is still operating in parallel mode). Training has been completed and ongoing liaison with clerks of court has been established. Relatively detailed workplans covering the expansion of the current SJIS to include criminal and conciliation cases has been completed. Current staff in the state court administrator's office appear highly competent and quite able to implement their projected plans on schedule. The legislative funding sources in Minnesota appear to be supportive of these efforts.

In short, while the project has suffered some serious setbacks, it now appears to be "on track" and on schedule, given the change in emphasis and direction from what was specified in the Phase II grant application.

4. Control Methods

Until the initiation of Phase II of this project, project control methods were essentially non-existent. Current project staff have demonstrated an ability to plan, design, and implement project deliverables on schedule and according to specifications. Documentation and project control mechanisms are in accordance with the PRIDE-oriented Policies, Procedures and Standards Manual which is mandated by Minnesota's Information Systems Division for all projects operating on the state's computer system.

5. User Participation

User participation in system design was accomplished via a formal advisory committee during Phase I of this project. During Phase II, no formal advisory committee was appointed. A relatively "soft sell" approach to clerks of court has been taken during Phase II and appears to have been successful. Informal liaison has been established with the Council of Chief Judges (a group consisting of the chief judge from each of the state's ten judicial districts) and the newly-appointed district court administrators. The current SJIS has been designed to provide information that is of benefit primarily to state-level court administration. However, future plans call for the system to be expanded and more information to be produced that will be of value to local trial courts. It is the assessment team's view that the current informal user liaison will not be sufficient to provide the necessary user input to facilitate the system's expansion so as to be truly beneficial to the trial courts. A user committee or committees should be created consisting of local clerks of court, chief judges, and trial court administrators, for the purpose of reviewing plans to expand the SJIS as well as specifying the type of system input and output that will be of maximum value to local trial courts. The current system of user liaison does not appear to provide for sufficient input from clerks and local judges as to the design needs of the proposed expanded system.

B. System Description

1. Processing Approach

SJIS operates on one of three IBM 370/158/MVS computers owned and operated by Minnesota's Information Systems Division (ISD), which is an executive branch

agency that supplies centralized data processing services to all state agencies. Within the 370/158, SJIS operates within the TOTAL database management system. Access to TOTAL is from the state court administrator's CRT type terminals via a front end teleprocessing system (TP EXEC) which is owned by ISD and controlled by the Department of Public Safety's Bureau of Criminal Apprehension. There are currently 6 data entry terminals located within the state court administrator's office. Sixteen additional CRT terminals have been funded and most will be placed in the offices of district court administrators to provide them with on-line access to case records being processed in the local courts for which they are responsible.

Several potential problems face the Minnesota SJIS project, and all are related to the current and potential capabilities of the state's ISD. With the planned expansion of SJIS to include criminal, conciliation, and possibly juvenile cases, the volume of transactions and number of inputs and inquiries to the system can be expected to expand significantly. SJIS project staff do not appear as yet to have conducted adequate studies to ascertain the effect of this increased volume of records and system activity on the overall SJIS system. This analysis is particularly important since IDS's current computer facilities appear to be at or near the saturation point. In addition, the teleprocessing network that SJIS relies on (an ISD-Developed version of TP EXEC) is also at the saturation point and is not smoothly compatible with ISD's TOTAL data base. These conditions have resulted in periodic slow response times (system degradation) and excessive scheduled and unscheduled system down time of from 1 to 1½ hours per day, and up to 25% of a normal workshift. Given the court's reliance on (but lack of control over) ISD, these conditions can be expected to cause potentially serious problems for Minnesota's SJIS. Prior to any expansion of the current SJIS system, both ISD's computer power and teleprocessing capabilities should be thoroughly reassessed to avoid implementing a system that will be so degraded in terms of user availability as to greatly diminish its usefulness to state and local court administration.

2. Data Collection, Preparation, and Verification

As discussed earlier in this report (see Figure 6), data collection is on forms supplied to local courts by the SJIS Project. Transaction forms are completed for each significant event occurring in a case and forwarded to the state court administrator's office for data verification and data entry. Data editing and validation techniques

appear to be adequate to assure a high degree of accuracy and validity within the SJIS database. Plans for the expanded SJIS indicate it will operate in the same manner as the currently operational segments of SJIS.

3. Data Entry

When transaction forms arrive at the state court administrator's office, the information is input to SJIS via on-line terminals. As a backup to on-line access to SJIS, the system has the capability to input data on a remote job entry basis via the same CRTs. In this mode, data entry operators input data that are stored on disk and then read into SJIS at night as if they were a batch entry. This mode of data entry is used during periods of scheduled down time or unscheduled system failure. Data on each transaction form are manually reviewed by data input operators to spot obvious errors or omissions of required data. Any such errors are corrected by a phone call to the clerk who filled out the form. Extensive editing is done by the SJIS system when data are entered either on-line or via the RJE option. Checks are made during data entry regarding proper format, illegal data values (e.g., a month value higher than 12), and logical consistency with existing case records (e.g., a trial event could not be recorded on a case record before a first appearance had been recorded). Automated and manual logs are prepared that will assist SJIS project staff in identifying and providing additional training to either data entry operators or clerks of court who are identified as excessively error prone.

4. Application Software

a. Processing Modules

The SJIS system uses two TOTAL databases: Terminal Session and the SJIS database. The Terminal Session (operator database) serves the purposes of supplementing the limitations of the teleprocessing network to provide for conversational capability for the SJIS on-line programs, accumulating on-line update report records for the current day, and accumulating civil case additions for off-line update at the end of the day.

The SJIS database contains two basic types of transaction data: criminal information from BCA's Criminal Justice Reporting System (CJRS) and non-criminal proceedings entered on-line. SJIS is broken down into eight (8) sub-systems:

- on-line applications,
- daily batch processing,
- file restore,
- judicial edit/update,
- judge edit/update,
- criminal batch edit/update,
- summary statistics processing, and,
- monthly reports.

Brief definitions of these sub-systems as listed in the SJIS detailed design document are provided below.

(1) On-line Applications: The on-line applications of SJIS is by far the largest and most diversified sub-system of SJIS. The sub-system consists of seven (7) modules that allow for inquiry and update of the SJIS database.

All file maintenance information for the Civil Files of SJIS is supplied by means of the Civil Transaction Form. The information supplied by this form is processed by the Civil Add Module and the Civil Update Module. Both the Civil Add and Civil Update Module call the Statistics Update Module, which is used to maintain the Daily Statistics File.

The five remaining modules are used for inquiry into the SJIS database. Direct access to the Civil File is obtained by using the Civil Inquiry and/or the Detail Inquiries. The Criminal File can be accessed directly by using the Criminal Inquiry. Two index inquiries are available for SJIS. They are the Docket Index and Date Filed Index.

(2) Daily Batch Processing: File maintenance and transaction reporting are included in the Daily Batch Processing sub-system.

- Transaction Reporting Module creates reports that list and tally the previous work day's on-line activity.
- Back-up.
- Statistics Initialization brings the Daily Statistics File up to date by creating a new record for each day since the last time the module was run. The process includes zeroing out all the new counters except those for pending cases for which it transfers the previous day's figures.

(3) File Restore: Used to restore the file in the event of system problems that may have destroyed its validity.

(4) Judicial Agency Edit/Update: The Judicial Agency Edit/Update is used to initially load the Judicial File and for any subsequent changes that may be applied to the file. The Judicial Agency Edit/Update is run on an 'as needed' basis.

(5) Judge Edit/Update: The Judge File is loaded and maintained by the Judge Edit/Update sub-system. The Judge sub-system is run when needed.

(6) Criminal Batch Edit/Update: BCA CJRS transactions are passed to SJIS and are processed by the Criminal Batch Edit/Update sub-system. The sub-system maintains the Criminal Files of SJIS and produces a report listing update activity against the file. To update the file, the Statistics Update Module is called to maintain the Daily Statistics File. The Criminal sub-system is run on a monthly basis.

(7) Summary Statistics Processing: On a monthly basis summary statistics are sent to SCA from the courts. These statistics cover all cases that are not reported on a transaction basis for civil and criminal cases. These reports are processed through the Summary Statistics Processing sub-system and applied to the Daily Statistics File.

(8) Monthly Reports: Reports are produced on a monthly cycle in four categories: (1) statistics, (2) cases pending, (3) judge list, and (4) system activity report.

(9) Operating Environment: All batch programs are written in COBOL and all on-line applications are written in ALC. The system is written using TOTAL Database Monitor and TP EXEC as the teleprocessing monitor.

b. Inputs - Outputs

Input formats are such that data entry is as straightforward as possible. CRT screen formats approximate the positioning of data on the reporting forms.

Current output formats (on-line) are oriented towards providing verification information for data entry operators. On-line case inquiry capability is somewhat

limited at this stage of the system's development. In order to access a case record on-line, a terminal operator must know the statewide SJIS number assigned to that particular case or the case number assigned at the local trial court level. Cases cannot be accessed by any of the participants' names. Generally, on-line inquiries for an information system allow the user to specify types of cases, dates of events, and other such options to make the inquiry capability as flexible as possible. Minnesota's SJIS system, because of concerns about bogging down the saturated ISD computers and teleprocessing network, has greatly restricted the amount of file searching and custom report preparation that can be accomplished on-line. As discussed earlier, this situation may negatively impact the system's utility to trial courts if the system is expanded to include on-line access from trial courts.

Batch output reports, which are produced on a monthly basis, are divided up between system activity reports, management-oriented statistical reports, and judge-oriented reports. System activity reports and judge reports were designed during Phase II of the project. Management-oriented statistical reports are essentially those designed by Arthur Young and Company during Phase I of the project with modified formats. SJIS output reports will be described below.

(1) System Activity Reports: These reports include:

- Civil Update Transaction,
- Civil Operator Activity Report,
- Criminal Update Transaction/Error Report,
- Judge Update Edit Report,
- Judicial Update Report,
- Operator File Edit List Report, and
- Operator File Listing Report.

All of these reports are designed to provide information to SJIS project administrators regarding the amount and quality of work done by data entry operators. They also identify areas where additional training is needed because excessive errors are being attributed to one specific court or court clerk.

(2) Judge Reports: These reports provide alphabetical listing of all judges and their locations. They can also be produced with alphabetical judge listings by county.

(3) Management Oriented Statistical Reports: These reports include:

- Pending Case Analysis (Criminal): This report lists all pending criminal cases for each court. It provides the defendant's name, case number, date arrested, date and judge at last reported activity, and the number of days pending since arrest.
- Pending Case Analysis (Civil): This report lists all pending civil cases for each court by case type. It provides case number, date filed, last activity date and status, and number of days pending from filing.
- Courtroom Activity Report (2 reports, one for district and one for county courts): These reports provide summary statistics regarding the number of each type of transaction (e.g., jury trials) that have occurred in a given courtroom in the last month, for civil and criminal cases.
- Civil Caseload Statistics: This report provides the civil caseload statistics for each court during the past month including the manner of disposition.
- Calendar Caseload Statistics (Civil/Probate): This report provides caseload information for each court during the last month regarding civil and probate cases. It provides information on the number of active cases and the stage of processing they are at (e.g., number with trial activity during the month) for both the court and jury calendars in each court.
- Probate Caseload Statistics: This report provides the monthly caseload for each court's probate caseload subdivided into cases involving: supervised administration, unsupervised administration, guardianship/conservatorship, and commitments.
- Family Caseload Statistics: This report provides the monthly caseload, including stage of processing for family case types in each court. Caseload is provided for: dissolutions, support cases, adoptions, and other family cases.

- Aggregate-Based Conciliation Caseload Statistics: This report provides the caseflow of conciliation (small claims) cases in each county, including whether cases terminated during the month required any courtroom activity. This report is based on summary reporting forms.
- Aggregate-Based Juvenile Caseload Statistics: This report provides the juvenile caseflow for each court during the last month. It subdivides the juvenile caseflow into delinquency cases, traffic cases, and cases involving neglect, dependency, or termination of parental rights.
- County Criminal Caseload: This report provides the monthly caseflow for criminal cases in each county court during the previous month. Caseflow, including whether cases terminated during the month required any courtroom activity, are broken down into: misdemeanors; traffic; game, fish, water, and DNR violations; and all other violations.
- District Court Criminal Caseload: This report provides the prior month's criminal caseflow for each district court. It provides general criminal caseflow plus information on the manner of disposition and the stage of disposition for cases terminated in the prior month.
- Probate Caseload Statistics (2 reports): These reports provide statewide caseflow, sorted by court, for cases involving: supervised administration, unsupervised administration, guardianship/conservatorship, and commitments during the last month. All counties are compared on this report.
- Family Caseload Statistics (2 reports): These reports provide summary caseflow data, sorted by court, for family cases involving: dissolutions, support, adoptions, and other family matters during the last month. All courts are compared on this report.
- County Court Criminal Caseload: This report provides the county court criminal caseflow for each county court during the last month. Case types are divided up into: misdemeanors; traffic; game, fish, water, and DNR violations; and all other. All county courts are compared on this report.

- Juvenile Caseload Statistics: This report provides all juvenile caseflow for the state, sorted by court for the last month. Each court's caseflow is subdivided into juvenile cases involving: delinquency; traffic; and cases involving dependency, neglect, or termination of parental rights. All juvenile court activity in the state in the past month is compared on this report.
- Summary Statistics: This report provides summary caseflow statistics for all district or county courts in the past month. It also provides information on the number of cases being added and deleted from each court's judge trial and jury trial calendars.

5. OBTS/CCH

OBTS and CCH data in Minnesota are provided via the Bureau of Criminal Apprehensions CJRS system. This system has been operational since 1972. Plans for the expanded SJIS call for SJIS to take over the data collection and input tasks which are currently accomplished via CJRS. Liaison has been established with BCA personnel, and they have been assured that OBTS and CCH data currently collected by BCA will also be collected and provided to BCA should SJIS take over collecting the judicial portion of these systems.

6. Security and Privacy

The Minnesota SJIS system is designed to be reasonably secure against the following types of hazard.

- Hardware failure,
- Erroneous data entry of new information,
- Update of existing data outside an operator's authority, and
- Unauthorized access.

The backup of the Minnesota SJIS database is on the same basis as the rest of the BCA network. The same data logging recovery procedures are used for the SJIS system. Batch processing required to maintain the SJIS system is included in the same job stream as the other BCA network batch processes and catalogued in the same PROC module. This assures that the batch programs are run in proper synchronization with the file back-up. All programs which update TOTAL files temporarily lock the records so there can be no contention problems that could affect the integrity of the SJIS data base.

The programs that update and add new information contain validity checking logic to reject incorrect information before it can affect the accuracy of the database. The input forms for civil/probate adds contain SJIS numbers pre-numbered with a check digit during printing. The judge number also contains a check digit.

Besides the physical security already provided by ISD, several other security measures are programmed into the State Judicial Information System. The majority of the application security procedures are handled by the Operator Master File.

In addition to the physical terminal security required by contract with BCA, the terminal operation using SJIS files requires operator security. The Operator Master File contains one record for each authorized user of the system. The Operator File is accessed by the operator code; without this code, nobody can obtain access to the SJIS files.

When access is attempted using an operator code, then the system front end performs additional security checks based on the code. Each operator record contains a restriction code that indicates the level of activity permitted (inquiry, update, delete, etc.) for that operator. A check is made to insure that the operator is not trying to perform a function he/she is not allowed to perform. In addition, the operator record contains a table of allowable terminals for the specified operator code. No access is permitted to SJIS files from terminals other than those listed for that operator code. Finally, there is a table of authorized counties, used to restrict access to only those records that are within that operator's jurisdiction.

Also included is a method of training security. In order to prevent accidental updates to live data by trainees, two methods are used to insure file security. The first is a special trainee operator code. While using this code, an operator can use the system within the assigned security restriction code. The second is a special county designation that is used by trainees to actually create and update records that are designated for training purposes and are ignored by other production programs. These special records are purged once a month.

A daily report prints listings for audit purposes of civil and probate cases affected by the current day's activity. In addition, a daily report is printed showing the number of times the entry key was used, number of updates, screens executed, and the number of error screens returned for each operator. This will identify attempts to "experiment" as well as point out the need for further on-job training.

All terminals are located in secured areas accessible only by authorized employees.

A complete set of system back-up tapes are maintained by ISD in case of massive system failure. However, these tapes are stored in the same building that contains ISD's computer facilities. In the case of a natural disaster such as an earthquake or major fire, the entire ISD data base could be lost.

7. Computer and Communications Configurations

SJIS runs on one of three IBM 370/158/MVS computers that are operated by Minnesota's Information Systems Division. Each 158 has 2 megabytes of core storage. ISD is an executive branch agency that provides centralized data processing services to all state agencies.

Minnesota's SJIS operates within Version 7 of the TOTAL Database Management System.

Access to the TOTAL database is via a front end teleprocessing network (TP EXEC) which is operated by ISD but controlled by the Department of Public Safety. CRT terminals (6 currently, with expansion to 22 planned) are Uniscope Model 200's.

As indicated earlier in this report, ISD's computer and teleprocessing facilities are operating at or near the saturation point. This is likely to pose problems for the expanded versions of SJIS that are planned. The courts have little administrative control over ISD since they are but one of the many agencies requesting services from ISD. ISD is a large bureaucracy employing over 300 persons. Conversations with SJIS staff and their consultant programmer leave the impression that getting ISD to improve its service to users has been a persistent and ongoing problem.

8. Documentation

The existing SJIS system is well documented. The PRIDE project control and documentation methodology has been employed by the SJIS project. During Phase I and II of Minnesota's SJIS project, the following documentation has been produced:

- Requirements Analysis and Conceptual Design: This document was prepared by Arthur Young and Company during Phase I development efforts. It includes: background on the Minnesota judicial system, proposed alternatives for SJIS development, functional performance requirements, input and output requirements, file types and estimated sizes, and estimates of necessary hardware. This design has been modified considerably in the detail design that was developed in Phase II when the system was altered to operate in an on-line mode.
- Detail System Design: This document describes the general purposes of the SJIS, the operational modules, the detail processing logic for each module, detail designs for input and output report (for both batch and on-line input and output), file restore procedures, and system security and privacy provision. This document is based on the PRIDE project control and documentation methodology, and is updated to reflect any modifications to the existing system.
- User Manual: A well-documented user manual has been prepared and distributed to all system users. It provides clear examples of how clerks are to fill out and process all SJIS forms.
- Program Listings: Complete program listings for all SJIS programs are maintained by the SJIS project staff.

C. Assessment Results

This section will review the current status of concerns and recommendations made by the 1976 assessment team and will describe the reactions of the current assessment team to the Phase II Minnesota SJIS project efforts in terms of the prospects for ultimate satisfaction of the project goals and objectives.

1. Concerns and Recommendations of the 1976 Assessment Team

a. The state court administrator's office was planning on using one person to edit the SJIS transaction input sheets. The team felt that this resource would have to be expanded to adequately handle the anticipated 80,000 transaction reports per year (estimate provided by Arthur Young and Company).

Current Status: Minnesota currently has six full-time staff involved in data entry and verification. Current transaction volumes average between 1200 to 1500 per day. This is approximately four times the number of transaction reports estimated during Phase I. As the system expands, the SJIS staff plan to hire additional input operators. In addition, a number of on-line edit checks are provided that would not have been available with the original batch design.

b. Since the court relied entirely on Arthur Young and Company for all technical liaison with ISD during Phase I, the assessment team recommended that the project hire a technical coordinator with a strong systems background to act as liaison with ISD and BCA.

Current Status: The SJIS now has two full-time personnel directing the in-house efforts of SJIS. Both of these individuals have proven to be very competent in designing, developing, and implementing the state's SJIS. Both of these positions are permanent, full-time positions that are now funded by the state. One additional systems analyst is currently being recruited, and another analyst slot is planned for the future.

c. The state court administrator's office has not conducted any study to determine the likely error rates on transaction reports and their effect on subsequent late output reports.

Current Status: Error rates were not assessed prior to implementation of SJIS. However, extensive field training and data validation are conducted by SJIS staff. Error rates appear to be within normal and manageable tolerances. SJIS staff feel that they are operating an exceptionally clean database. Output reports are currently in the initial stages of implementation. It is not known if monthly reports will prove to be timely.

d. Only verbal agreements between the state court administrator and the Bureau of Criminal Apprehension existed regarding access to the CJRS database for the purpose of supplementing SJIS information. The assessment team was concerned, since the CJRS database was owned by BCA, that a change in personnel at BCA could lead to restriction or elimination of the courts' access to the criminal case data contained in BCA's database.

Current Status: This situation has not changed since 1976, although relations between SJIS staff and BCA personnel remain quite cordial and cooperative. BCA is currently providing machine-readable input on all criminal cases to the SJIS database.

e. Concerns were expressed about the lack of a formal training schedule and methodology for training clerks of court regarding SJIS input transaction forms.

Current Status: Extensive formal and informal training has been completed with all clerks of court. Two full-time SJIS field representatives provide an ongoing liaison and training source for clerks of court.

f. No written agreement between the state court administrator and ISD existed for data processing services. Such arrangements were not provided for any state agencies receiving data processing services from ISD. The assessment team recommended that the state court administrator attempt to enter into a written agreement with ISD, identifying areas and levels of data processing services to be provided as well as schedules of performance to be adhered to.

Current Status: No formal agreement exists between the state court administrator and ISD.

2. Recommendations of Current Assessment Team

a. Formalized Agreement with ISD

While there are political and bureaucratic problems inherent in attempting to enter into a formal contract with ISD, it is the assessment team's recommendation that such an agreement be sought to specify the levels of service and priorities of processing to be provided to the courts. As stated in this report, the computer capabilities and teleprocessing capabilities of ISD are at or near the saturation point. If ISD cannot secure funding for additional hardware to support all of the state's operating systems, then some or all of the currently operating systems are going to be degraded in terms of response time and system availability. Currently SJIS suffers from 1 to 1½ hours of system down time during each work shift. During system up time, SJIS suffers from periodic excessive response times. A contract will not solve these current problems (although it will not increase them). However, should ISD decide to sacrifice certain systems in order to provide better service to others, a contract would protect the courts' interests. In addition, a contract should be worded so as to guarantee the courts' right to expand the capabilities of their current SJIS. If response times continue to be degraded and system unavailability continues to be a problem, then ISD is in a perfect position to decide that the courts' system cannot be expanded.

b. Formalized Agreement with BCA

Relations with BCA are currently quite cordial and cooperative. However, should personnel change at BCA, this spirit of cooperation with the courts could cease. An agreement should be entered into with BCA that would ensure the courts' access to the CJRS database and also ensure continued access to the BCA-controlled teleprocessing monitor on which the courts are dependent for on-line access to SJIS. Plans for the expansion of SJIS to include entry of criminal transaction data into SJIS rather than into CJRS will require careful negotiation between the courts and BCA. This would be an ideal time to formalize this relationship.

c. Expand On-Line Inquiry Capabilities

As indicated in the report, the current Minnesota SJIS is designed to facilitate on-line input of data rather than on-line output. As explained by SJIS staff, the limited on-line inquiry capability is due primarily to the concerns over the saturated status of the state's teleprocessing network. Inquiries that entail on-line sorting of records or special processing do require more computer power and teleprocessing capability. As long as the system remains static--so long as SJIS plans on providing management information on a batch basis--the current situation is adequate. If SJIS is going to be expanded in such a manner that access by local clerks and district court administrators is encouraged for local management information, then the current on-line inquiry capabilities are going to prove inadequate and difficult to use. The general inquiry program functioning in SJIS should be expanded to include the capability to access case records by the names of significant participants, by case types, and by event types over specified time spans. Management information required by local courts differs significantly from state-level management information. Most specifically, local trial courts demand much more timely information, which generally precludes reliance on batch reports produced on a monthly basis. If the system developed is to be of utility to the local courts and local district court administrators, then the on-line inquiry capability must be expanded.

d. Records Management Analysis Should Take Precedence over Expanded SJIS

Minnesota is currently working on three interrelated projects: SJIS, a weighted caseload study, and a records management study. Current plans call for SJIS to be expanded concurrently with the continued efforts at developing a weighted caseload procedure and a continuing analysis of local records management procedures. It is the assessment team's recommendation that the continuation of the records management analysis, weighted caseload study, and financial and personnel studies be given precedence over the immediate expansion of SJIS. A thorough analysis of local trial court policies and procedures (work and paperflow) will enable the SJIS staff to develop a state-wide system that will be of utility to local courts. If SJIS is expanded before a thorough analysis of these local court procedures is completed, it will quite likely lead to the implementation of a system that will be of limited value to local courts and will require significant reprogramming to adapt to local needs.

e. ISD System Support Should Be Continually Re-evaluated

As indicated previously, the system support provided by ISD to the courts leaves a great deal to be desired. With ISD's computer power and teleprocessing network at or near the saturation point, it is recommended that the court continually re-evaluate ISD's ability to provide adequate systems support. This is particularly crucial when the SJIS expansion efforts are undertaken. System users will not use or support a system that suffers from excessive down time or excessive response times. With the increased volume of input and output that will be required by the expanded SJIS, the assessment team has serious concerns regarding ISD's ability to adequately support the system. It is the assessment team's recommendation that the courts' data processing consultant perform periodic assessments of ISD's system support capabilities. If ISD cannot guarantee adequate system availability and response times, then expansion of SJIS should not be undertaken. Should this situation arise, the assessment team recommends that the court seek alternative data processing resources, which could include a stand-alone computer system operated by the judiciary, or contracting for data processing services with a local data processing service bureau.

f. An Ad Hoc Report Writer Program Should Be Developed

As SJIS is expanded and more users (and other agencies such as legislative committees) gain an understanding of what types of information are available from the system, SJIS staff should anticipate that there will be increased demand for ad hoc reports from the system. The system, as designed, is unable to respond to these ad hoc requests. Each output report must be individually written in COBOL. This is not the most efficient, and certainly not the most inexpensive way to produce reports from the system. While the TOTAL data base, which SJIS operates under, can generally support a generalized report-writing program known as SOCRATES, it is the assessment team's understanding that the manner in which ISD has generated SJIS within its TOTAL database precludes the feasible use of SOCRATES or other commercially available report writing programs. It is recommended that the SJIS staff explore with ISD the possibility of its adapting a report writing program to the current SJIS

database. If this cannot be done, it is the assessment team's recommendation that alternative sources be explored, including the possibility that a tape copy of the SJIS data needed to produce a report be processed by a service bureau or some other state data processing facility that has access to a generalized report writing program.

g. Establishment of a Formal Advisory Committee

During Phase I of the project a formal advisory committee consisting of local clerks of court and judges was used to review design plans and to establish the types of input and output report forms that would be appropriate for SJIS. During Phase II of the project an advisory committee has not been used, although informal discussions have been held with the Council of Chief Judges (the chief judge from each of the state's judicial districts) and the district court administrators. As SJIS is expanded to serve the needs of local judges and clerks of court, it will be crucial to have input regarding systems design, output reports, and on-line information requirements from the intended users of the system. While the records management study will provide some of this information, it is necessary to actively involve the actual users of the system in its design. A system that is developed and implemented from the state level down is likely to be perceived as an imposition on the local courts rather than a service. In addition, if local courts are afforded the luxury of identifying the expanded system as "your" system rather than "our" system, it is likely to produce a fair amount of passive resistance from local court personnel. Section 5.0 of the workplan for the expanded SJIS indicates that an SJIS advisory committee will be formed to "appraise the impact of new systems, determine desired outputs, advise methods to facilitate the design in regard to clerical processing, voice the concerns of the users, and review and approve the final product based on the original concept." It is the recommendation of the assessment team that this advisory committee be formed as soon as possible and that it become an integral part of continued SJIS development efforts.

3. Exemplary Findings

a. Staff Competence. The state court administrator's office has obtained the services of competent professional data processing personnel to manage the design, development, and implementation of its SJIS project. This hiring of professional staff who are knowledgeable in both courts and data processing areas will be a major factor in the continued successful development of Minnesota's SJIS.

b. User Training. SJIS staff have done an excellent job of providing systematic training for users of the SJIS system. As an acknowledgement that training is not a one-time phenomenon, the state court administrator's office has two permanent personnel who spend full time in the field providing ongoing training and liaison with local courts. The users manual provided to clerks of court is a very clear and concise training and reference document.

4. Conclusions

Minnesota's SJIS project has suffered from severe slippages in relation to the Phase I and Phase II grant specified time-tables. The project is currently at the stage that it had planned to be at the end of Phase I (1976). It should be noted that during the period since the end of the Phase I grant there has been a complete personnel changeover in the state court administrator's office, including the state court administrator himself. Prior to Phase II, there was no in-house SJIS staff within the state court administrator's office. Current SJIS staff have been hired within the last 1 to 1½ years. It is the assessment team's view that these personnel have done an excellent job of salvaging and turning around a project that was in serious trouble.

So long as this caliber of SJIS staff is maintained by the state court administrator's office, there is every reason to believe that Minnesota's SJIS Project will continue to be successfully expanded and implemented.

The major problems facing Minnesota's SJIS project revolve around its reliance on other agencies to provide data processing services. Should service provided to the courts continue to degenerate, the courts may well be forced to seek alternative data processing resources.

APPENDIX

ASSESSMENT OF PERSONNEL AND FINANCIAL INFORMATION PORTION OF THE MINNESOTA SUPREME COURT STATE JUDICIAL INFORMATION SYSTEM (SJIS GRANT) by Gerald B. Kuban, Management Analyst

A. BACKGROUND

This assessment was performed at the request of the National Center For State Courts during the period August 23, 1978, through September 5, 1978. The purpose of the assignment was to evaluate that portion of Minnesota's State Judicial Information System grant efforts that are being conducted by the National Center For State Courts' North Central Regional Office. Specifically, the consultant evaluated those efforts directed at studying and developing personnel and financial systems.

The report was to include:

- An assessment of whether work is being completed in accord with the stated goals of the SJIS grant application.
- An assessment of whether work is being completed in accord with grant specified milestones.
- An assessment of what work has been completed.
- An assessment of general caliber of work.

