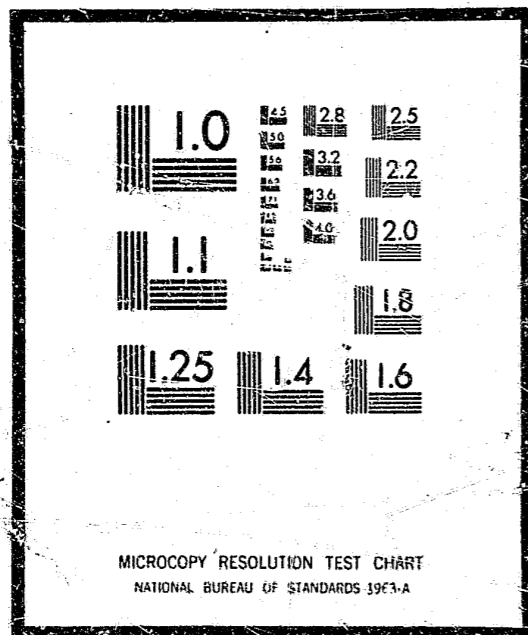


NCJRS

This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504

Points of view or opinions stated in this document are those of the author(s) 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

Date filmed

5/28/76

INFORMATION SYSTEM
REQUIREMENTS SPECIFICATION

LOS ANGELES REGIONAL CRIMINAL JUSTICE PLANNING BOARD

PREPARED BY:

LOS ANGELES REGIONAL
CRIMINAL JUSTICE PLANNING BOARD
304 S. BROADWAY, SUITE 210
LOS ANGELES, CALIFORNIA 90015

MOTT-MCDONALD ASSOCIATES, INC
2755 N. BUTLER ST.
ORANGE, CALIFORNIA 92665

OCJP PROJECT NO. 2144
PROJECT DIRECTOR: DONALD H. GRAHAM

"The preparation of these materials was financially aided through a Federal grant from the Law Enforcement Assistance Administration and the Office of Criminal Justice Planning under the Omnibus Crime Control and Safe Streets Act of 1968, as amended. The opinions, findings and conclusions in this publication are those of the author and are not necessarily those of the Law Enforcement Assistance Administration or the Office of Criminal Justice Planning."

"OCJP reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish and use these materials, and to authorize others to do so."

MARCH, 1975

ACKNOWLEDGEMENT

This document is one in a series of reports intended to assist managers and planners of Youth Service Programs in Los Angeles County. The material presented must be adapted to the local community by Program Managers and is not intended to provide specific answers to local problems. It may, however, be helpful in formulating and initiating management direction.

As Chairman of the Los Angeles Regional Criminal Justice Planning Board's advisory committee which was responsible for this product, I would like to express my appreciation for the advice and support provided to the project by its Interjurisdictional Steering Committee:

State of California

Department of the Youth Authority - Joseph Phelan
Robert L. Smith

Office of Criminal Justice Planning - William E. Wright, Ph.D.

County of Los Angeles

Chief Administrative Office - T. Julie Frederick, M.S.W.
Data Processing Department - Richard O. Doty
Department of Community Services - David Bisno
Department of Public Social Services - Gordon L. Todd
Probation Department - Raymond R. Johnson
Compton Area Juvenile Diversion Project - Regine Payne
Sheriff's Department - Lieutenant James I. Cook

City of Los Angeles

Los Angeles Police Department - Irene Gardner
Mayor's Office of Criminal Justice Planning - William J. Carey
Henry C. Marin
Mayor's Office, Youth Programs - Olivia Mitchell

In addition to the Steering Committee there were numerous individuals and agencies which contributed their time and energies to the success of this project. While it is impossible to name them all here, I would like to identify a few whose assistance was invaluable: George Smith, Marilyn Langford, and Tom Farnsworth of the Division of Technical Assistance and Consultation, Department of the Youth Authority, State of California; Ursula T. Mooz-Kolov and Frank Herzog of the National Council on Crime and Delinquency's Research Center; Elaine Duxbury, Marvin Bohnstedt, and the OCJP-funded "Evaluation of Juvenile Diversion Project" staff; and Dr. Malcom W. Klein, Chairman, Department of Sociology, University of Southern California.

The Regional Board is interested in your comments and in any suggestions you might have for the improvement of this document.

William P. Hoqoboom
Assistant Presiding Judge
Los Angeles Superior Court
and
Member, National Advisory
Committee for Juvenile Justice
and Delinquency Prevention

TABLE OF CONTENTS

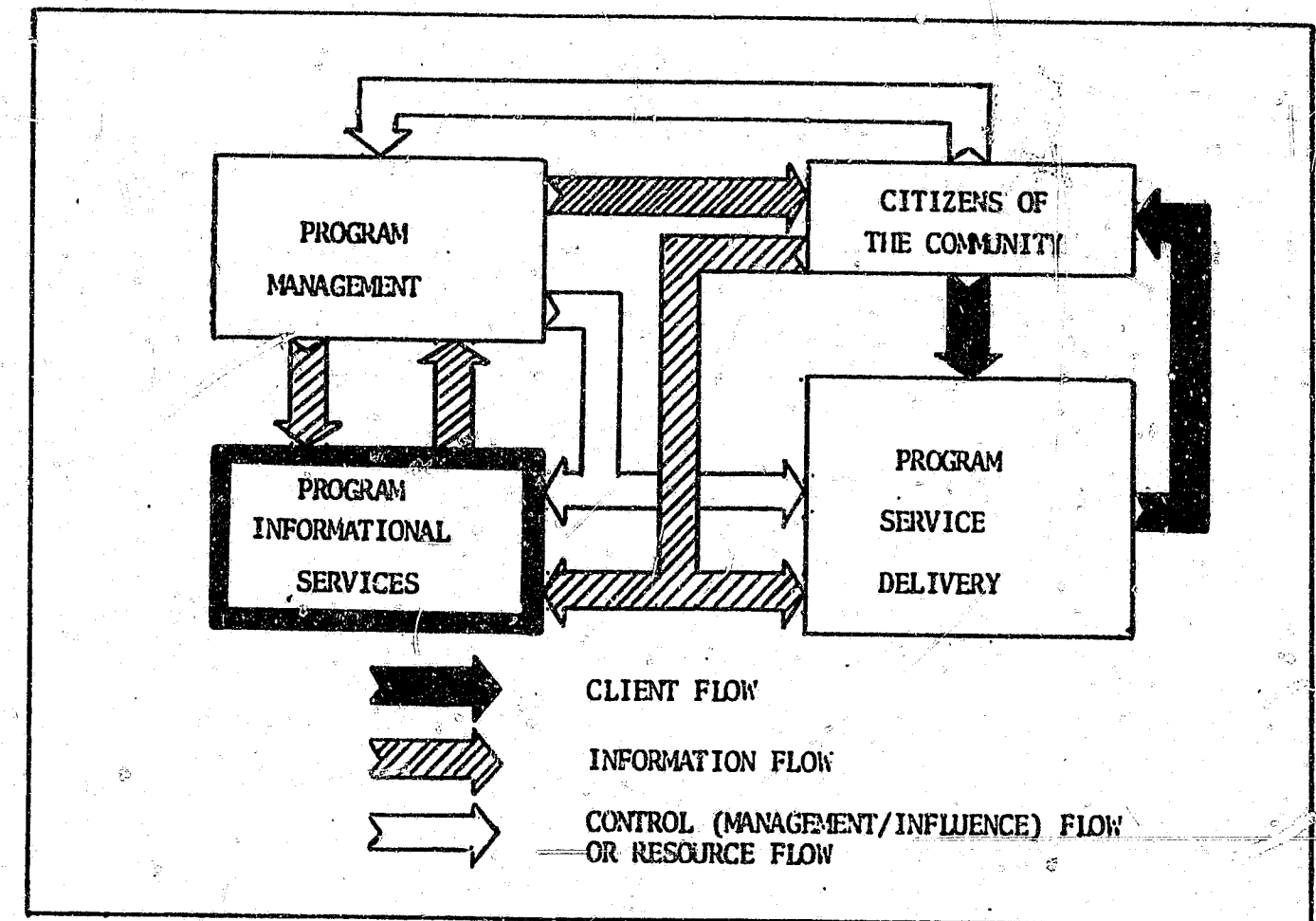
	<u>PAGE</u>
TITLE PAGE	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
FOREWORD	iv
I. INTRODUCTION	I-1
II. FUNCTIONAL REQUIREMENTS	II-1
2.1 Intake and Referral	II-1
2.2 Assessment and Classification	II-3
2.3 Case and Service Management	II-3
2.4 Program Management and Evaluation	II-4
2.5 Summary of Processing Specifications	II-5
III. INFORMATION REQUIREMENTS	III-1
3.1 Client Background Data	III-1
3.2 Client Intake Data	III-2
3.3 Client Assessment and Classification Data	III-3
3.4 Case Monitoring Data	III-4
3.5 Client Exit Data	III-4
IV. OPERATIONAL CHARACTERISTICS	IV-1
4.1 Data Transcription, Preparation, and Entry	IV-1
4.2 Data Processing	IV-6
4.3 Data Dissemination	IV-7
V. RESULTS OF SYSTEMS SURVEYED	V-1
5.1 Intake and Case Management Data Entry	V-3
5.2 Program Management - Level of Operations	V-5
5.3 Child Tracking Continuity	V-6
5.4 Data Elements	V-7
5.5 Report Flexibility	V-8
5.6 Report Timeliness	V-9
5.7 File Flexibility	V-10
5.8 Security and Information Confidentiality	V-11
5.9 Forms Input	V-13
5.10 Exception Monitoring	V-14
5.11 Verbal Data Input	V-16
VI. RECOMMENDATIONS	VI-1
APPENDIX A: Review of Systems Surveyed	A-1
APPENDIX B: Information System Requirements Specifications Supplement, March, 1975	B-1

The Los Angeles Regional Criminal Justice Planning Board Youth Program Planning manual defines six steps in the program planning process:

- Policy and Priority Formulation--the process of determining that a community has problems which must be solved, the general dimensions of those problems, the groups which might contribute to problem solution, the establishment of a preliminary program organization, and the preliminary formulation of objectives and priorities.
- Needs Assessment and Analysis--the process of determining in some detail what current community resource and organizational capabilities are, the full dimensions of problems, strategies available to combat problems, deciding upon appropriate strategies, formulating a preliminary program description, and obtaining community acceptance of proposed approaches.
- Program Design--the detailed definition of policy setting, program management, operational services, operational management information systems, and program evaluation guidelines, organizational roles and relationships, etc., of the "new" community youth program and obtaining concurrence of program participants.
- Program Development--the detailed proceduralization of an agreed-upon program design and tools.
- Program Implementation--initiation and continuing operation of the service delivery, program management, information, and evaluation elements of the youth service program according to the procedures established in the program development process.
- Program Evaluation--the process which determines whether all of the preceding processes attained desired results and, in general, what might be done to improve the program and processes. Did the preceding activities produce undesired or unanticipated results?

This current "Information System Requirements Specification" is the product of the third step of program planning--the Program Design step--for Los Angeles Regional juvenile diversion projects.

As discussed in the Youth Program Planning manual, a youth services system is composed of four major interrelated components as depicted in the illustration below.



In the "Information System Requirements Specification", the design criteria which must be met by a client case tracking and monitoring system--an element of the Program Informational Services component--are discussed in terms of functional design requirements, information content, and general operational characteristics. Various systems in use in youth-serving projects around the

United States are then compared to design criteria as a basis for selection of a system applicable to Los Angeles Regional project needs. Appendix B substantiates the final selection of a candidate system.

The reader is cautioned that the information system design process undertaken for the Diversion Planning and Evaluation System Project is atypical (though not unusual) in the sense that an existing system--forms, computer programs, procedures, etc.--was selected "off-the-shelf" for use in the Los Angeles Region. More typically, such systems are uniquely designed and developed for each new project in a design process which differs from that described in this document. Be that as it may, the design approach selected proved highly cost beneficial to Los Angeles Regional juvenile diversion efforts at a minimal level of sacrifice of desired information system functions.

1.0 REQUIREMENTS SPECIFICATION PURPOSE

The Information System Requirements Specification has been designed to serve a two-fold purpose: first, to present the juvenile Diversion Planning and Evaluation System Project (DPESP) team's findings concerning the functional, operational and informational requirements of a monitoring and case tracking system which will support diversion monitoring and evaluation activities; second, to record the results of the project team's analysis of the candidate systems selected on the basis of their potential to satisfy the diversion projects' needs.

The requirements and findings presented in this report are based on the information obtained from interviews with city, county and state project-related personnel, on the state-of-the-art survey conducted by the DPESP project staff, on the project team's analysis of the Project HEAVY organizational, operational and evaluative informational needs, on discussions with the staffs of diversion projects outside the Los Angeles area, on the experiences and knowledge of project team staff, and on the known operating constraints.

1.1 REPORT STRUCTURE

The material presented in this report has been organized in the following manner:

SECTION II- This section of the report outlines, conceptually, the functional requirements of the Case Data and Evaluation System.

SECTION III- This section of the report describes those data categories appropriate to a client's case record and suggests basic data elements which might be collected to support monitoring and evaluation activities.

SECTION IV- This section of the report compares system functions and information requirements discussed in Sections II and III to fundamental operating characteristics typical of automated information systems.

SECTION V This section of the report compares the capabilities of the surveyed case data and evaluation systems against a list of operational/functional system requirements which the DPESP project team felt were pertinent to project success.

SECTION VI- This section of the report provides the project team's recommendations concerning the selection of a prototype system to fulfill the diversion projects' information processing needs.

