

# NCJRS

The National Criminal Justice Reference Service (NCJRS) is a non-profit organization that provides free access to a vast collection of criminal justice literature. The service is available to the public through a variety of channels, including the NCJRS website, a toll-free telephone number, and a microfiche edition. The service is a valuable resource for researchers, students, and the general public interested in criminal justice issues.

For more information, contact the NCJRS at:

10

11

12

Available in microfiche and hard copy. This information is provided for informational purposes only. It is not intended to be used as a legal document.

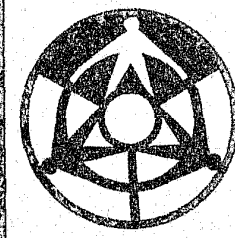
Results of the research studies in this document are those of the researcher and do not represent the official position or policies of the U.S. Department of Justice.

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

6 11 77

1 m d

39716



**THE AMERICAN UNIVERSITY**  
CRIMINAL COURTS TECHNICAL ASSISTANCE PROJECT  
Institute for Advanced Studies in Justice  
The American University Law School  
Washington, D.C.

A Program of the  
Office of Regional Operations  
(Adjudication Division)  
Law Enforcement Assistance Administration  
U.S. Department of Justice



**CRIMINAL COURTS TECHNICAL ASSISTANCE PROJECT**

Joseph A. Trotter, Jr., Director  
Caroline S. Cooper, Deputy Director  
R. William Linden, Jr., Technical Assistance Specialist  
Kathy Bradt, Administrative/Research Assistant  
Lucia Mencía, Secretary  
Susan Ellis, Secretary

**Project Advisory Board**

Nicholas N. Kitzler, Law School  
Richard A. Myren, Center for the Administration of Justice  
David J. Saari, Center for the Administration of Justice  
Elliott S. Milstein, Law School

**INSTITUTE FOR ADVANCED STUDIES IN JUSTICE**

Nicholas N. Kitzler, Institute Director  
Joseph A. Trotter, Jr., Associate Director  
David J. Saari, Associate Director  
B.J. Tennery, Associate Director (On Leave)  
Fran Lazerow, Assistant Director for Research

David E. Aaronson & C. Thomas Dienes, Co-principal Investigators  
The Impact of Decriminalization on the Intake Process for Public Inebriates

H.H.A. Cooper, Staff Director  
National Advisory Committee Task Force on Disorders and Terrorism

Jerry V. Wilson, Project Director  
War on Crime in the District of Columbia 1955-1975

Michael Rudolph, Project Director  
Assessment on the Critical Issues in Adult Probation Services

**THE AMERICAN UNIVERSITY**

Joseph J. Sisco, President  
Richard Berendzen, Provost  
Gordon A. Christenson, Dean, Law School

DEVELOPMENTAL RECOMMENDATIONS FOR AN  
AUTOMATED CRIMINAL JUSTICE INFORMATION  
SYSTEM IN ROANOKE, VIRGINIA

Prepared by:

David J. Saari  
Center for the Administration of Justice  
The American University  
Washington, D.C. 20016

Stevens H. Clarke  
Assistant Professor of Public Law  
and Government  
Institute of Government  
University of North Carolina  
Chapel Hill, North Carolina 27514

Steven J. Madson  
Director  
Court Management Project  
Bar Association of Greater Cleveland  
1044 Terminal Tower  
Cleveland, Ohio 44115

May 18-19, 1973

Criminal Courts Technical  
Assistance Project  
2139 Wisconsin Avenue, N.W.  
Washington, D.C. 20007  
202/338-7600

This report was prepared in conjunction with the Institute's Criminal Courts Technical Assistance Project, under a contract with the Law Enforcement Assistance Administration of the U.S. Department of Justice.

Organizations undertaking such projects under Federal Government sponsorship are encouraged to express their own judgement freely. Therefore, points of view or opinions stated in this report do not necessarily represent the official position of the Department of Justice. The contractor is solely responsible for the factual accuracy of all material presented in this publication.

The views expressed are those of the authors of the report and not the organizations where they are currently located.

## TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION . . . . .	1
II. BACKGROUND RELATING TO DEVELOPMENT OF CRIMINAL JUSTICE INFORMATION SYSTEM . . . . .	4
III. SUMMARY OF RECOMMENDATIONS . . . . .	7
IV. A DETAILED REVIEW OF RECOMMENDATIONS . . . . .	8
A. Develop Court System Advisory Board. . . . .	8
B. Create Position of Court Systems Analyst Immediately . . . . .	9
C. Define Scope of Information System . . . . .	11
D. Design One Basic Information System to Serve All Criminal Justice Agencies . . . . .	13
V. SUMMARY . . . . .	21

## APPENDICES

A. Felony and Misdemeanor Case Information . . . . .	23
B. Case Reports . . . . .	25
C. Sample Data Elements . . . . .	27

## I. INTRODUCTION

This report documents the second phase of technical assistance provided to officials of the Roanoke City, Virginia Hustings Court and surrounding jurisdictions through the resources of the Criminal Courts Technical Assistance Project at American University. The purpose of this assistance has been to aid local judicial officials in setting boundaries and data elements for the new felony information system which was recommended during the first phase of assistance and approved with a grant of \$55,000 by the State of Virginia Division of Justice and Crime Prevention to the Roanoke Courts. This second phase of assistance, the initial system design, is a logical outgrowth of the first.