The materials reviewed prior to the on-site visit included: the grant agreement between the Minnesota Supreme Court (grantee) and the Minnesota Crime Control Planning Board (Grantor); the National Center For State Courts' Project Proposal and Task/Staff Hour Analysis; and the LEAA Comprehensive Data Systems Guidebook.

The materials reviewed subsequent to the on-site visit included: the original request for proposal issued by the Minnesota State Court Administrator's office; Questionnaires issued by the National Center For State Courts covering 1) position descriptions; 2) fringe benefits; 3) personnel practices/organization; 4) budgeting practices; data summaries of the questionnaires and organization charts; and lastly the drafts of the project reports which were completed as of the date of assessment including those covering personnel standards, current budgeting practices and budgeting standards.

The on-site visit was conducted on August 23, 1978, and consisted of meetings with the other members of the SJIS assessment team as well as State Court Administrator Laurence C. Harmon, Director of the North Central Regional Office, Francis Bremson, and Frank and Sue Dosal, National Center for State Courts staff.

B. THE SJIS GRANT AGREEMENT (Between the Minnesota Crime Control Planning Board and the Minnesota Supreme Court)

The primary goal of the project as stated in the grant agreement is to "introduce management tools in the financial and personnel areas to the Minnesota court system in order to improve the base of information upon which policy decisions are made at the state and local levels."

Specifically, the personnel segment of the grant agreement is indicated as being concerned with the following areas:

- 1) --Devise a method to provide accurate, timely information about existing personnel staffing patterns and compensation packages in local courts on a continuous basis so that response to queries can be made at the time of the requests rather than six months later. (Emphasis supplied.)
- 2) --Establish a uniform personnel classification system for court personnel which can serve as a guideline for local courts and can provide a framework for a personnel system in the event of state funding.
- 3) --Provide guidelines for the determination of desirable non-judicial staffing patterns that can be applied by local courts to assess staff strength.
- 4) --Provide data to assess compliance with affirmative action programs.
- 5) --Provide and store data on the training needs of non-judicial personnel.
- 6) --Collect the data necessary to establish a system to determine judges' needs objectively.

It should be noted that items 1 and 4 were the only two matters covered in the RFP issued by the State Court Administrator's office.

The financial segment of the grant agreement is indicated as being concerned with:

- The establishment of a uniform chart of accounts for local courts so that data can be collected and reported on a uniform basis.
- Devising a method for local courts to collect the financial data as part of their daily
- Devising forms and procedures for local courts to report the financial data to the State Court Administrator.

--Designing reports to convey the financial status of the courts to the legislature.

The grant agreement further provides that the existing computer data base will be expanded to include data relevant to a systematic determination of judicial staffing needs for civil and criminal courts and that, as part of the workplan, model personnel and financial reporting systems will be developed. A determination of the reporting methodology, manual or computerized, is to be made.

C. THE REQUEST FOR PROPOSAL AS DRAFTED BY THE MINNESOTA STATE COURT ADMINISTRATOR'S OFFICE

The RFP of the Minnesota state court administrator's office further refines the goals set forth in the grant agreement. Specifically, the RFP requires that a proposal address the following areas:

- A personnel inventory that would collect and classify current non-judicial personnel data such as number and types of full and part-time personnel, salary levels, as well as procedures relating to promotion, evaluation, recruitment, in-service training and discipline. Organization charts are to be provided as a by-product of this segment.
- The development of statewide standards for recruitment, promotion, evaluation, discipline and in-service training of non-judicial personnel.
- Recommendation of a design for a statewide personnel information system to collect data annually to monitor changes in the personnel structure and compliance with standards. The recommendation is also to include a documented computer feasibility study. (Emphasis supplied.)
- A documentation of current court budget preparation and presentation procedures by identifying actors, time frames, budget policies, and supporting financial records.
- The development of statewide standards for local budget preparation including recommendations for local court accounts.
- A recommended financial information reporting system which will provide the state court administrator and the legislature with timely, accurate data and the local courts with data to support budget preparation. The reporting system is to be sufficiently detailed to allow for the preparation of a uniform court budget at a future date.

D. THE RESPONSE TO THE MINNESOTA PROPOSAL BY THE NATIONAL CENTER FOR STATE COURTS

The National Center for State Courts as the successful bidder on the project listed the following in their proposal:

- To conduct a personnel inventory and survey of personnel practices.
- To survey current financial budgeting practices of lower courts.
- To develop uniform statewide personnel and budget standards.
- To evaluate information reporting system design alternatives for the collection of current and reliable trial court personnel and financial data on an on-going and timely basis. (Emphasis supplied.)

Project deliverables were listed as reports on the following items:

- Numbers and costs of personnel.
- Current personnel practices.
- Current financial budgeting practices.
- Draft of uniform personnel and budget preparation standards and operational manuals.
- A modular information needs analysis and conceptual systems design.

E. ANALYSIS - COMPLIANCE WITH PROJECT GOALS AND MILESTONES; STATUS OF WORK PRODUCTS

The assessment of compliance with the stated goals of the grant agreement must consider not only the grant agreement but also the RFP and response to it as further defining project tasks and setting of project milestones. It should be further indicated here that the project was to begin initially on October 1, 1977, and terminate August 31, 1978. Delays in start-up, however, pushed the starting time to December 1, 1977, and the termination date to October 31, 1978. The total amount of project time available thus remained the same.

The proposal of the National Center for State Courts sets forth the following project tasks:

Task 1. Project Start Up/Phase I Data Collection
Milestone: Detailed workplan

Comment: The proposal itself sets forth a detailed workplan based on the project tasks. Two days after the

project contract was signed (October 26, 1977) a meeting was held with the state court administrator to discuss the proposed workplan. It was at this time that the project task dealing with the development of statewide uniform personnel standards was indicated as having the greatest priority. This priority was based on the Minnesota statutory provision which obligated the state court administrator to file a report on the uniform standards and procedures with the legislature by June 30, 1978.¹ More will be said about this priority in a later comment.

A subsequent meeting with the state court administrator on December 2, 1977, further refined the workplan.

Task 2. Develop Phase II Data Collection Instruments
Milestone: Approval of data collection instruments

Comment: The National Center for State Courts staff complied with this milestone by memo to the state court administrator on December 8, 1977, which requested approval of the position description questionnaire, fringe benefit questionnaire, and clerk's office organization questionnaire.

Task 3. Test Data Collection Instruments

Comment: An analysis of the collection instruments indicates that they are adequate in providing project information.

Task 4. Gather Information

Comment: This was a 19-20 week period during the project. Two items with regard to this task deserve comment. First, approximately midway through this period the research associate left the project for other employment. The employee was not replaced and this factor, it is felt, caused slippage on other project tasks since it became difficult to keep all tasks up to date.

Secondly, as of the date of this assessment 15 on-site audits remain to be done for verification of

¹M.S. 430.15 Subd 10a: The court administrator shall prepare uniform standards and procedures for the recruitment, evaluation, promotion, in-service training and discipline of all personnel in the court system other than judges, referees, judicial officers, court reporters and court services officers. The court administrator shall file a report on the uniform standards and procedures with the legislature by June 30, 1978.

personnel data. Twenty sites were targeted for this activity at the onset of the project.

Task 5. Compile and Analyze Data

Milestones: Personnel Inventory Report
Personnel Practices Report
Financial/Budget Practices Report

Comment: As of the date of this assessment, the personnel inventory and related salary costs has not been completed. A sample of the representative format of this report has been examined and appears to be adequate except for the conversion of full and part-time positions to F.T.E. (Full Time Equivalent) figures.

Further, a total of 87 organization charts are expected to be completed as part of this task. To date, 20 charts have been drawn based on questionnaire responses and field visits. These charts set forth a graphic representation of each court location and function. As of this writing 67 charts are awaiting completion.

The personnel practices report has been integrated into the personnel standards report which is covered under Task 6. The financial/budgeting practices report has been completed and upon examination proved to be a definitive statement of the current situation.

Task 6. Prepare Recommendations for Statewide Personnel Standards

Milestone: Preparation of report on personnel standards

Comment: This task was originally scheduled for 4 weeks of project time. However, approximately 18 weeks of the project time was ultimately spent on this activity. This time difference has impinged upon the completion of other project tasks but can be properly explained. First, the statutory requirement of the report by June 30th required that the task be made a top priority by the state court administrator and project staff. Second, it is possible there was some misunderstanding as to the content, nature and ultimate use of the report. The report does not merely set forth acceptable personnel standards for Minnesota courts. It goes further in that it identifies issues which will be of legislative concern relative to state funding

of the courts and alternative approaches. This expansion of the report from one which sets forth the current personnel situation and standards to one which identifies issues for legislative action caused an increase in the amount of time required to complete this task. The report, in its draft form, is a very acceptable statement on the current status as well as the future of Minnesota court personnel and related state funding issues.

Task 7: Prepare Proposed Standards For Local Budget Preparation
Milestone: Drafting of Budgeting Standards and Manual

Comment: The draft of the report on budgeting standards is completed and was reviewed as part of this assessment. This document was prepared as a training manual for court personnel and contains basic budgeting standards, monthly budgetary field reporting forms and a narrative on a model financial system. This model financial system section of the report, it is felt, should be integrated as part of the conceptual systems design contemplated in tasks 8, 9 and 10. The budgeting standards manual does not in any way set forth a uniform chart of accounts which was indicated in the grant agreement as being an objective. The manual includes reporting forms for budget expenditures but does not include forms for the reporting of court revenues. A reference is made in the draft to proposing such a system at a later date. At the time of the assessment, another report titled "Budget Manual" was unavailable for review. Thus it is impossible to tell how the "Budgeting Standards" publication and the "Budgeting Manual" publication relate to each other or what the final content might be.

Tasks 8. Determine Personnel and Financial Information Requirements
Milestone: Information needs analysis

9. Prepare Preliminary Conceptual Systems Design For Personnel and Financial/Budgeting Modules
Milestone: Preliminary conceptual design

10. Pilot Test Conceptual Design
Milestone: Final conceptual design

Comment: For the purpose of this discussion tasks 8, 9, and 10 will be dealt with together. All of these tasks relate

to the feasibility of a computerized personnel and financial information reporting system, a needs analysis, and a conceptual systems design and testing.

There appeared to be a significant misunderstanding between the project director and the state court administrator concerning the necessity for the completion of these three tasks. There was some indication or feeling that these tasks had been eliminated as project pursuits because of the heavy emphasis placed on completion of the "personnel standards" segment of the project. The consultant was assured by the state court administrator that these are indeed tasks which require completion although time is not of the essence in their performance.

It is significant that approximately 361 hours of project time were scheduled to be devoted to these tasks but as of the date of the assessment no staff work had been undertaken in these areas. This is especially significant since as of August 31, 1978, it appears that only \$4,000 of the total \$39,308 project budget will be left to spend for the wrap-up of the project. It appears that, apart from tasks 8, 9, and 10, there are a number of items left to do during the remaining months of the project (Sept-Oct). These items include: 1) the completion of the personnel inventory in typed form, 2) the preparation of 67 organization charts, 3) fifteen field audit visits, 4) the completion of the budget manual, 5) the revision of the draft sections of the report which are completed regarding personnel standards, current budgeting practices and budgeting standards, 6) the preparation of the final report.

It would appear that based on average billing rates for National Center staff, there could be a \$5,052 to \$6,137 project overrun. This is calculated on the 361 staff hours estimated in the proposal of the National Center that have been identified as necessary for the completion of tasks 8, 9, and 10.

It may be possible to minimize this overrun by inquiring of those states which have installed automated personnel/financial information systems about the possibility of transferring computer programs, forms and report formats. It is suggested

that the state court administrator's office in the states of Colorado, South Dakota, New Mexico and Kansas might be contacted for this purpose.

OVERALL ASSESSMENT AND CALIBER OF WORK

Apart from tasks 8, 9, and 10 (the information system feasibility study, information needs analysis, and conceptual systems design and testing) the project reports which have been completed represent high caliber work although some gaps exist relating to project deliverables as of the date of assessment. These gaps have been identified in the foregoing material. Since the project is still in the final stages it undoubtedly will be possible to complete these items.

NEW JERSEY PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On January 3, and 4, 1979, an assessment was made of the New Jersey State Judicial Information System (SJIS) project. The assessment was conducted by:

Mr. David Osborne, of Minnesota;
Mr. Greg Janowski of the National Center for State Courts; and
Mr. Ray Speight of the National Center for State Courts.

The purpose of this assessment was to appraise the administrative and technical status of the SJIS project relative to the requirements of the New Jersey SJIS grant from LEAA and relative to good systems development practices and procedures.

The primary participants from New Jersey's Administrative Office of the Courts (AOC) were:

The Honorable Arthur J. Simpson, Jr., Acting Director,
Administrative Office of the Courts; and
Mr. George J. Sikora, Chief, Judicial Management
Information Systems (JMIS), and Project Director, SJIS.

The LEAA representative at this assessment was Mr. Art Fuldner.

A. Management Summary

The New Jersey SJIS project is currently in Phase II, which began on March 7, 1978, with a completion date of March 6, 1979. The purpose of the project was to provide the judiciary with a minicomputer dedicated to satisfying some of the unmet information processing needs of the judiciary; to develop and implement administrative support systems for the AOC; and to complete the requirements analysis for five on-line SJIS subsystems.

The project is currently awaiting the responses of minicomputer manufactures to the judiciary's request for proposals. A requirements analysis has been completed for the Central Ethics Information System, an administrative support system. Three of the five requirements analyses for the on-line SJIS subsystems have been completed.

This report is divided into two major sections. The first provides an overview of the project and the environment in which it is being undertaken. The second provides a more detailed description and evaluation of the project. This includes a description of the project planning and management control methodology, description of the system being developed, and summary of the assessment team's findings.

B. Organizational Structure and Processing

1. Judiciary

As Figure 1 indicates, the New Jersey court system is composed of a court of last resort (Supreme Court), an intermediate appellate court (Appellate Division of the Superior Court), two trial courts of general jurisdiction (Superior Courts and County Courts), and three courts of limited jurisdiction (county district courts, juvenile and domestic relations courts, and municipal courts).

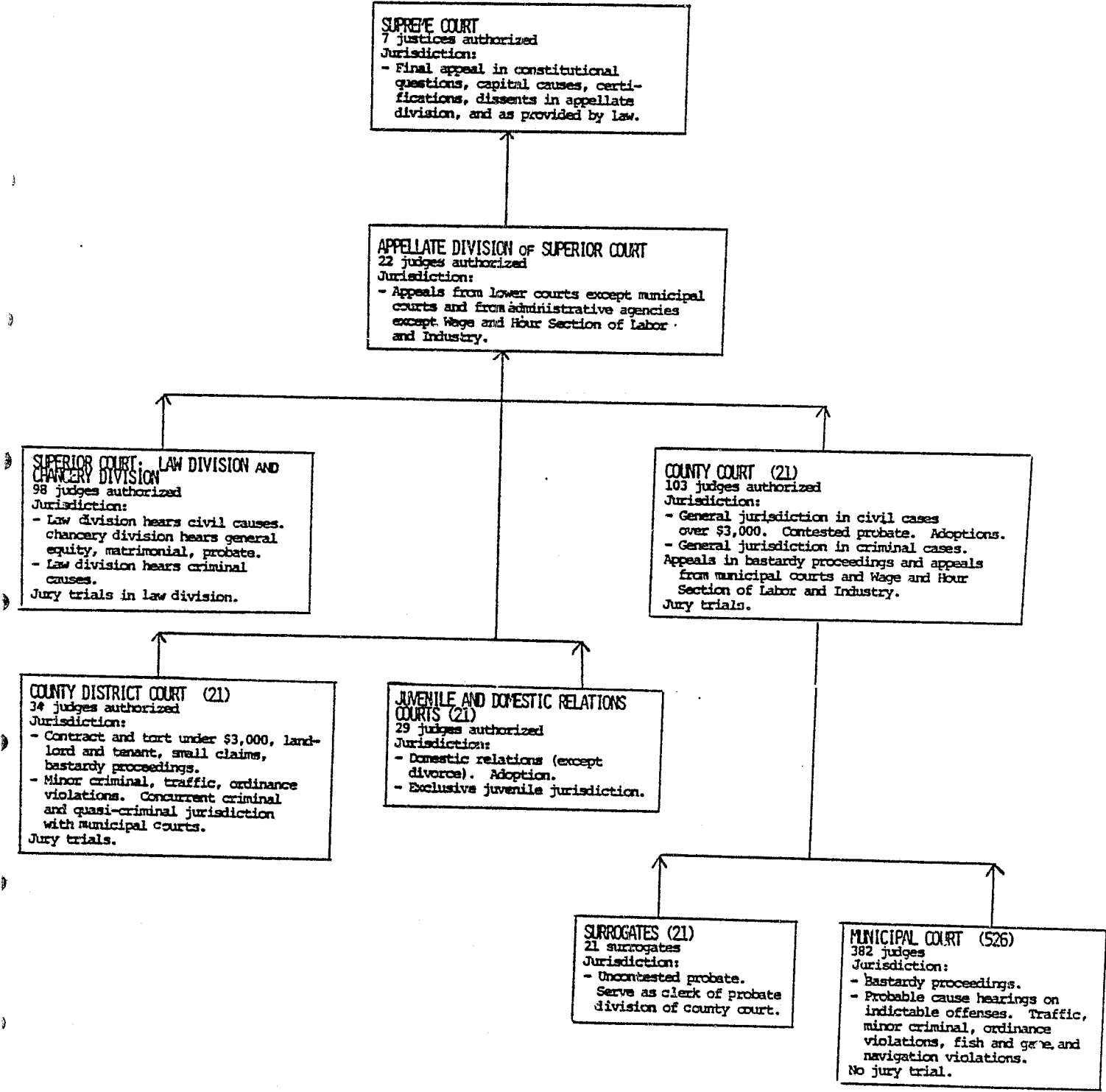
The Supreme Court is empowered to make rules governing both the administration of all courts in the state and, subject to law, the practice and procedure in all such courts. A 1974 constitutional article vested the control of all courts with the Supreme Court, and established the Chief Justice as administrative head of the system. The position of the Administrative Director of the Courts was created to aid the Chief Justice in his administrative duties.

2. Data Processing

The New Jersey state government operates five data centers, each run by one of the following state agencies: the Department of Labor and Industry, Department of Transportation, Department of Health, Department of the Treasury, and Department of Law and Public Safety. Any state governmental unit requiring systems development efforts or data processing (DP) services will be assigned to one of these five data centers. The judiciary's DP workload is processed by both the Treasury Data Center (TDC) in the Department of Treasury, and the

Figure 1

NEW JERSEY COURT SYSTEM, AUGUST 31, 1976



Source: National Court Statistics Project, NCSC.

† Indicates route of appeal.

Criminal Justice Data Center (CJDC) in the Department of Law and Public Safety. There are 18 independent, batch information systems being processed for the judiciary by the TDC, while the CJDC processes an on-line appellate court information system. The judiciary's systems development efforts are done either in-house, by AOC staff, or by the development staff of the CJDC.

Both of these state data centers are operating at close to maximum capacity. Dozens of state agencies, including the AOC, constantly vie for limited resources. Consequently, production deadlines are relatively inflexible; developmental resources are limited; priority scheduling is difficult; and judicial data privacy/security is a concern.

The AOC has certain DP requirements that cannot be met by the state-run data centers. The AOC has some highly confidential files that must be processed in a secure DP environment under the control of the judiciary. Examples of these files include the Judges' Weekly Bench Time Reports, Performance Evaluation files, Ethics files, files containing gubernatorial nominations for judicial appointments, character reports for Bar Exam applicants, etc.

The AOC plans to meet some of the judiciary's special information processing needs and to provide for security and privacy concerns by installing a dedicated minicomputer in the AOC office in the spring of 1979.

3. SJIS Project

The New Jersey SJIS project--Phase II is a 12-month endeavor which began March 7, 1978. The purpose of Phase II is twofold. The first is to permit the AOC to acquire both the necessary judicial DP personnel and computer facilities to process automated judicial applications. The second purpose is to implement automated judicial systems on the minicomputer that would support the administrative functions of the AOC.

The ultimate responsibility for the SJIS project lies with the Acting Director of the Administrative Office of the Courts, the Honorable Arthur J. Simpson, Jr. Day-to-day operational responsibility for the

SJIS project has been delegated to the project director, Mr. George J. Sikora.

Figure 2 represents the project's proposed staffing. At the time of the assessment some of these SJIS project positions were vacant. These positions have intentionally been left vacant until the installation of the judiciary's minicomputer in the spring of 1979. When hired, the new staff would report to the SJIS project director and would be responsible for operating the systems that will be processed on the minicomputer.

4. SJIS Advisory Committee

In the beginning of Phase I, i.e., 1975, the Acting Director of the AOC appointed an SJIS Steering Committee composed of individuals interested in the progress and outcome of the project. The Steering Committee was to provide policy recommendations, overall review, and guidance for the project. Its members were the following:

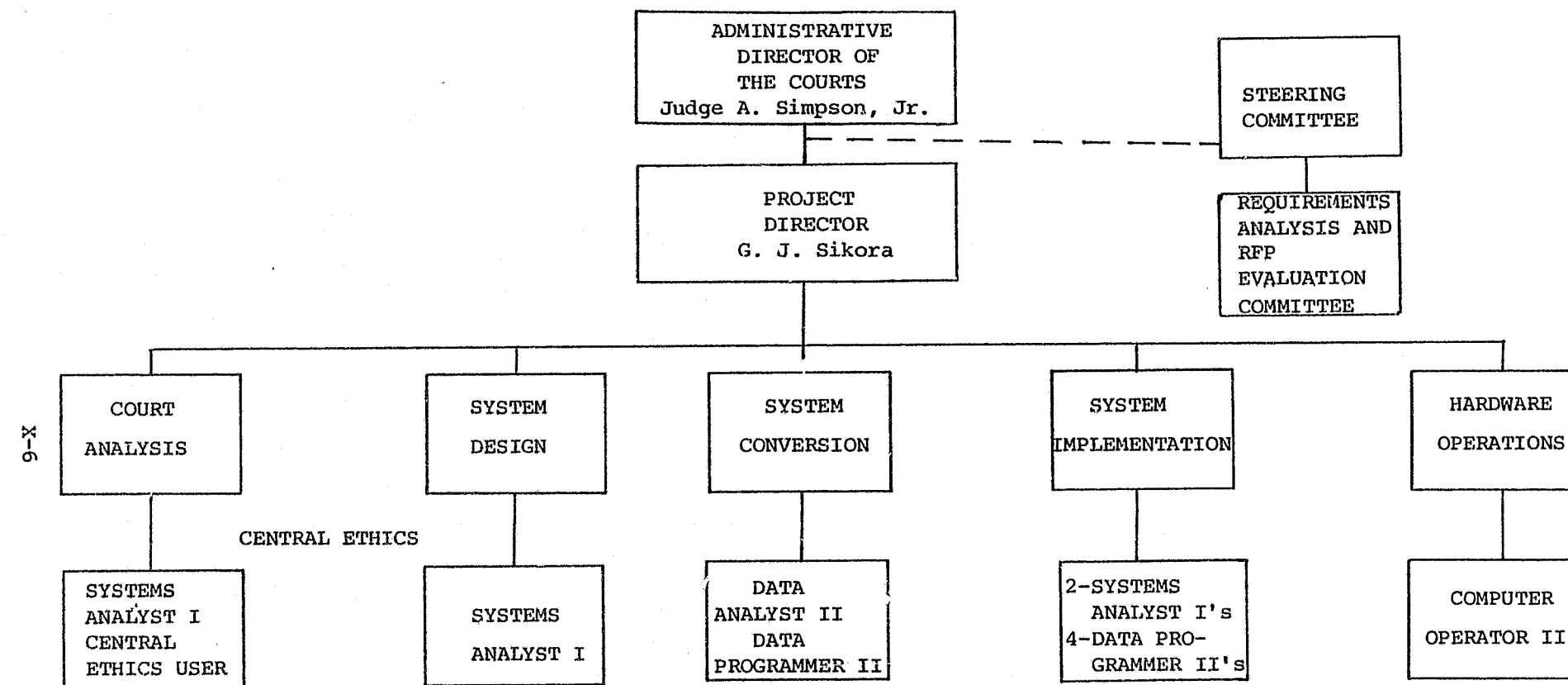
- Acting Director, Administrative Office of the Courts;
- Deputy Director of the Administrative Office of the Courts;
- Assistant Director, Ethics and Professional Services;
- Chief, Judicial Management Information Systems (JMIS); and
- Assistant Chief for Statistical Information.

This committee provided guidance from the judiciary's top management; however, as the project entered the detail design phase, the need for guidance from top management was replaced by a more specific need for input from middle management. As a result, the SJIS Steering Committee was discontinued. A working committee known as the Requirements Analysis and RFP Evaluation Committee was established to assist the AOC's staff in preparing an RFP to acquire a minicomputer. Members of this committee include:

- Two JMIS DP analysts;
- Two technicians from the Division of Data Processing and Telecommunications, Department of the Treasury; and
- One functional manager from the judiciary's Central Ethics Division (a primary user of the administrative support systems being developed during Phase II).

Figure 2

SJIS PROJECT ORGANIZATION CHART



Source: New Jersey Administrative Office of the Courts, Project Organization, unpublished.

It is the opinion of the assessment team that when designing an SJIS, extensive input is needed from clerks, administrators, etc. In addition to the Requirements Analysis and RFP Evaluation Committee, additional working committees should be used to channel the comments and reactions of the ultimate users of the system, i.e. the first-line supervisors, clerks, administrators, etc., back to the systems design staff.

5. Other SJIS-related Groups

In New Jersey the ultimate budgetary control of the DP hardware and software used by all five state-run data centers rests with the Director of the Division of DP and Telecommunications of the Department of the Treasury, Mr. Leroy Webber. His office coordinates the purchase and use of all state-owned DP facilities (including TDC and CJDC).

The SJIS Phase II workplan acknowledges the role of Mr. Webber's office with the following statement . . . "procurement of hardware and software will be coordinated with the Department of the Treasury."

The Criminal Justice Data Center and the Treasury Data Center are the two state-run DP facilities that handle the judiciary's information processing requirements. The TDC provides batch processing services. Most of the AOC's on-line systems development and production efforts are performed in cooperation with the CJDC staff. Hence, the AOC's on-line systems development efforts are partly limited by the availability of CJDC analysts and programmers. Any modifications or enhancements to an on-line application must be approved by CJDC staff before being implemented. This approval process has slowed the development of the AOC's on-line applications.

6. Judicial Workloads

Figure 3 reflects the statewide volume of judicial dispositions from September 1, 1975, through August 31, 1976.

7. Related Systems

In cooperation with the AOC, the state attorney general's (AG) office is implementing a statewide prosecutor management information

Figure 3
New Jersey's Judicial Dispositions
 (9/1/75 - 8/31/76)

<u>Unit</u>	<u>Dispositions</u>
Supreme Court	
Appeals	187
Other cases	798
Motions and other petitions	1,144
Appellate Division of Superior Courts	
Appeals	4,349
Motions and petitions	3,011
Law and Chancery Divisions (Superior Courts) and County Courts	
Civil	57,393
Criminal	29,466
County District Courts	
Civil	293,177
Criminal	2,320
Traffic	62,717
Juvenile and Domestic Relations Court	
Civil	61,439
Juvenile	83,276
Municipal Courts	
Criminal	294,746
Traffic	2,774,074

system (Mini-PROMIS). The AOC plans to develop a statewide local trial court information system as a by-product of the prosecutor's system. This trial court system will be called Mini-PROMIS/GAVEL. All of New Jersey's 21 counties will get operational trial court information from the clustered minicomputers that will be installed to support Mini-PROMIS and Mini-PROMIS/GAVEL. Summary data will be transmitted to SJIS. An LEAA grant is funding the AG's efforts.

The New Jersey Appellate Division of the Superior Court has an Automated Docketing and Management Information System (ADAMIS) that was implemented in 1976. Although not a direct product of the SJIS project--Phase II efforts, ADAMIS represents an integral, yet independent, part of New Jersey's judicial management information system. ADAMIS gives the AOC and the appellate court staff automated recordkeeping and case monitoring capabilities for appellate court cases. ADAMIS is an on-line system developed, operated, and maintained in a cooperative effort by the AOC staff and the CJDC staff.

There is also a ten-year-old, automated, batch caseload reporting system that produces monthly statistical summaries for the AOC.

C. Project Description

1. Background

In 1974, New Jersey submitted an SJIS Phase I grant application to LEAA. The application stated that the overall purpose of the SJIS project was to provide the AOC with a detailed set of plans, procedures and forms, and to define and model a fully integrated statewide judicial management information system. The database generated for SJIS was to be used by judicial planners and decision makers to further efficient administration for all levels of the courts.

The methods used to achieve the stated purpose of the project differed from Phase I to Phase II. During Phase I, project staff worked primarily on defining the statewide, on-line, criminal and civil information requirements. During Phase II the work emphasis shifted to the acquisition and operation of a minicomputer dedicated to judicial DP needs.

2. Functional Description

In addition to the acquisition of the judiciary's minicomputer, the SJIS project--Phase II is concerned with both the implementation of existing automated judicial systems onto the minicomputer and the development of new judicial systems to be processed on the minicomputer.

