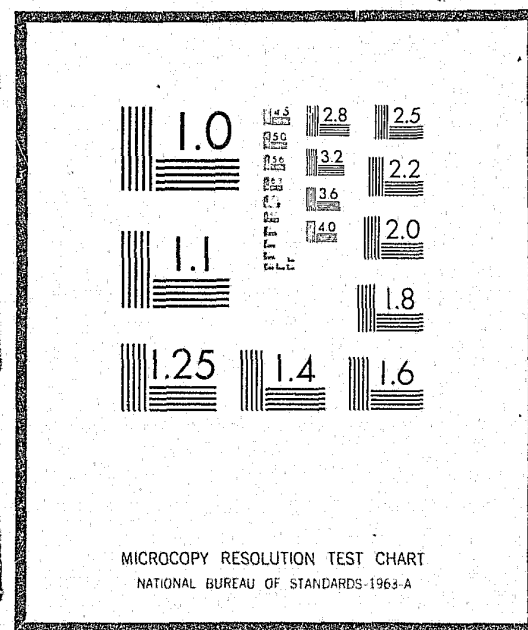


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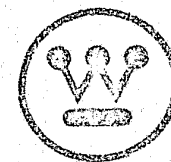
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Westinghouse Justice Institute

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Review of the Status  
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FOREWORD

The Oregon Law Enforcement Planning Executive Department requested technical assistance from Region X of LEAA to review the CRISS crime file from a data processing point of view and to set up a monitoring and evaluation system for the progress of grants for criminal justice information systems in Oregon.

In response, the Westinghouse Justice Institute, under the terms and conditions of Contract J-LEAA-016 72, assigned Paul S. Kraabel. This report contains the findings and recommendations resulting from his brief but intensive survey conducted between April 10, 1973, and May 15, 1973.

LEAPC

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## 1. INTRODUCTION

### 1.1 Background

CRISS, the Columbia Region Information Sharing System, is a computerized criminal justice information system serving the four-county metropolitan area around Portland, Oregon. It is one of two regional criminal justice systems in the state that interface with the statewide Oregon Law Enforcement Data System (LEDS).

Having started with police systems, the CRISS is now implementing a crime file application. Courts and corrections systems are planned.

A summary of CRISS activity is presented in Appendix A.

### 1.2 Intent of the Study

This study was undertaken to determine the reasons for the anticipated delay in the implementation of a computerized Crime File by the Columbia Region Information Sharing System (CRISS). Additionally, this report will present preliminary recommendations for a monitoring and evaluation system for the Oregon Law Enforcement Council which will assist them in the evaluation of the development of criminal justice information systems.

### 1.3 Approach

The approach of the consultant was basically to review the history of the CRISS project with the CRISS project director, analyze the system development process as it was applied to the Crime File Application, and review the system documentation and grant applications. The consultant also attended a meeting of the Criminal Justice Information System Master Plan Committee. Preliminary findings and recommendations were reviewed with Mr. E. Cooper and Norm Duncan of the Oregon Law Enforcement Council.

## 2. REPORT SUMMARY

The major results of the study are in three groupings, as follows.

### 2.1 CRISS Crime File Implementation Schedule Delay

The July 1973 date for the implementation of the CRISS Crime File was based on incomplete systems definition. Since the block grant application was prepared, the original design of the Crime File was expanded to meet user requirements; Uniform Crime Reporting and Resource Allocation were also included in the definition of the Crime File. The IMPACT grant application requests an increased level of expenditure to implement an expanded system in October 1973.

### 2.2 Monitoring and Evaluating the Development of the Crime File Subsystem

The development of evaluation criteria for a computer system is dependent on a comprehensive definition of what the system will do. Similarly, monitoring the system development process requires a definition of meaningful milestones, dates for the accomplishment of these milestones, and the responsible organization.

An examination of the Crime File system documentation revealed that the application objectives (what the system will do) was not defined, documented, and approved prior to the development of systems design and programming specifications.

### 2.3 OLEC Monitoring and Evaluation Requirements

OLEC should require a clear definition of what each system will do as early as possible in the Criminal Justice Information Systems development process. This document should be prepared together with a project plan prior to the start of programming and implementation activities.