APPENDIX A- This section of the report acquaints the DPESP Steering Committee with the prominent systems in existence and presents the differing designs, concepts and philosophies with the hope that it will aid them in selecting a potential prototype for implementation.

SECTION II FUNCTIONAL REQUIREMENTS

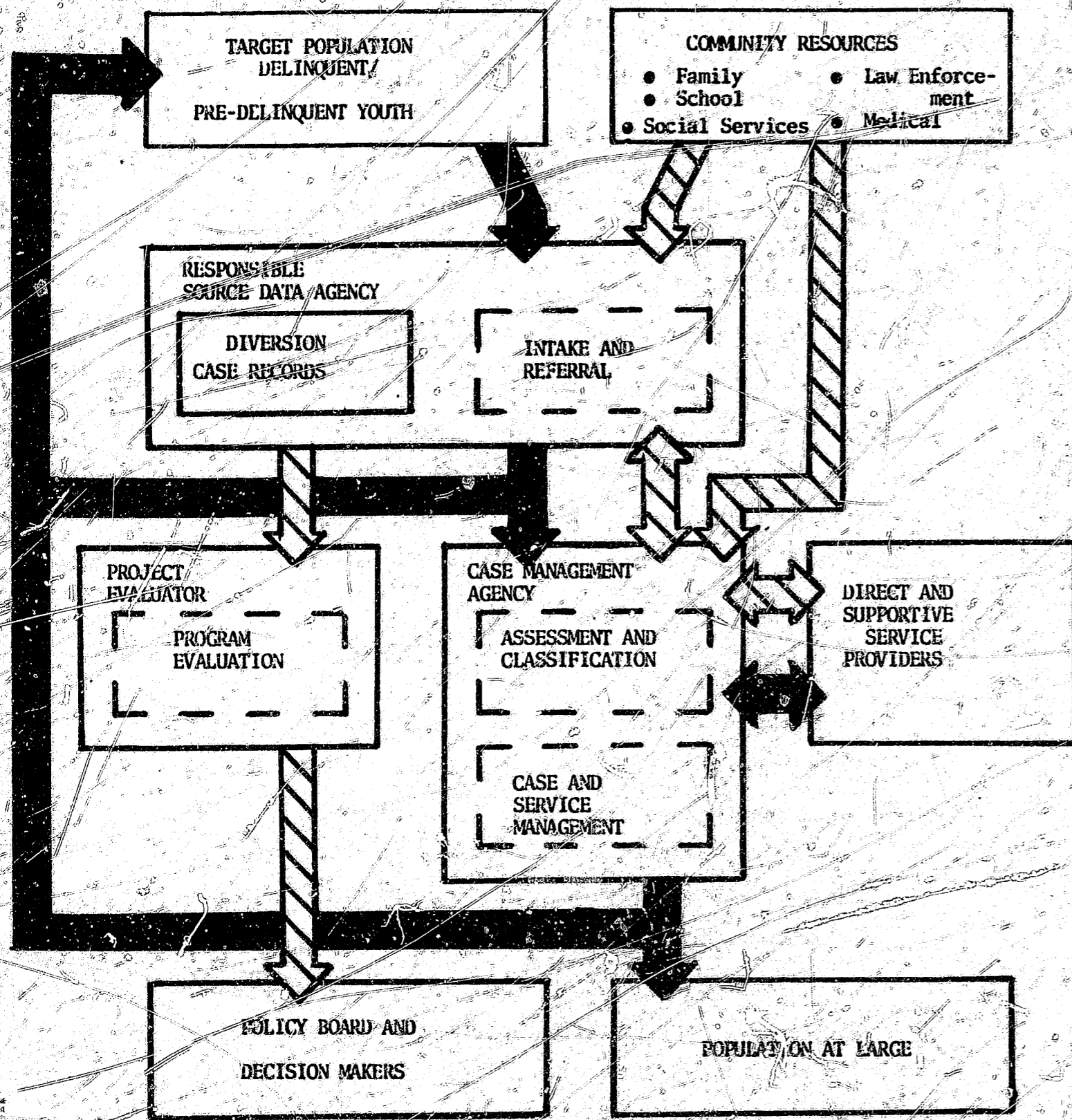
2.0 CASE DATA AND EVALUATION SYSTEM FUNCTIONS

An effective case data and evaluation system should support those functional activities depicted in the conceptual system flow chart (Figure 2.1) on the following page. This discussion focuses principally on system operational processes, as opposed to particular organizational environments in which a case data and evaluation system might be installed. Each of the identified functional components, i.e., Intake and Referral, Assessment and Classification, Case and Service Management, and Program Management and Evaluation, is discussed below in order to outline the scope of the system's functional requirements.

2.1 INTAKE AND REFERRAL

Intake is the process by which clients are accepted into the case data and evaluation system. Functions performed by this component are:

- To collect basic client background information including physical description, address, family and social circumstances, prior contact and previous dispositions;
- To collect basic administrative data including client contact source, reason for contact, contact date, alternate disposition to acceptance into project;
- To make intake disposition to accept or reject client into diversion project;



CASE DATA AND EVALUATION SYSTEM CONCEPT

FIGURE 2.1

DIVERSION CLIENT FLOW

CASE DATA AND EVALUATION INFORMATION FLOW

- To establish client routing for problem assessment and service plan development.

2.2 ASSESSMENT AND CLASSIFICATION

The Assessment and Classification process should begin when a service agency accepts a referral from the diversion project for case management services. Typical activities associated with this component are:

- Completion of client's medical, economic, educational, social, and criminal profiles, as required;
- Identification and assessment of client's prior, current, and on-going problems or barriers to social acceptability;
- Establishment of client's long term service goals and objectives;
- Establishment of specific service plan which addresses identified problem needs and includes estimated time of program enrollment and completion.

2.3 CASE AND SERVICE MANAGEMENT

Upon completion of the service plan, the client moves into the service phase of the case data and evaluation system. Major case and service management activities supported by this functional component are as follows:

- Management of the client's program activities which includes primary responsibility for service plan implementation and involves coordinating services for the client, providing

follow up, and monitoring progress;

- Direct services, such as: case monitoring, counseling, etc. provided by the case worker to the client which are not administrative in nature but rather are service activities;
- Direct service, such as: medical treatment, employment services, community-based home substitute services, enrichment programs, family planning, etc., provided by resource agencies authorized by the project's management and advisory staffs.

2.4 PROGRAM MANAGEMENT AND EVALUATION

The primary purpose of the Program Management and Evaluation component is to support measuring the effectiveness of the project in utilizing successful alternatives to initial or continued processing of juveniles into the justice system. To serve this management need, this component should draw upon the information captured during Intake, Referral, and Case Management and should aggregate the data to produce meaningful statistics and reports for program administration. In order to identify trends in client demographic characteristics, problem types and service delivery, these statistics should include information on:

- Client characteristics
- Client location and status
- Client goals and plans
- Services provided
- Outcomes

2.5 SUMMARY OF PROCESSING SPECIFICATIONS

An effective case data and evaluation system must be able to support the functional activities discussed above. The following specifications summarize by component the minimum information processing requirements identified in this section:

- Intake - The system must be able to perform internal file record clearances to determine current status (if any) of a potential diversion client;
 - The system must be able to create a basic client record consisting of client background and intake administrative data.
- Assessment - The system must be able to update basic client records with identified problem indicators, service plan requirements, and overall scheduling considerations.
- Case Management - The system must be able to accept changes in on-going problem and service status;
 - The system should monitor service delivery over time in terms of target review dates, expected service completion dates, and units of service provided;
 - The system should build client service history for both direct and supportive service activities;
 - The System should allow for inclusion of client closing data including termination reason, date, and exit prognosis.

● Program Management
and Evaluation

The system should be able to extract, summarize, and disseminate cross sectional and time series analyses from client history records using variable reporting formats and data extraction/aggregation criteria.

SECTION III
INFORMATION REQUIREMENTS

3.0 CASE DATA AND EVALUATION SYSTEM INFORMATION REQUIREMENTS

In order to support the case data and evaluation system functions described in Section 2.0, it is necessary to specify minimal data requirements which the system should process. Case data should reflect a client's pre-service history, current status and service plan, and case closing information. The following paragraphs describe data categories appropriate to a client's case record and suggest minimal data elements which might be collected.

3.1 CLIENT BACKGROUND DATA

Information sufficient to describe the client's physical characteristics and socio-economic background should include:

- Client's name
- Client's alias or also known as
- Client's current living address
- Client's date of birth
- Client's sex
- Client's race/ethnic group
- Client's living with status
- Client's in school/working/unemployed status
- Census tract of client's residence
- Client's religion
- Client's prior contact with system:
 - Agency
 - Reason
 - Disposition

- Client's medical profile:
 - Physical handicaps
 - Non-physical handicaps
 - Diagnosed by
 - Date of Diagnosis
- Client's educational profile:
 - Last grade level attained
 - Date of most recent enrollment
 - Relative achievement:
 - Academic evaluation
 - Sociological evaluation
 - Source of evaluation data
- Client's economic profile:
 - Relative income of family per unit time
 - Income of client per unit time
 - Job classification of head of family unit
 - Job classification of client
 - Client relationship to support of family unit

3.2 CLIENT INTAKE DATA

Information required to describe client admission into the diversion project and current acceptance for service would include:

- Identification of client contact or referral source to the diversion project
- Reason for client contact and referral including applicable sections of the penal code.

- Census tract of the offense or client contact
- Indicated alternate disposition to diversion by referral source
- Referral date (to diversion project)
- Client contact date for intake screening
- Intake disposition for client acceptance/rejection
- Intake disposition date
- Intake station identification
- Client routing:
 - Assessment - classification agency
 - Assessment completion date

3.3 CLIENT ASSESSMENT AND CLASSIFICATION DATA

Information required to describe the results of client assessment and service plan development would include the following data elements:

- Overall Goal (in terms of expected outcomes) of client involvement with diversion project service program.
- Identification of client's past, current, and on-going problems to which service activities may be addressed including cause and severity.
- Identification of service plan elements including:
 - Specification of different types of service provision
 - Identification of service provider by service type
 - Anticipated service initiation date for each service designated
 - Anticipated service completion date for each service designated
 - Relationship of services to be provided to each identified client problem

- Anticipated cost or other measure of units of service provision to be provided
- Estimated date of overall goal achievement

3.4 CASE MONITORING DATA

Data necessary for monitoring client program activities, which involves coordinating services, providing follow up, and reporting progress would include:

- Specification of problem status by level of severity such as to allow evaluation of service effectiveness over time
- Specification of service status for each service provided in terms of initiation, partial completion or termination condition
- Revised service completion dates (anticipated and actual)
- Method of service provision for each service provided (direct, purchased private, purchased contract)
- Mode of service provision (phone, letter, personal contact, etc.)
- Units of service expended to date for each service provided
- Effective date of current problem and service status
- Anticipated target review dates

3.5 CLIENT EXIT DATA

Information requirements sufficient to describe case record closure, client exit, and service termination circumstances would include:

- Status of identified problems at closure
- Status of services provided as of closure date
- Client termination date

- Client termination reason
- Status of overall client goal in terms of actual outcomes of client involvement with diversion project ~~service program~~
- Client exit prognosis
- Client discharge code (return to society, entered juvenile justice system, etc.)

SECTION IV
OPERATIONAL CHARACTERISTICS

4.0 CASE DATA AND EVALUATION SYSTEM OPERATIONAL CHARACTERISTICS

Case data and evaluation system requirements should include identification of desired operating characteristics which satisfy the needs of the diversion planning and evaluation system project. This section compares system functions and information requirements previously discussed to fundamental operating characteristics typical of automated information systems. It should be recognized that certain desired characteristics will be largely dependent on project organizational structure, funding resource availability, and various tactical and strategic decisions made during implementation of the program planning methodology. This discussion will focus on basic systems operations in order to provide a baseline from which system selection may proceed.

Figure 4.1 on the following page portrays five fundamental information system operations: data transcription, data preparation, data entry, data processing, and data dissemination. The following sub-sections discuss key aspects of these operations from the case data and evaluation requirement perspective.