The members of this second technical assistance team were David J. Saari, Director of the Center for the Administration of Justice at American University, Stevens H. Clarke, of the Institute of Government at the University of North Carolina and Steven J. Madson, Director of the Cleveland, Ohio Court Management Project. The team met with local officials in Roanoke City May 18 and 19 to study current information system problems, examine documents in criminal justice agencies, explore the statistical data available on operations and discuss at length problems involved with developing a complex information system within the criminal justice system.

In addition to discussing the system development for Roanoke, the technical assistance team provided insight into the experiences of other jurisdictions. For example, Mr. Madson provided materials including reports, forms and studies connected with the development of criminal

and civil information systems in the Cleveland, Ohio courts for both batch and on-line operations. Similarly, Mr. Clarke and Mr. Saari provided both materials and insight into the growing body of knowledge and experience in the field of information system development in the criminal justice area.

Among those present at these meetings were the following officials:

Honorable Stanford Fellers	Judge, Court of Law and Chancery Roanoke City
Honorable Ernest Ballou	Judge, Husting Court Roanoke City
Mr. Robert F. Rider	Commonwealth Attorney Roanoke City
Mr. Robert R. Osborne	Chief Assistant Commonwealth Attorney Roanoke City
Major David Hooper	Police Superintendent Roanoke City
Mr. Bobbie B. Andrews	Clerk, Municipal and Juvenile and Domestic Relations Courts Salem
Ms. Mary Ann Carroll	Deputy Clerk of Court Salem
Mr. Walker R. Carter Jr.	Clerk of Courts Roanoke City
Lieutenant Mike Cavanaugh	Sheriff's Office Roanoke County
Mr. Howard Douglas	Criminal Justice Planner Fifth Planning District Commission
Ms. Agnes C. Estes	Clerk, Juvenile and Domestic Relations Court Roanoke City
Mr. A. N. Gibson	City Auditor Roanoke City

Mr. W. Richard Lavinder

Assistant City Auditor  
Roanoke City

Ms. Patricia Testerman

Chief Deputy Clerk of Courts  
Roanoke City

Mr. Ruth A. Forde

Deputy Clerk  
Roanoke County Court (Richmond)

Mr. Edward L. Walters

Clerk, Municipal Court  
Roanoke

Ms. Sharon Siders

Court Systems Officer  
Division of Justice and Crime Prevention  
Richmond

Ms. Patricia Storino

Systems Analyst  
Division of Justice and Crime Prevention  
Richmond



II. BACKGROUND RELATING TO DEVELOPMENT OF CRIMINAL  
JUSTICE INFORMATION SYSTEM

Statewide judicial reforms will take effect July 1, 1973.<sup>1</sup> In Roanoke Valley these reforms will mean court consolidation along the following lines:

A. Circuit Court--23rd Judicial Circuit

The Circuit Court will be headed by The Honorable Stanford L. Fellers. He will be joined by Judge Ernest Ballou, Judge Thomas S. Fox and Judge Fred L. Hobach.

B. District Court--General Jurisdiction

The District Court of General Jurisdiction will be headed by Judge Beverly T. Fitzpatrick. He will be joined by Judges James Brice, George Dillard, James I. Mayer and one additional judge to be appointed.

C. District Court--Juvenile and Domestic Relations

The District Court for Juvenile and Domestic Relations cases will be headed by Judge Lawrence L. Koontz. He will be joined by a second judge to be appointed.

The new information system for Roanoke is intended to serve the management information needs in the Circuit Court of the 23rd Judicial Circuit and in the District Court of the 23rd Judicial District.<sup>2</sup>

This proposed information system will facilitate the solution of many managerial problems as well as communication of essential information to judges and others in the criminal justice system. Moreover, the technology utilized in developing the information system in the criminal area can be employed at a later date for civil cases in both the District and Circuit Courts.

<sup>1</sup>The Roanoke Times, May 20, 1973, p. C-2 and Chapters 544, 545, 546 and 1584 of the 1973 Session Laws of the Virginia State Assembly.