### 3. MAJOR FINDINGS AND CONCLUSIONS

#### 3.1 Findings and Conclusions from the State Criminal Justice DP Master Plan Meeting and Meetings with OLEC

- 3.1.1 There are no statewide project management standards for the development of computerized criminal justice information systems. This omission serves to increase the DP communication problem between agencies.
- 3.1.2 A draft copy (3/20/73) of the state criminal justice EDP master plan calls for adherence to DP standards and assigns the responsibility to the systems managers. It also requires that each proposed project or subsystem shall meet standards of cost effectiveness through the utilization of a cost/benefit analysis. However, the draft plan does not define the management control requirements as they apply to the systems development process nor does it define what is meant by a cost/benefit analysis.
- 3.1.3 The three regional Criminal Justice Information Systems (CRISS, LEDS and AIRS) have compatible computers (370/155). However, at this time, systems software and operations standards are not compatible. Also, the methods for changing for services are not uniform.
- 3.1.4 The State Criminal Justice EDP Master Plan has the dual goal:
  - "(1) To provide a comprehensive master plan for the development of an integrated, statewide criminal justice information system that will assist the Criminal Justice agencies in Oregon to reduce crime and delinquency.
  - (2) To develop and maintain an integrated system for the collection, storage, retrieval and dissemination of information necessary to the effective and efficient functioning of the criminal justice agencies in the State of Oregon."

Attainment of these goals will require a disciplined, coordinated approach to the development and operation of computerized criminal justice information systems.

### 3.2 Findings and Conclusions Resulting from Meetings with CRISS and DPA Personnel

- 3.2.1 There was a widespread lack of confidence in the ability of CRISS project personnel to develop and implement a criminal justice information system on time and within costs. This attitude is shared by the users within the criminal justice community as well as OLEC and LEAA personnel.

The lack of performance has been attributed to poor planning and documentation, organizational changes, management changes, hardware and software changes, lack of user (local law enforcement) cooperation, and inadequate standards for system security.

- 3.2.2 The 1972 to 1973 LEAA block grant to the CRISS project indicated a July 1973 implementation date for the crime file application. The pending application for IMPACT funding calls for an increased level of expenditure and an implementation delay until October 1973.

- 3.2.3 The primary reason for the anticipated delay in the implementation of the CRISS Crime File is that the application was expanded in scope. Also, the 1972 to 1973 application for block grant funds was based on inadequate systems definition. The following activities took place after submission of the 1972 to 1973 block grant request:

- An expansion of the Crime File system to include Uniform Crime Reporting and Resource Allocation.
- The Resource Committee together with CRISS and DPA staff members spent a considerable amount of time redefining the standard reporting system. All the report forms were revised and are now being distributed to the police agencies.
- An address data base was included in the crime file, and grid maps were designed for each agency.
- The coding procedure for M.O. information was changed.
- Additional requirements were placed on the system by IMPACT evaluation requirements and the Computer-Aided Dispatch System.



3.2.4 Several significant and constructive changes have taken place within the CRISS/DPA organizations during the past year. These changes resulted primarily from the appointment of a new DPA Director in May 1972 and a new CRISS Director in July 1973.

- CRISS was established as an organization separate from DPA in July 1972.
- CRISS will become a separate appropriation unit under the City of Portland in July 1973. DPA will remain under County administrative control.
- The new DPA director established an extensive Performance Management System for the DPA that defines the responsibility of each DPA employee and provides for personnel performance evaluation.
- Installation of the 370/155 resulted in faster turnaround and improved diagnostics. This should result in a more efficient environment for testing and implementing systems.
- The DPA instituted system review sessions for each major system under development in order to coordinate planning prior to implementation and acceptance. Participating in these meetings were representatives from Computer Operations, Scheduling and Control, Software, Systems Support, and Planning.
- The computer center was changed from an "open shop" to a "closed shop" in order to increase operator efficiency and improve security.
- A CRISS training coordinator was appointed in September 1972.
- DPA developed a standard costing system which allowed CRISS to allocate charges to the using agencies.
- A resource committee, made up of members from CRISS, DPA and the local law enforcement agencies, proved to be an excellent vehicle to force definitions of the Crime File and encourage user participation.