4.1 DATA TRANSCRIPTION, PREPARATION, AND ENTRY

Data transcription may be considered the process of recording information in English and user jargon to be used for ongoing staff support and line functions within various organizational hierarchies. Since within any organization information is recorded for a multitude of diverse reasons,

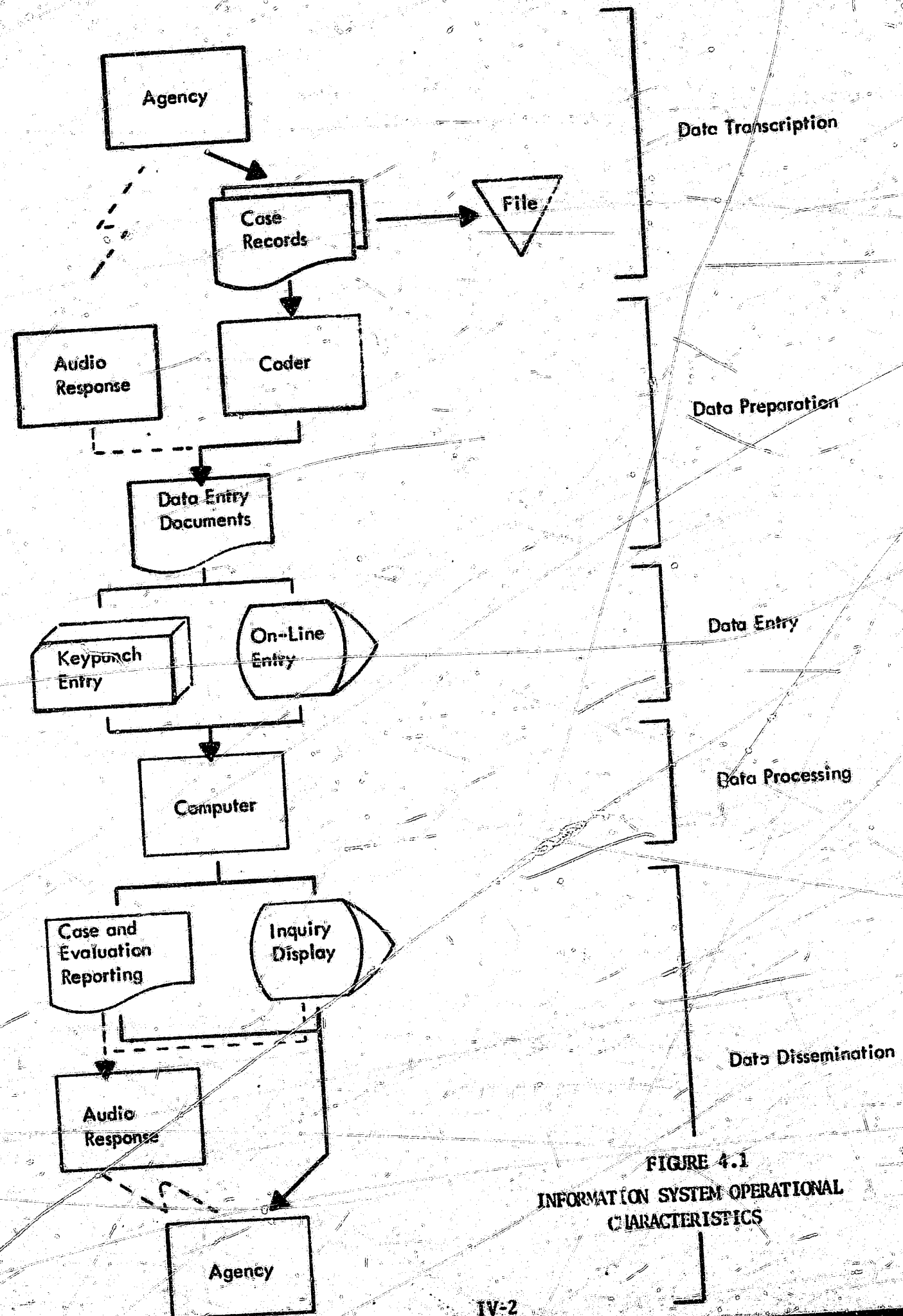


FIGURE 4.1
INFORMATION SYSTEM OPERATIONAL
CHARACTERISTICS

it is not typically data processing oriented but rather flows through normal channels of written communication. Case record data pertinent to the diversion project is in most instances already being recorded in various formats and degrees of content variability by potential case management agencies and other direct and supportive service providers.

The impact of these observations upon a proposed case data and evaluation system suggests three possible alternatives for collection of appropriate source data.

First, and perhaps least desirable from the diversion project point of view, would be an attempt to replace existing data collection documents with standardized diversion project forms and data collection procedures.

Activities associated with this approach would require:

- 1) Extensive field surveys to determine unique user agency requirements which would have to be incorporated in order to obtain effective utilization of new data collection instruments;
- 2) Negotiation among a host of diverse service agencies in order to agree on data element content, format and collection procedures;
- 3) Selection of a case data and evaluation system flexible enough to accommodate constantly changing user requirements with minimum cost for redesign and implementation.

Clearly, the level of effort required for this approach is beyond the scope of project objectives since the focus here is principally to

evaluate effect of diversion on the target youth population and service resources as opposed to managing the internal activities of human service agencies.

The second alternative for source data collection would be to define data elements and collection forms which satisfy diversion project needs but upon which data would be transcribed by case management and service provider agencies and forwarded to project staff for analysis. While a viable approach for data collection, the following drawbacks should be noted:

- 1) Participating human service agencies would be required to expend resources (in the form of clerical or case worker staff time) to process additional data collection forms which in many cases duplicate or are in addition to current operational practices;
- 2) It is conceivable that diversion project staff might experience delay (possibly unacceptable from a child-tracking perspective) in obtaining source data due to administrative, clerical, and mailing delays;
- 3) It is doubtful that data can be recorded in a sufficiently standardized manner using uniform coding structures and element definitions which would allow for a minimum of data misinterpretation and error correction on the part of diversion project staff.

The third alternative for data collection would be to establish a centralized source data facility responsible for collection of data at three key entry points of the case data and evaluation system:

- 1) Intake and Referral; 2) Assessment and Classification; and
- 3) Case and Service Management. By utilizing verbal data input (See Section 5.11) data could be collected, coded, and input utilizing standard procedures requiring minimal effort on the part of human service agencies.

4.2 DATA PROCESSING

Internal data processing operations are highly specialized, dependent on specific computer hardware used, and generally conform to operating standards of a particular data processing organization. Key issues pertinent to ultimate selection of a case data and evaluation system are outlined as follows:

- 1) It is understood that two week turnaround time is adequate to meet project data reporting requirements and that therefore the cost and overhead of an on-line installation is unnecessary.
- 2) The cost of on going computer operations for a batch installation should be something less than \$1500.00 per month.
- 3) Case data and evaluation system file size should be sufficient to support a target youth population of 10,000 cases.
- 4) Selected system should have been completely through system acceptance testing and in production operation for a period of at least several months.
- 5) Adequate operational and systems support documentation must exist in order to allow for efficient system transfer and on going program maintenance.
- 6) The system must be able to operate (preferably already is operating) on an IBM 370 running under QSMVT, and written in COBOL, PLI, or Fortran.

4.3 DATA DISSEMINATION

The case data and evaluation system reporting structure should satisfy three basic levels of information need:

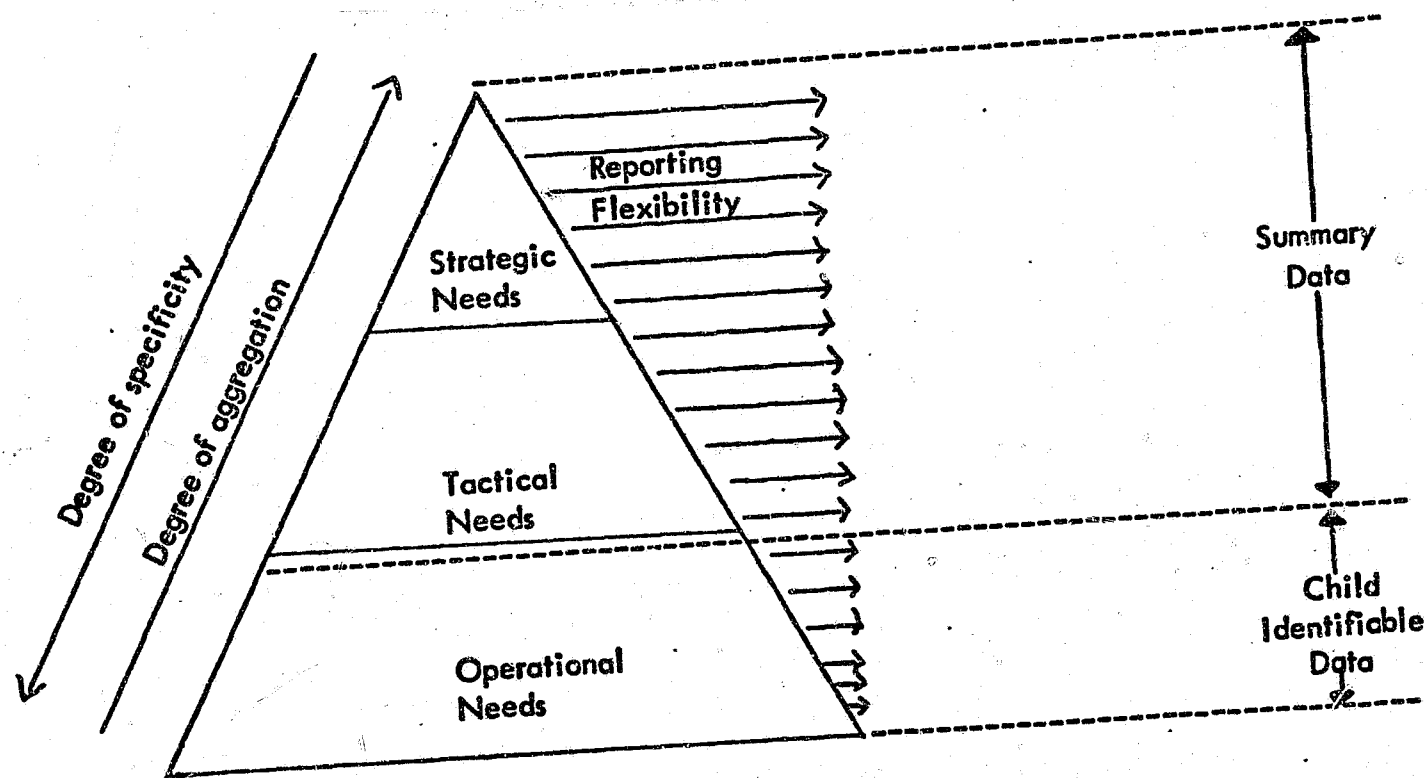
- Strategic (top administrative/management) needs
- Tactical (middle/line administrative/management) needs
- Operational (line worker/supervisor) needs

Figure 4.2 illustrates a typical hierarchy of user information needs. Referring to the diagram, strategic needs usually require the highest degree of reporting flexibility, using broad aggregative summary data for planning and decision making. Operational needs, at the other extreme of the organizational hierarchy, usually deal with very specific areas, using child identifiable data. Reports related to this area can generally be specifically defined to satisfy the information requirements of the users and therefore require a lesser degree of flexibility. Lastly, tactical needs fall directly between those of strategic and operational levels and transcend both levels, depending upon the current requirements of the user.

The organizational user level can be directly related to his domain of responsibility. Table 4.1 relates hierarchical information requirements to domain of responsibility. Examples of the types of information required at each user level is shown in table 4.2.

The majority of the information required at the strategic and tactical levels relate to the problems of management planning and control. The

Figure 4.2
HIERARCHY OF USER INFORMATION NEEDS



NOTE: In practice boundaries are fluid. Considerable overlap between levels is common.

Table 4.1

DOMAIN OF RESPONSIBILITY VS. INFORMATION REQUIREMENTS

Domain of Responsibility	Organizational Hierarchy		
	Strategic	Tactical	Operational
Federal	X		
Regional	X		
State	X	X	
County	X	X	
City	X	X	
Agency Group	X	X	
Agency		X	X
Worker			X

Table 4.2

ILLUSTRATIVE INFORMATION TYPE BY LEVEL OF NEED

Type of Information	Example
Strategic	Information for response to: <ul style="list-style-type: none"> - elected officials - legislature - federal agencies - local groups/media Information for Concept/Program Advocacy Information for Program Design/Development Information for Interagency Co-ordination
Tactical	Macro/Micro Analysis Program Evaluation Research Resource Allocation Interagency Information Exchange Agency/Individual Activity Assessment Forecasting and Trend Identification
Operational	Client Specific Information <ul style="list-style-type: none"> - who - when - why - where - what

administrative reports produced by the Program Management and Evaluation Component should be designed to support the managerial/administrative process by producing information which will aid in determining how effectively and efficiently resources are utilized to achieve the diversion project goals and objectives.

The reports generated at the operational level, on the other hand should be directed primarily to the problems of client logistics. The principle case data and evaluation system function supported at this level should be client monitoring via the case and service management component.

The following reports are suggested as a minimal guideline for supporting case data and evaluation system operations:

- Case and Service Management
 - Data collection turnaround document (for a batch system) or on-line data entry displays for creating and updating client case records
 - Caseworker caseload listing which reflects current status of each client on the service delivery system
 - Supervisor's caseworker activity report which reflects past, current, and ongoing case activity in terms of new client intake, assessment and service delivery status
 - Data entry exception report which advises clerical support staff of errors and omissions occurring during the data collection process

- Potential client duplicate report which identifies children who already exist within the system in order to avoid the creation of duplicate and fragmented information when a child reenters the service delivery system.
- Program Management and Evaluation
 - Analysis of services loading which should provide administrators with an analysis of service states and degrees of availability; across all services or by specific service codes, in order that deficiencies and over capacities can be identified.
 - Analysis of time flows between significant events which should allow the administrator to identify service delivery bottlenecks and to evaluate the times between significant events
 - Incoming service objectives versus client closing outcomes should provide the administrator of evaluating service delivery in terms of relative success in attaining client target goals

It should be possible to produce each of the program management and evaluation reports by variable cross sectional data extraction criteria in order to produce trending demographic snapshots of the client population over time. The case data and evaluation system will have to maintain a client history data base longitudinally in depth in order to provide these capabilities.

SECTION V
RESULTS OF SYSTEMS SURVEYED

5.0 COMPARISON OF POTENTIAL CASE DATA AND EVALUATION SYSTEMS

Before selecting a case data and evaluation system it is desirable to review those systems which are currently in existence in order to develop a sound basis upon which to proceed. Through examination of such common factors as system components (including Intake and Referral, Case Management and Program Management), data elements, reporting timeliness, level of operations, user orientation, etc., a better perspective on current practice can be formulated.