<sup>2</sup>The State of Virginia is currently considering the development of separate information systems for juvenile cases.

II. BACKGROUND RELATING TO DEVELOPMENT OF CRIMINAL  
JUSTICE INFORMATION SYSTEM

Statewide judicial reforms will take effect July 1, 1973.<sup>1</sup> In Roanoke Valley these reforms will mean court consolidation along the following lines:

A. Circuit Court--23rd Judicial Circuit

The Circuit Court will be headed by The Honorable Stanford L. Fellers. He will be joined by Judge Ernest Ballou, Judge Thomas S. Fox and Judge Fred L. Hobach.

B. District Court--General Jurisdiction

The District Court of General Jurisdiction will be headed by Judge Beverly T. Fitzpatrick. He will be joined by Judges James Brice, George Dillard, James I. Mayer and one additional judge to be appointed.

C. District Court--Juvenile and Domestic Relations

The District Court for Juvenile and Domestic Relations cases will be headed by Judge Lawrence L. Koontz. He will be joined by a second judge to be appointed.

The new information system for Roanoke is intended to serve the management information needs in the Circuit Court of the 23rd Judicial Circuit and in the District Court of the 23rd Judicial District.<sup>2</sup>

This proposed information system will facilitate the solution of many managerial problems as well as communication of essential information to judges and others in the criminal justice system. Moreover, the technology utilized in developing the information system in the criminal area can be employed at a later date for civil cases in both the District and Circuit Courts.

<sup>1</sup>The Roanoke Times, May 20, 1973, p. C-2 and Chapters 544, 545, 546 and 1584 of the 1973 Session Laws of the Virginia State Assembly.

<sup>2</sup>The State of Virginia is currently considering the development of separate information systems for juvenile cases.



Among the specific problems discussed during the two-day conference for which an automated criminal information system will provide assistance are:

1. The need for current detailed information to monitor bail activities, case processing and attorney schedules.

2. The preparation of complex reports, extensive indexing and maintenance of filing systems required of court clerks. Felony counts in the Hastings court rose from 538 in 1971 to 770 in 1972--about a 40% rise. A backlog of unresolved felony counts exists--218 pending at the end of December, 1972 compared with 86 pending at the end of January 1971. Felony dispositions increased from 500 in 1971 to 687 in 1972. In the municipal court drunken driving cases have risen 80% from 230 in 1971 to 418 in 1972. Traffic cases (excluding parking) rose from 7,072 in 1970 to 11,401 in 1972--more than a 60% rise. Misdemeanors, excluding alcoholic cases, rose from 4,829 to 7,613 in the period 1970-72--a rise of over 55%. These statistics illustrate that the courts are handling case volumes far beyond those of 1970 although court resources have not increased accordingly. The proposed criminal justice information system will greatly alleviate this problem by providing improved and timely management information. See Appendix C for suggested data element.

3. Expediting the process of indexing warrants and summons. The possibility was examined of automating, by itself, the process of indexing warrants and summons from the municipal court which are filed in the clerk's office of the circuit court. This entire process handles the recording of 2,250 to 3,000 warrants and summons a month. In the period January 1969 to February 1973 there were 58,000 such filings. Each document requires a manual sequencing by defendant's name, stamp of receipt, placement of index page number,

sequencing into numerical page order, typing onto master index books, and finally, folding and filing. The data typed is (1) date tried, (2) full name, (3) city or commonwealth case, (4) date received and (5) index number. This process consumes at least three weeks of one clerk's time.

It was decided during the meetings that this operation should be studied further with the objective of including the entire indexing process in the new criminal justice information system. Most, if not all, the data required could be captured at the post-arrest and lower court stage in machine-readable form. The indexing process could thus become a regular by-product of the information system once the system becomes operational.

The recommendations provided in this report are a response to the observations of the technical advisory assistance panel regarding criminal justice operations in Roanoke. In addition, these recommendations suggest a variety of issues in systems development and organization which should provide an initial overview of what a new automated criminal justice could look like.

It should be noted, however, that these recommendations and the proposed information system will not alleviate all current problems confronting Roanoke justice officials and continued efforts will be necessary to improve screening of criminal warrants, improve the timing of service of process--particularly witness subpoenas--develop more control of case scheduling practices and decrease the high turnover rate among commonwealth attorneys. Hopefully the benefits derived from the proposed information system will enable Roanoke Officials to concentrate on these other areas.

### III. SUMMARY OF RECOMMENDATIONS

A. RECOMMENDATION 1: Develop Court System Advisory Board

A court system review board should be created in the 23rd Judicial Circuit to assist in developing the criminal justice information system.

B. RECOMMENDATION 2: Create Position of Court System Analyst Immediately

The courts of the 23rd Circuit should request immediately that the City of Roanoke create and fund a new court staff position entitled court systems analyst.