- 3.2.5 CRISS project personnel are convinced that most of the problems are behind them and they can meet their present objective for the implementation of the Crime File by October 1973 with IMPACT funding.
- 3.2.6 An examination of the systems documentation revealed that what the system is designed to accomplish (application objectives) was not defined, documented, and approved prior to the development of systems design and programming specifications. In order to determine what the system is designed to accomplish, several different sources must be examined; these include: the Crime File Requirements Definition, Resource Meeting Notes, System Design Documentation, and Users Manuals. In other words, there is no specific Functional Requirement (application objective) documentation for the Crime File; consequently, a cost/benefit analysis can not be performed prior to the system design and programming effort. Also, meaningful evaluation criteria can not be developed prior to project completion.
- 3.2.7 Existing task descriptions for Crime File subsystem development are not defined in such a manner as to be easily understood by the using agencies or OLEC. The implementation milestones that are important to the users are not presented in the Requirements Definition.

#### 4. RECOMMENDATIONS

This section presents preliminary recommendations for a monitoring and evaluation system for the OLEC to assist them in the evaluation of criminal justice information systems.

4.1.1 Guidelines for the documentation of the Systems Requirements Specifications should be developed by OLEC. This document should include:

- Functional Requirements
- Performance Requirements.

4.1.2 A cost/benefit analysis should be the responsibility of the system manager. This analysis would be performed after the development of the Systems Requirement Specification and with the cooperation of the users and the Computer Center staff.

4.1.3 Following the cost/benefit analysis, a project plan should be developed and approved by the resource committee.

4.1.4 Changes to the Systems Requirements Specification or the project plan should require change control approval by the resource committee.

4.1.5 Specific responsibility for testing the functional and performance requirements as defined in the Systems Requirements Specifications should be assigned to the users.

4.1.6 The systems manager should be required to periodically report progress against the project plan to OLEC.

## APPENDIX A

### CRISS Activity

This section presents the background and status of CRISS. This information was taken from a planning document produced by the two regional criminal justice information systems in Oregon. The document is "CRISS/AIRS Master Plan"--a Joint Planning Effort of Columbia Region Information Sharing/Area Information System, dated October 1972.

#### A.1 CRISS Status--General

- A.1.1 The CRISS Project was originally implemented during the early months of 1970 through a Law Enforcement Assistance Administration planning grant awarded by the Columbia Region Association of Governments (District 2).
- A.1.2 During October of 1971, a contract was entered into between the Columbia Region Association of Governments and the City of Portland and Multnomah County for the development and implementation of CRISS.
- A.1.3 A Law Enforcement Policy Management Committee was formed, consisting of representatives from each county and municipal law enforcement agency. This committee formulated and adopted a constitution and bylaws to govern its activities.
- A.1.4 A Courts Policy Management Committee was formed, consisting of representatives from the Circuit Courts, District Courts, prosecutors' offices, corrections facilities, Clerks of the Courts offices, and an elective officer of the County government to represent the public. This committee formulated and adopted a constitution and bylaws to govern its activities.
- A.1.5 A Corrections Policy Management Committee was formed, consisting of members of adult and juvenile probation and parole offices and representatives from local corrections facilities. This committee formulated and adopted a constitution and bylaws to govern its activities.
- A.1.6 The consolidated City-County Data Processing Authority completed its move from the Water Services Building to remodeled quarters at 47th and East Burnside during April of 1972.
- A.1.7 Installation of an IMB 370/155 was completed following Data Processing Authority's move to the new quarters.

A.1.8 A standardized field reporting system has been adopted by the 34 participating police agencies. This system provides a completely unified method and procedure for the reporting by field officers of both criminal and noncriminal incidents. This system will be utilized to insure a high degree of system conformity and integrity by using the standardized report forms as source documents for input. Subsequent applications for the capture and use of the data will be designed around the data elements included in the report forms.

A.1.9 A Law Enforcement Resource Committee has been formed to assist in the design of future computer applications in the field of law enforcement. This small working committee will develop the technical aspects of the future programs and will make recommendations to its parent Law Enforcement Policy Management Committee. This smaller committee consists of personnel from the midmanagement level who are familiar with both operational and management problems within their organizations. Similar committees will be formed in the Courts and Corrections fields at the appropriate times.

A.1.10 Extensive studies by CRISS staff personnel of existing court records and record-keeping practices resulted in the introduction and passage of State Legislation to permit the application of Data Processing techniques and electronic methods to the storage and maintenance of court records.