At the time of the assessment, there were 80 computer programs, in 18 SJIS-related, automated job streams, operating to help meet the AOC's information needs. These 18 judicial systems are now processed by the Treasury Data Center (TDC) and will be transferred to, and processed by, the judiciary's minicomputer when it becomes fully operational. These systems, which include both summary caseload reports and the AOC's administrative reports are the following:

- Statistical Services Reporting
 - .. Judges' Weekly Reports
 - ... District Courts
 - ... Law and Chancery Divisions of the Superior Courts
 - ... Juvenile and Domestic Relations Courts
 - .. Juvenile Complaint Reports
 - .. Juveniles in Need of Supervision
 - .. Domestic Relations Reports
 - .. Reciprocal Support Complaints
 - .. Municipal Court Reports
 - .. Comparative Analysis of Statewide Caseload
 - .. Weighted Caseload
- Judicial Education Registration Reports
- Personnel System - Employee Time Reporting
- Pre-Trial Intervention Client Registry
- Central Appellate Research Statistics
- Clients' Security Fund Billing and Accounting Reports
- New Jersey Bar Examination Processing Reports
- Probation Research and Development Statistics
- Juvenile Delinquency Education Reports

At the time of the assessment, efforts to develop new computer applications for the judiciary's minicomputer had been temporarily

postponed by the AOC until the technical specifications of the minicomputer could be identified. This is scheduled for the spring of 1979.

Development on the Central Ethics Information System (CEIS) is a primary objective of Phase II and has progressed through the detail design stage. When operational, CEIS will be a state-level, judicially controlled, automated information system designed to support the Central Ethics Unit of the AOC. The Central Ethics Unit maintains files for all ethics and fee arbitration complaints emanating from the judicial process, and for any complaints against judges or attorneys made to the Advisory Committee on Judicial Conduct. For all complaints filed, CEIS will provide the AOC with case data for filings, backlogs, aging, status, dispositions, penalties, fines, disciplines, etc.

3. Goals and Objectives

The Phase II grant outlines two distinct types of project activities. As a result, there are two distinct groups of objectives. Some Phase II activities are a continuation of Phase I tasks which were not finished during Phase I. These tasks involve the completion of the requirements analysis for five on-line SJIS subsystems: Criminal, Matrimonial, General Equity, Probate, and Attorney Conflict Scheduling.

Because Phase I activities have not been completed, the following Phase I project goals also apply in Phase II:

- to design an on-line system capable of capturing misdemeanor and high misdemeanor (felony) data on each arrest and subsequent cases filed and disposed of within all the trial courts of New Jersey (both automated and non-automated counties);
- to design an on-line system capable of capturing civil case data from the Law Division and Chancery Divisions (General Equity, Matrimony, and Probate) on each case filed and disposed in the trial courts;
- to test implementation of the trial court segment of the system in two counties, one without any existing automated support of its recordkeeping process and the other with an existing automated

(computerized) trial court information system

(criminal and civil); and

- to collect the court data required for transfer from the SJIS data base to the OBTS/CCH subsystem.

In addition, two other major objectives unrelated to Phase I tasks were specified for Phase II. These objectives are the following:

- to provide the AOC with judicial personnel and DP facilities to satisfy some of the unmet information needs of the judiciary; and
- to develop and implement information systems to enhance internal accountability of the judicial personnel, finance, and central ethics units.

4. Expected Impact

By the spring of 1979 the primary benefits anticipated from the successful completion of the SJIS project--Phase II should be evident. The judiciary will be better able to establish data processing independence and to develop certain internal administrative systems.

The minicomputer will offer the AOC application independence and reduce batch processing response time. The judiciary will be better able to process confidential information systems such as the judges' time reports, performance evaluations, character reports, etc. All existing batch summary caseload and administrative support systems will be converted to a court-dedicated computer environment. It is expected that the services of the TDC, which currently processes all the AOC's batch programs, will no longer be required. The on-line appellate court system, ADAMIS, will still be processed by the CJDC.

When the Central Ethics Information System is implemented, it is expected that the AOC will be able to support the recordkeeping functions of the Central Ethics Unit.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

The SJIS project--Phase II was originally scheduled to begin on July 1, 1977. However, because of the slow pace with which Phase I funds were expended, several extensions of the Phase I grant were requested and approved. Phase I was continued through March 1978. Because a judicial data center could not be established, further development on the statewide SJIS criminal and civil modules was postponed, and the AOC returned approximately \$35,000 of unspent Phase I grant monies to LEAA.

The SJIS project--Phase II commenced on March 7, 1978, with a completion date of March 6, 1979.

LEAA awarded \$200,000 for Phase II with another \$22,222 provided as matching funds by the state. \$66,234 (29.8% of total) was earmarked for personnel and fringe benefits; \$134,982 (60.7% of total) for equipment expenditures; and \$21,006 (9.4% of total) for supplies, travel, contractual, and indirect charges. Clearly, the major goal of the SJIS project--Phase II, in terms of funds allocated, is the acquisition of a court-dedicated minicomputer.

2. Plans

The Phase II workplan that accompanied the grant application specified that Phase II activities be partitioned into three major phases and eight major areas of activity:

First Phase--Set-Up

- I. Project Organization
- II. Requirements Analysis
- III. Procurement of Hardware and Software

Second Phase--Design and Programming

- IV. System Design for New Systems
- V. Programming of New Systems
- VI. System Conversion of Time-Sharing Programs

Third Phase--Implementation

- VII. Installation of Hardware and Software
- VIII. Operations Follow-up

In the workplan each of these eight major areas of activity was explained, scheduled, assigned estimated manpower requirements, and divided into sub-tasks.

The workplan also contained an updated task schedule for the continuation of five unfinished Phase I tasks. These Phase I tasks included the completion of a User Requirements Document for the following SJIS subsystems: Criminal, Matrimonial, General Equity, Probate, and Attorney Conflict Scheduling.

Aided by hind-sight, it is easy to say that some of the estimates of man-days required for individual Phase II efforts were overly optimistic. For example, the preparation of an RFP for the judiciary's minicomputer was budgeted at 20 man-days; the definition of output specifications for the new systems (i.e., personnel, financial, and central ethics) was budgeted at 25 man-days, etc. Current progress in Phase II indicates that these tasks have taken considerably longer than initially planned.

3. Current Status

At the time of the assessment, the New Jersey SJIS project Phase II was behind schedule. This was due to a three-month delay in the approval of the request for proposal (RFP) for the judiciary's minicomputer by the Director of the Division of Data Processing and Telecommunications, Department of the Treasury. As a result, subsequent Phase II tasks were similarly delayed.

The minicomputer RFP was distributed to computer manufacturers on October 12, 1978. At the time of the assessment, the deadlines for the vendors to reply had not passed.

The Functional Requirements Document for the Central Ethic Information System (CEIS) was developed and finalized on August 16, 1978. Further development on CEIS, including input/output specifications, database design, program specs, etc., has been re-scheduled, and is to begin after the minicomputer hardware has been identified. This has been re-scheduled for the spring of 1979.

Certain Phase I tasks were only partially complete at the beginning of Phase II and required additional effort. The following Phase I efforts were finalized during Phase II:

- The User Requirements Document of the Law Division of the Superior and County Courts (an SJIS/Civil Subsystem) was revised and published on April 17, 1978. When operational, this subsystem will capture internal case processing events for each civil case in the Law Division of the Superior Courts and in the County Courts. On-line inquiry capabilities will be available.
- The User Requirements Document for the Criminal Proceedings of the Superior and County Courts (an SJIS/Criminal Subsystem) was revised and published on June 12, 1978. When operational, this subsystem will process information on the criminal proceedings of the county and superior courts as well as appeals from the municipal courts, wage/hour appeals, and bastardy appeals. The system will contain final disposition data, and will provide on-line inquiry capabilities.
- The User Requirements Document for the Chancery Division (Matrimonial) of the Superior Courts (an SJIS/Civil Subsystem) was revised and published on November 24, 1978. When operational, this subsystem will include case processing information and on-line inquiry capabilities for the Chancery Division (Matrimonial) of the Superior Courts.

The development of two other SJIS subsystems was also carried forward from Phase I. Requirements analyses for the Probate and Attorney Conflict Scheduling subsystems were to have been completed during Phase II. No effort had been expended on either of these subsystems during Phase II.

The AOC plans to have a statewide judicial information requirements analysis performed by an independent, non-governmental agency beginning in mid-1979. All efforts to develop statewide judicial systems have been postponed until the results of this analysis can be studied. No further efforts will be expended on developing any of the five SJIS subsystems until the analysis has been completed.

4. Control Methods

The Phase II workplan states that the project will be controlled, in part, by the use of the project's task control schedule. At the time of the assessment, an up-to-date version of the project's task control schedule was unavailable. The copy provided had last been updated on November 27, 1978. A task control schedule is an invaluable management tool used to track tasks, delays, milestones, etc. It should be kept current.

The workplan also states that periodic status reports will be used to assist management in controlling project work efforts. These periodic status reports include the following:

- reports to the steering committee (as often as required).
- quarterly progress reports to LEAA.
- a final report (at the completion of the project).

5. User Participation

The SJIS Steering Committee was originally formed in 1975. It was to provide top management input and review of the SJIS project. However, as the work effort shifted to the detail design stages, the practicality of the steering committee lessened. In time this committee was discontinued. Subsequent detail-level user input was obtained from a working committee drawn from middle management.

Additional opportunity for user input, in the form of more working committees, should be developed. Clerks, deputy clerks, and

clericals should all be consulted when attempting to refine the system design details.

B. System Description

SJIS is in a transition phase in New Jersey. There are two different levels of the SJIS system, i.e., the existing state-run data centers, and the judiciary's minicomputer being purchased with Phase II funds.

The two state-run data centers, which currently process the appellate court's ADAMIS and 18 smaller batch caseload and administrative reporting applications, represent one of the two levels of SJIS. ADAMIS is processed on the CJDC's ITEL AS/5-3 with two megabytes of main storage. The system operates under CICS and OS and is comparable to an IBM 370/158. The 18 automated applications currently being run for the AOC are processed on the TDC's IBM 370/158 operating under MVS/OS. Since no new applications were added to these data centers during Phase II, and since all these applications (except ADAMIS) will soon be shifted from the state data centers to the AOC's minicomputer, no further description of the state's data centers will be offered.

The second level of SJIS is represented by the minicomputer being purchased with Phase II funds. At the time of the assessment, requests for proposal (RFP) had been submitted to minicomputer vendors. RFP evaluation is scheduled for mid-February, 1979.

With the installation of the minicomputer, the on-line Central Ethics Information Ssystem will be developed and implemented. Included in the design of this system will be a fee arbitration subsystem. In addition, all the AOC's existing summary statistical and administrative support routines will eventually be converted to the judiciary's minicomputer. By converting as much of the existing judicial batch system as possible, the AOC hopes to minimize production delays, turnaround time, and data privacy concerns.

Since the minicomputer has not yet been identified, neither the computer/communications, configuration, nor the system support software have been defined. There are several generalized system

characteristics, however, that can be listed with a certain degree of confidence. The judiciary's minicomputer will have at least the following potentials:

- Conventional batch processing.
- On-line programming.
- Local interactive processing.
- Remote interactive processing.
- Local and remote on-line inquiry.
- Local data entry.
- I/O spooling.
- Adequate COBOL compiler to allow recompilation of the AOC's existing 80 programs written in ANS COBOL, 2.1.
- Multi-partition processing.

C. Assessment Results

1. Concerns and Recommendations

- Reactivation of the Advisory Committee. The functional manager, i.e., departments heads and assistants, use their day-to-day experience in court information systems to provide the SJIS staff with practical project input, evaluation and support. This liaison with functional managers has been through several ad hoc working committees. In addition to these working committees, however, a high-level management review board should be initiated to provide input, evaluation and support from a senior management perspective during the development of the project. The review board should consist of, among others, those senior officials whose areas of responsibility will be affected by the system being developed.

- Expanding Project Control Techniques. The primary control method used to monitor Phase II efforts is the project's task control schedule. At the time of the assessment, this schedule did not reflect the current status of the individual tasks. The assessment team recommends that the task control schedule be frequently updated.

- Control of the Minicomputer. The director of the Division of DP and Telecommunications of the Department of the Treasury coordinates the implementation and use of all state-owned DP facilities. The judiciary is aware of potential problems that could evolve if the minicomputer were controlled by some other state agency. The assessment team strongly recommends that the responsibility for the use of minicomputer rest solely with the judiciary.

2. Exemplary Findings

- Normalization of Inter-Agency Relations. The AOC is succeeding in relaxing the previously strained relationship that existed between the judiciary and the Department of Treasury. The normalization of relations between these two agencies is essential for the continued development of SJIS.

- Phase II Goals Are Realistic. The goals and objectives initially stated in the Phase II grant are realistic and appear attainable.

- SJIS Staff Is State Funded. The AOC staff developing SJIS are funded out of state revenues. By funding staff with state revenues and by purchasing computer hardware with SJIS grant funds (rather than vice versa), the AOC's staff positions will in all probability continue to be funded after the expiration of the grant. This tends to maximize the impact of LEAA's grant funds. At the end of Phase II the equipment will be paid for, and the staff will be permanent state employees.

- RFP Is Well Written. The request for proposal issued to minicomputer vendors in October, 1978, is very thorough and reflects extensive staff planning efforts. By precisely identifying their DP requirements, staff have helped guarantee that the hardware will meet the needs of the AOC and that the application programs will not be restricted by the limitations of the minicomputer.

- User Requirements Document Is Well Written. The User Requirements Document for the proposed Central Ethics Information System appears to be a comprehensive, well prepared report. This should enhance the quality of subsequent development efforts.

PENNSYLVANIA PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On October 2, 3, and 4, 1978, an assessment was made of the Pennsylvania State Judicial Informatin System (PSJIS) project. The assessment was conducted by:

Mr. Walter J. Kane, of Rhode Island.
Mr. Lynn A. Jensen, of the National Center for State Courts.
Mr. Francis J. Taillefer, of the National Center for State Courts.

The purpose of the assessment was to appraise the administrative and technical status of the Pennsylvania SJIS project relative to the requirements of the grant awarded by the Law Enforcement Assistance Administration (LEAA) and relative to good systems development practices and procedures.

The primary participants from the Administrative Office of Pennsylvania Courts (AOPC) were:

The Honorable Alexander F. Barbieri, Court Administrator.
Mr. Larry P. Polansky, Chief Deputy Court Administrator.
Mr. Stephen L. Ayers, Director, Data Processing Department.
Mr. Clifford P. Kirsch, Assistant Court Administrator.

The LEAA representative at this assessment was Mr. Al Breuel, Systems Specialist.

This report is divided into two major sections. Section I provides an overview of the project and the environment within which it is being undertaken. Section II provides a more detailed description of the actual accomplishments of the project and provides the results of the assessment, including areas of concern and recommendations.

A. Management Summary

The Pennsylvania SJIS project is currently in Phase I, which officially began March 1, 1976, and was scheduled to conclude 12 months later on February 28, 1977. An unexpected series of events occurred to interrupt project start-up. Because of these non-controllable delays, it became necessary to drastically shift project priorities and extend the project through February 15, 1979. The major events which forced alteration of project priorities and timing were:

- Equal Employment Opportunity (EEO) requirements hindered the process of quickly staffing the project.
- The executive and legislative branches of the Commonwealth of Pennsylvania became embroiled in the issue of which branch had the authority to allocate federal funds, and the state match for the SJIS grant became the test case for resolving this issue. This issue did not get resolved until May 1977, when the legislature acted to re-approve the state match funds, based upon the Pennsylvania Supreme Court's ruling in favor of the legislature.
- The AOPC's initial Director of Data Processing, who had been hired in anticipation of the grant being quickly funded, resigned in February 1977 due to the frustration of continuing grant funding delays.
- Security and privacy issues surrounding automated files were raised by citizen groups statewide.
- The AOPC encountered problems with its data capture procedures--case disposition reports were not being received even though the data was being collected.

A more thorough description of the consequences of these disruptions is contained in Section II of this report.

Because of revisions to project priorities, which we agree were necessary, it would not be reasonable to evaluate the accomplishments of the PSJIS

project only according to the objectives and tasking specified in the original PSJIS grant. A more meaningful evaluation would include consideration of actual accomplishments achieved by PSJIS staff during the grant period. This assessment does so.

Overall, the PSJIS staff achieved significant systems development. The bulk of this development was, however, quite different from the original PSJIS grant objectives.

B. Organizational Structure and Processing

1. Judiciary

The judicial department of the Commonwealth of Pennsylvania consists of courts of appeal, courts of general jurisdiction, and courts of limited jurisdiction, as shown in Figure 1(a).

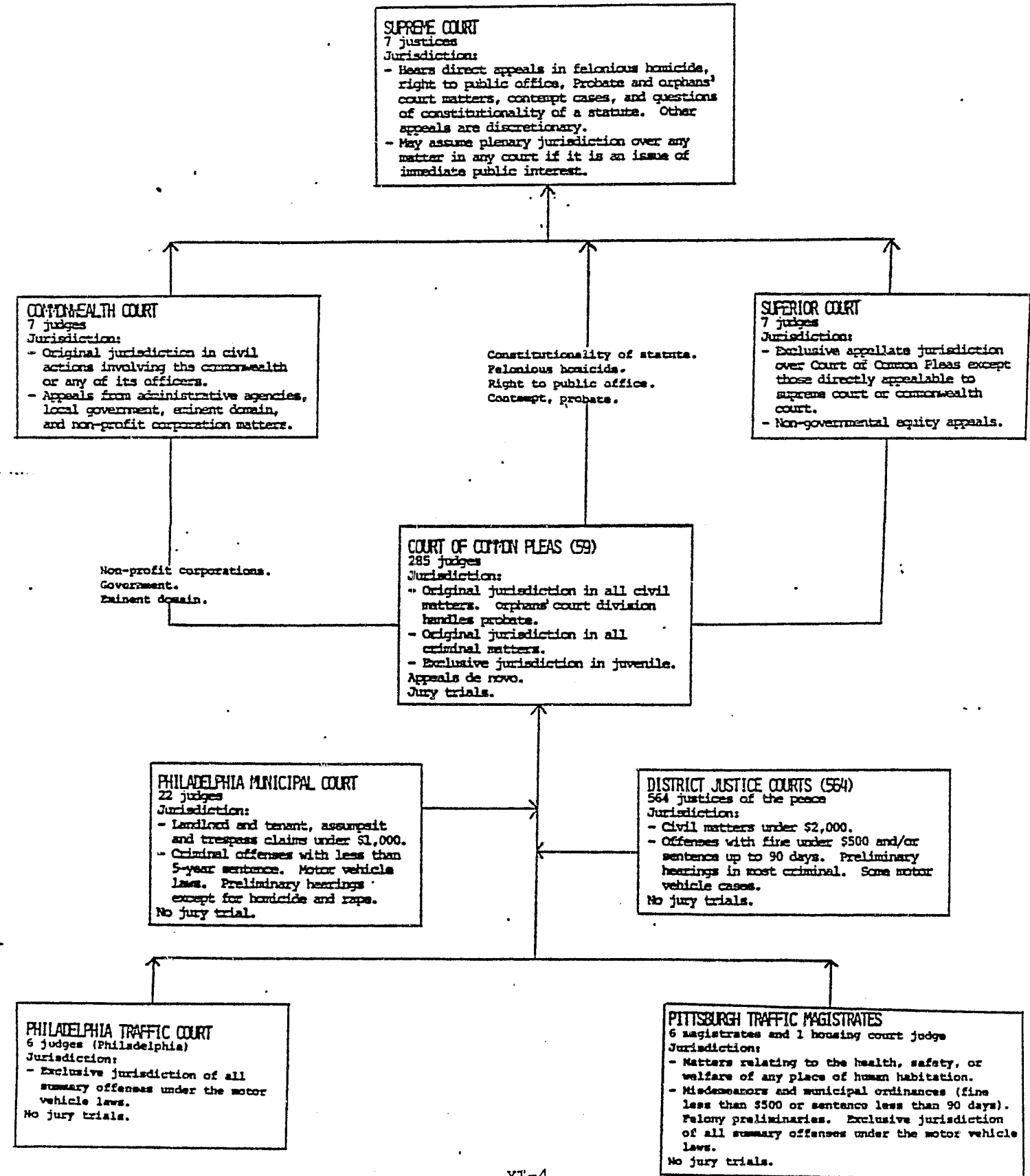
The Commonwealth of Pennsylvania has three appellate courts. The court of last resort in the supreme court, which consists of seven justices elected to ten-year terms. The court has jurisdiction over final orders of the two intermediate appellate courts, and the legislature has granted it exclusive jurisdiction over final orders of the general trial courts in cases of felonious homicide, the right to public office, probate or orphans' court matters, and certain other matters. The court sits periodically in each of three appellate districts.

The Commonwealth Court, consisting of seven judges elected to ten-year terms, has jurisdiction of appeals from orders of the courts of common pleas in matters involving the commonwealth, its agencies, and/or officers. Sessions of the court are normally held in the state capital (Harrisburg), but meetings are also scheduled in Philadelphia and Pittsburgh. Three judge panels are permitted.

The Superior Court has seven judges, who are elected to ten-year terms. The court sits periodically in Philadelphia, Pittsburgh, and Harrisburg. This court has exclusive jurisdiction over courts of common pleas appeals not within the exclusive jurisdiction of the other two appellate courts.

The commonwealth's general trial court is the Court of Common Pleas (CMP). The state has been divided into 59 judicial districts with 1 court per district. Generally, the court has jurisdiction over all matters not within the exclusive jurisdiction of limited and special jurisdiction courts. Many of these trial courts have divisions, such as civil, criminal, family, and orphans. Multi-judge divisions are headed by an administrative judge, while

Figure 1(a): Pennsylvania Court System
(as of October 1978)



multi-judge courts are headed by a president judge. These courts also hear appeals from decisions of limited and special jurisdiction courts.

All counties, except Philadelphia County, are divided into magisterial districts with one justice of the peace per district. These District Justice Courts, which are also called Courts of Initial Jurisdiction (CIJ), have jurisdiction over summary offenses that provide for a maximum punishment of 90 days in jail. They also hear landlord-tenant cases and civil claims involving \$2,000 or less. Preliminary hearings are conducted in these courts.

The Philadelphia Municipal Court consists of 22 judges elected to six-year terms. The president judge of the court is elected by his peers. The court has jurisdiction over summary offenses, except traffic related offenses, and over criminal offenses with a maximum sentence of five years. The court decides landlord-tenant matters and civil claims involving \$1,000 or less. Preliminary hearings are also conducted.

The Philadelphia Traffic Court has jurisdiction over all summary offenses arising under the state vehicle code and those city ordinances enacted pertaining to the code. The court has six judges who are elected to six-year terms. The court's president judge is appointed by the governor.

The Pittsburgh Magistrates Court is unique. It is authorized by law to have between five and eight magistrates, who are appointed by and serve at the pleasure of the mayor. The mayor also assigns some of these magistrates to sit on the bench of the Pittsburgh Traffic Court. The Pittsburgh Magistrates Court has jurisdiction over all ordinance violations and civil claims for recovery of fines imposed by ordinance. It may also hold preliminary hearings. When sitting as the Pittsburgh Traffic Court, a magistrate has jurisdiction over summary offenses under the vehicle code.

2. Data Processing

In Pennsylvania the responsibility for automated statewide judicial data processing falls within the jurisdiction of the AOPC. The AOPC's Data Processing Department (DPD) is located in Philadelphia and is charged with the responsibility of developing and implementing the PSJIS project and guaranteeing the system's ability to interface with other government information systems.

A full spectrum of data processing activities is performed by the data processing department including systems planning, development, implementation, and ongoing computer operations. Some of the individual counties

and municipal governments have their own data processing staff and computer facilities, and provide some automation support to local court operations (Philadelphia has the state's only local, fully dedicated court computer facility). The remainder rely on the AOPC's facility.

3. SJIS Project

As Figure 1(b) shows, overall responsibility for the PSJIS project rests with the State Court Administrator (SCA), the Honorable Alexander F. Barbieri. Day-to-day project management responsibility is vested in the director of the DPD, who serves as the PSJIS project director. All PSJIS project staff report to the director of the DPD. Any data processing staff that work for local courts report to their president or administrative judge; who, in turn, receives administrative orders from the AOPC.

One of the more serious disruptions to PSJIS development has been the difficulty of staffing the project. Personnel expenditures for the PSJIS grant, Phase I, were budgeted at \$150,000. This included the services of one project director, one senior systems analyst, two programmers, two computer operators, and a secretary. None of these personnel were project employees during the project period from March 1976 to October 1978 (a 30 month period). Initial staffing was hampered by federal EEO requirements. The EEO required search for qualified minority candidates partly served to postpone the commencement of detailed project development tasks.

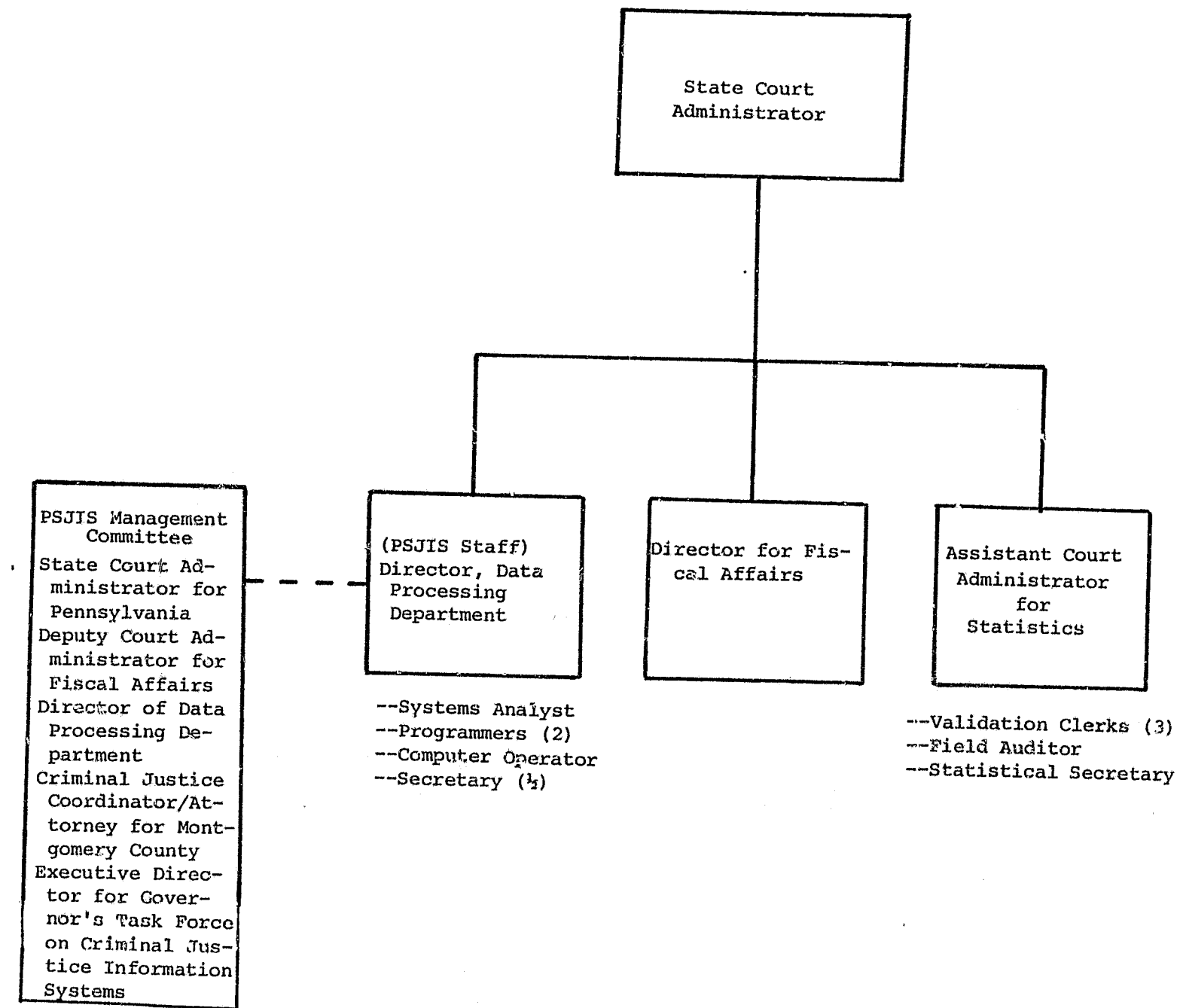
More seriously, the difficulty in getting state match funds caused much discontinuity and delay in fully staffing PSJIS. The individual initially hired as the director of DPD, James M. Vaseleck, was hired with the expectation of imminent PSJIS funding once the grant proposal was submitted (December 1975). He resigned in February 1977 due to the frustration of waiting a year for state match funding approval, with no apparent progress toward approval. Approval finally came in May 1977 but there was no longer a knowledgeable project director ready to complete the staffing.

During the recruitment of a new project director, the PSJIS hardware--previously ordered by Vaseleck--arrived (June 1977). Installation was held off until October 1977, so that the new project director, Stephen Ayers (hired in September 1977) could direct equipment set-up. The configuration was subsequently installed in the AOPC's Philadelphia office.

Ayers gave first priority to staffing to get the new computer system operational. The two lead programmer resources he hired were concentrated on

Figure 1(b): PSJIS Project Organization within AOPC

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getting the AOPC's existing Harrisburg-based payroll and personnel application programs and its data capture procedures for common pleas/district justice courts summary statistics updated, documented, and operational in Philadelphia. This conversion effort resulted in application program integration/update/modification, and laid the base for the new Payroll/Personnel and Statistics Modules. Despite success in this effort, the two lead programmers left the AOPC in February 1978. With this loss of PSJIS staff, a new recruitment cycle had to be initiated and staff retraining had to recur. By May 1978 the PSJIS project was once again fully staffed, but there existed by then a big credibility gap with the PSJIS program.

To overcome this credibility gap while giving court system orientation to the courts-inexperienced new PSJIS programming staff, Ayers shifted staff resources to development and implementation of the Budgetary Accounting System, or Financial (BAS) Module. This approach was used to deliver a tangible product from PSJIS in a short time while aiding programmer productivity by giving the programmers courts training. In fact, the strategy worked well because the module became operational in July 1978, and the then well oriented programmer resources were shifted to the much more complex and demanding case processing module development.