C. RECOMMENDATION 3: Define Scope of Information System

The courts of the 23rd Circuit, in cooperation with the court system advisory board, should determine the general scope of the new criminal justice information system and, in particular, decide as soon as possible whether to include or exclude traffic cases from the criminal justice information system.

D. RECOMMENDATION 4: Design One Information System to Serve All Criminal Justice Agencies

The courts of the 23rd Circuit, in cooperation with other agencies and the court system advisory board, should develop one multi-purpose basic criminal justice information system serving all criminal justice agencies. This system should take into consideration the design elements suggested in this report.

#### IV. A DETAILED REVIEW OF RECOMMENDATIONS

##### A. RECOMMENDATION 1: Develop Court System Advisory Board

A COURT SYSTEM ADVISORY BOARD SHOULD BE CREATED IN THE 23RD JUDICIAL CIRCUIT TO ASSIST IN DEVELOPING THE CRIMINAL JUSTICE INFORMATION SYSTEM.

The court system advisory board should be created in the 23rd judicial circuit to guide the development of the criminal court information system and monitor its eventual operation.<sup>1</sup> The board should consist of judges representing the two courts<sup>2</sup> in Roanoke County, the clerks of both courts, representatives of the four law enforcement agencies (Roanoke City Police, Roanoke County Sheriff's Department, Salem Police, and the state police), as well as the commonwealth attorney's office. The function of the advisory board should be to advise the project director regarding information needs throughout the 23rd circuit and to assist him in obtaining the cooperation of all who must provide information to the system. The board should be requested to review and approve the final design of the information system. In addition, at the invitation of the project director it should meet periodically to review progress in system design, and to review the effectiveness of the system once the system is in operation.

In carrying out the design, implementation, and operation of the criminal court information system a full-time court systems analyst should work

---

<sup>1</sup> It is assumed that the director of the information system project will continue to be Judge Ernest Ballou.

<sup>2</sup> After July 1, 1973, these will be the circuit court of the 23rd circuit and the district court of the 23rd district.

under the supervision of the project director. The service of the data processing unit of the City of Roanoke should be made available for processing (but not collection) of all input information, indexes, and other outputs. The courts should be responsible for collecting, reformatting, coding, and keypunching and verification of all data.

B. RECOMMENDATION 2: Create Position of Court Systems Analyst Immediately

THE COURTS OF THE 23RD CIRCUIT SHOULD REQUEST IMMEDIATELY THE CITY OF ROANOKE TO CREATE AND FUND A NEW COURT STAFF POSITION ENTITLED COURT SYSTEMS ANALYST.

The courts of the 23rd circuit should request immediately that the City of Roanoke create and fund a new court position entitled court systems analyst. The court systems analyst should be appointed by and report directly to the Judge of the new Circuit Court serving as director of the criminal justice information system project.

Discussions with Roanoke officials indicated that a competent person knowledgeable in computer programming systems analysis and data processing should be immediately employed by the courts to begin the overall systems planning. One of his first tasks should be to acquire a thorough familiarity with the practical needs of the various proposed users of the new criminal justice information system in Roanoke City, Roanoke County and the City of Salem. There exists a potential for funding such a position in Roanoke City if a request is made promptly to the City Council. It is believed that a salary range for such a position would be approximately \$11,000 to \$13,000 a year.







system for the very high volume traffic cases was noted. There were 50,629 traffic cases in the City of Roanoke alone. Of these, 418 were drunken driving cases, 38,868 were parking tickets and 11,401 were other traffic cases. There has been an 80% growth since 1970 in drunken driving cases and a 60% rise in other traffic cases from 7,077 in 1970 to 11,401 in 1972. In 1972, \$688,559 were collected in receipts.

The criminal justice information system planning and design should include a thorough review of information needs relating to the processing of traffic cases. Based upon such a review, a decision should be made whether and to what extent to include traffic cases in the new criminal justice information system. This is the most opportune time to make such a decision and, if proper staff work is done, a decision can be made soon. The study team observed strong positive court staff reaction to the idea of including traffic cases in the planning, design and implementation of the new information system.

However, the inclusion of traffic cases involves a complication. The State of Virginia LEAA grant to Roanoke City to develop a criminal justice information system is governed by state policy barring the use of LEAA block grant funds for traffic court purposes. However, the study team members believe that it is important to take a total view of the court needs to build an intelligent information system. In many court systems, in Virginia and elsewhere, traffic case processing is the first function to be automated. Therefore, it is reasonable to expect growing pressure to include traffic in the court information system in Roanoke. It seems wise to anticipate such inclusion at least in the design, if not the operation, of the information system. An additional consideration is the possibility

of obtaining a federal highway safety grant to support the inclusion of traffic cases in the new information system.