Eight Case Data and Evaluation Systems were chosen as representative of the population of systems in use today. They are:

- CCPIS (Child Care and Placement Information System)
- CWIS (Child Welfare Information System)
- JURIS (Juvenile Uniform Referral Information System)
- CACTUS (Client Action, Characteristics, Tracking and Record Updating System)
- CHILDATA
- DAP (LA County Drug Abuse Program Tracking System)
- Extension Zero Staff Support, Client Tracking and Evaluation System
- JIS (Santa Clara County Juvenile Information System)

The rationale for including a system within this study was twofold:

- The system had to meet certain minimum requirements as set by the evaluative staff in such areas as degree of operability,

thoroughness of documentation, adoptive flexibility, etc.

- The system had to be one which, through a general concensus of knowledgeable individuals in the field of child welfare, was recognized as being one of the leading examples of what a Case Data and Evaluation System should resemble.

The purpose of this section is to further acquaint the Diversion Planning and Evaluation System Steering Committee with the prominent systems in existence and present the differing designs, concepts and philosophies with the hope that it will aid them in selecting a potential prototype for implementation.

Although the points to be discussed which follow are by no means meant to be exhaustive, they do reflect the major areas of concern when considering the selection of a Case Data and Evaluation System.

The topics to be discussed in this section include:

- Intake and Case Management Data Entry
- Child Tracking Continuity
- Report Flexibility
- File Flexibility
- Forms Input
- Program Management - Level of operations
- Data Elements
- Report Timeliness
- Security and Information Confidentiality
- Verbal Input Capability

5.1 INTAKE AND CASE MANAGEMENT DATA ENTRY

It is possible that data relating to the child can be initially inputted during the intake process. Ideally the maximum amount of data should be captured at this point in order that the administrative work load of the caseworker be kept at a minimum.

Table 1 deliniates the categories of data initially captured during the intake and case management process.

Table 1

Initial Data Entry Into the Information System

System	Intcke Function	Case Management Function
CCPIS		1,2,3,4,5,6,7
CHILDATA		1,2,3,4,5,6,7
CWIS		1,2,3,4,6,7,
JURIS	1,2	5,7
CACTUS	1,2,4,5	6,7
DAP	1,2,3,4,5	6,7
Extension Zero	See Note 1	See Note 1
JIS	1,2	5,7

Taxonomy of Data Elements

1. Child
2. Administrative
3. Financial
4. Goals and Plans
5. Diagnostic
6. Services
7. Outcomes

Note 1: Extension Zero is a meta-compiler that generates program code to satisfy user information requirements based on the results of a detailed operational review and an extensive systems developmental effort which is conducted by the consulting firm's professional staff. It is not a structured program with a specific number of data elements, source documents and output reports. As a result, report flexibility, tracking continuity, etc. can be as extensive as a user requires. However, due to the nature of Extension Zero, it is impossible to compare it effectively with the other surveyed systems. Therefore, tables dealing with system performance factors will not contain an entry for Extension Zero.

5.2 PROGRAM MANAGEMENT - LEVEL OF OPERATIONS

An important characteristic of Case Data and Evaluation Systems is the hierarchical geographical and/or organizational level at which it is operational. A system which has the capability of being utilized at the state level, for example, usually includes sub-systems which can be utilized at lesser levels of aggregation. On the other hand, systems designed to operate at a specific sub-division (such as agency, agency grouping, city, region, sector, etc.) cannot usually be upgraded to include more encompassing areas and/or organizations.

Table 2 specifies the highest level at which the systems under consideration are operable.

Table 2

Highest Level of Operability

System	Level
CCPIS	State
CHILDATA	Agency Grouping
CWIS	City
JURIS	City/County
CACTUS	City/County
DAP	County
Extension Zero	Agency Grouping
JIS	County

5.3 CHILD TRACKING CONTINUITY

The ability of a Case Data and Evaluation System to track a child chronologically from the intake to the discharge period is its most important function. Not only should the system be capable of tracking him through agencies in time, keeping his unique identity intact, but it should also be capable of tracking him across time. That is to say that the system should also provide for tracking multiple agencies and/or caseworkers which may interact with the child simultaneously.

Table 3
Tracking Continuity

System	Through Time	Across Time
CCPIS	Yes - case is automatically closed one month after it is referred to the next agency. Unconfirmed openings and closings are flagged.	Reports to primary caseworker plus secondary case load listing to previous workers.
CHILDATA	No - child must be redefined as a separate entity upon entering each agency.	Yes - but no linkages between agencies and between caseworkers.
CWIS	Yes - the agency code is modified to reflect the new agency.	No - does not support simultaneous handling of client by multiple agencies and caseworkers.
JURIS	Yes - child's juvenile justice descriptive profiles monitored through time.	Yes - linkages between agencies and between caseworkers exist but simultaneous case handling is not supported.
CACTUS	Yes - handles previous contact, referrals, and intra system transfer	Yes - does support simultaneous handling of client by multiple agencies and caseworkers but only 1 case manager may exist at any given point in time.
DAP	No - child must be redefined as separate entity upon entering each agency.	No - does not support simultaneous handling of client by multiple agencies and caseworkers.
Extension Zero	See Note 1	See Note 1
JIS	Yes - child is tracked in process, in custody and under supervision	Yes - linkages are maintained between law enforcement agencies but child record update responsibility belongs to current agency of record.

5.4 DATA ELEMENTS

The usefulness of a Case Data and Evaluation System is directly related to the quality and quantity of information stored within its data-base. As the quality or value of a piece of information is strictly subjective and is dependent upon the perception of the user and the specific circumstance under which it is used, this aspect will be dealt with during the design phase. Therefore, in terms of data element comparison, quantity of data will be discussed below.

The more data we have the greater the detail, but also the greater the difficulty to assimilate and utilize the information. Conversely, the less data we have, the greater the generality, but the easier it is to utilize. Obviously, there exists a point of optimal data collection where an appropriate balance between detail and ease of use occurs.

Table 4 presents the number of data elements within major category.

Table 4
Number of Data Elements

Taxonomy of Data Elements							
System	Child	Administrative	Financial	Goals & plans	Diagnostic	Services	Outcome
CCPIS	13	10	1	3	2	6	1
CHILDATA	5	18	4	12	3	3	11
CWIS	4	13	1	12		9	3
JURIS	27	33	-	1	6	16	6
CACTUS	12	15	-	-	22	14	3
DAP	25	12	23	13	26	28	3
EXTENSION ZERO	See Note 1						
JIS	23	20	-	-	15	12	7

5.5 REPORT FLEXIBILITY

The ability to modify the reports generated in order to keep them abreast of the needs of the user, without having to re-program the system, is termed report flexibility. As new needs are recognized, the Case Data and Evaluation System should be able to adapt its reporting structure to fulfill these needs. A method by which this is accomplished is through the use of a report generator--which permits the rapid preparation of a new reports on any data element, or group of data elements, in various permutations and combinations.

Table 5 illustrates report flexibility.

Table 5

Report Flexibility

System	Rigid Reporting Structure	Flexible Reporting Structure
CCPIS	X	
CHILDATA	X	
CWIS	X	
JURIS	X	
CACTUS		X
DAP		X
Extension Zero	See Note 1	See Note 1
JIS	X	

5.6 REPORT TIMELINESS

One of the most important characteristics of an information system is the frequency or timeliness of its reports. Information must be produced in time for the user to be able to make some type of decision based upon its content. Reports which are produced too early usually do not contain sufficient information upon which to base a decision. On the other hand, reports produced too late have from minimal to zero worth.

Table 6 presents the timing schedules of the child tracking documents along with other Case Data and Evaluation System reports.

Table 6

Report Timeliness

System	Child Tracking Document	Other Reports
CCPIS	Weekly	Monthly
CHILDATA	Bi-Monthly	Monthly, Quarterly
CWIS	Monthly	Monthly, Quarterly
JURIS	Daily (as updated)	On-line, Daily, Monthly, Quarterly
CACTUS	-----	Weekly, Monthly, Quarterly
DAP	-----	Monthly
Extension Zero	See Note 1	See Note 1
JIS	Daily (as updated)	On-line, Daily, Monthly, Quarterly

5.7 FILE FLEXIBILITY

As the information needs of the user changes, so must the Case Data and Evaluation System data-base. Ideally, a user oriented system would permit the re-definition of the data files without the need of technical intervention. This ability to easily add and/or delete data elements from the data-base is termed file flexibility.

Table 7 presents file flexibility.

Table 7

File Flexibility

System	Rigid	Flexible
CCPIS	X	
CHILDATA	X	
CWIS	X	
JURIS	X	
CACTUS		X*
DAP	X	
Extension Zero	See Note 1	
JIS	X	

*NOTE: CACTUS is flexible only in the sense that room has been left within its data base records for 23 optional data elements.

5.8 SECURITY AND INFORMATION CONFIDENTIALITY

One of the prime prerequisites of a Case Data and Evaluation System is that it be able to maintain the integrity, confidentiality and security of its child data. This is especially true when data pertaining to the juvenile justice process is present.

Security can be imposed both externally and internally to the system. Examples of external security include: staff screening, bonded messengers, registered mail, and restricted report distribution, whereas examples of internal security include file read/write keys (which permits access to data only if the proper code is specified), scrambling (a technique to permit readable output upon specification of a key phrase otherwise data is garbled), data partitioning (a method of allowing the user to only access his own data) and directed output (data is only printed on specific pieces of equipment at predefined locations).

Table 8 illustrates the techniques of security and information confidentiality.

Table 8

Security and Information Confidentiality

System	External Security Measures	Internal Security Measures
CCPIS	Staff screening, bonded messengers, first class mail, restricted report distribution, coded child name for special cases, contract with operational group	None
CHILDATA	Staff screening, bonded messengers, registered mail, restricted report distribution.	User password, standard external and internal file labels, data removed from on-line system when not in use.
CWIS	Staff screening, bonded messengers, registered mail, restricted report distribution, coded child name.	Coded file keys which limit access to child data; programs will only operate once/cycle - unauthorized running will be automatically terminated.
JURIS	Staff screening, bonded messengers, registered mail, restricted on-line access and report distribution	User transaction codes, standard external and internal file labels.
CACTUS	Staff screening, bonded messengers, restricted report distribution.	None
DAP	Coded client name, staff screening, restricted report distribution.	Coded file keys which limit access to client data.
Extension Zero	See Note 1	See Note 1
JIS	Terminal access limited to specific agencies/individuals, restricted data dissemination, procedural approval of Juvenile Policy Committee.	Independent child data storage, software controlled (password, transaction code) data retrieval/update capability.

5.9 FORMS INPUT

A measure of the administrative work load imposed on the caseworker is the quantity of paperwork which must be filled out during both the intake and the case management process.

Table 9 indicates the number of pages of documents that are inputted in each of these functions.

Table 9
Forms Input

System	Intake No. of Pages	Case Management No. of Pages
CCPIS		1
CHILDATA		2
CWIS		4
JURIS	1	1
CACTUS	2	4
DAP	2	2
Extension Zero	See Note 1	See Note 1
JIS	*2	*3

*(On-line Input Screens - Forms Independent)

5.10 EXCEPTION MONITORING

The ability of an information system to notify the user that some type of action has been taken or should be taken is termed exception monitoring.

In relation to Case Data and Evaluation Systems, three categories of exception monitoring occur:

- Anniversary or regulatory date notification - Dates are entered into the system indicating periods when regulatory reports are due. The system automatically notifies the user when the date occurs (usually some specified period prior to the date). The same concept is used to indicate upcoming child birthdays.
- Target review dates - Projected dates are entered into the system as to when various service objectives are to be accomplished. The system automatically notifies the user when these dates occur in order that he may review the progress made, reassess his estimates, and reinput new dates.
- Long range goal date - This date is used to evaluate current status versus plans and goals to indicate the estimated time at which the child's long range goal should be accomplished. At pre-defined periods the system automatically inquires as to the status of the child's goal attainment. This assures that the caseworker at all times keeps in mind the ultimate goal of the child.

Table 10 presents the exception monitoring capability.

Table 10

Exception Monitoring Capability

System	Anniversary or Regulating Date	Target Review Date	Long Range Goal Date
CCPIS		X	X
CHILDATA	X		
CWIS	X	X	
JURIS	X	X	
CACTUS	X	X	
DAP	See Note 3	See Note 2	See Note 2
Extension Zero	See Note 1	See Note 1	See Note 1
JIS	X	X	

Note 2: DAP does not generate case reminder or exception reports to the case manager. The system is used principally for gathering input statistics used to evaluate the Drug Abuse Program for the Los Angeles County Health Department.

5.11 VERBAL DATA INPUT

The selected Case Data and Evaluation System will include the capability for verbal data input and output reporting. This capability is somewhat independent of a particular information system structure, and is, therefore, described here in terms of the advantages and disadvantages it presents the Project staff.

The most significant impact of a verbal data input capability on a Case Data and Evaluation System would be to eliminate duplicate forms handling (either case record copies or special forms) required for input to the information system. In addition, if this capability were to poll each member agency on a scheduled basis, then exception monitoring (see 5.10) and error corrections could be followed up much more effectively.

Table 11 presents various advantages and disadvantages of utilizing a verbal data input capability within a centralized data collection facility.

Table 11

Impact of Verbal Data Input Capability

Advantages	Disadvantages
1. Reduction in time spent by worker in handling forms.	1. No audit trail would exist for data integrity responsibility.
2. No delay for mailing.	2. Audio response might be susceptible to misinterpretation of verbal input (spelling errors, data omission, etc.)
3. No cost for special communications hardware.	3. Method of handling exception monitoring (no hard copy would exist in the field for handy reference - output would have to be transcribed by clerical support staff).
4. Central data collection would allow standardized data entry/response procedures to be uniformly applied.	4. Would probably require on-line capability to be most effective (error correction and case status inquiry).
5. Direct interaction of coder with agency clerical support staff for error correction.	