4. SJIS Advisory Committee

To enhance the timeliness and quality of feedback from the users of the system, two committees were to assist PSJIS project staff. A high-level management steering committee and a users committee were to provide advice and product review to staff. The management steering committee shown in Figure 1(b) and currently active, consists of the following:

- State court administrator (chairman).
- Deputy court administrator for fiscal affairs (AOPC).
- Director, data processing department (AOPC).
- Deputy court administrator for district justice courts.
- Criminal justice coordinator.
- Executive director for the Governor's Task Force on Criminal Justice Information Systems.

Twenty other individuals representing system users and state agencies involved with PSJIS were named, in the project proposal, to the users committee; this is a vehicle with potential for encouraging user feedback to the project

staff. Now dormant as a committee, feedback from the below listed user group is currently being accomplished informally by the project staff. The user group originally called for is:

- President/administrative judges of districts (4).
- Deputy attorney general (1).
- District attorney (1).
- Prothonotary (1).
- Public defender (1).
- Bureau of corrections staff (1).
- Probation and parole officers (3).
- District justice (1).
- Juvenile representative (1).
- Domestic relations judge (1).
- State police representative (1).
- Local police representative (1).
- Bail representative (1).
- Governor's justice commission representative (1).
- LEAA representative (1).

5. Other SJIS-related Group

PSJIS operates in an environment typical of more complex SJIS systems. All of the groups mentioned in the previous section are directly or indirectly involved with the development of PSJIS. Some of these groups will be manual users and/or suppliers of data to PSJIS; others will be recipients of data. In addition, there are several sophisticated local automated judicial information systems, of which Montgomery County is being used as a PSJIS test site.

6. Judicial Workloads

Figure 2 shows Pennsylvania's annual caseload filings for 1976. Caseload projections are available from the state's Annual Report.

7. Related Systems

The fully automated Philadelphia Court of Common Pleas and the Philadelphia Municipal Court have long been regarded as leaders in the field of dedicated hardware-based automated judicial information systems. Although the Philadelphia Justice Information System has recently run into funding

Figure 2
CASELOAD FILINGS, 1976

Type of Court	Filings
<u>Supreme Court</u>	
Appeals	830
Other cases	906
Other proceedings	<u>1,195</u>
	2,931
<u>Superior Court</u>	
Appeals	3,631
Other proceedings	<u>6,223</u>
	9,854
<u>Commonwealth Court</u>	
Appeals	2,131
Other proceedings	<u>305</u>
	2,436
<u>Court of Common Pleas</u>	
Civil	178,800
Criminal	76,302
Juvenile	<u>37,084</u>
	292,186
<u>Philadelphia Municipal Court</u>	
Civil	69,219
Criminal	<u>43,904</u>
	113,123
<u>District Justice Courts</u>	
Civil	151,672
Criminal	438,319
Traffic	<u>1,105,175</u>
	1,695,166
<u>Philadelphia Traffic Court</u>	
Traffic	1,653,121
<u>Pittsburgh Traffic Magistrates Court</u>	
Traffic	Data not available

difficulty, it still provides a significant standard of excellence for local judicial information systems.

Several other counties in the commonwealth have partially automated judicial information systems. PSJIS will interface with each of them.

C. Project Description

1. Background

Prior to PSJIS, Pennsylvania trial courts had operated as local entities within the 59 judicial districts of the commonwealth, with little or no statewide standardization. In 1968, the amended Pennsylvania Constitution created a "Unified Judicial System" to be administered by the AOPC. Among many other duties, the AOPC began to introduce modern techniques to bring about more effective and efficient court administration.

In order to establish communication and exchange judicial data with other criminal justice agencies, the AOPC became a member of the Governor's Task Force on the Comprehensive Data System (CDS). The task force is a statewide committee staffed by representatives from law enforcement agencies, courts, the probation/parole board, corrections, and the state planning agency. The need for an information system for judicial department operations and management goes far beyond the scope of the state CDS plan. Areas recognized as essential for standardization, as listed in the Phase I SJIS grant, are:

- Docket number.
- Case jackets/file folders.
- Docket forms.
- Case scheduling techniques.
- Nonstandardized forms.
- Inconsistent terminology.
- Lines of responsibility.
- Statistical reporting procedures.
- Data dissemination/availability.

2. Functional

The Phase I grant specified that PSJIS develop, test, and implement a general jurisdiction criminal case processing and information system. Phase I has continued for 30 months and is still ongoing as of the date of assess-

ment. During this time SJIS funds were expended to develop some or all of the following modules:

- Criminal and civil, appellate.
- Criminal case docket transcript, general jurisdiction (courts of common pleas) and initial jurisdiction (district justice courts).
- Statistical.
- Financial.
- Name and address.
- Payroll/personnel.

3. Goals and Objectives

As stated in the PSJIS grant, the project's major objectives were to eliminate duplicate recordkeeping procedures by the various agencies involved in the judicial system, and to develop a responsive information system that will furnish timely management data to these agencies. To accomplish this, data was to be collected, stored, and disseminated at a central location in each county so that all agencies could have easy access to reliable, standardized information. Each county system would be developed so that its data could be incorporated into the overall PSJIS, which would ultimately interface with the Pennsylvania CDS.

To meet these objectives, various phases were established to ensure system development. These phases were:

- Form a policy committee consisting of all involved agencies and users for monitoring the test project.
- Develop a four-county test project to be used to modify manual procedures and implement the automated system.
- Develop procedures for the remaining judicial districts (those to be serviced by the automated system upon satisfactory completion of the test project).

As mentioned earlier, major disruptive events occurred to change the overall direction of PSJIS. This change is best evidenced by comparing the above mentioned original goals, written in 1975, to the statement of objectives submitted as part of the SJIS assessment questionnaire (September 1978). The 1978 objectives for the staff of the PSJIS project "... are to implement a Docket Transcript [module], develop financial and personnel

[modules], implement facilities and property management, implement word processing, develop an appellate court module and provide technical support to state and local courts."

The Docket Transcript is a six-part manual form used by court clerks to report case processing activity for misdemeanors, felonies, and summary appeals. The statewide use of this form was the only major goal to be included in both the 1975 and 1978 statements of objectives.

4. Expected Impact

Several major benefits will accrue from the full development of PSJIS, according to the Phase I grant. They are as follows:

- Improve the quality/speed of justice.
- Reduce current operating costs in some areas.
- Improve information flow and management capabilities.
- Improve the use of severely limited resources.

In addition to the above, other specific impacts were expected as the result of PSJIS. As stated in the original grant, the PSJIS staff would develop standard procedures to expand the test project into a total statewide system, over a 6-8 year period. PSJIS would act as a state-level service bureau in at least two ways. First, for those counties using data processing equipment, PSJIS would extract the necessary information from the local systems to interface with the State Central Repository (for transmittal of case disposition data to the CDS program, which includes OBTS/CCH). Second, for those counties not already using data processing equipment, PSJIS would serve as a total data processing service bureau for day-to-day preparation of trial lists, docketing procedures, time delay schedules, witness notification, attorney conflict schedules, juror selection and utilization, and county-to-county notification of outstanding wants/warrants. Also, PSJIS would ultimately become a single statistical system using uniform data and terminology for the preparation of reports for all judicial districts, thus eliminating individual reporting procedures and making statistical reporting more meaningful.

The above described expected impacts were not time-phased by year, so a measurable set of milestones against which to compare PSJIS progress in achieving desired benefits is lacking.

In keeping with the project's redirection by the time of this assessment, the submitted SJIS assessment questionnaire (September 1978) described

the chief impacts/benefits already derived from the PSJIS project as being ".... the beginning of management control over trial level courts and the capability to statistically analyze workloads." In the same questionnaire, future benefits expected from full development of PSJIS are ".... management control over court activities throughout the state, coordination of local warrants, coordination of attorney activity and elimination of attorney conflicts with scheduling, capturing the required CCH data, and providing the necessary court elements for the Pennsylvania CDS plan. These will be derived through statistical analyses of workloads and system monitoring of individual cases on a continuing basis."

The assessment team agrees with this later set of PSJIS expectations and actually achieved benefits. They are more realistic than the grant specified impacts, and are in keeping with the changed direction of PSJIS.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Pennsylvania's Phase I SJIS grant began on March 1, 1976, and after several extensions, was scheduled to expire almost 36 months later on February 15, 1979.

In early 1976, LEAA provided \$200,000 in discretionary federal funds, contingent upon the commonwealth providing \$24,674 in matching state funds. During early 1976, at the time state match funds were sought for Phase I, the executive and legislative branches were each claiming exclusive authority to allocate federal funds and approve necessary match funds for federal discretionary grants. The SJIS grant match funds became the test case for resolving this issue. Ultimately, it took a state supreme court ruling to determine that the legislature had the responsibility to allocate these funds and authorize match monies for federal discretionary grant programs. Because the authority issue was not resolved prior to this ruling, state match funds were not appropriated, and the PSJIS project was not actually begun, until May 1977, some 15 months after the originally approved start date.

Of the original \$224,674 total project budget, \$150,000 (67%) was earmarked for personnel and fringes, \$33,594 (15.0%) for travel, \$29,080 (13%) for equipment/supplies, and \$12,000 (5%) for indirect charges. Clearly, the bulk of PSJIS grant funds was intended to pay for staff services (for seven full-time project members). The consequence of the delay in providing state match funds was to effectively curtail all SJIS development work and outdate then-existing project plans.

This \$224,674 was all the money that PSJIS received as the result of the LEAA SJIS development program. There were, however, two other non-SJIS grants that at least partially funded related activities. Both were state block grants, consisting of federal revenue sharing funds from LEAA that were administered and distributed by the Governor's Justice Commission, which is Pennsylvania's equivalent to a state planning agency (SPA).

The first of these two grants was for \$150,000 and was awarded to the AOPC in June of 1976, to purchase computer hardware. The grant terminated June of 1977, with a total of only \$13,000 expended. The remaining \$137,000 was unencumbered and returned to the SPA.. The second non-SJIS grant was again a \$150,000 block grant from LEAA. This grant ran concurrent with the SJIS project, i.e., through February of 1979, and was also earmarked for the purchase of computer hardware. By the time this grant expires, \$145,000 will have been spent.

Pennsylvania will apply for a follow-on Phase II SJIS grant from LEAA. Preliminary discussions indicate that PSJIS will receive another \$200,000 in federal discretionary funds. In addition, the commonwealth will award PSJIS a third block grant for the purchase of additional judicial computer hardware.

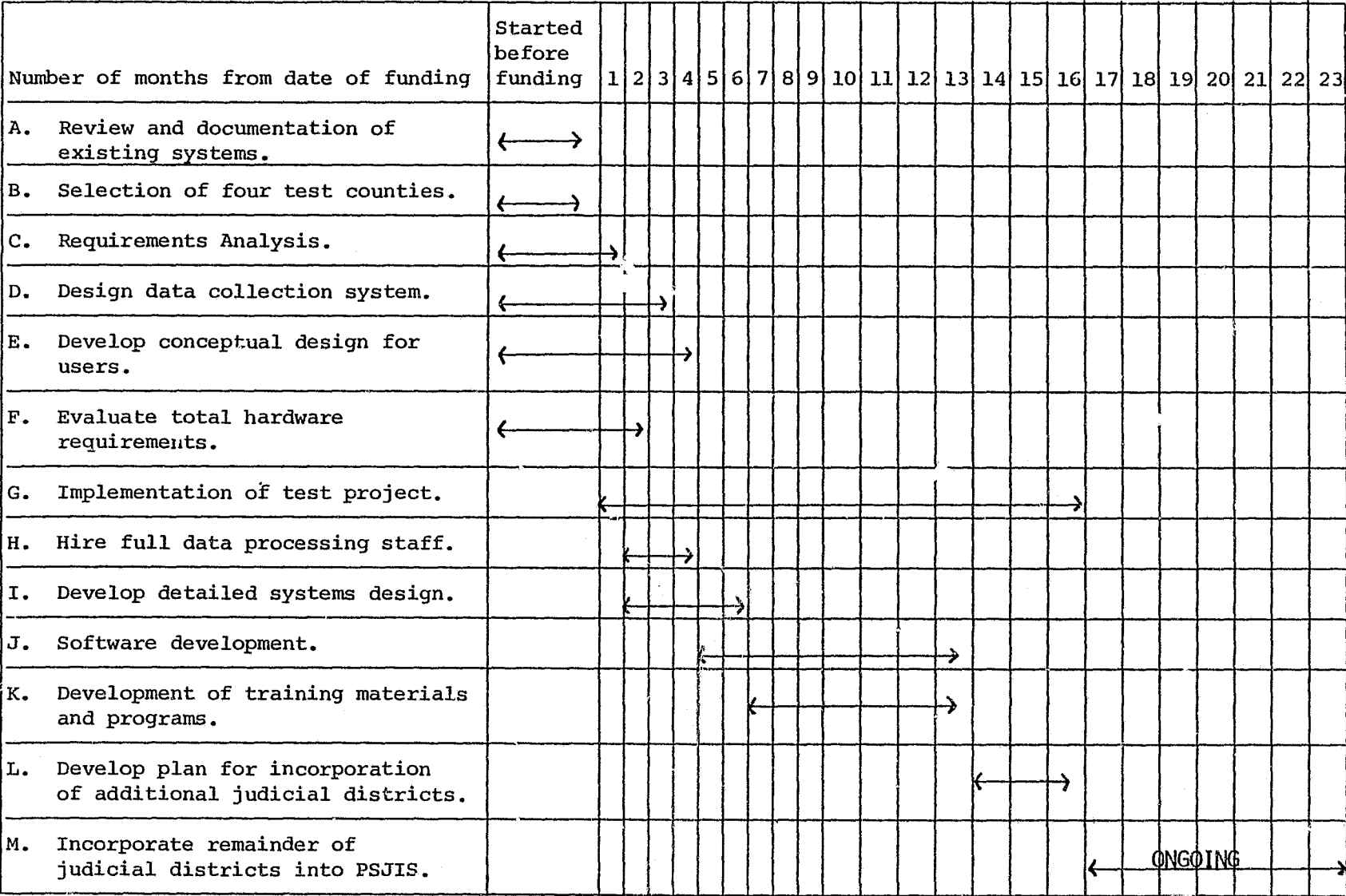
2. Plans

The workplan submitted as part of the Phase I grant contains a description of 13 major tasks and includes the anticipated time frames in which those tasks were to be performed. This original timetable is presented in Figure 3. With the perception afforded by hindsight, examination of the original grant taskings and workplan lends insight into why project timing and priority changes were necessitated, even after adjusting for project startup delays.

--The workplan methodology was weak, lacking a structured focus, and was too tightly time-phased.

--The project was not scheduled to be fully staffed (Task H) until four months into the PSJIS grant. Meanwhile six of the listed 13 major milestones were scheduled to be completed (these six included two tasks that were to be completed before project startup).

Figure 3: PENNSYLVANIA STATE JUDICIAL INFORMATION SYSTEM--MILESTONES



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ONGOING

These six tasks included a review of the existing system, requirements analysis, design for data gathering, hardware requirements, etc. Such an approach placed an unrealistically heavy burden on the already-hired, would-be project director to do most of this work alone, an ambitious undertaking for a project director who at the same time would have to go through the time consuming process of project startup logistics and the recruiting and hiring six staff members.

--The detail systems design (Task I) was scheduled to commence three months prior to the completion of the user's conceptual design. Overlapping of non-sequential activities can be used to permit some detail design efforts to begin before completion of the client users' conceptual design. In general, however, a client's approval of the total conceptual design is essential before substantive detail design can begin.

--The project's central thrust seemed aimed at improving basic recordkeeping procedures, forms, paperflow as a foundation for the automated PSJIS. The magnitude of such a statewide records management effort was severely underestimated in the grant, as witnessed by the fact that the grant called for making general recordkeeping more efficient at the same time PSJIS was being developed. Each of these two activities (records management and information systems development) were big enough and complex enough to be concurrent or sequential large projects in their own right.

3. Current Status

The method normally used by NCSC staff in assessing an SJIS project is to evaluate the project staffs' accomplishments within the objectives and taskings of the original grant. For this assessment, however, in addition to the aforementioned evaluation, a review will be made of actual accomplishments achieved by project staff during the grant period. The enlarged scope of review permits assessment of the value derived from the project's redirection and shift in task priorities.

a. Status relative to original grant. Most of the milestones listed in Figure 3 have not been completed. The first two tasks were completed prior to project inception. None of the remaining tasks were completed as originally intended or within original time schedules. For example, Task G, Implementation of Test Project, was partially redirected and then completed. This included use of a new manual data gathering form and procedure called the Docket Transcript. All other tasks were also performed within redirected project objectives and done in a sequence other than the one specified in Figure 3.

b. Status relative to redirected grant activities. Figure 4 summarizes the status of PSJIS. There are six separate modules that have been or are being developed at least in part with PSJIS funds. These modules are as follows:

- (1) Appellate (case processing for the Superior Court of Pennsylvania).
- (2) Docket Transcript (for criminal case-by-case reporting in the general jurisdiction Courts of Common Pleas and the initial jurisdiction District Justice Courts).
- (3) Statistical (for reporting aggregate case activity data monthly in Courts of Initial Jurisdiction and Common Pleas Courts).
- (4) Financial (budgeting and accounting system).
- (5) Name and Address (mailing labels and directories).
- (6) Payroll/Personnel (for court system employees).

An Appellate Module, which will support appellate case processing and reporting on a case-by-case basis, has been defined and is ready for implementation. PSJIS staff currently plan to use INSLAW's New-PROMIS software package for the implementation and completion of documentation, so the module's operational date hinges entirely on the success of that adaptation. Within the Appellate Module, case data needed for the computerized record will be obtained from existing case processing papers and actions. Using standardized CRT screen formats, data will be input on-line and processed on the AOPC computer. On-line inquiry/update transactions will be supported, and batch reports produced as needed.

Figure 4: PSJIS STATUS: MODULES COMPLETED OR IN DEVELOPMENT, DOCUMENTATION PROGRESS, AND DATA PROCESSING SUPPORT AVAILABLE (As of October 1978)

	Appellate	Docket Transcript (Criminal)	Statistical (CJ/CMP)	Financial (BAS)	Name and Address	Payroll/ Personnel
I. Module Completion Status						
1. Development Stage	Requirements & Functional Design Completed (to be implemented using New-PROMIS)	Requirements & Most of the Functional Design (to be completed using New-PROMIS).	Operational	Operational (7/78)	Operational	Operational (6/78)
2. Type of Data Processing	Batch & On-line (case-by-case reporting)	Batch & On-line (case-by-case reporting)	Batch (summary reporting)	Batch	Batch	Batch
3. Percent Complete	20%	50%	100%	100%	100%	100%
II. Documentation Progress (Percent complete)						
1. Requirements Analysis	100%	100%	100%	100%	100%	100%
2. Concept Design	100%	30%	100%	100%	100%	100%
3. Program Specifications	N/A because these two modules plan to use New-PROMIS.					
4. Database Specifications						
5. User's Manual	0	50%	100%	100%	100%	100%
6. Operations Manual	0	0	100%	100%	100%	100%
7. Program Maintenance Manual	0	50%	100%	100%	100%	100%
8. Test Plan	0	50%	100%	100%	100%	100%
9. Implementation Plan	0	0	100%	100%	100%	100%
10. Data Fully Documented	?	?		9/78		10/78
III. Data Processing Support						

1. Documentation Techniques - FIPS PUB 38 used as a general guide.
2. Programming Languages - ANSI COBOL 68 used for new program development; FORTRAN IV used for statistical programs; SPSS-G on order, to be used for statistical analyses.
3. Data Base Management System - INSLAW DBMS, a specialized database handler written in COBOL.
4. Telecommunications - Integrated Communications Access Method (ICAM); Information Management System (IMS).
5. Operating System - OS/3 revision 5.2 is used.
6. Hardware - Central Processor: Univac 90/30 (262K); Batch Data Entry: (two) Univac VIP 1710; Teleprocessing: Modems - (two) GTE 2400 and (two) Bell Telephone 201C; RJE - Data 100/76; CRT - (three) Delta Data 4050U and (one) Univac U200. Peripherals: Card Reader - 600 cpm; Card Punch - 100 cpm; Printer - 400 lpm; Disks - (two) 8430 (100 megabyte/pack); Tapes - (two) Univac U14 (9 track).

The Docket Transcript Module, which supports trial level criminal case processing and reporting on a case-by-case basis in the Courts of Common Pleas and District Justice Courts, derives its data from a six-part standardized, manual, data gathering form called the Docket Transcript. When a case is filed, page six is mailed to the AOPC. Page three is mailed when the case's disposition is known. The case-related data are key-punched and entered in both batch and on-line modes. The AOPC inputs this data to PSJIS and later transfers disposition data to the commonwealth's criminal justice central data repository, the Bureau of Criminal Justice Statistics (SAC) within the Governor's Justice Commission.

The docket transcript form and subsequent reports are used by the staff of the district justice courts to process their case-related data. Beyond this, monthly reports, utilizing data from the Docket Transcript form, will be produced and will contain the following management information for each trial court:

- Dispositions by case type.
- Filings by case type.
- Comparisons of current year, current month to prior year, same month.
- Month-to-month changes in status.
- Citation activity: traffic and non-traffic.
- Complaint activity: misdemeanor, felony, and civil.
- Arrest warrants issued and returned.
- Average filings, dispositions backlog, etc., by office.
- Backlog indices.

This information has been integrated with a computer graphing device that enhances the clarity and usefulness of the management reports. The graphs show, pictorially, filings versus dispositions and the corresponding backlog of cases for each month by district justice, by judicial district, and for the entire state. The graphs can be produced showing data for prior years as well as the current year.

The Docket Transcript form, by capturing felony and misdemeanor case filing and disposition data, helps the court system monitor case processing

for compliance with Pennsylvania's speedy trial rule, which requires trial within 180 days of the complaint filing date. The Pennsylvania CDS list was used to establish minimum data elements for the Docket Transcript form; thus, the Docket Transcript Module becomes the key mechanism for judicial branch input to the CDS program. The module's data elements satisfy OBTS/CCH needs for defendant, offense, sentencing, and disposition data, which is furnished through the AOPC to the SAC.

The form standardizes criminal case data capture and recordkeeping. It is usable by District Justices as the record for cases starting there (thereby replacing the statutorily set, old Form 301--a confusing form even when new in 1968). The Common Pleas Court clerk also uses the Docket Transcript form, and it becomes the linking document for cases bound over.

The Docket Transcript Module is now operational manually because of completion and printing/distribution of the Docket Transcript form. Still the timetable for automation of the Docket Transcript module depends on the success of the PSJIS staff's planned use of New-PROMIS for implementation and completion of documentation. There is no intent to write programs "from scratch" to process the Docket Transcript data on felony and misdemeanor cases, which has been coming to the AOPC since July 1, 1978. Major concentration of programming resources has been on data capture and conversion needs, such as definition of codes, keypunch layouts, and tape transfer set-up for Docket Transcript data.

The planned adaptation of New-PROMIS is expected to enable speedy automation and system documentation, by using New-PROMIS documentation as a base and adding the existing Docket Transcript module as an appendix. A copy of Mini-PROMIS now resides on disk at the AOPC. AOPC personnel are evaluating adaptation problems by assisting Montgomery County in its local implementation of Mini-PROMIS and its testing of Docket Transcript data elements and standard codes for criminal offenses. AOPC personnel are thus learning more about the Mini-PROMIS software packages' capabilities and limitations while assessing its usability for the entire state. Usability for civil case processing is also being assessed.

The plan is to make sure that the Mini-PROMIS version of New-PROMIS, or perhaps the just announced Maxi-PROMIS version, works in Montgomery County for six months and that the New-PROMIS software and AOPC's modules are fully documented. After that, the PSJIS transfer statewide will occur on a county-by-county, as requested, basis.

The Statistical (CIJ/CMP) Module is operational in batch mode and produces summary reports on all case processing, including both criminal and civil. Summary statistical data are gathered monthly on statistical report forms from both District Justice Courts of Initial Jurisdiction (CIJ) and Courts of Common Pleas (CMP). Types of major statistical reports and analyses now operational and available from the Statistical (CIJ/CMP) module include:

- Summary analyses of aggregate data by county for trial courts and District Justice Courts.
- Monthly case volume activity for trial courts, by county.
- Statewide trial court case volume activity, by filing, disposition, and inventory type.
- Annual case volume reports, by trial and District Justice Courts.
- Correlation and activity analyses of filings/dispositions, descriptive analysis for annual report purposes, case weighting and forecasting analyses, and on-request special analyses.

Actual data collection for the AOPC is conducted by its statistical section. Its responsibilities, beyond performing required statistical analyses, include monitoring the monthly report forms which capture data for the Statistical (CIJ/CMP) Module and conducting field audits to verify these reports. It also collects, compiles, and edits Docket Transcript forms--the data capture vehicle for the Docket Transcript Module.

The AOPC's statistical section plans to expand its Statistical Module capabilities. Planned enhancements include, for example, SPSS software package access, regression and time interval analysis, case volume/procedure relationship analysis, sociological/demographic/case type relationship analysis, and caseflow management.

The Financial (BAS) Module or Budgetary Accounting System (BAS) provides budgetary accounting and accounts payable support for state judicial funds. Some of the key products of this fully operational, batch system, are:

- Vendor name and address listings and file.
- Transaction journal listings (shows transactions processed, by account).
- General journal file (preserves record of all transactions).
- General ledger file (records transactions into the accounting system).
- Payable vouchers (for the State Treasury Department).
- Budget status statements.

The Financial (BAS) Module prepares budget and expenditure reports by using a detailed object code for various units and subunits of the judiciary. This allows for tight financial control and detailed analysis of all budgetary activity.

The module is also used to monitor the financial status of federal grants, producing reports showing the amount of matching funds versus federal funds received, and the expenditure status of each grant on a monthly and quarterly basis. Financial reports for LEAA and other grants thus are prepared easily. Further, the system provides capability for analyzing budgets, ignoring unit or subunit boundaries. Thus, the AOPC can collect all salary data within the judiciary, all supplies, or all equipment rentals, etc. This enables the budget to be broken down by function as well as by department. Overall, BAS is highly flexible and meets the needs of the judiciary. BAS is currently run in batch mode for all updating, edits, and report production.

The Name and Address Module is an operational, batch oriented system for producing mailing labels and telephone directories of judicial department related audiences, for example, appellate judges, Commonwealth Court judges, District justices, Pennsylvania law libraries, legislators, advisory committees, clerks of court, and support (probation) personnel. The module is flexible with regard to possible type of selection criteria usable, and operates efficiently on an as needed basis.

The Payroll/Personnel Module is an operational, batch oriented system that processes the payroll for the judicial department (appellate courts, common pleas judges, district justices, all judicial staff paid by the state) and maintains judicial personnel records. The two subsystems that comprise this module consist of roughly 100 prior-existing application programs, which have been integrated during Phase I of PSJIS development.

Major computer generated reports from the payroll subsystem include:

- Earning statements.
- U.S. saving bonds report.
- Medical-hospital reports.
- Life insurance reports.
- Social security reports.
- Local wage tax statements.
- Philadelphia wage tax statements.
- 941s.
- W-2 forms.
- Judicial vacancy reports.

The monthly, batch personnel subsystem monitors judicial vacancies, tracking active and retired Common Pleas Court judges and District Justice Court justices. Data captured include name, employment beginning date, term expiration date, retirement date, job title and salary. Compensation earned by senior judges is reported for judicial assignment purposes, and total salary requirements can be forecast.

4. Control Methods. Very few system development efforts go exactly as planned, and the PSJIS project has been no exception. PSJIS has had difficulties beyond the control of any possible contingency planning, e.g., personnel staffing problems and difficulty in obtaining state approval for the allocation of LEAA funds (the legislative-executive authority issue). There were other problems, however, which affected the progress of the project that might have been at least partly avoided through better long-term planning and control.

The most visible means of short-term project control seen during assessment visit was the use of task schedules. The project director uses this mechanism to keep project workflow well structured and properly sequenced. This technique is

excellent for day-to-day operations and scheduling, but it does not go far enough (in time). Pennsylvania does not have an internal, formally approved data processing program master plan for long-range development of PSJIS. The plan that was first prepared as part of the PSJIS grant has long since lost its value and is in need of extensive revision and update. Judicial information system development can be best coordinated and controlled within the framework of a pre-determined master plan. Priorities for development, deadlines, the allocation of limited productive resources, coordination, etc., will be influenced by the presence, or absence, of a fully considered program master plan.

5. User Participation. Formal user feedback comes from the members of two committees, the active high-level management steering committee, and the larger user coordinating committee. The monitoring done by these committees provides the project with a potentially invaluable source of user input, and is an effective way of strengthening the quality and acceptance of PSJIS developments. These mechanisms provide an adequate exchange of information between users and AOPC staff.

B. System Description

1. Processing Approach

PSJIS is a centralized data processing system. Interface to local courts supported by county-based automation is effected by the AOPC by means of its administrative authority being exercised through the local chief administrative judge. Tape transfer to the AOPC of required case activity data is expected for counties providing automation support to local courts (only Philadelphia has dedicated hardware for its courts, most counties have partial automation support). As described earlier, the New-PROMIS software package is being looked to as the standard for local interface to and implementation of PSJIS' Docket Transcript Module, thereby assuring statewide compatibility of system design and data transfer. PSJIS interface to the state SAC (for its CDS program) will be by AOPC tape transfer of disposition data.

2. Data Collection, Preparation, and Verification

The Statistical section of the AOPC is responsible for collecting, preparing and verifying summary and docket transcript case reports from local clerks and courts. Data for the non-case modules of PSJIS are the responsibility of the AOPC's Fiscal Affairs section. The AOPC spot monitors the accuracy of items

in its various data files. Verification techniques include visual checks of key data fields in submitted report forms, yearly field audits to accomplish a physical inventory of cases, and computer edits of entered data.