D . RECOMMENDATION 4: Design One Basic Information System to Serve All Criminal Justice Agencies

THE COURTS OF THE 23RD CIRCUIT IN COOPERATION WITH OTHER AGENCIES AND THE COURT SYSTEM ADVISORY BOARD SHOULD DEVELOP ONE MULTI-PURPOSE BASIC CRIMINAL JUSTICE INFORMATION SYSTEM SERVING ALL CRIMINAL JUSTICE AGENCIES. THIS SYSTEM SHOULD TAKE INTO CONSIDERATION THE DESIGN ELEMENTS SUGGESTED IN THIS REPORT.

The design of a data processing system which will meet the operational and management needs of a court is a complex time-consuming task. Many factors must be considered before the system is designed and implemented. The case processing and paper flow systems of the court must be thoroughly described, documented, and understood by technical personnel. The court's jurisdictional and structural characteristics will also affect the methods utilized for collecting, storing, processing, and reporting information from the computer system.

A general description computerized criminal justice information system suitable for the 23rd Judicial Circuit is provided on page 16 of this report. This basic system description is intended to familiarize the reader with an idea of how the system will function. Considerable work on the part of judges, clerks, and other judicial personnel will be required before the minute characteristics of the system can be finalized.

The design of the basic system must take into account the need for providing data on misdemeanor and felony cases and should anticipate data needs relating to traffic cases. It must also consider the effect of having three different court locations and six different clerks of court engaged in the system. Because of the logistical problems created by having court functions in three different buildings it may be necessary to adopt a phased approach in the implementation of the system. Thus, it may be desirable to have the systems tested and debugged in the Roanoke City Circuit and District Courts prior to implementation in Salem or Roanoke County. Without a doubt, however, the system should be designed to accommodate all three locations and both levels of courts. This approach insures close coordination among the courts and other units. It also greatly reduces the redundancy of present data collected to serve the indexing and docketing needs of the District and Circuit Courts.

A concept basic to the development of all information systems is "enter once," wherever possible, repetitive data collection steps should be eliminated. In actual implementation this means that the data collected in the lower courts should be utilized by the higher court for cases that come to it of collecting the same data again.<sup>3</sup> This concept also implies that all justice agencies, i.e., police prosecutors, sheriff, etc., would have access to and utilize a single set of data instead of developing their own special record indexes and case listings. This is not to say that each agency does not have its own unique record and data needs. On the contrary, each agency can continue to gather its own unique data but will also be able to benefit from access to a shared set of data.

---

<sup>3</sup>It should be noted that the "higher court" handles misdemeanors as well as felonies.

Another assumption implicit in the design of this basic system is the interrelationship between a court's manual records system, the production of paper work, and the development of management and statistical information. To the greatest extent possible management and statistical information should be the normal by-product of a computer system which assists the courts in daily record keeping and paperwork. The same data that is recorded and computerized for indexes and dockets can also be sorted and organized to provide the court with information on case loads, pending cases, and periodic statistical reports.

The present level of familiarity of court personnel with computer technology and the present capabilities of computer equipment dictate, to a certain extent, the characteristics of the computer system. Any prospective computer user is advised to "walk before he runs" when considering the implementation of a system. The courts are no exception. The present data processing equipment of the City of Roanoke data processing unit is capable of adequately handling a batch process system<sup>4</sup> that would provide for periodic data collection, updating, and report generation. A batch process system permits maximum control over the reliability, accuracy, and completeness of data placed into the system by court personnel. After some experience with a batch process system, the courts may wish to consider the feasibility of utilizing more advanced on-line computer input and inquiry equipment

---

<sup>4</sup> A "batch process system" is one in which units of input data are saved for a day, a week, or some other period of time, and fed to the computer periodically in a "batch." The resulting output will then reflect activity during the particular batching period. This is to be contrasted with an "on line" system in which data is entered directly into the computer's files and processed as soon as it is generated.

The following is a summary of suggested functions that the proposed information system should be expected to perform.

Collect, maintain, and report data on felonies, misdemeanors, and traffic cases.

Assist the clerk of court in performing his record keeping duties by providing computer generated.