SECTION VI
RECOMMENDATIONS

5.12 CONCLUSIONS

The purpose of the preceding section was to compare and contrast eight representative Case Data and Evaluation Systems in relation to their respective characteristics as categorized within a number of subjectively chosen areas. There was no intent made here to choose the "best" system among the eight, but rather to examine the state-of-the-art and to some degree identify desirable characteristics to be considered in specifying requirements for a Case Data and Evaluation System.

6.0 INTRODUCTION

Before we present the Project Team's findings and recommendations concerning the selection of a case data and evaluation system, it seems appropriate to provide the DPESP Steering Committee with a summary of the methodology chosen to conduct this study. The following paragraphs provide that summary.

6.1 STUDY METHODOLOGY

At the beginning of the study, some major strategy decisions were made. First, it was assumed that the Project Team could identify an existing client monitoring and tracking system that would fulfill minimum functional, informational, and operational requirements of the Los Angeles Diversion Project's Case Data and Evaluation System. Every effort was made to identify existing children and youth-oriented monitoring and tracking systems that appeared to satisfy functional and informational requirements similar to those of the Diversion Projects. The shortness of time and the limited budget made the fulfillment of this assumption mandatory. Second, it was assumed that a great deal was already known by the Project Team (based on prior experience and background) about the Case Data and Evaluation System's functional and informational requirements. Again, every effort was made to determine exactly what was, in fact, known and to make sure that the study progressed from that point, rather than duplicating the same data. Time and costs also made this step very important.

Third, in line with the above point, it was decided that primary emphasis of the remaining study activities should be given to the identification of the Diversion Project's client monitoring and tracking needs. Evaluation data requirements, while important, were given second priority in terms of staff time.

Following partly from the above decisions, the study's overall findings and recommendations are summarized below.

6.2 INFORMATION SOURCES

Within the limitations of time and staff, every potential significant source of information was explored. Interviews were held with City, County and State project-related personnel; a state-of-the-art survey was conducted by project staff; an analysis of the Project HEAVY organizational, operational and informational requirements was undertaken; and discussions with the staffs of diversion projects outside the Los Angeles area were initiated. The results of these activities provided the basis for the requirements outlined in Sections II, III, and IV.

6.3 STUDY FINDINGS AND RECOMMENDATIONS

The findings and recommendations recorded here have resulted from careful review of the data contained in previous sections of this report and from detailed analysis of the capabilities of the surveyed systems. Briefly, the Project Team's findings and recommendations

are as follows:

- FINDING - Three of the surveyed systems; CHILDATA, JIS, and JURIS, are on-line systems, while they provide a very desirable capability for immediate access to client records for updating and review purposes, they represent an extremely costly operating expense that is neither required nor justified by the Diversion Project's requirements.
- FINDING - Each of the above three systems has at least one functional or system performance limitation critical to the Diversion Project's operations. CHILDATA has been designed to meet its agency's specific functional and information needs---which includes a minimal client tracking capability. JURIS does not contain a case monitoring capability adequate for the needs of the Diversion Projects. In addition, JURIS has an extensive juvenile justice reporting capability that far exceeds the Project's needs and is extremely costly. JIS has also been designed to address requirements other than those needed by the Diversion Projects (i.e. court calendaring, etc.). Additionally, it is currently in an operating limbo while the system undergoes review for security and privacy deficiencies.
- RECOMMENDATION - That JURIS, JIS and CHILDATA be eliminated from further consideration by the Project.

- FINDING - The DAP system is too drug specific and would require extensive modification to meet the Diversion Project's functional and informational requirements.
- RECOMMENDATION - That the DAP system be eliminated from further consideration by the Project.
- FINDING - The CWIS system has no capability for reentry of data and has a limited statistical reporting feature.
- RECOMMENDATION - Since both features are important to Diversion Project operations it is recommended that the CWIS system be eliminated from further consideration by the Project.
- FINDING - That the Extension Zero system is a meta-compiler that generates program code to satisfy user information requirements based on the results of a detailed operational review and an extensive systems developmental effort. It is estimated that the review and developmental effort would minimally require a four to twelve month period to complete and would need to be conducted by the professional staff of Extension Zero since that system is a proprietary software package. While there are numerous advantages to the Extension Zero approach and capability (e.g. the resulting system would be designed specifically to the Project's needs) time and budget limitations prevent the Project Team from pursuing this option.

- RECOMMENDATION - That the Extension Zero system be eliminated from further consideration by the Project unless the remaining options prove undesirable as our analysis continues.
- FINDING - Both the CACTUS and CCPIS systems appear to meet the minimum functional and informational requirements of the Diversion Projects. Additionally, both systems have been designed to operate on hardware that is consistent with that of the County's Data Processing Department. Both appear to be modifiable in the time frames afforded the Project and both were developed by government agencies which may mean that they are available to the Diversion Projects at minimal cost.
- RECOMMENDATION - That the Project Team initiate both a detailed review of these systems and a cost/benefits study to determine the feasibility and cost of procuring these systems to meet the Diversion Projects' requirements.
- RECOMMENDATION - Concurrent with this action, the Project Team recommends that they be given permission to ask Extension Zero for their estimates on the length of time and cost that would be required to conduct the necessary review and development of an Extension Zero-based Case Data and Evaluation System. This recommendation would require that we provide a copy of this document, minus Section VI and Appendix A, to the Extension Zero staff; since they would need to know, minimally, what the system would need to support in order to develop meaningful estimates.

6.4 SUMMARY

Since time is of the essence it is important that the Steering Committee soon make some tentative decision concerning subsequent steps. At this point there is little doubt in the consultant's mind that we have three options to pursue. The first, is the selection and modification of the CACTUS system. The second, is the selection and modification of the CCPIS system. And the third, is the initiation of an Extension Zero system developmental effort.

Sufficient documentation exists to show that all other systems are either too extensive in scope, therefore creating an extremely costly operating environment, or are limited in some area of their operation critical to Diversion Project effectiveness.

Accepting these statements, the next step should be to conduct a detailed review of the remaining systems and concurrently, the initiation of a cost/benefits study. The Project Team asks permission, by virtue of this report, to implement that strategy.

APPENDIX A:

CANDIDATE DIVERSION CASE DATA AND EVALUATION SYSTEM SURVEY

TABLE OF CONTENTS

	PAGE
1.0 CLIENT ACTION: CHARACTERISTICS, TRACKING AND RECORD UPDATING SYSTEM (CACTUS)	1
1.1 History and Scope	1
1.2 Significant Users	1
1.3 System Overview	1
1.4 Data Input and Output Reporting	3
1.5 Facilities Requirements	10
2.0 JUVENILE UNIFORM REFERRAL INFORMATION SYSTEM (JURIS)	11
2.1 History and Scope	11
2.2 Significant Users	11
2.3 System Overview	11
2.4 Data Input and Output Reporting	13
3.0 CHILD CARE AND PLACEMENT INFORMATION SYSTEM (CCPIS)	20
3.1 History and Scope	20
3.2 Significant Users	20
3.3 System Overview	21
3.4 Data Input and Output Reporting	21
3.5 Facilities Requirements	24
4.0 CHILD WELFARE INFORMATION SYSTEM (CWIS)	25
4.1 History and Scope	25
4.2 Significant Users	25

	PAGE
4.3 System Overview	25
4.4 Data Input and Output Reporting	27
4.5 Facilities Requirements	31
5.0 THE CHILDATA SYSTEM	32
5.1 History and Scope	32
5.2 Significant Users	32
5.3 System Overview	32
5.4 Data Input and Output Reporting	34
6.0 SIGNIFICANT LOCAL SYSTEMS	38
6.1 Los Angeles County Justice Computer Center	38
6.2 Drug Abuse Program Tracking System (DAP)	40
6.3 Department of Health Services, Mental Health Services, Patient Tracking System	41
7.0 UNITED COMMUNITY EFFORTS, EXTENSION ZERO STAFF SUPPORT, CLIENT TRACKING AND EVALUATION SYSTEM	44
7.1 History and Scope	44
7.2 Significant Users	44
7.3 System Overview	44
7.4 Data Input and Output Reporting	45
8.0 EXTENSION ZERO, STAFF SUPPORT, CLIENT TRACKING AND EVALUATION SYSTEM	47
8.1 System Scope	47
8.2 System Users	47
8.3 System Capabilities	47

1.0 CLIENT ACTION; CHARACTERISTICS, TRACKING AND RECORD UPDATING SYSTEM (CACTUS)

1.1 HISTORY AND SCOPE

CACTUS, which is now known as the Youth Service Information System, is an operations oriented process which systematically collects client and administrative data from youth (social) service agencies. It stores and processes the data by computer and produces (1) client case records, (2) client tracking reports, and (3) service system work load reports for direction and control of day-to-day operations. It also produces statistical summary reports from the operations data. These can be used to plan, program, administer, and evaluate youth (social) services.

The Youth Service Information System (YSIS) was designed by the Greater Kansas City Mental Health Foundation's Evaluation Unit and is currently in full use by the Kansas City Youth Service Center. The present YSIS design, however, can be altered for use in a wide variety of communities and programs, and can handle variations from city to city. Any city or program can use YSIS which generates information in four areas of service:

Client Intake

Client Assessment

Client Action: Case Management and Services

Client Discharge

1.2 SIGNIFICANT USERS

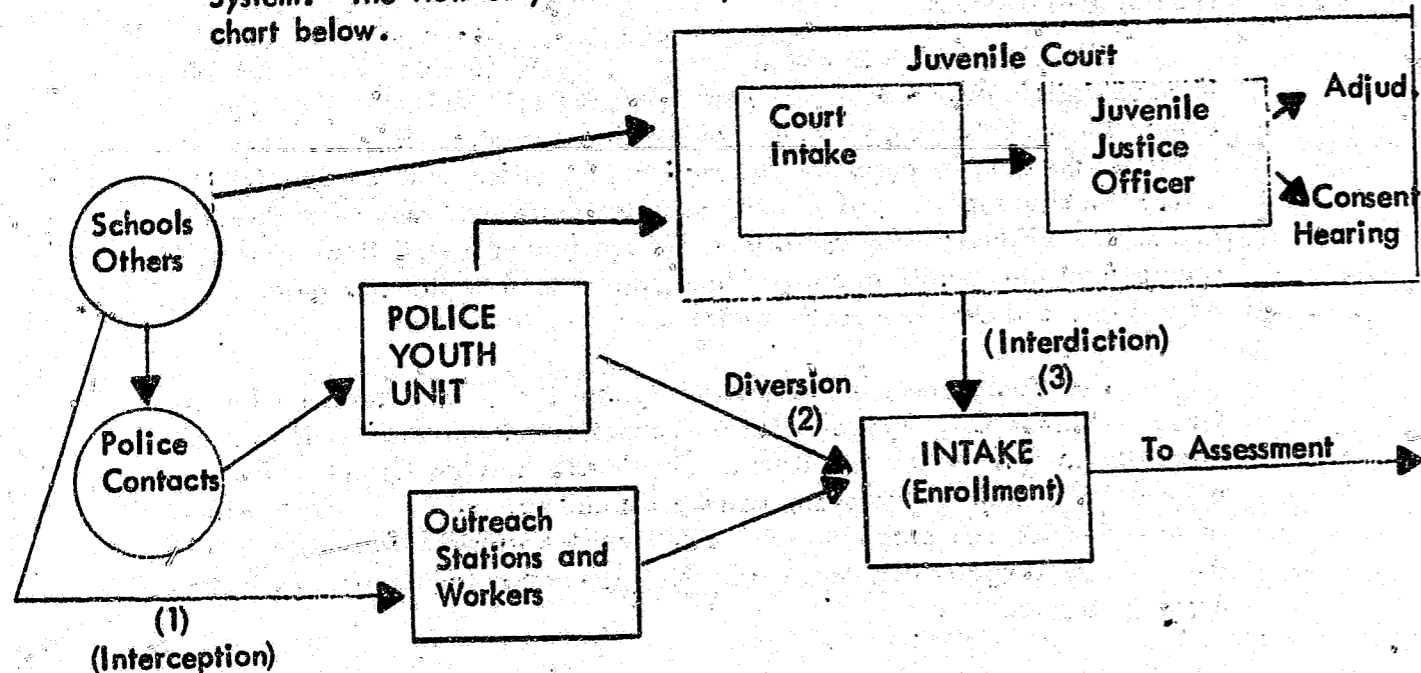
YSIS will work with a highly centralized program where one organization performs all functions, or with a multi-component program with a number of organizations providing service under sub-contract, delegate agency, or some related basis. The Kansas City Youth Service Center is a multi-component program, acting as a coordinating agency for approximately 29 youth service agencies in a five county area around Kansas City.

1.3 SYSTEM OVERVIEW

The YSS has three main phases in regard to the flow of clients through the System: Intake, Assessment, and Services (which includes Case Management and Direct Services).

I. Intake

Intake is the process by which youth are accepted for enrollment in the System. The flow of youth to the point of Intake is graphically shown in the chart below.



After the Intake process, the client is placed with a Case Management Agency where he enters the second phase of the system, known as ASSESSMENT.

2. Assessment

The Assessment process begins when an agency formally accepts an official referral from the YSC for the provision of Case Management services. Thus the agency is identified as the Case Management Agency.