3. Data Entry

PSJIS data entry is a combination of as needed on-line and periodic batch input for its planned Appellate and Docket Transcript modules, and periodic (usually monthly or weekly) batch for all other modules.

4. Application Software

Refer to the discussion in Section II.A.3 for a description of each major application (module) and the output reports available from each.

5. OBTS/CCH

As already discussed, the Docket Transcript Module of PSJIS has been built using the CDS program's OBTS/CCH data element requirements as a base. Thus, PSJIS will satisfy the CDS data transfer needs. Prior to July 1, 1978 case disposition data (page 3 of the Docket Transcript form) were being sent by local courts directly to the Bureau of Criminal Justice Statistics (the SAC), and the AOPC was not getting a record of case dispositions for PSJIS. As of July 1, 1978 in accordance with a Transfer Agreement between the AOPC and State Central Repository, local courts now send disposition data (page 3 of the form) to the AOPC to complement the already submitted filing data (page 1). The AOPC, in turn, will transfer disposition data to the State Central Repository on a periodic basis, by means of computer tape.

6. Security and Privacy

PSJIS hardware is located within the AOPC office in Philadelphia, so physical security is good and outsider access is not a problem. One potential weakness is that all backup files (library, disk packs, master files) are in a 3,000 pound fire-proof safe on the AOPC premises. An off-site backup set of files would be more desirable. Because most applications are still primarily batch runs, terminal security is not a significant problem. As the system becomes progressively more on-line, access security will become a real issue. Planning for adequate design and implementation of system security and privacy, not now done formally, should be addressed as part of the PSJIS master plan for program development. The foregoing described Transfer Agreement has gone a long way toward ensuring that the AOPC has adequate control over PSJIS collected data.

7. Computer and Communications Configurations

The hardware and software support available to PSJIS is shown in Figure 4.

8. Documentation

The status of system documentation efforts is shown in Figure 4.

9. Implementation

Because PSJIS is in its initial stage, only its internal, administrative support oriented modules have been fully implemented. The case processing modules have yet to be made fully operational and implemented statewide. Much of this latter development hinges on the success of the New-PROMIS adaption. Further, extension to civil case reporting on a case-by-case basis has been deferred to 1980. Local court and user training is expected to be accomplished by development of User Manuals (not yet done) and regional and statewide training sessions conducted by PSJIS staff.

10. Maintenance

It is evident that PSJIS at the AOPC level will be given ongoing maintenance funding support once federal funds are depleted. Local courts will have to rely on local county support for day-to-day operations--PSJIS will furnish software only, and look to the local counties to support it.

C. Assessment Results

1. Concerns and Recommendations

The following concerns and recommendations are the same as those passed along verbally to the Pennsylvania SCA and PSJIS project staff at the time of the on-site assessment exit briefing.

a. The AOPC staff should develop a viable long-range (5-year) master plan for judicial information systems program development. Without a cohesive, comprehensive (showing ongoing costs, development priorities, time-phasing court projections) master plan, attempts to develop separate priorities, time-phasing systems that are incompatible with each other. The plan should be sure to include civil case processing needs, should maintain the requirement for use of COBOL for programming the Docket Transcript Module, and should be updated yearly to maintain its currency and 5-year planning horizon. The assessment team recommends that this master plan be developed as soon as possible and that it be approved by the State Court Administrator and Supreme Court before any new, sizable system efforts are undertaken.

b. The Phase I PSJIS grant workplan very quickly became outdated, yet it was not updated even after the PSJIS project underwent major redirection. This is attributable to the continuing staffing problems experienced by the project. It is recommended that a revised detailed workplan and timetable be developed and kept updated.

c. Costing of alternative PSJIS system development approaches is needed but has never been done formally. The choice of using New-PROMIS to implement the PSJIS case-by-case reporting was based on an informal determination that it was the most cost-efficient option available. While the conclusion may well prove quite correct, it highlights too ad hoc a process. The SCA should be brought into policy oriented and far-reaching decisions, and a cost-benefit analysis of alternatives is a good way of contributing to the quality of the decisions to be made while also helping the PSJIS staff itself in arraying and systematically thinking through alternatives.

d. The organizational placement of PSJIS within the AOPC is not always clear with regard to responsibilities. The data processing department director and the head of the Statistics section seem to function as co-partners in PSJIS development, yet it not always clear who has full, direct responsibility for the PSJIS program and its statistical interface. For example, system development, forms design and implementation, and procedures development for the Docket Transcript Module are areas where this haziness of responsibility manifests itself. It would be helpful to have job descriptions and a formal organizational chart fixing this responsibility (Figure 1(b) is the assessment team's understanding of responsibilities). For any future PSJIS grant development, the director of DPD should write the grant.

e. Documentation activities are not now budgeted as an ongoing, planned activity. Typically, the system documentation is done after the application or subsystem is complete, not during development. This is not a good practice. The potential hazards of this practice are only partly ameliorated by existing DPD procedures, which require a programmer to finish the documentation prior to leaving that work parcel. For instance, the Payroll subsystem is still undergoing documentation and the Personnel subsystem has very little documentation, even though both are now operational. If the involved programmer was to leave abruptly, the ability to go into logic sections for program modification could prove time-consuming and a drain on resources. All

documentation (for systems and programs) should be completed as an ongoing activity and should be preceded by a table of contents as well as a table of tables, for ease of reader access.

f. Security and privacy aspects of PSJIS systems development should be formally planned for and addressed within the master plan for program development.

g. The Docket Transcript form is not being filled out correctly, due to local variances in case processing practices and a sometimes loose coding/category classification structure. The AOPC is well aware of this partly form refinement and partly training problem, and is addressing it. Their goal is to standardize codes and to revise page 3 of the Docket Transcript form to add a page 3a for needed commitment data. Continuing efforts will have to be expended in the training area to ensure data integrity and proper orientation of new clerks.

2. Exemplary Findings

a. With the completion of the Transfer Agreement with the State Central Repository, the AOPC has cleared away the last of the major political and logistical hurdles which have impeded the progress of PSJIS, and particularly its Docket Transcript Module.

b. While some of the modules completed under auspices of the PSJIS grant reflect an unformalized change in project direction, the project staff is to be commended for persistently moving forward in total system development despite particularly vexing external time delay and staffing problems.

c. The AOPC has instituted a very effective informal policy coordinating and user feedback mechanism by relying on the Presidents of the Common Pleas Judges and the District Justices Associations for review of data processing plans.

3. Conclusion

The AOPC's PSJIS project staff has successfully re-directed the state-level judicial information systems development along realistic and attainable lines. The original emphasis on statewide standardization of record-keeping and data terminology as a prelude to any automation has been shifted, and we think correctly so. Development now focuses on building a good, usable

automated system and encouraging its adoption statewide. As it proves itself, it will act as a catalyst in helping standardize court procedures, records, and data.

RHODE ISLAND PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On November 8 and 9, 1978, an assessment was made of the Rhode Island State Judicial Information System (SJIS) project. The assessment was conducted by:

Mr. John Fisher of Delaware.

Mr. Robin Trenbeath of Washington.

Mr. Greg Janowski of the National Center for State Courts.

Mr. Ray Speight of the National Center for State Courts.

The purpose of the assessment was to appraise the administrative and technical status of the SJIS project relative to the requirements of the Rhode Island SJIS grant from LEAA and relative to good systems development practices and procedures.

The primary participants from the Rhode Island Judicial Department were:

Mr. Walter Kane, State Court Administrator.

Mr. Ron Lachance, SJIS Project Director.

Mr. Rod Ryan, Senior Systems Analyst.

The LEAA representative at this assessment was Mr. Al Breuel.

A. Management Summary

The Rhode Island SJIS project is to be performed over a four-year period and will develop an automated database of accurate, timely information for criminal justice agencies (supreme, superior, district, and family courts; Department of Attorney General; Public

Defender; Department of Corrections, Division of Probation and Parole). The stated goals of the project are as follows:

- To provide comprehensive, reliable information for adjudication planning and policymaking.
- To provide agency administrators with the capability to automate some of their manual procedures in order to manage their caseload more effectively.

The project is currently in Phase II, which began February 1, 1978, and is scheduled to continue for 12 months. The project is in the detail system design stage and is on schedule. Rhode Island has progressed through the initial stages (i.e., project planning, requirements analysis, conceptual design, output requirements) in generally exemplary fashion.

In summary, the prospects are excellent for successful development and implementation of the planned system.

This report is divided into two major sections. The first provides an overview of the project and the environment in which it is being undertaken. The second provides a more detailed description and evaluation of the project. This includes a description of the project planning and management control methodology, description of the system being developed, and summary of the assessment team's findings.

B. Organizational Structure and Processing

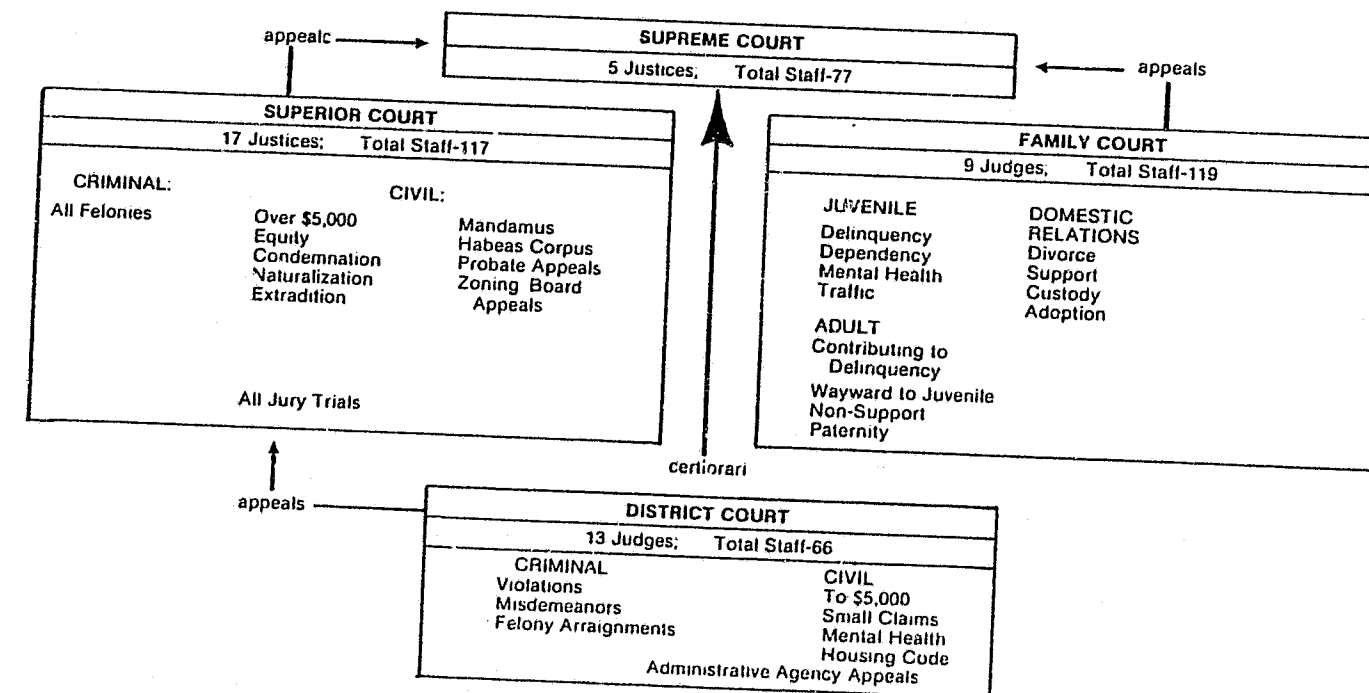
1. Judiciary

Rhode Island has a unified state court system composed of four statewide courts: the district and family courts are trial courts of limited jurisdiction, the superior court is the general trial court, and the supreme court is the court of review.

The entire court system in Rhode Island is state-funded with the exception of the probate and municipal courts, which are locally funded and are not part of the unified state court structure. All bench appointments are for life. Figure 1 illustrates the schematic relationship of the component parts of Rhode Island's judiciary.

- District Court: Most people who come to or are brought before courts enter, at least initially, the district court.

Figure 1
Rhode Island Judicial Structure



This court was established to give the people of the state easy geographic access and reasonably speedy trials to settle civil disputes in law involving limited claims and to judge those accused of lesser crimes. It has statewide jurisdiction and is divided into eight divisions so it can hear cases close to where they originate.

Appeals from district court decisions in both civil and criminal cases go to the superior court for trials de novo. In actual practice, this right to a new trial is seldom used, and district court dispositions are final in 96.7% of criminal cases and 98.5% of civil cases.

- Family Court: The family court was created to focus special judicial power and wisdom on individual and social problems concerning families and children. Appeals from decisions of the family court are taken directly to the state supreme court.
- Superior Court: The superior court is the state's trial court of general jurisdiction. It hears civil matters concerning claims in excess of \$5,000 and all equity proceedings. It also has original jurisdiction over all crimes and offenses except as otherwise provided by law. There are four superior courts, one at Kent, Newport, Washington, and Providence/Bristol. Appeals from the superior court are heard by the supreme court.
- Supreme Court: The supreme court is the highest court in the state, and in this capacity not only has final advisory and appellate jurisdiction on questions of law and equity, but also has supervisory powers over the courts of inferior jurisdiction. Its area of jurisdiction is statewide. It has general advisory responsibility to both the legislative and executive branches of state government and passes upon the constitutionality of legislation.

The chief justice of the supreme court serves as the executive head of the entire state court system. Acting in this capacity, he appoints the state court administrator and the staff of the Administrative Office of the State Courts. This office performs personnel, fiscal, and purchasing functions for the state court system. In addition, the administrative office serves a wide range of management functions, including consolidated, long-range planning; the collection, analysis, and reporting of information on court caseload and operations; the development and implementation of management improvement projects in specified areas; and the application for and administration of federal grants for the court system.

The chief justice is the executive officer of the supreme court, while the superior, district, and family courts have chief or presiding judges. All chief and presiding judges are appointed by the governor for life. The administrative clerk of the superior court assists the presiding justice in the management of the court. The chief clerk of the district court, who is appointed by the governor, is responsible for the administration of the court. The family court administrator is appointed by the chief judge of the court and is responsible for budget preparation, supervision of court personnel, and other administrative tasks as assigned.

Each year the state courts present a unified budget to the governor. The request for the 1978-79 fiscal year was \$9,118,561 for state judicial operations. This represents 0.929 of the total state budget. In the past five years Rhode Island's total state budget has increased at an average annual rate of 10.5%. During that same time span, the judicial budget has increased at an average annual rate of only 5.7%.

2. Data Processing

Rhode Island's judicial information systems are both manual and automated. The manual systems include a combination of the traditional judicial statistics and caseload reporting and are primarily the responsibility of the local court clerks and administrators. Rhode Island's automated data processing systems are centralized in, and the responsibility of, the director of the State Judicial Information Systems (SJIS).

Rhode Island's judicial data processing activities readily lend themselves to using one centralized mainframe. Information is batched and submitted by the local courts, which are in turn provided a combination of periodic reports and on-line inquiry capabilities. Currently, the Department of Administration, Division of Information Processing's (DA/DIP) facility supports the automated SJIS system processing.

3. SJIS Project

The State Court Administrator (SCA) has formal responsibility for the SJIS project. He has the responsibility for overall supervision and interagency coordination together with authority to determine policy issues. The director of SJIS, appointed by the SCA is the project manager, providing full-time day-to-day coordination and direction of the staff and project activities.

Figure 2 depicts the Rhode Island SJIS project organization. The seven analysts who are responsible for helping design SJIS are full-time, experienced staff, on loan from their respective user areas. This staffing technique provides the project with years of invaluable on-site user experience.

4. SJIS Advisory Committee

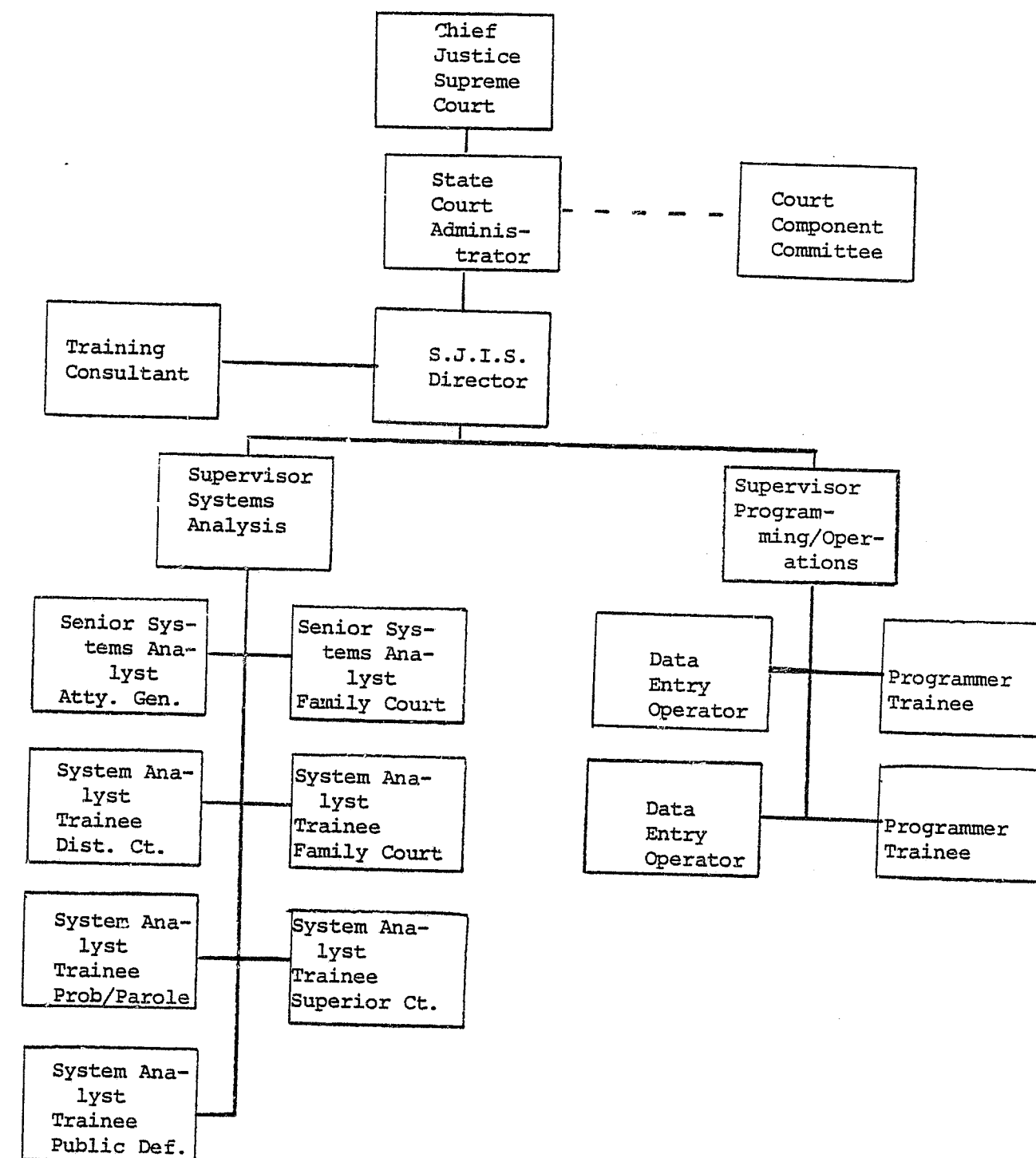
The Rhode Island Court Component Committee (CCC) serves as the SJIS project advisory committee. CCC has representatives from each of the adjudication agencies. The members of the committee are: the chief justice; the presiding justice of superior court; the chief judges of family and district court; the attorney general; the public defender; the director of probation; the state court administrator; deputy state court administrator (ex-officio); director of court planning (ex-officio); and the director of SJIS (ex-officio). This body will formulate policy and approve the reports to be completed at each phase of the project.

The advisory relationship of the CCC to the SJIS project can be clearly seen on Figure 2.

5. Other SJIS-related Groups

All Rhode Island's criminal justice agencies are directly involved in developing SJIS. The courts, prosecutors, public defenders, and corrections agencies are all represented on the CCC and have full-time technical staff working in a liaison capacity with the SJIS project. In addition, the state and local police departments have provided input into the SJIS data requirements.

Figure 2
SJIS Project Organization



The State Judicial Planning Council (JPC) acts as an advisory panel to the state judicial system. Though technically a separate entity, the JPC is, de facto, identical in staff and in spirit to the CCC.

6. Judicial Workloads

The 1976 Report on the Judiciary listed a variety of caseload statistics from which Figure 3 was culled.

Figure 3

Rhode Island Caseload Filings

<u>Court (locations)</u>	<u>1976</u>
Supreme (1)	411
Superior (4)	10,010
Family (4)*	12,260
District (8)	57,783

* family court has four circuit sites.

7. Related Systems

Rhode Island's SJIS is being built on, and adapted from, two automated software units: the Prosecutor's Management Information System (PROMIS) and the Juvenile Information System Requirements Analysis (JISRA). SJIS also interfaces with several manual reporting systems.

In 1974 the SCA assumed responsibility for PROMIS which had been undergoing extensive re-design in the Rhode Island attorney general's office. PROMIS was developed by INSLAW in Washington, D. C. and was adapted by the Rhode Island SJIS staff for on-line use by the courts and prosecutors.

PROMIS remains the framework around which the Rhode Island SJIS project was built.

The SCA staff has recently begun working with the Director of Research for the National Council of Juvenile and Family Court Judges (NCJFCJ). He is developing and testing some juvenile court prototype theories in Rhode Island's family court. The outcome of his LEAA-funded research will be the development of a "model" Juvenile Justice Information System (JJIS). Rhode Island's SJIS staff intend to modify and then implement the JJIS prototype.

In addition to these two automated routines, which process a large portion of judicial data, the SCA also receives reports from the following manual information reporting systems:

- Superior court civil cases.
- Superior court criminal cases.
- District court cases.
- Family court cases.

C. Project Description

1. Background

Rhode Island's SJIS Project intends to build an automated judicial data processing system that will produce viable information for the state's criminal justice agencies. As stated previously, the goals of the project are as follows:

- To provide comprehensive, reliable information for adjudication planning and policymaking

- Provide agency administrators with the capability to automate some of their manual procedures in order to manage their caseload more effectively.

During the first year of the project, a Criminal Module of the SJIS was designed, and some segments were implemented. As a result of the initial stage of this module information requirements were developed to support the operation of the SJIS.

During Phase I, the system requirements and needs analyses were covered in detail for selected SJIS sub-systems. Pilot implementations of selected sub-systems were accomplished. Phase I also identified new emphasis on needs and pointed up areas where the original Phase I workplan should be revised.

Phase II is to implement these additional service areas and will expand many of the previously identified SJIS subsystems beyond the pilot stage into implementation.

There are several factors that are unique to Rhode Island and are important to the success of this project. One is that an atmosphere of cooperation already exists among the adjudication agencies. Representatives of each judicial component have been working as a committee, the CCC, on several integrated projects since 1973.

Another factor is that Rhode Island has made significant progress in meeting its information needs. A manual statistical system has already been developed using data reported by the core agencies, e.g., district and superior court, the public defender and the attorney general. The SCA's office, using PROMIS as the structural foundation, has re-designed and is in the process of implementing an on-line court-oriented management information system called PROMIS/RI. Finally, the family court has begun to develop a juvenile case tracking system.

2. Functional

During the Rhode Island Phase II SJIS project, staff plans to proceed with the development of several distinct modules:

- Criminal Module/Superior Court.
- Criminal Module/District Court.
- Juvenile Justice Module (JJIS)/Family Court.

- Criminal Module/Supreme Court.
- Civil Module/Superior Court.

Efforts prior to Phase II have resulted in various degrees of development of each of the following modules:

- Criminal Module/Superior Court.
- Criminal Disposition Module/District Court.
- Criminal Disposition Module/Superior Court.
- Juvenile Case Tracking Module/Family Court
- Criminal Case Management Module/Attorney General's Office.

Future developmental efforts of Rhode Island's SJIS will probably include at least the following modules:

- Civil Module/Supreme Court.
- Civil Module/District Court
- Inter-Component Agency/Data Transfer.
- Enhancements to all the above.

3. Goals and Objectives

As stated in the Phase II grant application and supporting workplans, the expressed goals of the SJIS project (Phase II) are:

- To provide comprehensive, reliable information for adjudication planning and policy making.
- To provide adjudication administrators with the capability of automating data collection, retention, and reporting procedures, and, by using the more accurate and timely information which is then available, to manage their caseload more effectively.

To achieve these goals, certain objectives were established.

These objectives are:

a. The full operation of the SJIS criminal module within the superior court for all counties. The module will be enhanced by:

- The design and implementation of "on-line" processing for the criminal module within the superior court for Providence/Bristol Counties.
- The design and test of a warrants support system for criminal matters before the superior court.

- The design and test of a criminal case scheduling support system for the superior court.

- The design and test of a jail list support system for criminal cases before the superior court.

b. Completion of the design and testing; beginning of operation of the SJIS criminal module in two divisions of the district court.

- The design and test of a warrants support system for criminal matters before the district court.

- The design and test of a jail list support system for criminal matters before the district court.

- Completion of the design and initial implementation of the SJIS juvenile justice module (JJIS).

- Completion of the design and initial implementation of a module to meet the needs of the supreme court regarding criminal matters.

- Completion of the design and testing of the SJIS civil module; implementation within the superior court for one county.

- Merger of the manual and automated reporting procedures for criminal caseflow in the superior court.

- Acquisition of the hardware configuration necessary to support full scale system's operation.

4. Expected Impact

The primary impact expected from the development of SJIS is the availability of more accurate and timely data and the beneficial effect that this data will have on management decisions.

At the time of the assessment certain effects had already been experienced. These are:

- A standardization of docket entries had been effected.
- An identification had been achieved of the problems in criminal history recordkeeping.
- A swift adjudication of "aged" criminal cases has been possible, where previously "aged" cases were dismissed.

- Statistics and various research views never possible before have been routinely made available by the SJIS development.
- An inventory of case workloads was available in superior and juvenile courts.
- An awareness had been achieved of the points of delay experienced in case processing.

As SJIS is built and implemented state-wide, certain additional benefits are expected to be available:

- Case tracking of each case entering Rhode Island's adjudication system.
- Operational support for each of the local courts.
- Managerial statistics for the SCA.

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summary

Rhode Island's Phase II SJIS grant from LEAA began on February 1, 1978, and is scheduled to last one year. Federal funding amounted to \$200,000; matching state funds amounted to \$22,222, for a total project budget of \$222,222.

Of this, \$186,309 (83.8%) was allocated for SJIS staffing; \$2,000 (0.9%) for travel; and \$33,333 (15%) for indirect expenses. The major portion of LEAA's seed money went to pay for staff; specifically, one project director, two working technical supervisors, four information specialists, and two clerical workers.

LEAA funding for the second phase was needed to complete the systems design and testing and to support the initial operation of SJIS' principal modules.

2. Plans

Rhode Island developed a comprehensive workplan to support Phase II efforts. The purpose of this workplan was to provide a structure which would aid in the control of the project by state-level judicial administration and by project management. Ultimately, the workplan provided a timetable that acted as a road map for the project director and staff to steer a course through to project completion. In this way, the results of all efforts were compared to original estimates.

In the workplan, each of the project's objectives enumerated earlier in section I.C.3. is explained in a narrative description and then fully dissected into tasks and sub-tasks. Ten pages of accompanying project planning charts affix staff responsibility and scheduled completion dates for each of the project's 103 sub-tasks. A list of the major tasks, and their status, is provided in section II.A.3. (Current Status) of this report.

The project's workplans are well structured; they realistically tie project objectives to the specific steps necessary to accomplish those objectives.

3. Current Status

During the assessment, a review of the status of each of the project's tasks provided an understanding of how the project was progressing. A synopsis of that status appears in Figure 4.

4. Control Methods

The project workplans described in sections II.A.2. and II.A.3 represent extensive efforts undertaken to monitor the progress of the staff. The presence of these workplans provides management with a handy monitoring device. Weekly timesheets are required by all project staff. Ongoing time accounts have been developed to track all time and tasks.

To further facilitate control, the SJIS project will follow State of Rhode Island Standards using PRIDE to document development. PRIDE (Profitable Information Systems by Design) is a proprietary project of M. Byce Associates, Inc., Cincinnati, Ohio. This method insists on subsystems phasing and heavy interaction with the component user staff. PRIDE facilitates personnel resource allocation and helps staff to determine whether or not project milestones are being met. The method also insures that complete documentation of the system is accomplished during the project life, not after its completion.

5. User Participation

User involvement in the design and implementation of the SJIS project was extensive in certain areas and disappointing in others.

Figure 4

Current SJIS Task Status

Major Tasks	Planned Comple- tion Date	In Process		Completed	
		On Sched- ule	Revised (# Add'l Weeks)	On Sched- ule	Revised (# Add'l Weeks)
1) Criminal/Superior	10/78		3		2
2) Case Pending Reports	7/78				
3) Juvenile Justice Module	3/79		10		
4) Detention Support/Superior	1/79		12		
5) Arrest Reports to SJIS	10/78			✓	
6) A. G. Diversion	8/78			✓	
7) Criminal Case Scheduling	5/79		20		
8) On-Line Inquiry	3/79		12		
9) Merge Manual/Auto	1/79	✓			
10) Warrant Support/District	2/79	✓			
11) Detention Support/District	12/78	✓			
12) Criminal/District	3/79	✓			
13) Hardware Acquisition	4/79	✓			
14) Civil Design	4/79	✓			

On the positive side, each agency that is actively involved as a component of the system has assigned one staff person, experienced in the operational details of his user agency, to work on the SJIS project, thus providing the project with invaluable knowledge of both existing agency procedures and subsequent agency requirements. Local user input/feedback is continually sought at all stages of the project's development. The Court Component Committee, also comprised of users, has been very active. It has convened eleven times since the beginning of the project and continues to offer suggestions from a different, more farsighted, perspective. Seminars, users manuals, system demonstrations, etc. have all been used by project staff to encourage user awareness of both the status and capabilities of the system. This awareness, it was hoped, would facilitate subsequent user participation.