1. Indexes, e.g., the index to warrants
2. Dockets
3. Accounts
4. Court room calendars
5. Data to the state criminal history file (CCRE)

Provide the court, commonwealth attorneys and other members of the system with management reports such as

1. Aged case listings
2. Judge, prosecutor, and attorney caseload reports
3. Prison reports and jail inventory
4. Defendant and case status reports
5. Case disposition reports

Assist the court by providing statistical reports such as

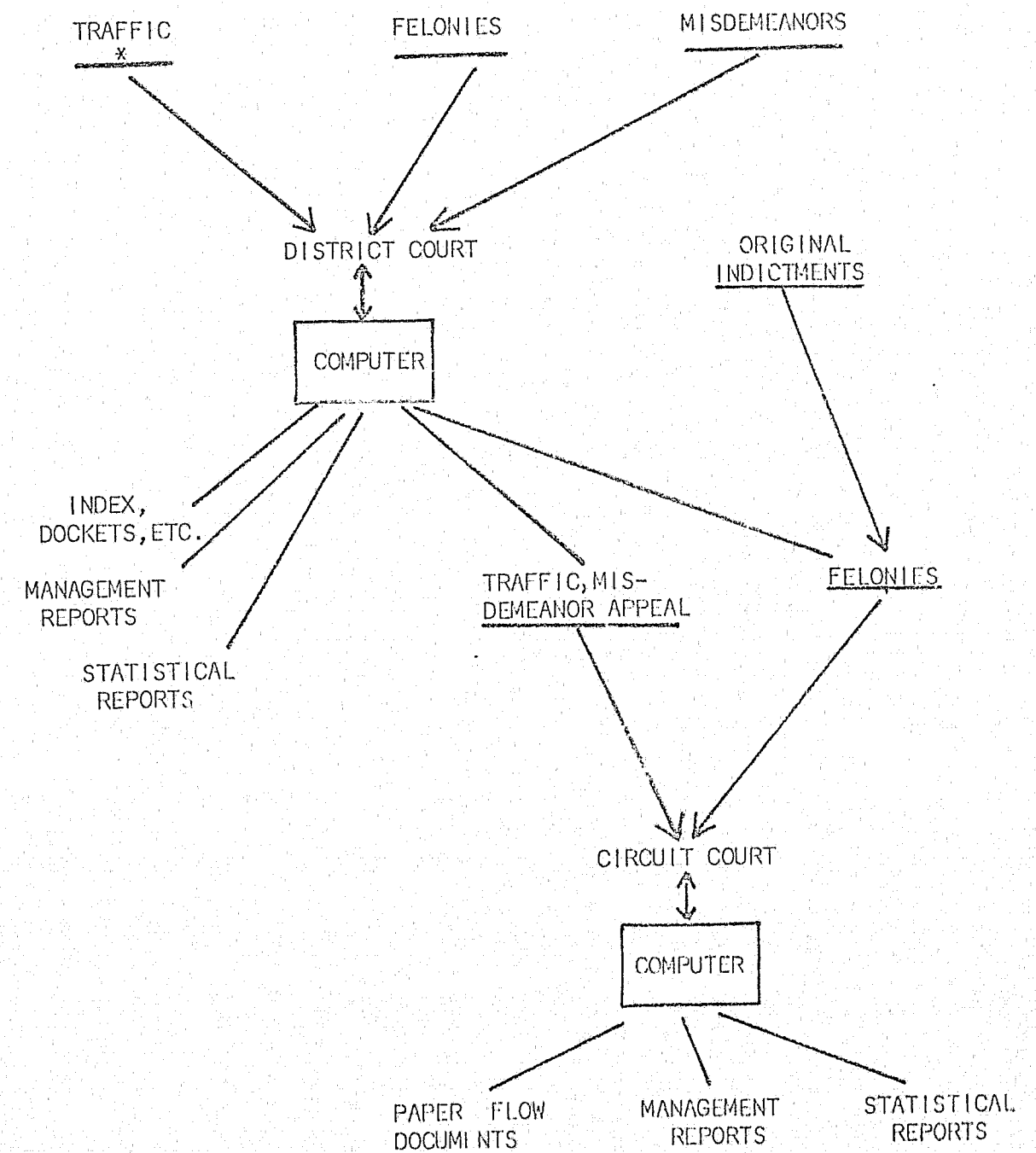
1. State traffic reports
2. FBI disposition reports
3. Monthly and annual court statistics to the Supreme Court

The frequency of reporting, reports' distribution, and the actual format and content of the reports will be determined during later stages of systems development.

The following chart provides a conceptual overview of the system.



CONCEPTUAL OVERVIEW OF THE SYSTEM



Prior to the production of any reports from a computer system it is necessary to define the data elements that the system will contain. Obviously, it is impossible to produce a report if the information has not been inputted into the computer in the first place.

Court personnel, working closely with computer system personnel, must decide what information the computer will store and process. The complexity of the task of defining data elements should not be underestimated. A delicate balance must be achieved between collecting all data related to a case and collecting only the information that is needed to satisfy the management and operational requirements of the court.

To meet the needs of the court the computer systems should contain information on people and cases, as illustrated below.