A service plan is developed which may include services to be provided by the Case Manager, services to be provided by others in the Case Management Agency and/or direct services to be provided by other agencies (which may be part of the YSS or totally separate).

Time Frame. According to YSS standard operating procedure, the assessment process must be completed within 10 days of the official date the client is assigned to the case management agency. That is, within 10 days, personal contact should be made, an Assessment made, a Service Plan developed and reported to the YSC.

However, if a thorough Assessment and Service plan cannot be made during this time, an interim Assessment and plan should be made and placed on the Assessment Report and reported to the YSC, indicating that a revised assessment will subsequently be reported.

III. Service

As the client moves into the Service Phase of the YSS, he begins to receive three levels of care depending on his needs:

- 1) Case Management - the primary responsibility implementing the Service Plan which involves coordinating services for the client, providing follow-up and monitoring progress. This is done on a day-to-day basis. This would generally involve all activities undertaken by the Management Agency (through a designated "Case Manager") on behalf of the client but not activities which involve services to the client.
- 2) Case Manager's Services - are activities by the Case Manager which are not executive in nature, which are not managing the case of a client, but which are providing direct service to the client. This type of effort may generally be looked at as services with the client.
- 3) Direct Services by Others - is the general category of service which the client receives from third parties whether in the Case Manager's own agency or another agency. The YSS has a special form to account for these activities separately so that they can be distinguished from activities of the Case Manager. Direct Services includes such activities as Medical Treatment, Job Training, Athletic Recreation, Group Home Care, Behavior Management Classes, Remedial Reading, etc. They will be included in the Service Plan set forth on the Assessment Report, -- at least in general.

1.4 DATA INPUT AND OUTPUT REPORTING

The input side of YSS is a simple, routine procedure requiring close administration and supervision to be accurate and meaningful. There are six standard code sheets which provide data input at various phases of the client's flow through the service system.

In addition to four code sheets for client intake, assessment, action and discharge, a fifth code sheet is needed if the client is receiving service from more than one agency. (Since the distinction is made between a client who receives service from one agency and a client who receives service from two or more agencies, the term Case Manager is used to designate the one case worker responsible for the client. The client may be served by several case workers or agencies but has only one Case Manager.) Also any police contact the client has during enrollment or after discharge

from the Youth Service Center program is recorded on a sixth Recidivism code sheet. All of these are prepared by the agency subscribing to the YSIS and mailed to the Youth Evaluation Unit of the Foundation in Kansas City, Missouri.

(To give a further example of the flexibility of the YSIS, Kansas City Youth Service Center made the decision not only to record all clients enrolled in the program, but also to record and track all program contacts, including those who declined service or were referred elsewhere).

The following is a list of information recorded on the code sheets:

1. Youth Intake Code Sheet

- name, address
- age, race, sex, height, weight, eyes, hair complexion
- lives-with status: mother, father, step-father, etc.
- date of birth
- in school, working, or unemployed
- grade
- presenting problem or offense
- census tract of offense and census tract of residence
- source of referral
- date and time of police contact
- indicate previous police contact
- indicate previous contact and/or jurisdiction, juvenile court
- others with youth at police contact
- admission status: new, readmission, intra-system transfer, etc.
- official intake date or decline service date
- official date assigned to service (action)
- action agency (service provider)
- intake station site code

There is room in the computer file for approximately 23 additional units of information. Use of such additional capacity can be made on a negotiated basis.

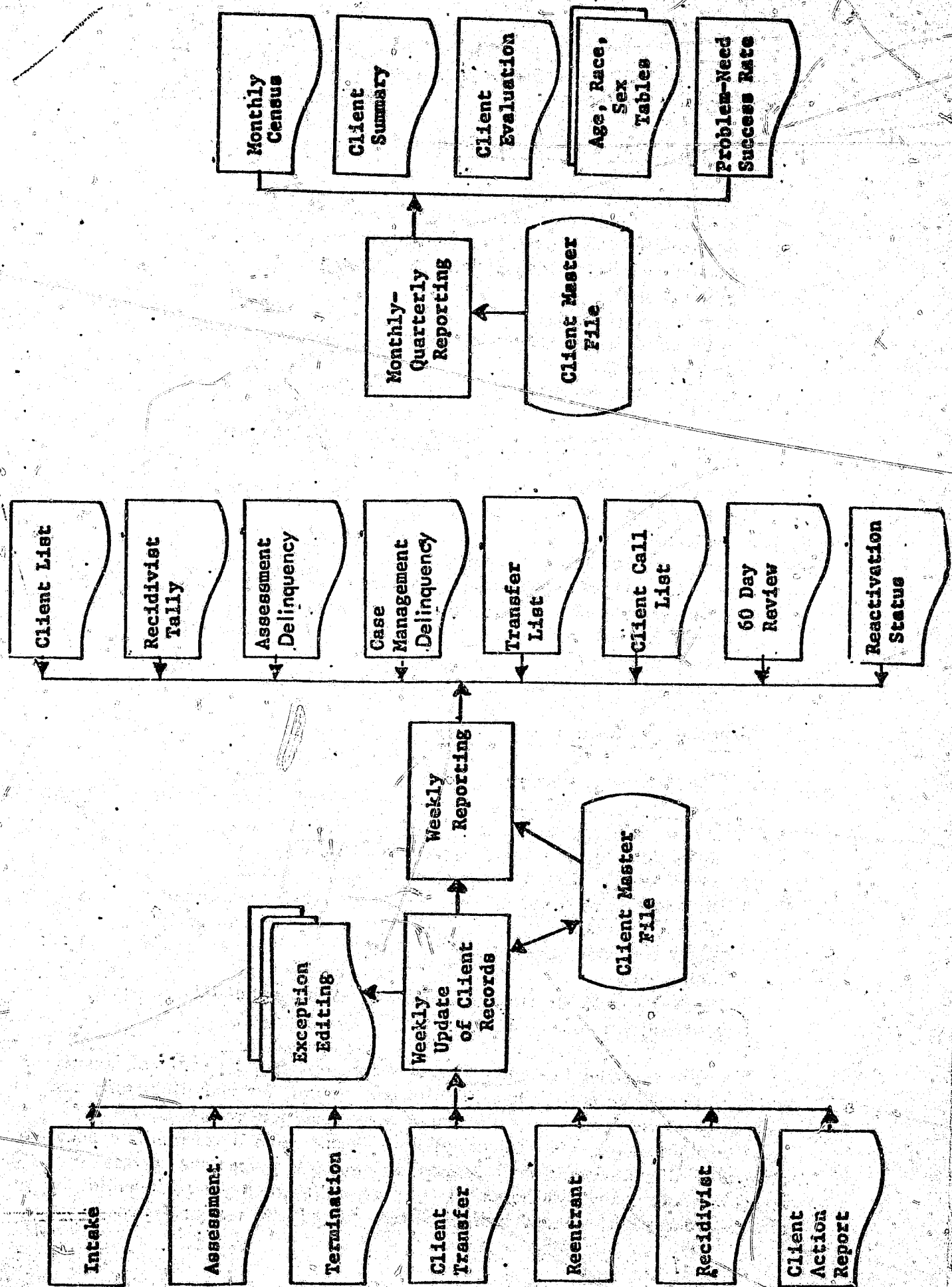
2. Assessment Report Code Sheet

- client computer number
- name, address, and phone number of family contact
- name and agency of the case worker or case manager
- five problem indicators
- seven service plan elements or steps: identifies type(s) of service and provider(s)
- estimated time of enrollment and plan implementation

This is an optional procedure for those programs who do not currently

INPUT DATA

YOUTH SERVICES INFORMATION SYSTEM: DATA INPUT AND REPORTING



assess (diagnose) their clients.

3. Client Action Report Code Sheet

client computer number
kind of action: case management, counseling, other
if contact involved: agency, role or position of contact
mode of contact: phone, letter, or in person
client present
duration of contact
relationship to service step reported on assessment report
date of action
report on general progress

4. Client Action Report of Action by Others Code Sheet

name, date of birth
agency, case manager, site
date
service action taken
provider of service/contact
setting of service
reason for service
nature of service
progress

5. Recidivism Code Sheet

client computer number
date
offense code number
disposition: juvenile court, under warrant, etc.

6. Discharge Code Sheet

client computer number
action date
discharge code: enrollment completed, dropout, terminated, etc.
termination reason

YSIS generates two categories of output reports: Operational Reports which track and describe client activity and progress for operating staff, and Program Analysis Reports used for planning and decision-making by top level administrators. The Program Analysis Reports give a complete, cumulative picture of clients served, their geographic dispersal through the service area, the nature and distribution of their presenting problems or juvenile offenses, and the status and flow of clients through the service system.

The frequency of the following reports can be decided upon by the program administrator.

A. Operational Reports

1. Client Base

An alphabetical list by client name of all contacts in the Youth Service System. Weekly printout. Includes:

name, address
status: declined, holding, etc.
agency
intake date
assessment date
client computer number

2. Assessment Due

A list by agency and intake date that indicates when a client is due or overdue for an assessment. The due date can be keyed to any period of time the system manager selects. Kansas City uses ten days after the date of assignment to an agency. Weekly printout. Includes:

client computer number
name
intake date
assessment due date
totals

3. Sixty Day Review

A list by agency and intake date of clients in the system for thirty, sixty, ninety days or whatever days wished. Kansas City uses a sixty day review. Weekly printout. Includes:

case manager
agency
client name
assessment date
intake date

4. Client Contact

A list by agency and case worker indicating all the clients assigned and the case worker's date of the last contact. This is a reminder to the case worker and his supervisor of his load and of

whom he should see during the time period agreed upon. In Kansas City the standard client contact is a minimum of once every two weeks. Weekly printout. Includes:

agency
case manager
client name
date of last action
date of last report/service
client computer number

5. Client Action Report Delinquency List

A list by agency and case worker of all clients for whom a Client Action Report has not been submitted in the preceding two week period. It is a powerful management control for spotting clients who are not receiving good service. Weekly printout. Includes:

agency
case manager
date of last action
intake date
client computer number

6. Client Action Report of Services Delinquency List

A list similar to above by agency and case worker of all clients when a Client Action Report of Other Services has not been submitted in the preceding two week period. Weekly printout. Includes:

agency
case manager
date of last report/service
intake date
computer number

7. Client Summary

An individual, cumulative report on each client. Monthly printout. Includes:

client name
agency, case manager
date of intake, site, source, presenting problem

date of assessment, problem indicator
service plan, agency
date, type, person contacted, by whom, action
service steps, duration
time totals by type of service

8. Cumulative Deactivation

A list by client name of all clients discharged. Includes:

client name, agency
deactivation code
deactivation date

B. Analysis Reports

1. Client Census: Summary and Schedules I - VI

A table with variables of age (nine through sixteen), sex, and race (black, white, other) of youths contacts. Schedules analyze the number of youths declined, enrolled, holding, assigned, and discharged in the youth service system. Monthly and quarterly printout.

2. Intake and Site Code

A table with variables of age, sex, and race by source of client contact. In Kansas City by Youth Service Center, Kansas City Police Youth Unit, Jackson County Juvenile Court Youth Unit, or Southeastern Jackson County Mental Health Center; and by further breakdown, police, school, social agency, county welfare, family, self, outreach worker, juvenile court, and other. Monthly and quarterly printout.

3. Analysis by Agency

A table with variables of age, sex, and race showing current enrollment by agency. Monthly and quarterly printout.

4. Analysis by Offense Code

A table of all discharges, presenting type of discharge by age, sex, and race. Discharge code includes enrollment completed, dropout, termination, etc. Monthly and quarterly printout.

5. Analysis by Offense Code

A table setting forth specific client presenting offenses by age, sex and race. Offenses are identified according to the

National Crime Information Center (NCIC) categories. Monthly and quarterly printout.

6. Intake Category

A table with forty categories, eleven "civilian" and twenty-nine law enforcement, which describes the presenting problem or offense at intake into the youth service system. The data is presented in three printouts by the geographic location in the city (i.e., census tract): first by the census tract in which the youth resides, second by the census tract of the offense, and third by residential census tract as correlated with offense tract (i.e., where youth lives and where he commits offense). Monthly and quarterly printout.

7. Exception Reports

The system has the capability to analyze any of the variables stored. Miscellaneous exception reports can be generated as needed. For example, "Client Aging in Program" report, and "Evaluation T01" report, which for each client in the system presents variables of presenting problems, characteristics (sex), service, status, history, and recidivism.

1.5 FACILITIES REQUIREMENTS

Originally CACTUS was written in RPG for use on an IBM System 3. It has subsequently been changed (as YSIS) and is currently running as a series of remote batch jobs on Control Data Corporation hardware at the United Telephone Co. computer facility. (This facility is operated as a public utility and processing is available in a time sharing mode from remote terminals).

An on-line, interactive version of this system is being developed to run on IBM 360 hardware operated by the Kansas City Police Department and will be available approximately July 1, 1975. A third version of this system is planned for implementation in Des Moines, Iowa in September of 1975. This system will also be on-line and will utilize either System 2000 or Data Language I as the data base management system.

2.0 JUVENILE UNIFORM REFERRAL INFORMATION SYSTEM (JURIS)

2.1 HISTORY AND SCOPE

In 1971 through the joint efforts of the Juvenile Courts of the City of St. Louis and St. Louis County, with the aid of LEAA funding, a coalition was formed to develop an automated juvenile justice system. The objective of the system was to be able to serve the unique administrative, judicial and correctional requirements of the juvenile courts. The secondary objective was to develop a system which could handle the information requirement of surrounding rural courts with minimal incremental expenditure.