Despite these extensive efforts to encourage involvement, user acceptance has not been totally satisfying in all areas of the judiciary. Most user departments, family court and probation and parole excepted, have not fully embraced the service and support to be provided to their operational managers by the SJIS database. This acceptance has slowly changed from nonparticipation in early stages of SJIS to one of passive acceptance, as judges and user supervisors see the benefit of products produced.

Some partial explanations can be offered for this apparent user disinterest:

- Prior to 1973 most court-related jobs were political appointments. The cooperation of staff may be lost if their loyalty is owed to the person who got them their job (i.e., a political friend) rather than to their immediate supervisor.
- Clerks and administrators are concerned that their operations may be vulnerable to criticism if SJIS begins to report certain operational data. Some administrators would prefer only selective disclosure of certain operational aspects of their jurisdiction.

- The existing manual system was not efficient. Errors were detected in the manual records, unassigned responsibilities noted, overlapping authority existed, and controls seemed non-existent. The first step in an environment where procedures and controls need improving is to systematize and streamline the manual operation before attempting automation.

B. System Description

1. Processing Approach

Rhode Island's SJIS processing is run on the state's Department of Administration/Division of Information Processing's IBM 370-148. The system operates under DOS/VS and uses CIC's to control its teleprocessing. Processing is centralized with two CRT's updating and accessing the files. Additional CRT's are scheduled for installation in various offices of the judiciary in the near future.

2. Data Collection

Data are collected by court clerks and locally transcribed onto standardized reporting forms. On a daily and weekly basis these forms are mailed to the state data center in Providence.

The data being submitted by the local judicial agencies are visually checked for accuracy by the SJIS staff. This manual verification is reinforced by various audit procedures used by SJIS staff to further guarantee system accuracy:

- In the superior court in Providence County the entire criminal calendar is audited; a match is made on each defendant and charge.
- In the remaining counties a random audit, matching docket records and system data, is continually performed by two part-time students.

All deviations and corrections are reported to the SCA. Any discrepancy between the court records and the automated SJIS files is highlighted each week in a deviation report to the individual court administrator in whose jurisdiction the error was detected. Since both

the court records and the input for the SJIS files are the responsibility of the local clerks, any discrepancy may prove to be embarrassing. Consequently, the weekly deviation report receives very limited circulation and is purposely limited to only one major type of error per week. It is hoped that this deviation reporting technique will make the court administrators more aware of the importance of data integrity and give them the opportunity to gradually streamline and tighten up their operating procedures.

3. Data Entry

As the data recording forms are received at the SJIS office, they are scanned for reasonability, keypunched onto diskettes, and later batch processed.

The primary categories of data stored in the SJIS files are criminal (which is handled in the PROMIS-based portion of SJIS) and juvenile (which is handled in the non-PROMIS portions), covering both defendant and transaction entries.

4. Application Software

A large part of Rhode Island's SJIS is PROMIS. PROMIS was modified extensively to conform to the local needs of criminal case reporting in the superior court.

PROMIS is a relatively sophisticated system possessing full editing, updating, on-line inquiry, and report generation capabilities.

The primary reports expected when the system is in full operation are as follows:

- Pending case - in summary or detail; for any individual court or statewide.
- Closed cases - in summary or detail; for any individual court or statewide.

Both pending and closed cases can be listed in any of the following sequences:

- By a particular statute citation.
- By a group of statute citations.
- By indictment number.

- By defendant's name.
- By defense attorney.
- By prosecutor.
- By assignment judge.
- By date of indictment.
- By date of last action.
- By arresting police department.

- Daily Calendars.
- Pre-trial Conference Calendar.
- Arraignment Calendar
- Monthly Sentencing Register.
- Monthly Sentencing by Counts
- Awaiting Trial List.
- Bail Decision Statistics.
- Statute Citation and Corresponding Indemnity Fund Value.
- Superior Court Disposition/Dismissal Statistics.
- Speedy Trial Statistics.
- Pending Case Statistics.
- Court Continuance Statistics.
- Outstanding Warrant Listing
- Scheduling Book.

5. OBTS/CCH

The Rhode Island PROMIS contains the vast majority of data needed by the CCH and OBTS components of LEAA's CDS program. The OBTS/CCH data are available but not currently utilized or transferred. As yet, the appropriate recipient has not been identified.

Any attempt to meet federal regulations which require that OBTS data be forwarded to the State Planning Agency by December, 1978, is being postponed, because the definition of some of the OBTS/CCH data elements have not been determined.

At the time of the assessment, there were three separate repositories which kept various segments of CCH data:

- The attorney general's office maintained records in the State Bureau of Criminal Identification (Rap sheets).

- The courts maintained court-related case history.
- The State Police kept intelligence-type data.

Unfortunately, because three different agencies are involved, there is very little substantive communication, much duplication of effort exists, and no single repository contains complete CCH data.

6. Security and Privacy

The DA/DIP is responsible for security and privacy from an operational viewpoint. The individual terminals, located in the respective users' offices, are protected by physical locks. Access is restricted by appropriate password, transaction code, time of day, and terminal location.

Back-up files are generated at specified intervals and stored in a locked vault. Hard copy documents, required for legal purposes, can provide sufficient data for manual operation if the automated system becomes temporarily unavailable.

7. Computer and Communications Configuration

The Rhode Island SJIS is run on DA/DIP's IBM 370-145. This facility is shared by several other state agencies, is fully owned by the state, and each month bills the individual users, including the SCA, for services rendered.

The DA/DIP facility operates primarily on IBM equipment. The devices which are directly related to SJIS processing include:

- 1 3705 Communication Controller (IBM).
- 4 201C Modems (Dataphone).
- 2 3275 CRT (IBM).
- 2 3420 Tapedrives (IBM).
- 2 3330 Diskdrives (IBM).
- 1 1403 Printer (IBM).
- 1 3742 Key-diskette (IBM).
- 1 3747 Keypunch (IBM).

Installation of additional CRT's is planned in the immediate future.

The project workplan suggested that the judiciary acquire a dedicated computer system capable of fully supporting SJIS operations.

Studies were being conducted to analyze the feasibility of obtaining this dedicated system. At the time of the assessment, the DA/DIP computer facility appeared unable to handle the current judicial data processing requirements. Response time, turnaround time, job priority, etc., were inadequate. A dedicated judicial data center would be better able to service these data processing requirements.

8. Documentation

The documentation of Rhode Island's SJIS is both extensive and current. PRIDE is being used to record all steps in the project's development process. Output documents have been designed prior to both file design and input requirements.

A manual reviewing the procedures used in the Rhode Island superior court was published by the National Center for State Courts in May 1978. It contained explicit statements of policy, office and courtroom procedures, job functions, report formats, controls, etc. The report failed to receive acceptance by the superior court clerk and at the time of the assessment (i.e., 6 months after the manual's publication), the user training sessions traditionally associated with issuing a new manual had not yet been scheduled by the clerk.

Legislation, passed in January, 1978, now requires all major undertakings which are at least partially state-funded to be cost justified. All future aspects of SJIS development will be supported by a cost-benefit analysis.

9. Implementation

The rate of implementation of the SJIS modules has been intentionally slow to ensure complete understanding by user components. Most user departments, family court and probation and parole excepted, have not fully embraced the service and support to be provided to their operational managers by the SJIS database. This acceptance has slowly changed from nonparticipation in early stages of SJIS to one of passive acceptance, as judges and user supervisors see the benefits of products produced. To assist in this problem area, the state court administrator has been actively offering the management of

the user departments seminars and planning meetings to create a better understanding of the role of users in operational management.

Test plans include a systems test and a parallel test to be run after installation.

10. Maintenance

Since maintenance requirements will arise in later stages after system implementation, no maintenance activities have yet transpired.

C. Assessment Results

This section describes the reactions of the assessment committee to the Rhode Island SJIS project and the prospects for ultimate satisfaction of the project goals.

1. Recommendations

a. There is an acknowledged lack of user acceptance and involvement in the superior courts. Stronger marketing techniques might be useful in attempting to overcome this lack of user involvement. Efforts are needed to make the user more aware of the benefits which can be derived from the SJIS system, to better identify agency needs, and to identify key user employees who might be influential in selling the virtues of a new system.

b. There is a need to develop a cost-benefit analysis for all future undertakings.

c. The SJIS advisory committee (i.e., CCC) should be reinforced by several smaller sub-committees. These should become involved with making recommendations in some of the more detailed areas of the systems operation.

d. The functions of training and educating the users should be the responsibility of one permanent, full-time SJIS staff person.

e. The style of project management currently employed is excellent; however, the acquisition of staff with greater technical skills would make this management style much more effective.

f. Data entry and inquiry should be transferred to the various user offices. This should enhance the user's sense of involvement and control.

g. Rhode Island SJIS staff should examine the feasibility of certain productivity tools that would facilitate their programming tasks, e.g., VIDEO 370.

h. A contract should be drawn up outlining the responsibilities between DA/DIP and the SCA. An itemization of who would perform which tasks should be specified.

2. Exemplary Findings

a. The Rhode Island SJIS staff have fully documented the major problems currently facing their system. They also have taken the realistic view that there are not easy solutions to several of these issues.

b. The developmental efforts are continually being documented via PRIDE.

c. Component criminal justice agencies have significantly participated in the development of SJIS by providing analyst trainees to staff the project.

d. The efforts to build a Juvenile Module are well organized. System outputs have been defined prior to identifying systems input; manual workflow was fine-tuned prior to systems development; and the Rhode Island SJIS staff have established an excellent client relationship.

e. Excellent project management techniques have been used to develop and control the project.

f. The project is on-schedule vis-a-vis the original grant workplan.

g. There is a strong commitment by both the Rhode Island SJIS staff and by certain elements of the state judiciary to deliver the project objectives on schedule.

h. The project staff has learned, in spite of previous operational difficulties, what to expect when dealing with a state-owned data processing facility, which must simultaneously serve many agencies. The project is now moving in a favorable direction in this area.

i. Faced with disinterest or non-acceptance in the superior court, the project staff still intends to deliver the products as promised.

j. The SJIS project staff appears to have benefitted from their past experience with the superior court. They have taken positive steps in identifying a favorable pilot site for future implementation of the district court system. They have rightly chosen a small court with some enthusiastic clients.

k. SJIS staff have wisely delayed development of the Civil Module for the superior court until the Criminal Module is first successfully implemented.

WASHINGTON PERFORMANCE ASSESSMENT REPORT

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SECTION I

PROJECT OVERVIEW

On January 3, 4, and 5, 1979, a performance assessment was made in Washington of their State Judicial Information System (SJIS) Projects. The assessment was conducted by:

Hon. Loren D. Hicks, State Court Administrator,
Supreme Court of Oregon.
Mr. James M. Parkison, State Court Administrator,
Supreme Court of Missouri.
Mr. Lynn A. Jensen, National Center for State Courts,
SJIS Project.
Mr. Richard W. Delaplain, National Center for State
Courts, SJIS Project.

The purpose of the assessment was to appraise the administrative and technical status of the Washington SJIS Projects relative to the requirements and objectives of the Washington SJIS grants from LEAA and relative to good systems development practices and procedures.

No prior assessment has been conducted regarding Washington's Phase I SJIS activities. Therefore, this assessment report will cover both Phase I and Phase II activities.

The primary participants from the Office of the Administrator for the Courts (AFC) were:

Mr. Phillip B. Winberry, Administrator for the
Courts, Supreme Court of Washington.
Mr. Robin Trenbeath, Director of Information Systems
Division, AFC.
Mr. Fred Van Jepmond, Assistant Director, Information
Systems Division, AFC.
Mr. James Hanna, Project Manager SJIS Phase I (ACORDS
Project), Information Systems Division, AFC.
Mr. Mark Johnson, Project Manager SJIS Phase II (JUVIS/
PROFILE Project), Information Systems Division, AFC.

Mr. Leslie Stomsvik, Clerk of Division II, Washington Court of Appeals, and Ms. Joanna Crawford, Chief Deputy Clerk of Division II,

Washington Court of Appeals, were also interviewed regarding the ACORDS Project. Several other staff members from the AFC's Information Systems Division were also interviewed regarding portions of Washington's overall JIS activities.

A. Management Summary

Phase I of Washington's SJIS efforts began on October 1, 1976, and was scheduled for completion in September of 1977. Because of a late start in Phase I activities (work did not commence until February of 1977), a no-cost extension of Phase I was granted until March 31, 1978.

The Washington SJIS Project is currently nearing the end of Phase II of its development efforts. Phase II began on April 20, 1978, and was scheduled to end April 19, 1979. A no-cost extension of the Phase II has been granted until June 30, 1979.

This report will assess the activities in both Phase I and Phase II of Washington's SJIS efforts since neither phase has been the subject of a prior assessment report. Phase I activities were directed towards the development of an appellate courts management information system called the Appellate Courts Records and Data System (ACORDS). Phase II activities were directed towards the development of the Juvenile Information System (JUVIS). Both of these proposed systems were to be designed as integral parts (subsystems) of the Washington Judicial Information System (JIS) which has been under development by the Office of the Administrator for the Court's Information Systems Division (ISD) since 1974.

The overall goal of Washington's JIS is to establish a statewide judicial information system which provides a combination of on-line, batch, integrated, and stand alone data processing systems to serve all of the courts in the state. The eventual goal is to integrate all of these court data processing systems into one cohesive network to make up a statewide judicial management information system. Both Phase I and Phase II SJIS activities are considered steps towards this eventual objective.

All subsystems within Washington's JIS are designed to be programmed and implemented in specified phases. For each subsystem of the overall JIS, there is a prescribed series of modular capabilities scheduled for development and implementation over an extended period of time. The priorities for

implementation of capabilities varies from subsystem to subsystem, but they all include consideration of the following modular capabilities (as appropriate to a specific subsystem): (1) Case or citation indexing (reference system of litigants, cases, etc.); (2) Docketing (chronological recording of court events and documents); (3) Case or citation tracking (identifying and reporting the status of cases); (4) Issue tracking (identification and reporting of individual case issues--appellate module only); (5) Calendaring support (scheduling court appearances and printing calendars); (6) Accounting (bail, fees, fines, trusts, forfeitures); (7) Jury selection and management (trial courts only); (8) Warrants, summons, and subpoena control (trial courts only); (9) Court minutes and exhibits--(appellate and general jurisdiction trial courts only); (10) Statistical and management reports; (11) Communication links with other judicial and criminal justice systems, and; (12) Miscellaneous procedures (possible functions relating to text editing and statute searches--appellate and general jurisdiction trial courts only).

These 12 general systems capabilities make up the menu of functions that various subsystems of the JIS will be designed to accomplish. Each subsystem will have its own unique implementation schedule and priorities for implementation of any of these 12 capabilities. The specific priorities for each subsystem are established via detailed requirements analyses and conceptual designs (which rely heavily on end-user input) to indicate which services should be developed in what sequence.

At the time of this assessment, a general jurisdiction trial court subsystem had gone through the development cycle and was operational (in terms of indexing, docketing, case tracking, and production of statistical management reports) in several judicial districts in the state. This subsystem, the Superior Court Management Information System (SCOMIS), had been under development since 1975 by ISD staff. SCOMIS had been implemented in pilot sites with the above capabilities and was scheduled for expansion to all superior courts within the next six years. As this phased implementation progresses, additional capabilities will be added to the module. An Interim District and Municipal Court System (DISCIS) had also been implemented in most major jurisdictions throughout the state (in terms of

indexing, case and citation tracking, calendaring support, general accounting functions, and the production of statistical management reports).

Personnel within the Information Systems Division of the AFC are divided into project teams assigned to the development and implementation of the various subsystems, along with general data processing support personnel. Hence, the design, development, initial implementation, and expansion of various subsystems takes place simultaneously, with different subsystems being at different stages of development or implementation at any given time.

By delaying actual development work on their JIS until late 1975 and early 1976, Washington's ISD was able to take advantage of new technology which was not available to some other states. It is the intention of ISD personnel that all JIS subsystems will eventually operate within the JIS database (ADABAS) as resident subsystems, or be linked to ADABAS via distributed processing networks of stand-alone minicomputers in the various judicial districts within the state. SCOMIS operates within the ADABAS system, as does the ACORDS module. The interim DISCIS system operates on stand-alone decentralized IBM 3741 hardware and does not communicate with ADABAS. The JUVIS system, for reasons that will be explained later, has been developed as a stand-alone system which, while operating on the state level computer, does not communicate with ADABAS.

It is into this operational environment that Washington's SJIS effort was absorbed. Phase I of Washington's SJIS effort was allocated to the development of the appellate court system. According to the Phase I SJIS grant, the ACORDS project activities were to include:

1. SJIS Phase I (ACORDS Project)

- Development of an information system for the Supreme court and the three divisions of the court of appeals which would be integrated with the existing trial courts system of JIS;
- Development of OBTS and CCH data generation at the appellate court level;
- Development of management information for all appellate courts;
- Provision of day-to-day operational support for all appellate courts in such tasks as case indexing, docketing, calendaring, and other clerical functions.

The specific tasks to be completed during the grant period were to be determined by the requirements analyses which was identified as the first priority to be accomplished during the grant. In June of 1977, a requirements analyses was produced which identified the specific tasks to be completed during the grant as the development of indexing, docketing, case tracking, and management report module capabilities for the ACORDS subsystem and their implementation at a pilot site (Division II of the Court of Appeals). In addition, a conceptual design was to be developed specifying the additional capabilities that should be added to ACORDS in subsequent years.

At the end of Washington's Phase I SJIS grant, the basic ACORDS subsystem had been implemented and was fully operational in Division II of the Court of Appeals. This subsystem consisted of operational indexing, docketing, case tracking, management, and statistical reports modules. The basic ACORDS subsystem operates with on-line entry of data to disk storage followed by batch update of the database which includes routine EDIT of inputs. Subsequent to data entry, case records and management reports are available through an extremely versatile on-line inquiry system (ADASCRIP). On-line access is supplemented by the production of weekly computer output microfiche (COM) indexes and case dockets which serve as the basic working records for the clerks' offices. At the time of this assessment visit, the basic version of ACORDS had been fully implemented in all three divisions of the court of appeals and was scheduled for implementation at the Washington Supreme Court in July of 1979. Work has continued on development of additional capabilities for ACORDS (e.g., automated notice preparation, etc.) as specified in the conceptual design for subsequent phases of ACORDS development which was produced in November 1978.

At the time of this assessment, the ACORDS project was operating according to the schedules developed during Washington's Phase I SJIS grant. Development work has been accomplished by a highly professional staff from ISD, has been well documented, and according to interviews with users of the system is considered to be a very beneficial system to the clerks of the Court of Appeals. There is every reason to believe that this module will continue to be developed to its full potential in

the near future. For other states that have access to the ADABAS database system, the ACORDS appellate court subsystem should be seriously considered as a candidate for technology transfer.

2. SJIS Phase II (JUVIS/PROFILE Project)

In June of 1977, the Washington State Legislature passed House Bill 371 which substantially reorganized the manner in which juvenile courts in the State of Washington must operate. This bill took effect on July 1, 1978. Many of the provisions of this bill (including the requirement that readily accessible yet secure criminal history records be developed for juveniles, the requirement that accounting functions be set up for juvenile restitution orders, the development of management statistics to assess the bill's determinate sentencing provisions, etc.) have dramatically altered the manner in which juvenile court records must be maintained and processed. The impact on the judiciary and on the directors of Juvenile Court Services throughout the state was perceived as substantial. This perception led to a formal request from the Association of Directors of Juvenile Court Services to the office of the Administrator for the Courts that a management information system for the juvenile courts be developed which would operate as a subsystem of the AFC's JIS, which was already under development. While a juvenile subsystem had been originally planned as part of JIS, the passage of SHB 371 and the available juvenile case filing projections (which indicated that there would be 15,500 filings in 1977 and a projected 48,000 filings by 1985) made the immediate development of a juvenile subsystem a high priority. In June of 1977, the AFC submitted a grant application to LEAA to use its Phase II SJIS grant for the development of a juvenile court subsystem to the JIS. The juvenile system, which was given the acronym JUVIS, was to be developed as an operational subsystem within Washington's existing ADABAS database so that the juvenile subsystem could take advantage of much of the technology already developed and implemented during the development of other subsystems (SCOMIS and ACORDS) of Washington's JIS. The Phase II SJIS grant (JUVIS) was to begin in February of 1978.

As in the case of the Phase I SJIS grant, the Phase II grant indicated that the specific sequencing and content of modules which would be developed for the JUVIS subsystem would be based on a requirements analysis conducted by ISD personnel with the assistance of a user committee.

Because this SJIS grant was submitted approximately seven months before actual development was scheduled to begin, the grant application indicated that existing ISD staff would have completed the requirements analysis before the start of the grant. All of the relevant user group committees would have signed off on the proposed JUVIS design so that development work could commence immediately after receipt of funding. The grant application outlined the development of a basic JUVIS subsystem (consisting of 2-4 modules out of a possible 10-12 that would eventually be developed), to be implemented in one pilot site during the grant period. In subsequent years, the subsystem would be gradually implemented throughout the state, and additional modules of the subsystem would be developed as enhancements to the basic subsystem. This was in keeping with the development methodology employed in earlier JIS development efforts.

ISD staff began work in July of 1977 on the requirements analysis for the JUVIS subsystem of Washington's JIS. A requirements analysis report was produced in April of 1978 which laid out the modular development of JUVIS within ISD's ADABAS controlled JIS structure. As a part of this requirements analysis, juvenile court systems in several other states had been reviewed to ascertain the state of the art in juvenile systems. By the time that the requirements analysis report, which indicated that the development of a comprehensive JUVIS subsystem would be a multi-year effort, was produced in April of 1978, the user committees (specifically the juvenile court directors) expressed a sense of urgency in having a short-term, interim operational system which could help them meet the mandates of SHB 371. Therefore, the decision was made to attempt to transfer the PROFILE juvenile court system which was then in operation in the State of Utah. As an updated project workplan for SJIS Phase II indicated:

"The workplan has changed and progressed markedly from the original grant submission in July, 1977, through the April 1978 start date, to the present. . . .

"Basic philosophical changes were made in the strategy for providing juvenile courts with comprehensive information. The workplan in the revised grant submitted was based upon using current systems as guidelines but developing a unique system individually tailored to the needs of the Washington Juvenile Courts and their legislative constraints. After a

very careful analysis of the needs of the Washington courts, the sense of urgency expressed by the court directors, and the limited financial resources available a . . . (new) plan was developed.

"The new plan included 1) the technology transfer of the Utah juvenile court information system to Washington as a complete, unadulterated package; 2) testing and evaluating that system in total; 3) making system improvements to increase reliability, security, and ease of maintenance; 4) changing the table contents from Utah data to Washington data; 5) using the system for an interim period to obtain operational experience; and finally 6) developing a long range plan for Juvenile Court information system improvements."

After some delay in securing the necessary documentation of the Utah PROFILE system, the transfer of the system was made. It exists as a stand-alone system within the Washington JIS. That is, it is not capable of communicating with other JIS systems. In addition, this system was not developed with the same state of the art design characteristics as the rest of the JIS system, and it requires a much higher commitment of maintenance resources than do other JIS subsystems. However, the system was successfully transferred at a substantial cost and time savings over developing the intended JIS subsystem.

Once the delays in securing adequate system documentation were overcome, the project has progressed according to the milestones identified in the revised workplan referenced above. At the time of the assessment, the JUVIS/PROFILE system was being readied for implementation in a pilot site. Following pilot site testing, it will be implemented on a phased statewide basis.

B. Organizational Structure and Processing

1. Judiciary

a. Washington State Court System. The Washington state courts consist of a supreme court, 3 divisions of an intermediate appellate court (Court of Appeals), 28 districts of the general jurisdiction trial court (Superior Court), and 316 courts of limited jurisdiction (73 District Courts, 241 Municipal Courts, 2 Justices of the Peace). The Washington court system,

including the jurisdictions of the various levels of the courts, is summarized in Figure 1.

b. Office of the Administrator for the Courts. The Office of the Administrator for the Courts, established by the Legislature in 1957, operates under the supervision and direction of the Chief Justice of the Washington Supreme Court, its purpose to study the operations of the courts of the state, and to make recommendations for their improvement. Consistent with state statutes, the administrator for the courts is responsible to the supreme court for the execution of the administrative policies and rules as applicable to the Washington judicial system.

In general, the office performs the following functions:

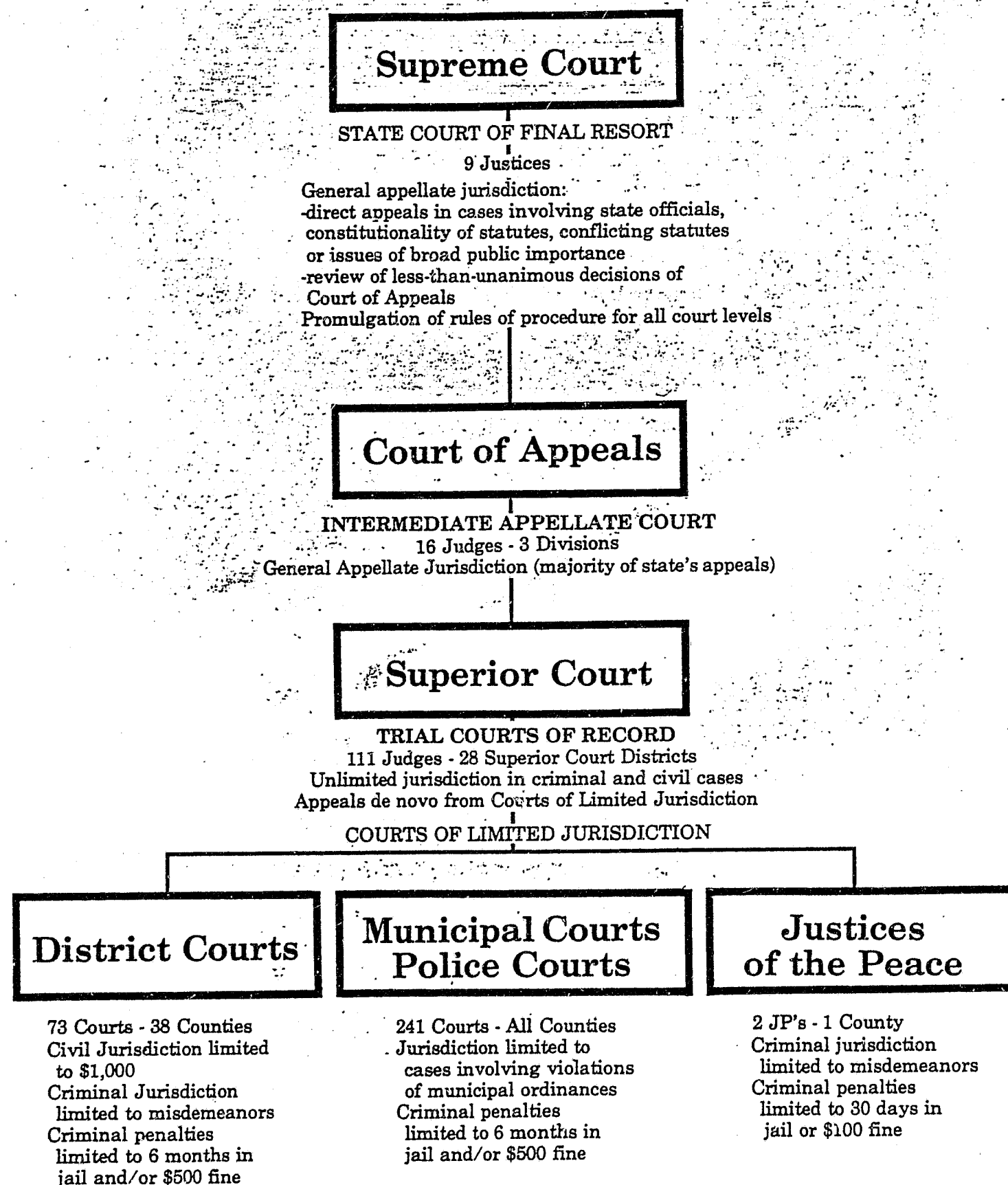
- Collects and compiles meaningful statistics;
- Develops and promotes modern management procedures to accommodate the needs of the state's courts;
- Continuously studies and evaluates information relating to the operations and administrative methods of the judicial system;
- Provides pertinent substantive and procedural information to the members of the judicial community, the other branches of government, and to the general public;
- Prepares and submits budget and accounting estimates relating to state appropriations for the judicial system.¹

The structure of the Office of the Administrator for the Courts and the duties of the various components of the office are summarized in Figure 2.

¹Office of the Administrator for the Courts, Judicial Administration in the Courts, State of Washington, 1977, p. 77.

Figure 1

THE COURTS OF WASHINGTON



2. Judicial Workloads

The latest verified statewide caseload figures available for the State of Washington are from the 1977 Annual Report. Filings in the various courts are presented in Figure 3.

3. Data Processing

Computer facilities for the Washington Judicial Information System (which includes all SJIS Project efforts) are provided, under contract, by the Washington State University (WSU) Computer Center.

Analytical and design work for JIS (including the SJIS project) are performed entirely by the staff of the AFC's Information Systems Division. Programming and maintenance of systems are done by ISD staff via remote terminals linked to the JIS database located in the Washington State University Computer Center.