## A.2 Project Management

A.2.1 The CRISS Project operates under a signed contract between Columbia Region Association of Governments and the City of Portland and Multnomah County.

A.2.2 The CRISS Executive Board consists of representatives from the City of Portland and Multnomah County together with the chairmen of the Policy Management Committees (Law Enforcement, Courts, and Correction). The members of this Board are charged by the City and the County with maintaining overall administrative control of the Project and insuring that the objectives listed in the contract are achieved.

A.2.3 The staff assigned to the CRISS Project consists of a Project Director, Law Enforcement Coordinator, Courts Coordinator, and Training Coordinator. The Project Director is responsible for the coordinated and efficient development of the project, the preparation of plans and budgets, the monitoring of project activities and expenditures, the reporting to appropriate

authorities of exceptions or alterations to plans or schedules, and the maintenance of efficient communications with other regional, state, and national systems. In the developmental work surrounding any application within the scope of the project, the Law Enforcement and Courts Coordinators are responsible for the liaison between their Policy Management Committees and the Data Processing Authority staff. They are specifically responsible for assisting in the requirements definition and systems design stage of each application in their field. The Training Coordinator is responsible for the production of training manuals and materials and for conducting classroom and on-site training for members of user agencies.

- A.2.4 Data Processing Authority personnel, such as analysts and programmers, are not directly employed by the CRISS Project. Data Processing Authority services are contracted for the performance and achievement of tasks or objectives established at the beginning of each fiscal year.

### A.3 Activities and Applications

- A.3.1 The CRISS system utilizes IBM 2740 keyboard-type terminals and GTE Ultronic cathode ray tubes and printers as inquiry and input devices.
- A.3.2 Thirty-one terminals are presently located in 15 police agencies and one District Court Clerk office.

Beaverton P.D.	Milwaukie P.D.
Clackamas County S.O.	Multnomah County S.O.
Clark County S.O.	Portland Police Bureau
Forest Grove P.D.	St. Helens P.D.
Gladstone P.D.	Vancouver P.D.
Gresham P.D.	Washington County S.O.
Hillsboro P.D.	West Linn P.D.
Lake Oswego P.D.	Multnomah County District Court

- A.3.3 A high-speed (2400 baud) line interfaces the CRISS System with the Oregon Law Enforcement Data System (LEDS), and permits CRISS users to access Department of Motor Vehicle and National Crime Information Center records, and the National Law Enforcement Teletype System (NLETS).
- A.3.4 The teleprocessing and communications network utilizes IBM 2701 and 2702 control devices and IBM's Telecommunications Access Method (TCAM) to control and power the network.

- A.3.5 Internal blocking has been established to restrict the distribution of confidential information exclusive to authorized terminals.
- A.3.6 A data capture program for the CRISS on-line name file was completed in March of 1972. This resulted in the capture of 48,000 identity records, all of which are supported by fingerprints.
- A.3.7 The record formats and access techniques for the name file have been established and approved by the Law Enforcement Policy Management Committee.
- A.3.8 The captured identity records are now on-line and available to users. Incident record maintenance programs (entry, modify, clear, cancel, etc.) are in the final testing stages. The Name File will be reloaded approximately November 1, 1972, and CRISS users will begin adding incident data at that time. Training of user personnel will begin on October 30.
- A.3.9 A conceptual design for a Courts Records Management System was completed and accepted by the Courts Policy Management Committee. This system design incorporates the following capabilities:
- An on-line Jail Booking System and Court Case Number assignment.
  - The Court Records Management System which will produce the calendars, notices, and statistical reports necessary for the efficient and proper operation of the courts.
    - First Appearance
    - Pre-Trial Calendars
    - Trial Calendars
    - Pre-Trial Notices
    - Trial Notices
    - Statistical Reporting
      - Number of Cases Filed
      - Analysis of Disposed Cases
      - Case Status Report (subjects in process)
- A.3.10 A Cash Accounting System for the District Courts has been successfully implemented and is currently in use.

A.3.11 A Subjects-In-Process Tracking System (interim), now being tested, will be operational soon after completion of minor modifications.

A.3.12 Preliminary design work and requirements definition has begun on:

- a. Crime File
- b. Uniform Crime Reporting
- c. The resource allocation portion of the Management Information System



END

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