PEOPLE	CASES
Judges	Events
Commonwealth Attorney	Dates
Defense Attorneys	Categories
Defendants	Stages
Others (Police, Witnesses, etc.)	Costs/Fines/Fees

Various data element lists and codes will be needed to facilitate accurate and complete information. In the process of preparing data for the computer it is normally necessary to translate data elements into codes which can be understood by the computer. To aid this process, numerical codes are often substituted for standard words. Thus, a list of major events in a criminal case might appear as follows. (See Appendix C for a sample data element list.)

- 16 -

Arrest	01
Arraignment (D.C.)	02
Preliminary Hearing	03
Indictment	04
Arraignment (C.C.)	05
Pretrial	06
Trial	07
Pre-Sentencing	08
Sentencing	09

By using numbers instead of letters it is possible to compact more information into the same amount of space.<sup>5</sup> It is also easier for the computer to handle numbers. Of course normal practices dictate that the computer output should be translated back into words for user purposes. Just as it is possible manually to inaccurately record an event, it is also possible to inaccurately record codes. Great care must be exercised to insure that all parties recognize the importance of providing accurate, timely, and complete data. Additional plans should be made to provide for regular review of the data to correct errors and omissions.

The proper recording and encoding, for later keypunching and input into the computer, of events which occur in the criminal process, from arrest until final disposition, is perhaps the most difficult task in the entire information system. All information that is to be keypunched--information presently captured manually in a variety of formats by law enforcement personnel, clerks, judges, and prosecutors--must now be captured in a new, standardized way by these same persons. As painful as it may be, mastery of the new data

---

<sup>5</sup>Code lists also promote standardization and consistency in court record systems.

capture procedures will be absolutely essential to the success of the new system in producing accurate outputs. The history of the 1960s is littered with the ruins of information systems that failed because insufficient attention was paid to data capture. Therefore, any detailed design for a criminal justice information system should include training-realistically scheduled- of all data capture personnel, and also for "dry runs" and periods of parallel operation of the old and new systems until adequate proficiency in new data capture procedures can be assured.

Directly related to the problem of data collection is the problem of providing security for the information once it has been collected. The basic components of a security system for computerized data include physical security for computer equipment, data protection through the use of program controls such as passwords, and the employment of trustworthy personnel. Since most of the data in the system is a matter of public record, the output of the systems will not require major protection. However, it is necessary to protect data from unauthorized alteration, destruction, and use. Proper controls should also be instituted to protect data from destruction as the result of a natural disaster or computer failure. Adequate protection in this area can be provided by periodically generating duplicate listings of actual data and the computer programs. Providing adequate security and backup systems should be viewed as normal overhead for the system as such, provisions should be made to require periodic review of security and systems "backup."

V. SUMMARY

The foregoing sections of this report have outlined a number of recommendations which will greatly affect the effectiveness of the computerized information. Any change in a court system will result in a certain amount of turmoil. The recommendations regarding staff, project organization, and systems design have been developed to minimize the "growing pains" experienced in implementing any computer system.

APPENDICES



APPENDIX

A

FELONY AND MISDEMEANOR  
CASE INFORMATION

SOURCE OF INFORMATION: Walker R. Carter, Jr.  
Clerk of Court Office  
Hustings Court  
City of Roanoke

YEAR: 1971	FELONIES			MISDEMEANORS		
	Commenced	Concluded	Pending end of Month	Commenced	Concluded	Pending end of Month
Month:						
JANUARY	23	34	86	22	103	131
FEBRUARY	41	41	86	64	97	98
MARCH	50	57	79	92	73	117
APRIL	60	50	89	144	89	172
MAY	29	40	78	70	122	120
JUNE	35	30	83	92	95	117
JULY	31	33	81	93	77	133
AUGUST	35	11	105	86	57	162
SEPTEMBER	37	44	98	89	135	116
OCTOBER	111	24	185	67	107	76
NOVEMBER	45	83	147	43	54	65
DECEMBER	41	53	135	103	71	97
Total	538	500	135	1,065	1,080	97
YEAR: 1972						
Month:						
JANUARY	81	68	148	45	64	78
FEBRUARY	124	74	198	47	64	61
MARCH	62	68	192	95	61	95
APRIL	22	71	143	59	83	71
MAY	74	63	154	100	95	76
JUNE	58	62	150	84	91	69

APPENDIX

A

FELONY AND MISDEMEANOR  
CASE INFORMATION  
(cont'd.)