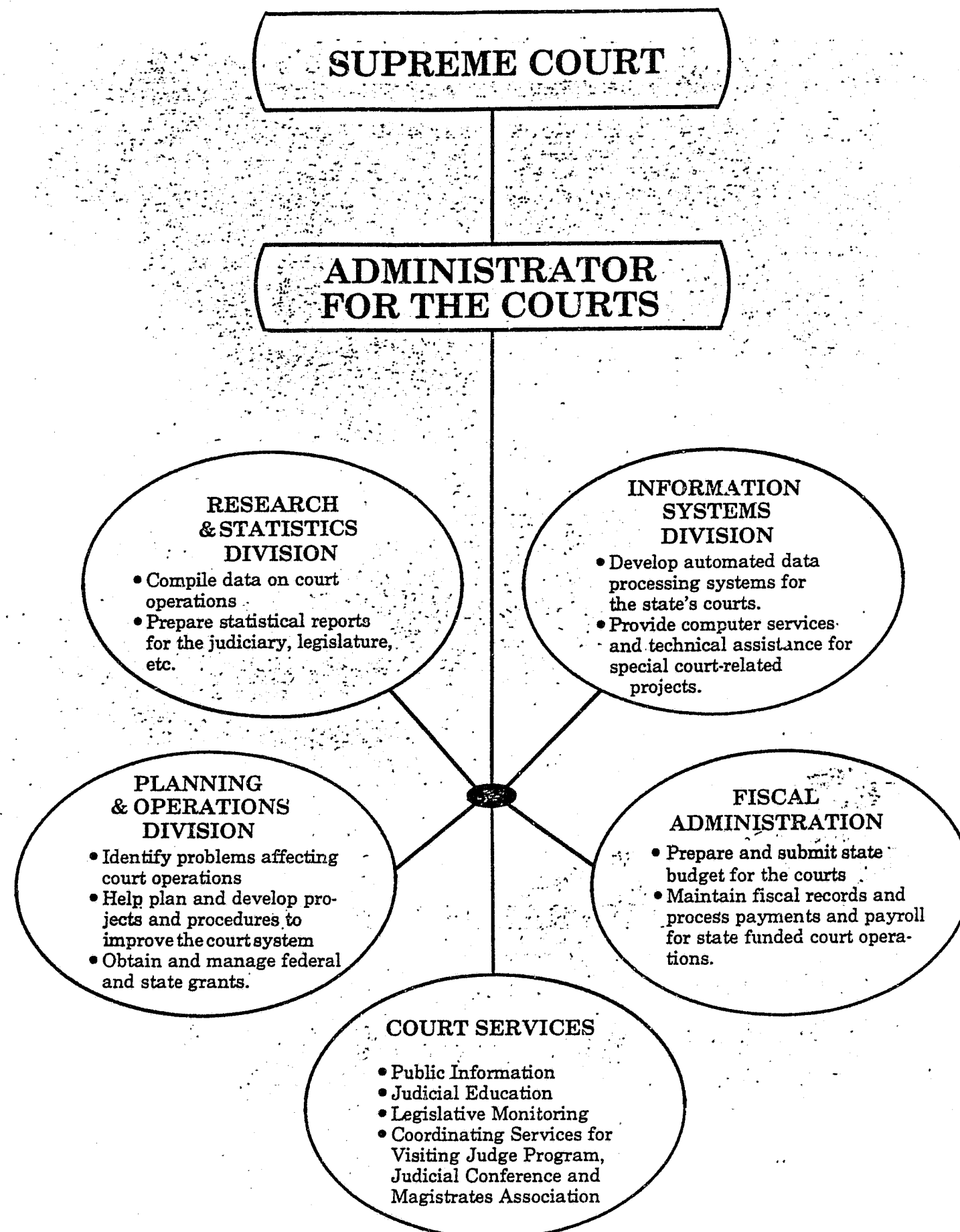
The AFC planned to install a dedicated IBM 370/3031 computer within its ISD in early 1979. However, due to financial constraints and problems encountered in contract negotiations, the purchase and installation of a computer dedicated to Washington's Judicial Information System has been cancelled. For the foreseeable future, Washington's JIS will continue to function on the WSU computer and some stand alone mini computer equipment which is currently being utilized by the District Court subsystem of JIS.

4. SJIS Project

Washington's SJIS Projects for Phase I and Phase II (ACORDS and JUVIS projects) are operational units within the Information Systems Division (ISD) of the Office of the Administrator for the Courts. The organizational relationship of these projects to the Washington court system as well as to the various judicial advisory committees that oversee the development of JIS projects is depicted in Figure 4. The organization of the Informations Systems Division and the resources assigned to the two SJIS projects are depicted in Figure 5.

Personnel who were assigned to the SJIS Phase I Project (ACORDS) were retained by the ISD at the conclusion of the project. They are currently supported by a mix of state funding and state block grant funds.

FIGURE 2



Source: Judicial Administration In The Courts, State of Washington, 1977

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Figure 3: 1977 CASELOADS FOR THE COURTS OF WASHINGTON

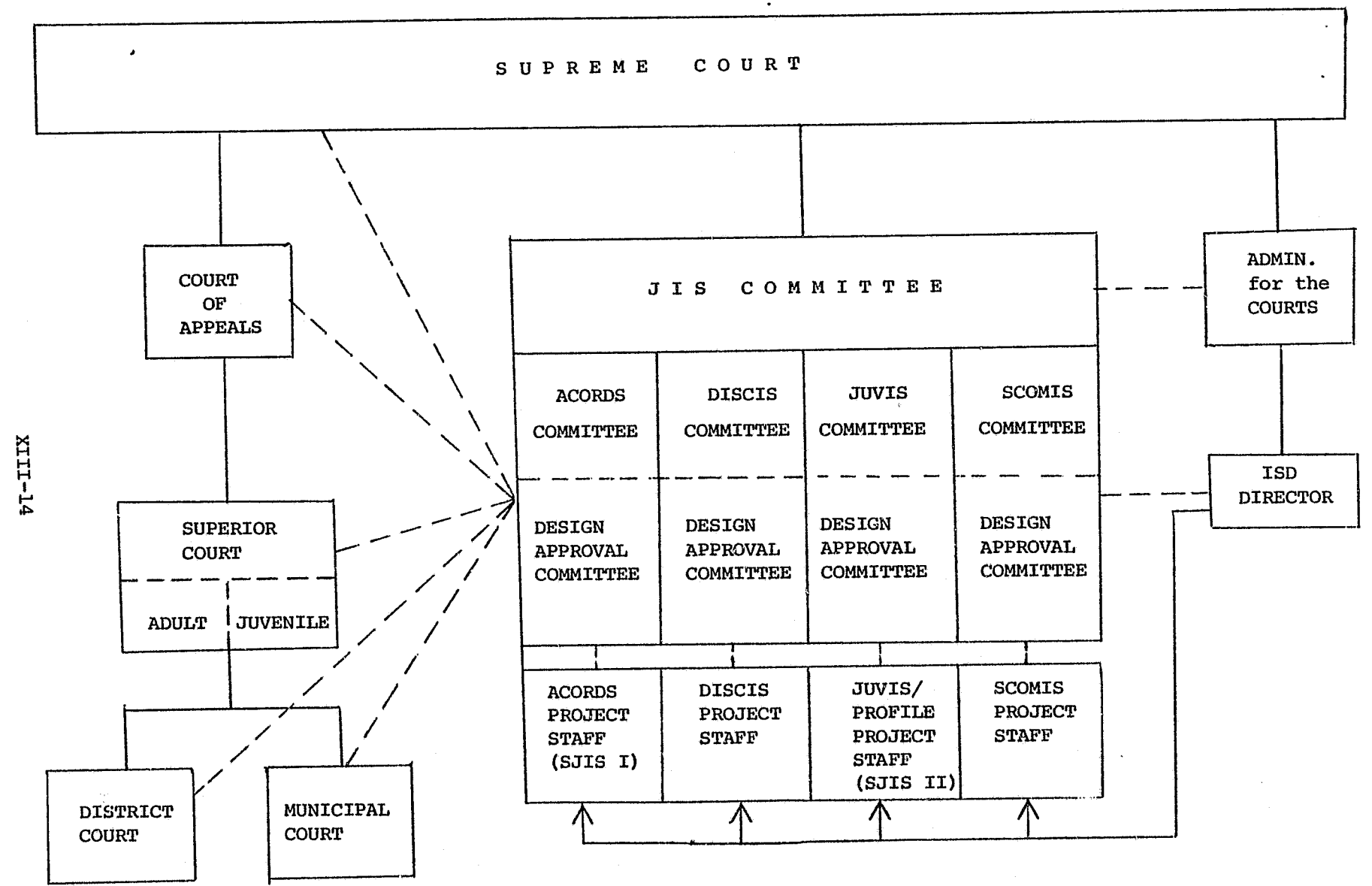
<u>Supreme Court Filings</u>	
Criminal Appeals	66
Civil Appeals	156
Total Appeals Filed	222 - up 11% from 1976
Criminal Petitions for Review	155
Civil Petitions for Review	136
Total Petitions for Review	291
Motions, Writs, etc.	114
Disciplinary Procedures	11
TOTAL MATTERS FILED	638 - up 8.3% from 1976
<u>Court of Appeals Filings</u>	
Appeals Filed	1,697
Motions, Writs Filed	299
TOTAL MATTERS FILED	1,996 - up 12.3% from 1976
<u>Superior Court Filings</u>	
Civil	80,026
Criminal	14,141
Probate	16,164
Juvenile	14,824 - up 10.5% from 1976
Mental Illness	2,810
TOTAL FILINGS	127,965 - up 5.1% from 1976
<u>District Court Filings</u>	
Traffic	412,419
Criminal	43,073
Felony	6,731
Civil	50,681
Small Claims	21,074
TOTAL FILINGS	533,978 - up 7.5% from 1976
<u>Municipal Court Filings</u>	
Traffic	407,611
Criminal	67,570
TOTAL FILINGS	475,181 - up 10.7% from 1976

Source: Judicial Administration in the Courts, State of Washington, 1977, pp. 6, 10, 16, 23, and 27.

Note: Justice of the Peace filing data were not available.

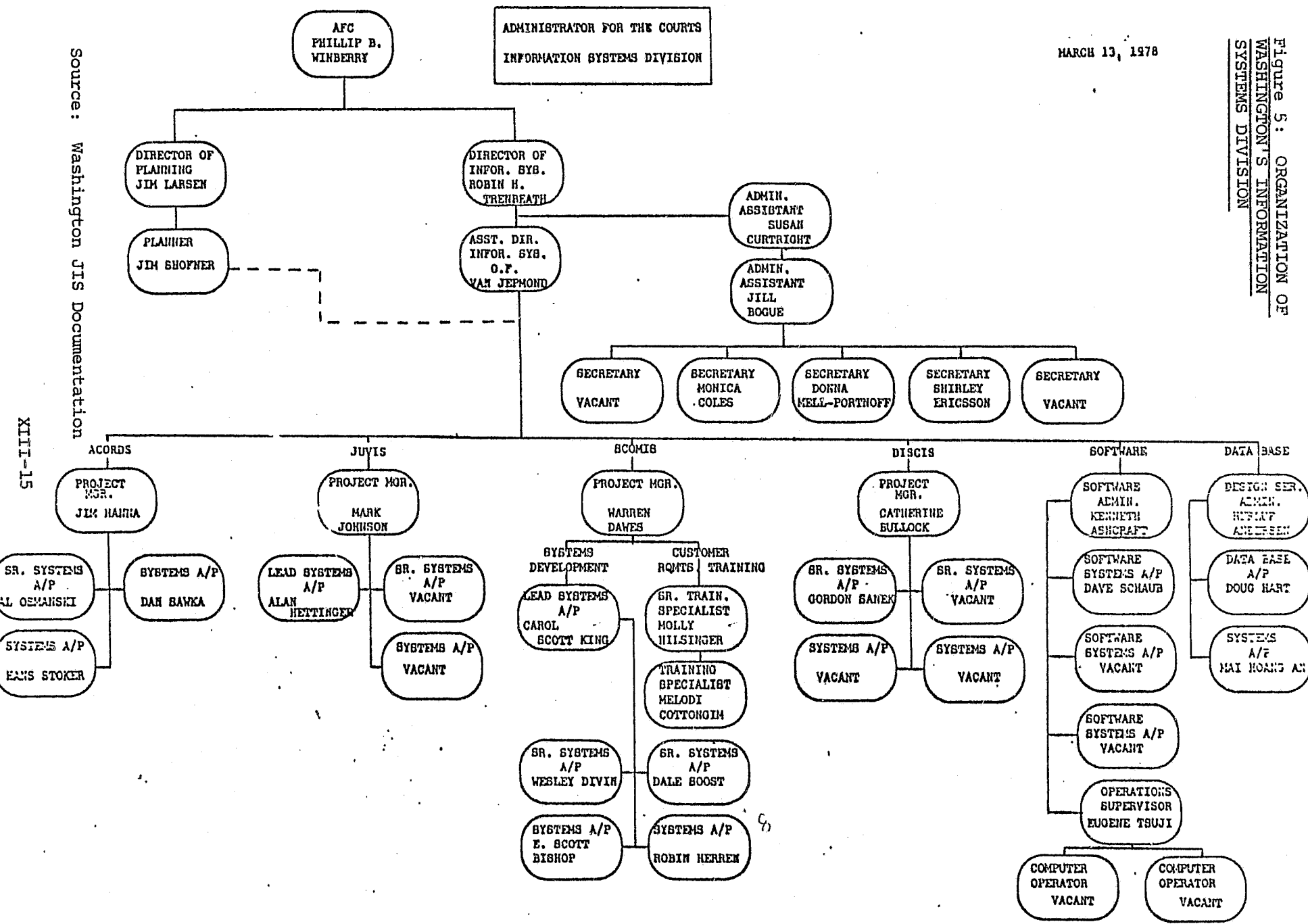
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WASHINGTON JIS ORGANIZATIONAL STRUCTURE



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Figure 4



Personnel assigned to the SJIS Phase II project (JUVIS/PROFILE) are still supported by grant funds. At the conclusion of the JUVIS project, these personnel will also be retained by ISD.

5. SJIS Advisory Committees

The State of Washington has established a series of advisory committees that oversee all development efforts for the state judicial information system. In 1976, the supreme court promulgated the Judicial Information System Committee, which is responsible for overall JIS development efforts, and established court rules for the operation of a 22-member committee responsible for directing the design and operation of a statewide judicial information system. The committee members, appointed from names submitted to the Supreme Court by representative groups and associations within the judicial system, include judges, clerks, and administrators from all court levels, a prosecutor, a bar member, a lay citizen, and the Director of the Washington State Data Processing Authority.

The JIS Committee has appointed the following four ad hoc committees to coordinate the development and implementation of computerized systems within the courts:

- The Appellate Courts Records and Data Systems (ACORDS) Committee which consists of user and administrative personnel concerned with appellate court operations.
- The Juvenile Information System (JUVIS) Committee which consists of user and administrative personnel concerned with juvenile court operations.
- The Superior Court Management Information System (SCOMIS) Committee consisting of persons with interests in general jurisdiction trial court operations.
- The District/Municipal Court Information System (DISCIS) Committee consisting of persons with interests in limited jurisdiction courts.

The ACORDS Committee has been responsible for overseeing the design and implementation of the SJIS Phase I Project, including the official review and signoff on the requirements analysis and conceptual design documents.

The JUVIS Committee has been responsible for overseeing the design and implementation of the SJIS Phase II Project, including the decision

to transfer Utah's PROFILE system into Washington as an interim juvenile court management information system. This committee has also been responsible for reviewing and approving the requirements analysis report for the more long-term goal of developing a juvenile subsystem to the overall JIS.

In addition to these officially constituted committees, there are various ad hoc committees that meet to consider specific design or implementation problems and strategies regarding the various subsystems that are currently under development. ISD personnel provide staff support to all committees.

All of these committees meet regularly and play an active part in overseeing all aspects of JIS development. Committee members' knowledge of the working environment in which a prospective system will be used has been an invaluable resource. In general, Washington has made excellent use of the user agency resources available to them, and this aspect of Washington's SJIS efforts has played a key role in the success of the system's development and implementation efforts to date.

6. Related Systems

Three local jurisdictions in Washington currently operate or are in the process of developing local/regional subject-in-process type information systems. These local systems do not relate directly to Washington's JIS efforts. It is anticipated that all of these jurisdictions will be given access to whatever subsystems of JIS are appropriate to their needs. The AFC has had a policy of attempting to discourage the proliferation of local court information systems. It is the intent of the Washington judiciary that local courts become a part of the Washington JIS rather than developing independent local/regional systems which would then have to be interfaced with JIS.

C. Project Description

1. Background

In 1973, the Supreme Court of Washington instructed the administrator for the courts to develop a program to meet the information management needs of the Washington courts. To this end, the Judicial Information System (JIS) was established as a tool to assist in the administration of justice in Washington's courts through the retrieval and processing of information.

During 1974 and 1975, staff from AFC's Information Systems Division studied existing systems in multiple states and reviewed the types of data processing technology that was available to assess its appropriateness to Washington's environment. Staff of the Information Systems Division determined that Washington's JIS efforts should take advantage of state-of-the-art data processing technology to develop an overall information system that would consist of multiple subsystems providing services to specific levels of courts. To establish the JIS, ISD staff decided to utilize a commercially available database package known as ADABAS which was a product of Software AG. Long-range plans were developed which envisioned all judicial information subsystems as operational subsystems within the ADABAS database, or operating as distributed subsystems utilizing ADABAS and the main computer as the system host. Initially, ADABAS was installed at the Washington State University Computer Center, with long-range plans calling for the acquisition of dedicated hardware which would be under the control of AFC.

ISD's long-range plans called for the development of four subsystems of JIS (Appellate Subsystem, General Jurisdiction Subsystem, Limited Jurisdiction Subsystem, and Juvenile Subsystem) and their phased implementation on a statewide basis. Full development of these subsystems (indicating the completion of JIS) was not envisioned until 1985.

Actual development work began on two of the JIS subsystems in 1976. SCOMIS, a superior court management information system for general jurisdiction trial courts (to handle all general jurisdiction court caseload), began its development cycle with the goal of developing a statewide on-line system that would operate from the state computer via remote terminals in all superior courts. DISCIS, a stand-alone on-line system for limited jurisdiction district and municipal courts, was begun as an interim system operating within the major district and municipal courts. Long-range plans call for its redesign and inclusion within the overall JIS. The interim DISCIS system operates on stand-alone minicomputers which are self-contained systems within selected district or municipal courts.

a. SJIS Phase I. In late 1976, funding for SJIS Phase I was received. This project was to develop an appellate court information system (ACORDS) which would eventually provide management information

services to the three divisions of the court of appeals and to the supreme court. The SJIS-funded phase of the ACORDS project called for the development of the basic subsystem (indexing, docketing, case tracking, and the production of management reports) and its implementation in at least one pilot site (Division II of the Court of Appeals) by the end of the grant period.

b. SJIS Phase II. In early 1978, funding for SJIS Phase II was received. This project was to develop a juvenile court information system (JUVIS) which would provide management information services to the states' juvenile courts. The SJIS-funded phase of the JUVIS project called for the development of the basic subsystem (indexing, docketing, case tracking, and the production of management reports) and its implementation in at least one pilot-site juvenile court by the end of the grant period. The portions of the overall ACORDS and JUVIS projects which were funded by SJIS are summarized in Figure 6.

2. Functional Description

At the time of this assessment, the ACORDS system had been developed and the basic subsystem was implemented in all divisions of the court of appeals. The JUVIS system design had been completed. However, rather than develop a juvenile system from scratch, Washington had decided to transfer Utah's PROFILE system (a juvenile justice management information system) to Washington. This transfer had been accomplished and during February, 1979, the first two pilot sites began using the JUVIS/PROFILE system. This system is considered an interim system by ISD personnel and will eventually be replaced by the originally planned JUVIS subsystem.

Both the ACORDS and JUVIS/PROFILE subsystems are operational and provide basic indexing, docketing, case tracking, and management report production at the selected implementation sites. A more detailed description of each system is contained in Section II (PROJECT ASSESSMENT) of this report.

3. Goals and Objectives, SJIS Phases I and II

a. SJIS Phase I. The overall goal of Washington's Phase I SJIS grant was to develop an appellate court subsystem to Washington's JIS. Specific objectives specified in Washington's Phase I grant application included:

ISD PROJECT PHASING

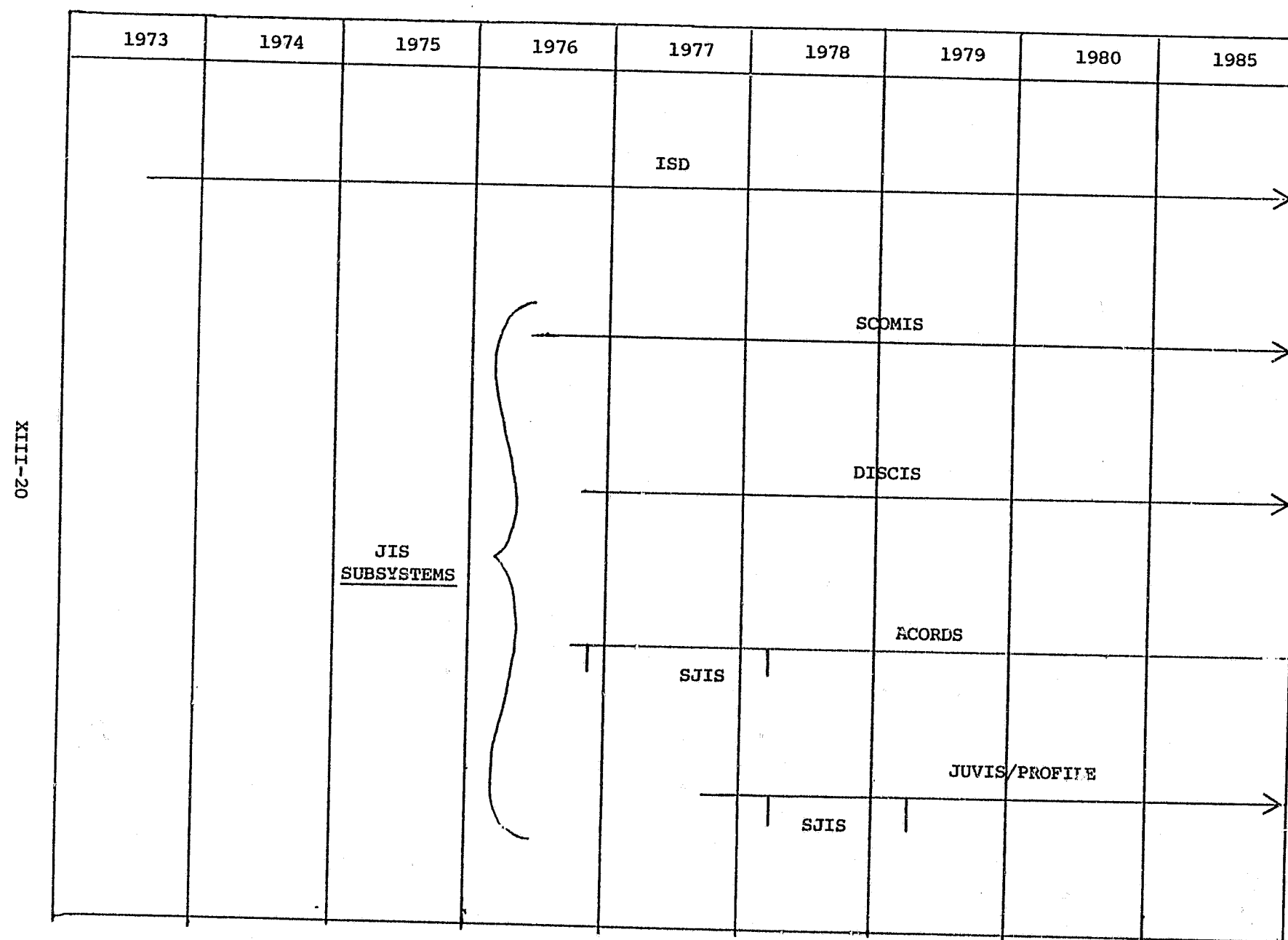


Figure 6

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- Development of an information system for the supreme court and the three divisions of the court of appeals, integrating the requirements of trial courts.
- Enable OBTS/CCH data support by the appellate courts to other components of the criminal justice system.
- Development of management data for the supreme court and each division of the court of appeals.
- Encouragement and assistance in the standardization of statistical data elements reporting and usage.
- Provision of information concerning
 - . calendar backlogs,
 - . source of case filings by various categories,
 - . dispositions,
 - . duration of cases, and
 - . issues for possible consolidation of cases.
- Provision of day-to-day operational support to the appellate court on such tasks as
 - . indexing,
 - . docketing,
 - . calendaring,
 - . case consolidations, and
 - . law search.

The specific objectives (work to be completed during the grant period) were defined by the requirements analysis that was to be completed during the first months of the project. These objectives included the design, coding, testing, and implementation of the basic ACORDS system (case indexing, docketing, case tracking, and management report production) in a pilot site (Division II of the Court of Appeals). In addition, the design documents for additions (enhancements) to the system were to be produced during the grant.

b. SJIS Phase II. The overall goal of Washington's Phase II SJIS grant was to develop a juvenile court subsystem of Washington's JIS. Specific objectives listed in Washington's Phase II grant application included the following:

- Provision of useful management information for administration of the juvenile court system and for its statistical reporting.
- Integration of the system into the Judicial Information System of the Washington Judiciary.
- Implementation of the requirements mandated by the Legislature in House Bill 371.

- Provision of a means to help juvenile courts increase their efficiency and handle the increased workloads caused by the rising trend in filings.
- Provision of appropriate support to OBTS as developed in conjunction with the Judicial Information System.
- Establishment and maintenance of a computerized criminal history file for juvenile cases.
- Establishment and maintenance of appropriate communication links among juvenile courts and between the courts and relative juvenile justice agencies.
- Provision of an accounting system for restitution in juvenile cases.

As was the case in Phase I efforts, the specific work to be completed during the grant period was to be defined by a requirements analysis report which would be completed (work on it had started before the grant was awarded) during the first month of the grant. During the JUVIS requirements analysis effort, the JUVIS Design Committee decided that, rather than develop a juvenile subsystem to their existing JIS, they would attempt to transfer Utah's PROFILE system to Washington. Once this decision was made in April of 1978, the objectives of the grant shifted to the transfer and implementation of this system in Washington. After reviewing Utah's PROFILE system, the JUVIS committee felt that it could meet all of the original objectives specified in the SJIS grant, except that PROFILE's design characteristics precluded its operation within the existing JIS database. Hence, at least on an interim basis, it would operate on the same state university computer but would essentially be a separate data processing system from JIS.

4. Expected Impact

a. SJIS Phase I (ACORDS Project). The major benefit anticipated from this project was to be an increase in the efficiency and effectiveness of appellate court administration. It was anticipated that better clerical processing would allow a reduction in the average time for civil cases from the filing of a notice of appeal to the issuance of an opinion. In addition, ACORDS would facilitate comprehensive statistical analyses of reported data, help in the avoidance of duplicative clerical efforts, and avoid costs that would otherwise be associated with the increasing appellate caseloads.

b. SJIS Phase II (JUVIS/PROFILE Project). The major benefit expected from the JUVIS project was the development of an operational juvenile justice system. As a by-product of this operational system, management statistics would be available not only to measure case processing and recidivism rates but also to help the juvenile court better manage its own internal processing and resources. The system to be implemented would contain accumulating juvenile criminal history records (CCH) and would also provide data on how juveniles were processed to the appropriate OBTS facilities. In addition, the proposed system would contain an accounting function regarding court-ordered restitution in juvenile cases and would address other areas mandated by the legislature's recently passed juvenile court reorganization act (SHB 371.)

SECTION II

PROJECT ASSESSMENT

A. Project Planning and Control

1. Grant Summaries

a. SJIS Phase I (ACORDS Project). Phase I of Washington's SJIS Project began on October 1, 1976, and was scheduled for completion in September of 1977. Due to a late start in Phase I activities in February of 1977, a no-cost extension of Phase I was granted until March 31, 1978. The ACORDS Project grant application provided overall objectives for the grant period but indicated that the specific workproducts to be accomplished during the grant would be defined in the requirements analyses which would be completed during the early stages of the grant year. The ACORDS requirements analysis report was produced in June of 1977.

The ACORDS requirements analysis report indicates the work to be completed during the SJIS grant in the following passages:

"This phase will provide on-line data entry to and updating of computer files for all case record information now contained on the court's docket sheets, case status cards and name cross reference index cards. All case record data will be updatable with a single entry of data via the video terminals in the clerk's office. If desired, this information can also be reproduced on a printer terminal at the same location.

This module will provide the basis for a complete case-flow management system. It will also provide inquiry access to the court's information base by name and case number, as well as providing a mechanism for instantly determining the status of a given case. Back-up procedures will be provided which will prevent the impairment of court operations in the event of computer unavailability."

This phase of the ACORDS project would see the design, development, and pilot implementations of the basic caseflow management capabilities of the appellate subsystem. The specific functions that would be automated included

- Case indexing (reference system of litigants, cases, etc.);
- Docketing (chronological recording of court events and documents); and
- Case tracking (identifying and reporting the status of cases).

b. SJIS Phase II (JUVIS/PROFILE Project).

Phase II of Washington's SJIS Project began on April 20, 1978, and was scheduled to end April 19, 1979. Because of delays in receiving all of the necessary documentation involved in the transfer of Utah's PROFILE system to Washington, the project has received a no-cost grant extension until June 30, 1979.