2.2 SIGNIFICANT USERS

JURIS is currently being used by the Juvenile Courts of the City of St. Louis and St. Louis County.

2.3 SYSTEM OVERVIEW

The JURIS juvenile justice information system is comprised of five sub-systems:

- Base/Referral Processing Sub-system - is the portion of the system which automates the judicial process of the Juvenile Court. It provides information storage and retrieval capability, as well as, functional operational assistance and case monitoring. Its major function is to track children who have been referred to the Court for each category of juvenile referral (delinquency, traffic, adoption and neglect).
- Administrative Control Sub-system - is the portion of the system which provides information on hearings scheduled to the court (automatic docketing and calendaring). It also embraces the financial and control activities of the courts pertaining to foster care and institutional payments.

The automatic docketing and calendaring function can be likened to the establishment of target and review dates to improve the time flow of services delivered to juveniles.

Date elements used within this subsystem are largely inputted via the base referral processing subsystem.

- Counselor Evaluation Sub-system - This portion of the system attempts to determine a qualitative and quantitative evaluation of the effectiveness of each social worker, counselor, and Deputy Juvenile Officer ((DJO)).
- Victim Assistance Sub-system - is the portion of the system that maintains information on victim needs and assistance. Witness data is also maintained within this subsystem.
- Correctional Probability Aid Sub-system - This portion of the system computes correlations between child characteristics and delinquent behavior, delinquent corrections, treatment program success, and counselor-type success.

As conceptualized, the system is approximately 60% operational. The basic referral processing sub-system is close to 100% operational, while the other sub-systems are either still in the conceptualization/design phase or are only partially implemented.

Presented below is a table delineating the current status of each of the sub-systems:

JURIS SUBSYSTEM STATUS

Sub-system	Status
Base/Referral Processing	95% operational
Administrative Control	70% operational
Counselor Evaluation	50% operational
Victim Assistance	Design Phase
Correctional Probability Aid	Conceptualization Phase

The system does not support the simultaneous handling of a child by either multiple workers or multiple agencies.

Any child who may be entered into JURIS who has violated the Missouri Juvenile Code and has been apprehended for an offense. Although juvenile jurisdiction terminates at age 17, the child may be maintained on the active file until he reaches maturity (21) or possibly further.

A child can enter the system by way of an

- information referral
- neglection referral

- police referral
- walk-in referral

Normally, when a child reaches 17, he will be taken off the active system (unless he has siblings referred to the court). At this time, his information will be placed on magnetic tape and given Court Enbac (i.e., sixteen (16) judges must approve release of his information).

2.4 DATA INPUT AND OUTPUT REPORTING

Initial data entry to the juvenile justice system occurs during the Intake process. A juvenile continuation form (F-11) is received from the initiating source from which the data is inputted into the system.

The initial data entry into the system, via a real time computer terminal, falls into three categories:

- juvenile personal data
- juvenile referral data
- others in offense data

Data included within the first category are:

- juvenile number (family and sibling, identifier)
- case numbers
- juvenile last name, first name, initials
- apprehension code
- person or place child is staying
- location of child
- code of child's residence-municipality
- code of child's residence-census tract
- school identifier
- weight
- hair
- eyes
- scar location
- tatoo location
- father's address
- Grade in school or occupation
- race and sex
- religion
- age
- date of birth
- verified date of birth
- place of birth
- marital status
- height
- Alias (4 of them)
- mother's last name, first name, initial
- mother's address
- mother's occupation
- father's last name, first name, initial
- father's occupation

Data included within the second category are:

- referral number (sequential count of number of times a child is referred to the court)
- juvenile last name, first name
- referral date
- referral time (24 hour clock system)
- status of child's file
- referral source
- Police Department complaint
- place of apprehension
- referring officer's last name, first name
- detention code
- date detained
- date of offense
- municipality where offense occurred
- time detained
- reason for detention
- hold order code
- release date
- release time
- released to code
- Deputy Juvenile Officer, identifier
- date assigned to DJO
- DJO unit (neglect, delinquency, etc.)
- 1st to 4th offense codes
- time of offense
- census tract where offense occurred

Data included within the last category are:

- juvenile number
- referral number
- case number
- number of persons involved in alleged offense

● For each person involved:

- last name, first name, initial
- Jr./Sr.
- Race/sex code
- connection code (victim, witness accomplice)
- age
- juvenile number (if previously referred to the court)
- under supervision code
- known by victim code

Instead of keypunching data and then inputting the cards into the computer, the JURIS system allows the user to directly input data through a computer terminal, which is a device similar to a typewriter, but having a small television screen so that the data typed can be visually checked by the user. This process speeds up the editing process, therefore insuring that correct and current data is rapidly available for use.

Changes made to Case Records are recorded on the Referral Process form and inputted via a real time computer terminal on an as needed basis. Periodically, an updated referral processing form is produced by the computer.

Data that can be updated include the three categories mentioned above, as well as, the data appearing within the Records and Referral Action category. These data elements include:

- juvenile number
- case number
- screening officer's last name, first name
- legal custody code
- type of pleading
- pleading amended code
- evidence code
- warrant issued code
- date warrant issued
- recommended handling code
- initial DJO identifier
- date DJO assigned to case
- assumed by DJO (number of DJO who took over the case)
- date assumed
- DJO supervision unit
- recommended disposition code
- legal cause file number under which case to be heard
- petition type
- petition date
- number of witnesses
- subpoena served by
- referral number
- juvenile last name, first name
- medical examination date
- psychological evaluation
- psychological evaluation received code
- hearing sequence number
- hearing officer initials
- type of hearing
- date of hearing
- time of hearing
- child's attorney last name, first name
- parent's attorney last name, first name
- court attorney initials
- continuance requested by
- admission by child code
- court jurisdiction code
- disposition ordered code
- disposition date
- treatment terminated date

The JURIS system facilitates case management monitoring in two respects:

- It monitors the child's juvenile justice descriptive profile through time.
- It monitors the status of a child's hearings that are scheduled to the court.

Within the former category, there are three classifications of outputs:

- Data inquiry
- Turnaround document
- Reports

The JURIS system produces five reports pertaining to performance evaluation:

- 1) **DJO Comparative Performance Report** - The purpose of this report is to list each DJO within a court delineating the number of referrals and total performance index measure for this month, last month and percent deviation (monthly-programmed, but not operational).
- 2) **Court Quality Report** - The purpose of this report is to list all children under the court's jurisdiction, their number of referrals, the date of the last referral and their total score (monthly - programmed, but not operational).
- 3) **DJO Work Quality Reports** - The purpose of this report is to list each child under a DJO, the specific referrals handled by the DJO, the date of last referral and the child's score (monthly - programmed, but not operational).
- 4) **Court Quantity Performance Report** - The purpose of this report is to summarize the number of cases this month, last six months and last year, indicating the number of: cases assigned, cases terminated, work load deviation, case complexity, assigned case complexity, terminated, current court work load (cases), current court case complexity and current complexity average (monthly - programmed, but not operational).
- 5) **DJO Treatment vs. CPS Treatment Performance Report** - The purpose of this report is to compare the treatments administered with those recommended by CPA (Correctional Probability Aid Subsystem) to determine a success rate. A success is defined to be a fourteen month period in which a recidivism does not occur (not operational).

The JURIS system produces two reports related to scheduling juvenile hearings:

- 1) **Court Action Report for Witness Notification** - The purpose of this report is to prepare a list of juveniles scheduled for court hearings. The report includes the child's hearing sequence number, his name and identifier, his attorney's name, the referring officer name, the witnesses notified and the time of the hearing. This report is generated three weeks prior to the scheduled hearing date (daily).
- 2) **Daily Docket by Hearing Officer Report** - The purpose of this report is to prepare a schedule of cases to be heard, by hearing officer. The format of the report is identical to the Court Action Report for Witness Notification (daily).

Data inquiry is the capability to operate with the computer system in an interactive mode. That is to say that by pressing buttons on a CRT terminal, pertinent child data can be immediately accessed and displayed. The availability of data on a real-time basis is the ultimate response in terms of information timeliness for decision making processes.

The JURIS system supports two major types of inquiry output.

- 1) **Complete file display** - which allows the user to display all the information on the child's file.
 - 2) **Snapshot display** - which allows the user to display pertinent summarized and/or abbreviated child information.
- The turnaround document (Referral Processing Form) is used for case status monitoring. Periodically, if an error was changed on the child's file or if there was a change in his status, an updated Referral Processing Form is produced to replace the previous copy.
- Reports are produced which are basically utilized at four organizational levels:
- 1) DJO
 - 2) Supervisor
 - 3) Court Administrator
 - 4) Judge

These include:

-- At the DJO and Supervisor levels --

- i) **DJO Activity Summary** - The purpose of this report is to inform the DJO of the time spent, by category, on a particular case current month, year-to-date- and total by office hours, community hours, telephone hours, case record hours, and correspondence hours (monthly).
- ii) **Adoptions Report** - The purpose of this report is to list children who are available for adoption (parental rights have been terminated). It also flags those children which have been available for greater than one calendar year (monthly).
- iii) **Work Load Supervision Report** - The purpose of this report is to list all children under the care of a JDO and their current status (monthly).

- iv) **Recidivism Activity Report** - The purpose of this report is twofold:
 - to list all juveniles that have more than one referral
 - to list those juveniles whose latest referral was within the current calendar month (not first timers). (monthly)
- v) **Detention Status Report** - The purpose of this report is to list juveniles being detained, total days in detention, referral reason, DJO involved, the number of previous detentions, and the referring agency and officer (daily).
- vi) **Child Placement Report** - The purpose of this report is to list all children placed in institutions, his placement date, current month and year-to-date days enrolled and days remaining (monthly).
- vii) **Child Master List** - The purpose of this report is to list all children who have been involved with the court. Children who have reached majority will be purged from the list.

-- At the Court Administrators and Judge levels --

- i) **History Record - Juvenile Treatment** - The purpose of this report is to monitor treatment success by observing recidivism rate within treatment category (monthly).
- ii) **School Referral Category Report**. - The purpose of this report is to list the number of children referred to the court by referral category (delinquency, traffic, neglect, custody, special proc. and adoption) by school (monthly).
- iii) **Referrals by Disposition Report** - The purpose of this report is to list, by hearing officer, the number of offenses within outcome-current month, last month, and year-to-date (monthly).
- iv) **Referral and Disposition Summary** - The purpose of this report is to list the number of juveniles referred and disposed by the court - current month, last month, and year-to-date, by referral reason (delinquency - includes undetermined, serious, minor, city ordinances, non-law; traffic, neglect; jurisdiction; administration and attempts/service) - (monthly).
- v) **Referral and Disposition Report** - The purpose of this report is to summarize the number of juveniles referred and disposed by referral reason (annual).

- vi) **Referrals by Reason for Referral Report** - The purpose of this report is to list the number of children, by sex/race, within referral reason (monthly).
- vii) **Referral Source by Race and Sex for Delinquency Report** - The purpose of this report is to list the number of children by sex/race by referral source for delinquency referrals only (monthly).
- viii) **Referral by Source Report** - The purpose of this report is to list the number of children referred to the court by source (e.g., schools, parents, relatives, police agency, etc.), categorized by referral reason (monthly).
- ix) **Delinquency Referral Report** - The purpose of this report is to list the number of times children were referred to the court for delinquency by race/sex year-to-date (monthly).
- x) **Disposition With Referral Reasons by Hearing Type Report** - The purpose of this report is to list the number of disposition within referral reason for each hearing officer (monthly).
- xi) **Disposition by Type of Hearing Report** - The purpose of this report is to list the number of children disposed by hearing type within month (monthly).
- xii) **Disposition by Category and Month Report** - The purpose of this report is to list the number of juveniles by referral type within disposition for this month, last month, percent change, current year-to-date, last year-to-date, and percent change (monthly).
- xiii) **Reason for Detention Report** - The purpose of this report is to list the number of children by race/sex and detention reason for current month, last year current month, current year-to-date, last year-to-date and percent changes (monthly).
- xiv) **Placement and Days in Detention Report** - The purpose of this report is to list the number of children placed and days in detention by race/sex for this month, same month last year, this year-to-date, last year-to-date and percent changes (monthly).
- xv) **Released from Detention Report** - The purpose of this report is to list the number of children by race/sex and reason for release from detention for current month, last year current month, current year-to-date, last year-to-date and percent changes (monthly).

3.0 CHILD CARE AND PLACEMENT INFORMATION SYSTEM (CCPIS)

3.1 HISTORY AND SCOPE

The CCPIS system was developed to enhance the data gathering and reporting which is necessary to manage caseloads, track individual cases, and prepare necessary regulatory reports. It was intended that use of the CCPIS system would provide help to improve child care programs by encouraging more rational decision making and optimizing use of human resources. The system was developed jointly by the Information Systems staff of the Michigan Department of Social Services (MDSS) and a committee comprised of workers and administrators representing various child care agencies throughout the state. This included probation officers, court supervisors and probate judges, representatives from the Supreme Court Administrators Office, state office personnel specializing in statistical reporting, adoption, foster care, delinquency and other related areas.

3.2 SIGNIFICANT USERS

The system is currently being used by three sectors, i.e., all agencies within the MDSS, the probate courts, and all private agencies licensed by the MDSS. The CCPIS Control Unit, which is supported by the MDSS is responsible for the operation of the system and performs the following functions.