YEAR: 1972 (cont'd.)	FELONIES			MISDEMEANORS		
	Commenced	Concluded	Pending end of Month	Commenced	Concluded	Pending end of Month
JULY	25	78	97	52	59	62
AUGUST	68	1	164	68	4	126
SEPTEMBER	53	48	169	96	113	109
OCTOBER	45	43	171	53	77	85
NOVEMBER	86	40	217	41	50	76
DECEMBER	72	71	218	84	37	123
Total	770	687	218	824	798	123

APPENDIX B

MEMORANDUM TO: SECOND TECHNICAL ADVISORY ASSISTANCE PANEL

FROM: Edward L. Walters, Clerk  
Roanoke City Municipal Court

RE: Case Reports

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Total Traffic Cases	42,666	52,240	50,269
Regular Traffic	7,077	10,752	11,401
D.U.I.	230	331	418
Parking Tickets	35,589	41,488	38,868
Total Criminal Cases	8,795	10,193	11,711
General Misdemeanor	4,829	6,095	7,613
Alcoholics	3,966	4,098	4,098
Civil Cases	8,420	7,923	6,389
Commissions	184	182	171
 Total Receipts	 \$577,237.76	 \$633,889.16	 \$688,559.01
City Collections		331,498.88	366,512.72
State Collections		179,756.02	199,099.94

# THREE YEAR SUMMARY

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Total Traffic	42,666	52,240	50,269
Total Criminal	<u>8,795</u>	<u>10,193</u>	<u>11,711</u>
Total Cases	51,461	62,433	61,980

This is the anticipated volume for the criminal justice information system plus 550 to 850 felony cases.

# APPENDIX C

## SAMPLE DATA ELEMENTS

### Data Element Name

#### Record Type - Basic Case/Defendant Data

Record Type  
 Case/Defendant Number/Traffic, Felony, Misdemeanor  
 Defendant Name  
 Defendant Alias  
 Defendant Address  
 Defendant Local I.D. Number  
 Defendant IBI Number  
 Defendant Incident Number  
 Defendant FBI Number  
 Defendant Arrest Number  
 Defendant Social Security Number  
 Defendant Sex  
 Defendant Race  
 Defendant Date of Birth  
 Defendant Age  
 Defendant Place of Birth  
 Defendant Height  
 Defendant Weight  
 Defendant Eyes  
 Defendant Hair  
 Defendant Skin Tone  
 Defendant Glasses (Yes/No)  
 Defendant Marks, Scars, etc.  
 Where Defendant Employed  
 Defendant Occupation  
 Victim/Complainant Name  
 Victim/Complainant Address  
 Weapon of Defendant  
 Date of Incident  
 Date of Arrest  
 Arresting Officer Number  
 Bond Type  
 Bond Amount  
 Bond Set by Judge or Rule of Court  
 Date Bond Paid  
 Paid by Whom

Data Element Name (continued)

Bond Number  
Bond Envelope Number  
Cash Receipt Number  
Bond Amount Paid  
Date of Request of Bond Refund  
Exparte Issue Date  
Bond for Future Judgement Date  
Bond Forfeiture Notification Date  
Grand Jury Number  
Indictment Number  
Case Initiation Date (Misdemeanor or Information)  
Grand Jury Indictment Date  
Probable Case Finding Date  
Initial Court Date (Misdemeanor)  
Initial Hearing Date Grand Jury  
Arraignment Date  
Last Hearing Date  
Next Hearing Date Type (Continuance Date)  
Continuance Requesting Agencies (Reason for last 4 continuances)  
Misdemeanor Courtroom  
Felony Courtroom  
Misdemeanor Judge Number  
Number of Times in Misdemeanor Court  
Number of Times in Felony Court  
Trial Type (Bench, Jury, Bench/Guilty Plea)  
Asst. States Attorney Number  
Defense Attorney  
Court Sergeant to Handle Flag (Yes/No)  
Probation Officer Number  
Last Warrant Date  
Number of Warrants Issued  
Major Charge  
Release Notification Flag  
Warrant Flag  
Summons Flag  
Appeal Flag  
Motion Flag  
Demand ROF Trial Flag  
Closed Flag  
Subpoena  
Tier Number  
Case Disposition Date  
Case/Defendant Disposition, Guilty/Not Guilty  
Net Sentence  
Institution/Probation/Supervision  
Total Fine



1. The first part of the report is a general introduction to the subject of the study.

2. The second part of the report is a detailed description of the methods used in the study.

3. The third part of the report is a discussion of the results of the study.

4. The fourth part of the report is a conclusion of the study.

5. The fifth part of the report is a list of references.

6. The sixth part of the report is a list of appendices.

7. The seventh part of the report is a list of figures.

8. The eighth part of the report is a list of tables.

9. The ninth part of the report is a list of footnotes.

10. The tenth part of the report is a list of indexes.

11. The eleventh part of the report is a list of errata.

12. The twelfth part of the report is a list of acknowledgments.

13. The thirteenth part of the report is a list of dedications.

14. The fourteenth part of the report is a list of prefaces.

END

7. 10. 1944