The JUVIS grant application provided overall goals and objectives to be achieved by the JUVIS project. As in the case of the ACORDS project, the actual workplan was to be specified in the requirements analysis report which would be completed during the first month of the grant-funded period of the project. A requirements analysis report was produced in May of 1978 which layed out the specific functions of the JUVIS system that would be developed in Phase I of the development efforts of this JIS subsystem. However, by the time that the requirements analysis had been completed, the JUVIS Advisory Committee had decided to opt for the transfer of Utah's PROFILE system rather than proceed with the immediate development of a juvenile subsystem to Washington's JIS. Hence, the objectives of Phase II of Washington's SJIS efforts have been reduced to the transfer, modification, and pilot site implementation of Utah's PROFILE system. This interim juvenile justice system has been entitled the JUVIS/PROFILE Project. Specific tasks that were identified to be accomplished during Phase II of Washington's SJIS Project included the following:

- Complete the technology transfer of the Utah juvenile court information system (PROFILE) to Washington as a complete unadulterated package;
- Test and evaluate the PROFILE system in total;
- Make appropriate modifications to PROFILE to increase its reliability, security provisions, and ease of maintenance;
- Change the hard coded table contents of PROFILE from Utah data to Washington data (e.g. judge names, etc.);

- Implement PROFILE as an interim system in at least one jurisdiction; and
- Develop a long-range plan for juvenile court information system improvements (the development of a JUVIS sub-system for JIS).

2. Plans

ISD staff have developed written project plan worksheets for both the Phase I (ACORDS) and Phase II (JUVIS/PROFILE) SJIS grants. These workplans are attached to this report as Appendix I (ACORDS workplan) and Appendix II (JUVIS/PROFILE workplan). In addition to these project-specific workplans, the ISD unit produces a supplement to the administrator for the court's annual work schedule. At the time of this assessment, the 1978 work schedule was available for review; however, the 1979 work schedule was still being printed.

One of the grant-specified goals of the JUVIS/PROFILE project (SJIS Phase II) was the production of a long-range plan covering development of JUVIS as a module of JIS. This document was produced in May of 1978 in the form of a requirements analysis and planning document. It contained plans for the eventual phase development of a juvenile module to JIS which will be implemented in subsequent years as a replacement to the PROFILE system transferred from Utah.

All currently operational and planned subsystems to JIS have similar planning documents which specify the long-range plans for implementation, enhancement, and expansion to all courts in the state of the various subsystems (e.g., SCOMIS, DISCIS, ACORDS, JUVIS).

3. Current Status

a. ACORDS (SJIS Phase I). At the time of this assessment, Washington's Phase I SJIS efforts (ACORDS) were continuing to progress according to the workplan contained as Appendix I to this report. ACORDS has now been fully implemented in all three divisions of the court of appeals. Supreme court implementation is scheduled for July, 1979. A site visit was made to Division II of the Court of Appeals to verify ACORDS operational status. The system is operational and works to the complete satisfaction of the clerical staff assigned to that court. In summary, Washington's JIS staff have completed, on schedule, all grant-specified objectives for the ACORDS (SJIS Phase I) Project.

b. JUVIS/PROFILE (Phase II). At the time of this assessment, the PROFILE system from Utah had been physically transferred into Washington's JIS environment. The system was operational in a test mode and the final alterations were being made to the system (altering hard coding from Utah codes to Washington codes for court names, judges names, etc.).

Subsequent to this assessment visit, JUVIS/PROFILE was implemented in two pilot sites (February 1979) and is scheduled for implementation in three more sites during 1979. This work was completed according to the workplan for the JUVIS/PROFILE Project which is attached to this report as Appendix II. In summary, Washington's JIS staff have completed, on schedule, all grant-specified objectives for the JUVIS/PROFILE (SJIS Phase II) Project.

4. Control Methods

All subsystem development work within Washington's JIS is the responsibility of the Director of Information Systems. Project work is accomplished by project teams which work somewhat independently of each other. Each team leader (project manager) is required to submit periodic written and verbal reports to the Director of Information Systems which allow the Director to monitor each project team's development progress. Each project team operates on a documented timetable which specifies the precise deliverables which are due by specific dates.

All employees (team members) are required to maintain active "Work Status Logs" which contain information relative to all tasks assigned them, including the work to be done, the estimated versus actual completion dates, and the amount of time billed to a specific task. A duplicate set of these task control sheets is maintained by the team leader (project manager) for all work assigned to his/her team. These sheets form the basis of the periodic reports made to the Director of Information Systems. They allow a great deal of control over the work being performed and allow for rapid identification of problem areas in terms of work completion, deliverable dates, or adherence to budget limitations.

All control methods are formally documented and distributed to all employees in the form of a System Development Manual which specifies all project control methods which are to be adhered to by all team members and team leaders. These project control methods specify how all project work will be accounted for and provide specific procedures

for the control and documentation of systems maintenance and/or modifications work that is requested by users or team members. In addition, specific written guidelines are included covering library standards and program documentation as well as the actual coding conventions to be employed. System documentation is developed using Warnier Diagrams to depict the operation of systems at the conceptual and detailed design levels, and the program listings stem from the more detailed Warnier Diagrams.

JIS uses full-time documentation personnel to make sure that user documentation and system documentation are kept current. If a modification to a system affects documentation previously written, a documentation specialist updates the appropriate area in the documentation (users manuals, system descriptions).

5. User Participation

The Washington SJIS Project staff has thoroughly integrated user participation in both their Phase I (ACORDS) and Phase II (JUVIS/PROFILE) projects. The prospective users of each subsystem have participated in the subsystems development process from start to finish and continue participation as the system is enhanced and expanded throughout the state.

B. Systems Descriptions

1. Processing Approach

a. ACORDS Overview. The ACORDS (Appellate Courts Records and Data System) operates as a centralized data entry and retrieval system for all appellate courts within the state. Using the Washington State University computer system, data are entered on-line to disk storage during terminal update sessions. When the operator signifies that the update session is terminated, the material stored on disk is then batched into the JIS database while simultaneously being passed through standard EDIT programs which check for possible clerical or logic errors (e.g., operators placing numerical entries in fields designed alphabetic, or entering certain types of case records before other required type of records have been entered). A listing of update transactions containing errors is provided to the terminal operators immediately following the update session. The operator then modifies his/her entries and resubmits the corrected transactions for inclusion in the JIS database.

Information currently contained in the system includes case indexing (reference system of litigants, cases, etc.); docketing (chronological recording of court events and documents); case tracking (identifying and reporting the status of cases); and court minutes and exhibits (recording the short version of minutes and exhibits filed on a case).

Output reports include on-line access to any case record, as well as printed output reports and microfiche. The printed reports are compiled at the request of the terminal operator. By choosing from a list of available reports, the operator submits to the computer a series of commands which tell the computer exactly which report is desired. Once the computer has compiled the report, the operator can type in more commands to get the report to print on the local court printer.

Some lengthier reports are generated via Computer Output microfiche (COM) and mailed to the courts. All indexes and registers of actions (dockets) are reproduced on COM on a weekly basis and mailed to the courts. Hence, the local court has the option of accessing the case on-line or referencing the COM-produced indexes and register of actions.

b. JUVIS/PROFILE Overview. The JUVIS/PROFILE (juvenile information system) as transferred from Utah's PROFILE system is a totally on-line management information system for juvenile courts in the State of Washington. It is a centralized system (it also runs on the Washington State University computer system) but does not operate within the ADABAS database management system that the other JIS subsystems use.

Data are entered via remote terminals on-line to the central JUVIS/PROFILE system. As data are entered, they undergo on-line EDIT for standard clerical errors (e.g., entry of alphabetical data in fields specified to be numerical, etc.). Once data are passed through EDIT, they update the master and interrelated on-line disk files for that case. These files are accessible via on-line inquiries from any juvenile court terminal.

Information contained in JUVIS/PROFILE can be divided into three major types: records processing data (master juvenile CCH record, petitions, summons, docket production, notice production, various tickler lists, and restitution accounting functions); management information (case tracking; workload reports for local courts, judges, and probation personnel; juvenile detention facility reports; general statistics for annual report

production; and reports to other juvenile justice related agencies); and, prediction/evaluation data (information to predict the probability of recidivism from case data and personal characteristics of the juvenile). The current version of JUVIS/PROFILE produces 10 output reports.

Because of major changes in juvenile court law in Washington during 1978, the state will develop a statewide CCH system for juveniles. The master juvenile record in JUVIS/PROFILE will serve as the basis for this CCH system in that it accumulates cases involving a particular juvenile over time.

2. Application Software

All application software for Washington's JIS are written in COBOL. ACORDS (SJIS Phase I) operates within Washington's JIS database (ADABAS) while JUVIS/PROFILE is a stand-alone system.

a. ACORDS (SJIS Phase I).

"The Appellate Courts Records and Data System is a hybrid of batch COBOL programs, on-line COBOL programs and several software packages including CICS, ADABAS, VIDEO/370, ROPES, WYLBUR, EDIT, UPDATE and REPORT programs. The following is a brief overview of the components and their interaction within the system.

Data entry is accomplished with VIDEO/370 under CICS which allows an operator to enter data directly from source documents onto pre-formatted display screens. Data are stored in VIDEO/370 data files and can be assessed on-line by the entry operator for update or correction. Data are subsequently formatted into logical records by the batch extract program of VIDEO/370. Data extracted are saved on disk and used as input to the edit and update run.

The edit and update batch job applies the courts data to the ACORDS data base files, which are handled by ADABAS, a data base management package supplied by Software A.G. The data on file is accessed through an associator table which connects data records to various record-key files and allows quick and flexible retrieval of all, or any portion, of the stored data.

The edit and update job is initiated by the user by using WYLBUR, a text editor program which contains a high-level execute command program language. An interactive WYLBUR program has been developed to create the JCL for this edit and update run stream, or any of the report programs to be run by court staff. These batch reports may be retrieved by using an interface called "ROPES" which transmits printed reports to on-line terminal printers.

A series of CICS on-line programs have been written to access the ROPES print queues for the user. With these, through simple English commands, printed reports can be easily handled by the court staff. In addition to those reports printed at the sites, a set of microfiche is produced weekly for each court which includes a listing of all information on file for each case and two cross-reference listings.

In addition to these reports, the capability for on-line inquiry of the ADABAS files is also available. This is accomplished through the use of macro commands written in "ADASCRIP+", a high-level inquiry language which is supplied with ADABAS. Thus, simple English commands can be used to formulate data base queries with the resultant report being formatted and returned to the requesting video terminal."²

b. JUVIS/PROFILE. The juvenile information system was transferred from Utah. It exists as a stand-alone system which operates under CICS, OS, MVT but does not operate within the JIS database (ADABAS). Access to JUVIS is via on-line remote terminals through CICS to six on-line index sequential disk files. These six interrelated on-line disk files are linked by case number to allow single entry and multiple file updating. Files include master file (contains all identifying, social, family, detention, referral, and disposition history information regarding each juvenile processed by the juvenile court); name index (a phonetic name index); calendar file (contains a chronological listing of all cases to be heard by each judge and provides the basis for on-line printing of docket calendars); court services delivery file (contains essentially a register of actions regarding court and probation actions taken for each case); order followup file (contains accounting information for restitution accounting and tickler list generation); and detention population file (contains records for all juveniles detailed and serves as the basis for daily listings of detention populations).

JUVIS provides for on-line access to any specific case, plus use of the master file as an on-line CCH file for juveniles.

3. OBTS/CCH

Neither ACORDS nor JUVIS/PROFILE are designed to specifically provide OBTS data, although both could be capable of producing such data with minor modifications. JUVIS will serve as the central repository for

²Material quoted from ACORDS system documentation.

juvenile CCH data and will be made accessible to non-judicial agencies on a "right to know" basis.

None of the JIS subsystems currently provide machine-readable OBTS or CCH data to state repositories. There is currently no statewide OBTS operation and the Washington Bureau of Criminal Identification (state repository for adult criminal history information) will not accept machine-readable case dispositions without attached fingerprint records. Hence, case disposition is accomplished through standardized reporting forms filled out by local courts.

4. Security and Privacy

The Washington SJIS system is designed to be reasonably secure against hardware failure hazards and natural disasters. However, because the systems operate in a shared environment (Washington State University computer system), absolute control over accidental or intentional software modification cannot be assured.

All system files for ACORDS and JUVIS are copied onto back-up tapes daily and stored off site in a locked vault. Remote terminals are all under the physical control of judicial personnel and have physical locks as well as password protection for operator usage.

The Washington JIS Committee is currently working on a security and Privacy manual for submission to the supreme court. ISD staff have submitted reports identifying the various issues that should be addressed by the committee in such a manual.

Security and privacy for Washington's SJIS appears adequate except in the area of access to the actual computer system (which indirectly allows for access to the programs and data files). The assessment team expressed concern at the low level of data file security provided by the university computer center. As is often the case with university-run computer centers, numerous students have access to the computer room and via time share terminals could figure out ways of accessing files controlled by various subsystems of JIS. There exists no agreement with the university which guarantees the security of JIS files. However, it was the assessment team's feeling that a written agreement would not actually guarantee security. The probable answer to this problem is to remove the JIS system from the university computer center and to establish

a separate judicially controlled data processing center. A second (and less desirable) choice would be to put JIS on a computer system operated by law enforcement agencies, where overall database access would be more closely monitored than in the current academic setting. The second alternative, if available, would have to be weighed against the potential for second-rate service that law enforcement (executive branch) agencies might supply to the judiciary. In general, operations the size and complexity of Washington's SJIS should strive to avoid dependence on other agencies to supply computer support.

5. Computer Configuration

Both the ACORDS and JUVIS/PROFILE systems operate on the Washington State University's Amdahl Model 470V/6-II computer which operates with 8 megabytes of core storage. The JIS operating environment is OS/MVT Release 21.8 and operates under the CICS Release 33 Teleprocessing System. ACORDS operates under ADABAS (a commercially available database management system). Remote video terminals used by both ACORDS and JUVIS are Harris Model 3277's (approximately 50 on-line currently). Remote printers are Harris Model 3125's. Disk storage is on two Calcomp Model 3330-II's with 200 megabytes of storage each. The system uses two IBM Model 3420-5 tape drives.

The ISD had plans to purchase an IBM 370/3031 for installation in January of 1979. Purchasing negotiations broke down on this unit and its peripheral equipment, so for the foreseeable future JIS will continue to operate on the Washington State University computer system.

6. Documentation

Documentation of all of Washington's JIS subsystems is done in accordance with guidelines established and published by the ISD. Requirements analyses (called External Designs by ISD) and systems design documents (called Internal Designs by ISD) are published documents which are reviewed and approved by several user committees. Documentation for programs and systems logic are provided by Warnier Diagrams of sufficient detail that program statements follow from the diagrams. Documentation for the ACORDS project (SJIS Phase I) was complete and up to date at the time of the assessment. Documentation for the JUVIS/PROFILE project (SJIS Phase II) was being developed at the time of the assessment visit.

Documentation for this system, which was received from Utah, was not as complete as ISD guidelines called for, and therefore ISD staff were expanding the quantity and quality of documentation available for JUVIS/PROFILE. Provisions are made to keep all documentation current on a continuing basis.

In general, the assessment team feels that Washington's ISD has done an outstanding job of documenting their systems development and planning. The level of documentation that is available in Washington makes their systems ideal candidates for transfer consideration by other jurisdictions that may be hardware and database-compatible to Washington. Washington's JUVIS/PROFILE is currently undergoing transfer to the State of South Carolina.

7. Implementation and Maintenance

Formal on-site training sessions are conducted by ISD staff for all users. Within ISD is a unit that is responsible for ongoing liaison with users and continuing followup training. In addition, this unit is responsible for continually updating all user documentation (user manuals, etc.).

Each system is thoroughly tested and debugged prior to actual implementation in pilot sites. When a new system is implemented, regardless of how well tested it has been in other sites, users operate the old or manual system in parallel mode with the new automated system until such time as they are confident enough to completely changeover to the automated system.

Any modifications to an existing system (programs, reports, etc.) are requested in writing on a standard form. The request is scheduled and personnel are assigned as appropriate from the project team responsible for that system. When the modification is completed, a documentation specialist updates all appropriate documentation (user manual, system documentation).

C. Assessment Results

This section will review the current status of Washington's Phase I and Phase II SJIS Project efforts.

1. Concerns and Recommendations

In general, the assessment team was very pleased and impressed with the progress and the quality of work completed by Washington's SJIS (ISD)

staff. Projects have been completed on schedule, properly documented, and users have been involved from start to finish of each phase of system development.

The one area of concern expressed by the assessment team related to the question of the degree of security and privacy that can be secured at the Washington State University Computer Center. In general, it was the assessment team's view (which was shared by ISD staff) that the security provided for JIS systems that operate within the university computer center environment is quite low. The relatively relaxed security usually associated with university computer centers is not sufficient to meet the more stringent security and privacy requirements associated with the processing of criminal justice-related information. With the development of juvenile CCH capabilities within the JUVIS/PROFILE system, this problem will become increasingly acute.

It is therefore the assessment team's recommendation that the Office of the Administrator for the Courts attempt to secure more stringent security and privacy safeguards from the university computer center. If this type of arrangement cannot be secured, it is recommended that ISD seek alternative sites (preferably equipment that can be controlled by ISD) to support JIS systems.

2. Exemplary Findings

The following exemplary findings should be noted:

a. Staff Competence. JIS staff in general, and those associated with SJIS efforts in particular, have demonstrated a high degree of professional data processing skill. The overall organization of ISD promotes individual initiative and has resulted in high-quality work being completed in a timely manner. The Director of ISD has hired a professional staff who are knowledgeable in both courts and data processing. This staff competence has been and will continue to be a major factor in the successful development of Washington's SJIS.

b. User Participation. JIS staff in their development efforts have done an excellent job of involving system users. The various committees and subcommittees which actually control the development efforts of ISD are comprised of individuals who are involved in the day-to-day operations of the courts (and related agencies) and have played a crucial role in assisting the ISD staff in JIS development and implementation.

c. Documentation. Washington's JIS staff have done an exceptionally good job in documenting their operational and developing systems. Documentation is produced in consistent formats for the various systems and is of consistently high quality. This factor, in conjunction with the quality of the systems developed, makes the Washington JIS subsystems ideal candidates for technology transfer to other states which are hardware and software (database) compatible with Washington.

d. Technology Transfer. Washington is one of the few states that has successfully transferred a state-level stand-alone system from another state. Given the time involved and the quality of documentation with which staff had to work, Washington's ISD staff are to be commended for the successful technology transfer of Utah's PROFILE that they have just completed.

3. Conclusions

Washington's SJIS Projects (Phase I--ACORDS and Phase II--JUVIS/PROFILE), when evaluated against the Phase I and Phase II SJIS grants and good systems development practice and procedures, are in excellent condition. The ISD staff have produced quality systems in a timely manner that have satisfied the needs of the courts. Staff have actively solicited and made outstanding use of input from end users of the systems being developed.

Staff on the ACORDS project have been retained with a combination of state funding and state block grant funding. It is anticipated that when the JUVIS/PROFILE grant expires in June of 1979, that staff from this project will also be retained by state funding.

The caliber of ISD staff meets the highest professional standards, and in the assessment team's opinion will continue to develop and implement successful systems in the future.

APPENDIX I
ACORDS SUMMARY WORKPLAN

ACORDS PROJECT YEAR ONE - SJIS FUNDING

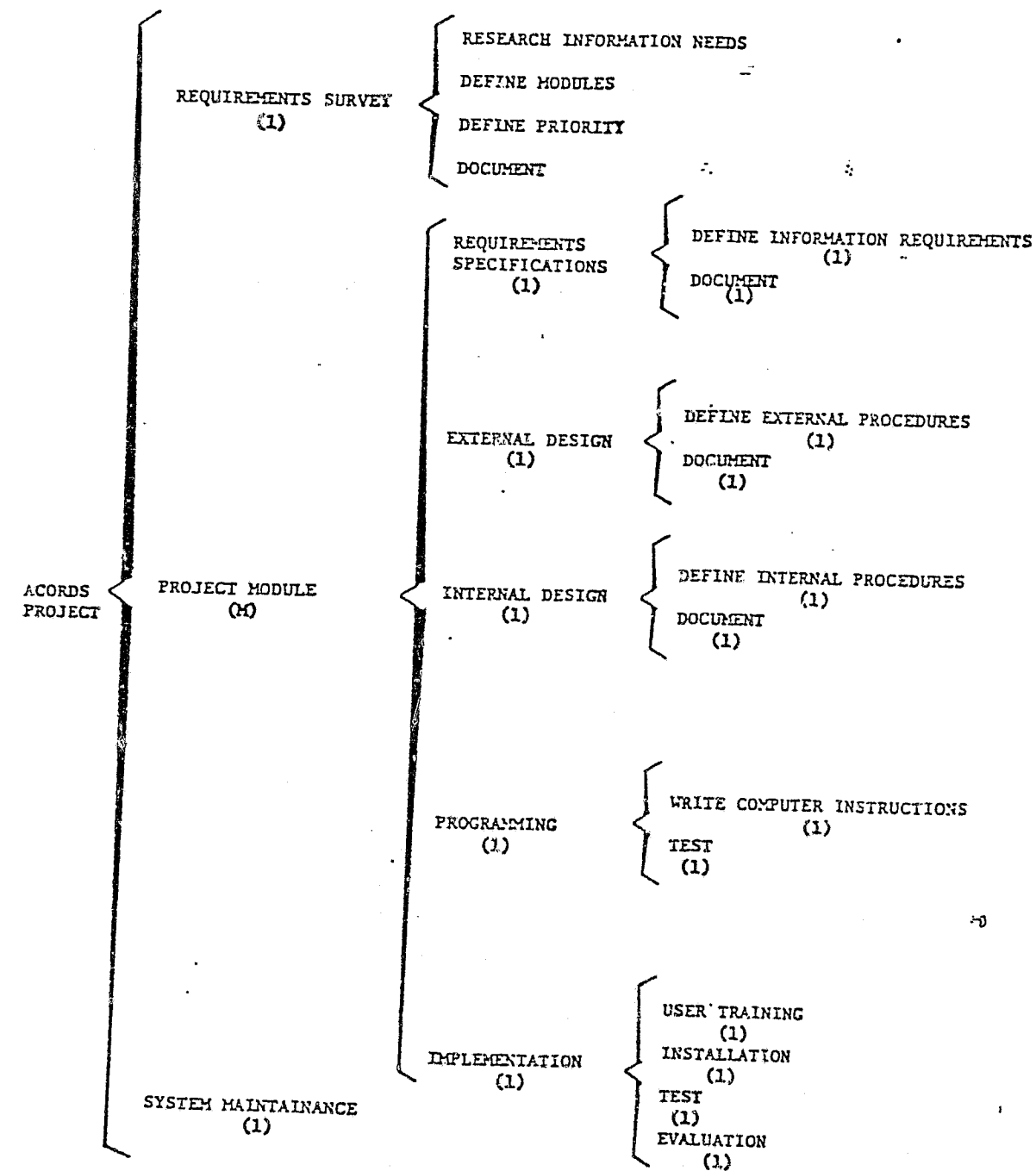
1977 FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	1978 JAN
WORK PLAN											
		REQUIREMENTS SURVEY									
					EXTERNAL DESIGN-PHASE I						
								INTERNAL DESIGN			
										CODING	

ACORDS PROJECT YEAR TWO-BLOCK GRANT & STATE FUNDING

1978 FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	1979 JAN
CODING											
TESTING											
	PILOT SITE IMPLEMENTATION										
		EXTERNAL DESIGN-PHASE II & III									
							2nd SITE IMPLEMENTATION				
									INTERNAL DESIGN		
										3rd SITE IMPLEMENTATION	

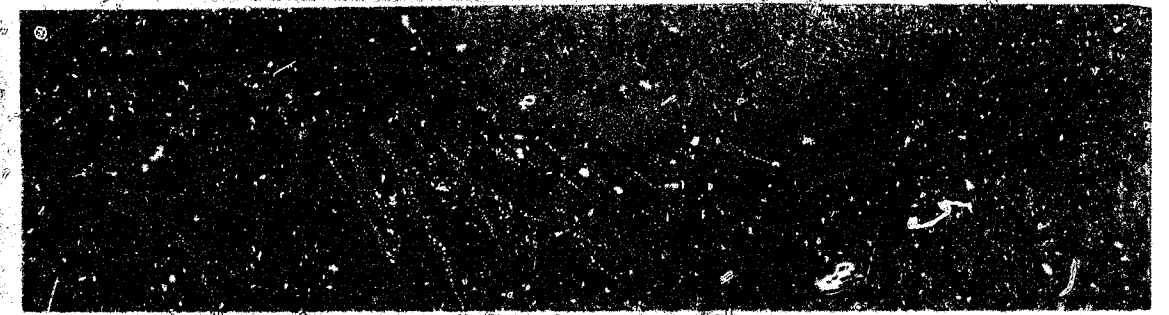
XIII-AI-1

ACORDS SYSTEM DEVELOPMENT CYCLE



NOTE: This diagram demonstrates the use of a "structured design" tool and is referred to as a Warnier diagram. It provides an easily understood means of graphically representing the logical relationships and sequence of procedures and data. Logical relationship is indicated by reading from left to right. The terms on the right of the bracket are logical subsets of the term the bracket points to on the left. Sequence is indicated by reading the terms on the right side of the bracket from top to bottom. The figure in parentheses beneath each term indicates the number of occurrences or repetitions of the term, with a letter representing a variable number. These diagrams replace the traditional flowcharts or block diagrams.

CONTINUED



LEAA Grant #78-SS-AX-0025

JUVENILE COURT INFORMATION SYSTEM

Detailed Workplan

This workplan for LEAA Grant #78-SS-AX-0025, "Juvenile Court Information System" is provided for LEAA pursuant to special condition 14 of the grant, as modified. This plan reflects the best estimates of the Information Systems Division staff concerning tasks, milestones, resources, time lines, and deliverable dates and descriptions, based upon currently available information.

The workplan has changed and progressed markedly from the original grant submission in July, 1977, through the April, 1978 start date, to the present. The present workplan reflects the innovations, time, and cost saving procedures used by the Administrator for the Courts to achieve the maximum positive impact from the limited grant resources.

Basic philosophical changes were made in the strategy for providing juvenile courts with a comprehensive information. The workplan in the revised : submitted was based upon using current systems as guidelines but developing a : que system individually tailored to the needs of the Washington Juvenile Courts and their legislative constraints. After a very careful analysis of the needs of the Washington courts, the sense of urgency expressed by the court directors, and the limited financial resources available, a bold, imaginative plan was developed.

The new plan included 1) the technology transfer of the Utah juvenile court information system to Washington as a complete, unadulterated package; 2) testing and evaluating that system in total; 3) making system improvements to increase reliability, security, and ease of maintenance; 4) changing the table contents from Utah data to Washington data; 5) using the system for an interim period to obtain operational experience; and finally 6) developing a long range plan for Juvenile court information system improvements.

The major tasks, milestones, resources, time lines and deliverable products are outlined in the accompanying charts.

APPENDIX II

JUVIS/PROFILE DETAILED WORKPLAN

SJIS-JUVIS PROJECT
LEAA DETAILED WORK PLAN

* * * AFC/ISD PROJECT SCHEDULE * * *

REPORT DATE: Updated 9/30/78
REPORTING UNIT: JUVIS

Chart 1
PAGE 1 of 5

TASK #	TASK DESCRIPTION	Apr 78	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 78	Jan 79	Feb	Mar	Apr	May	Jun	July
.1	Requirements Survey Effort			✓													
.4	Review by JUVIS Committee	✓															
.5	Review by JIS Committee			✓													
.2	External Design										✓						
.2.1	Construct Design Objectives	✓															
.2.2	Develop System Operations		✓														
.2.3	Develop System Flow									✓							
.2.4	Develop Screen Formats									✓							
.2.5	Develop Training Plans									✓							
.2.6	Develop Implementation Schedule									✓							
.2.7	Review with JUVIS Design Comm.									✓							
.2.8	Produce External Design Document										✓						
.2.9	JUVIS Committee Approval											✓					
.2.10	JIS Committee Approval												✓				

AFC/ISD PROJECT SCHEDULE

REPORTING UNIT: JOVIS

PAGE 2 5r

[illegible]

LEAA DETAILED WORK PLAN

* * * AFC/ISD PROJECT SCHEDULE * * *

REPORT DATE: Updated 9/30/78

REPORTING UNIT: JUVIS

Chart 1

PAGE 3 of 5

ASK #	TASK DESCRIPTION		Apr 78	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 78	Jan 79	Feb	Mar	Apr	May	June	Ju
.4.11	Prepare Findings								▽									
.4.12	Work through review process										▽							
.5	Utah Conversion																	
5.1	Program checkout										▽							
5.2	Data Conversion																	
5.2.1	Washington Definitions										▽							
5.2.2	Loading Tables										▽							
5.2.3	Testing Data										▽							
5.3	Training																	
5.3.1	Manuals										▽							
5.3.2	Materials										▽							
5.3.3	Trainer Staff Preparation										▽							
5.4	IBM/VS Production Packaging																	
5.4.1	Job Stream Testing										▽							
5.4.2	File Building												▽					
5.4.3	Job Stream												▽					

SJIS-JUVIS PROJECT
LEAA DETAILED WORK PLAN

*** AFC/ISD PROJECT SCHEDULE ***

REPORT DATE: Updated 9/30/78

REPORTING UNIT: JUVIS

Chart 1
PAGE 4 of 5

BK #	TASK DESCRIPTION		Apr 78	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 78	Jan 79	Feb	Mar	Apr	May	June	Jul
.6	Pilot Installation																	
.6.1	Compatibility Analysis									▽								
.6.2	Pilot Site Requested Changes									▽								
.6.3	AFC/JUVIS Required Changes												▽					
.6.4	Training Sessions												▽					
.6.5	Installation											▽						
.6.6	Monitoring														▽			
.6.7	Evaluation Report														▽			
.7	Pierce Installation																	
.7.1	Compatibility Analysis									▽								
.7.2	Review of Pilot Req. Changes									▽								
.7.3	AFC/JUVIS Required Changes												▽					
.7.4	Training Sessions												▽					
.7.5	Installation											▽						
.7.6	Monitoring														▽			

AFC/ISD PROJECT SCHEDULE

Chart 1
PAGE 5 of 5

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Updated 9-30-78

CHA 2

[illegible]

CP - 4

[illegible]

END