1. Handles all incoming input documents from county, court and private agency offices and batches them for data processing.
2. Performs a file clearance for those input documents that do not have a recipient ID number when the inquiry into the client information system proves negative.
3. Resolves problems that arise through the rejection of input data from the edit programs and correcting the invalid data when applicable.
4. Notifying and/or returning major problems which the control unit cannot solve on site.
5. Handling correspondence and communication to insure timeliness and accuracy of input to the system.
6. Performs education function to the field staff.

As an undercare reporting system, CCPIS is tracking and monitoring service delivery in approximately three hundred agencies throughout the State of Michigan.

3.3 SYSTEM OVERVIEW

CCPIS is essentially a 'child-tracking' system for gathering, processing and producing information about children in Michigan in the care of, or under the supervision of child care or service agencies.

The CCPIS data base is a set of "child" records, i.e., case histories of all children in the system. No family data is carried in the system. The client base then consists of all children under the care or supervision of child care or service agency agencies, including the Department of Social Services, probate courts and private child care agencies, who live outside of their own homes and/or whose parental custody has been disturbed by court action. Children under the supervision of the probate court of Department of Social Services on an informal or preliminary basis may also be entered in order to provide accurate statistics on the provision of, and need for social services to children.

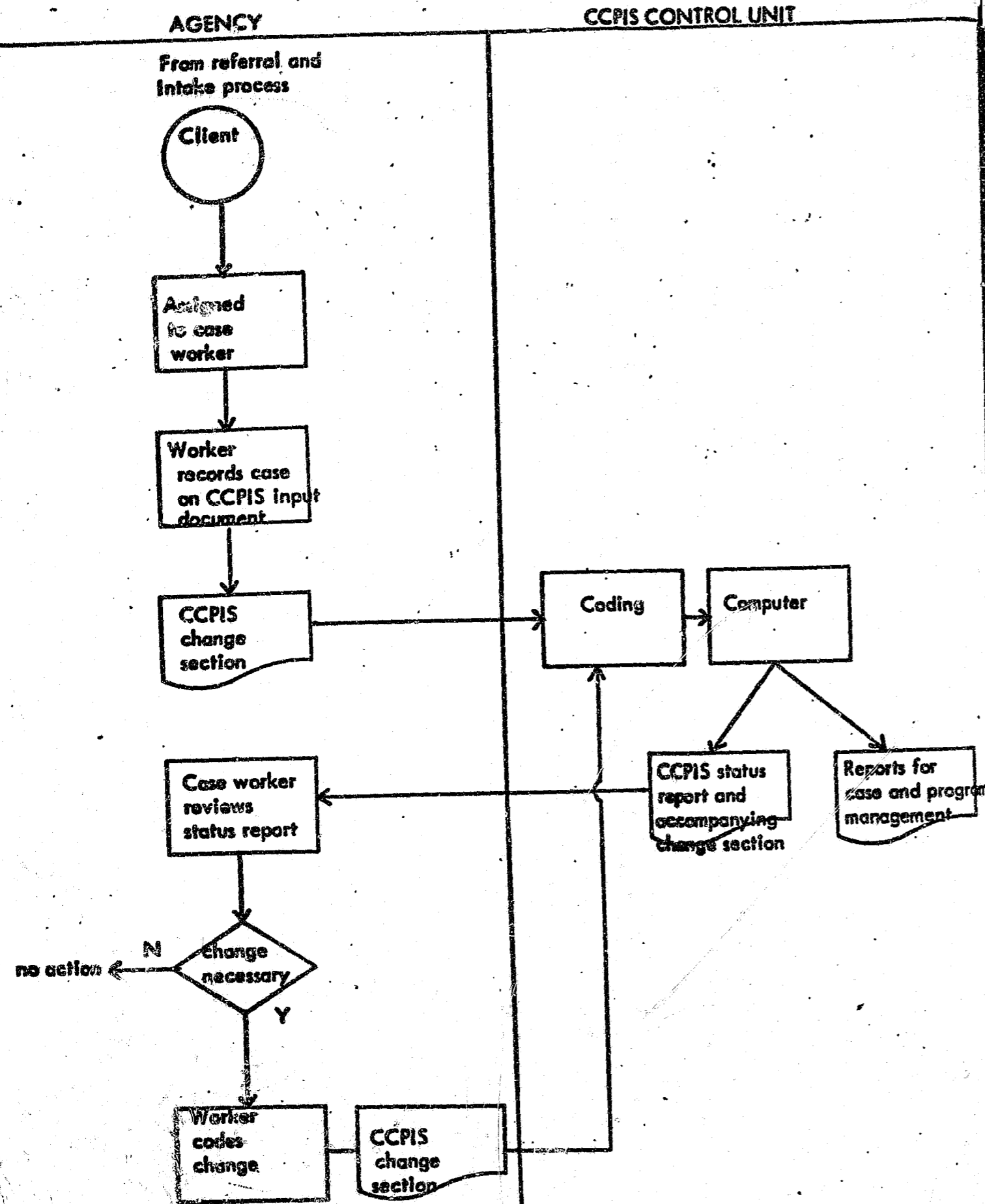
Case histories are stored in the system and the caseworker has the ability to update that information as necessary. Also, the worker is kept informed of his client's status and alerted to potential problems or review points by the system. The caseworker is responsible for maintenance of the individual client records. The system will also produce agency level reports containing aggregate information which can be used for program management and evaluation. It also produces reports which are used by the sectors and/or the state for mandatory reporting and program management and evaluation.

3.4 DATA INPUT AND OUTPUT REPORTING

Data input to CCPIS is done via a single input document which contains the following data items:

- | | |
|---------------------------------|--|
| 1. agency and branch codes | 14. total offenses |
| 2. child's name | 15. child's living arrangements |
| 3. child's birthdate | 16. placement date |
| 4. child's sex | 17. county where living |
| 5. child's race or ethnic group | 18. commitment date |
| 6. child's religion | 19. current status of child |
| 7. handicaps, if any | 20. client case events |
| 8. source of referral | 21. services needed |
| 9. performance levels | 22. long-range goal |
| 10. legal status of child | 23. review date |
| 11. petitions or complaints | 24. sources of support |
| 12. latest offense | 25. county responsible for financial support |
| 13. type of hearing | 26. agency case number |

CCPIS SYSTEM FLOW



The above data is gathered by the various agencies after intake and referral and input to CCPIS. The data is then processed and CCPIS is capable of producing the following reports:

<u>Report</u>	<u>Description and/or Function</u>
DSS-3191 Report	Notice of placement to foster home, institution, etc.
Court delinquent report	Reports movement to and from wardship
Court neglect report	Reports movement to and from wardship
Initial placement listing	Listing of state wards initial non-detention placement
Parole Board Review Roster) Private Agency case review roster) Court Agency case review roster)	Listings of cases up for review on mandatory anniversary review dates
Delinquency report	New offenders vs. recidivists by offense
Intake report	Distribution of referral vs. placement
Length of stay of placements	Summary of length of placements by various criteria
Secondary Caseload Summary	Summary of workers secondary caseload (those which have been transferred to another agency)
Inter Sector flow	Tracking movement between sectors (MDSS, courts, private agencies)
Services seeking/needed report	Report those services designated as needed but not available
Closings by wardships source of support, reason for closing	Distribution by the listed criteria
Age, source of support, living arrangement by wardships	Distribution by the listed criteria
Profile of children awaiting placement	Summaries of those children awaiting placement
Long-term foster care analysis report	Profiles of children in long-term foster care
Offense report	Frequency distribution by offense

Report

Description and/or Function

Change of placement report	Movement out of and into placement
Commitments of Court Wards)	Rosters and summaries of new wards
Commitments of State Wards)	

3.5 FACILITIES REQUIREMENTS

The Child Care and Placement Information System is currently operating in a batch mode on a Burroughs B-4500, running under the Burroughs Master Control Program. The twelve CCPIS source programs consist of approximately 6000 lines of COBOL instructions. Client population of 30,000 active children in placement requires computer processing time of approximately 1 1/2 hours per week in addition to 15 hours per month for reporting.

4.0 CHILD WELFARE INFORMATION SYSTEM (CWIS)

4.1 HISTORY AND SCOPE

CWIS is a result of several years of gradually converging efforts within the child welfare field. Two major studies contributed to the development of the system. The first began in 1969 when the Council of Voluntary Child Care Agencies (COVCCA) started independent initial efforts toward developing an integrated information system. A survey was conducted of various existing computer based child welfare information systems and to determine the feasibility of an integrated information system. The report recommended the development of such a system and also the establishment of a non-profit service bureau to develop and operate the system. The second study was initiated in 1971 by the New York City Interagency Council on Child Welfare to determine the optimal structure and operation of the City's child welfare services network and the data requirements for a comprehensive information system.

Convergence of these efforts led to a decision to establish the needed information system and the service bureau as a public-voluntary partnership.

4.2 SIGNIFICANT USERS

CWIS Inc. (the service bureau) acts as a non profit organization operating CWIS (Child Welfare Information System) under contract to over eighty-five authorized public and voluntary agencies in the child welfare field.

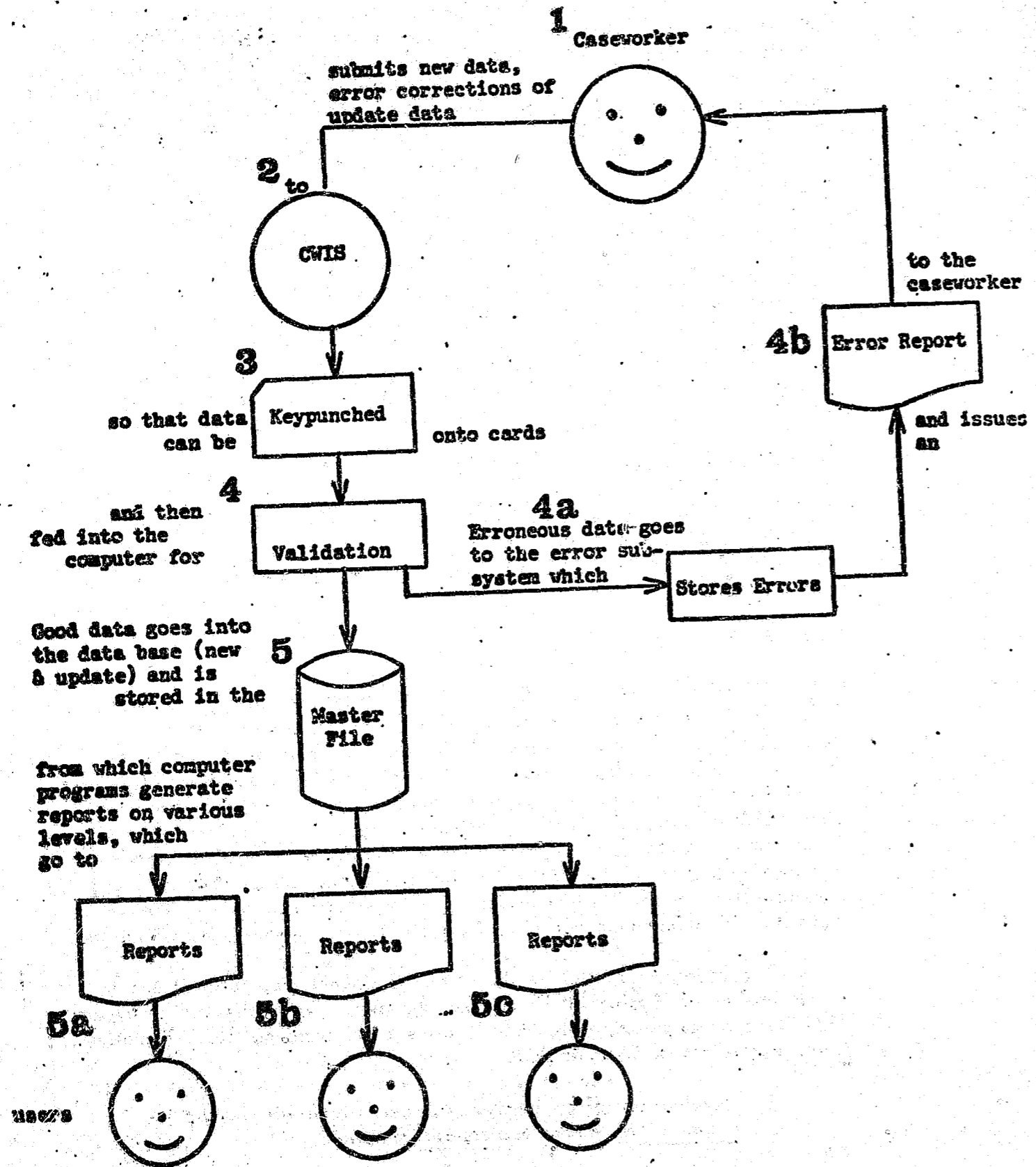
4.3 SYSTEM OVERVIEW

CWIS provides detailed data on each child's condition, family status and location within the child welfare services network. It is considered a "child tracking" system, with the data base being the set of individual child records, together with associated sibling and head of household data. The caseworker is responsible for input to the system for each of his clients. The system supplies the worker with current status information on each client so that he may effectively manage his cases, and also with summary information on his case load. It provides administrative personnel with various regulatory and administrative reports and also with information necessary for program management and evaluation.

The undercare portion of the system is currently operational and is in the process of phasing in the member agencies. As of the end of December 1974 there were approximately 24,000 active child cases on file. Tentative future expansions of CWIS include:

- 1) development of an in-process system which will handle the application, intake and referral functions,

CWIS
UNDERCARE SYSTEM



- (2) modifications to the input and error correction process which will simplify case worker clerical effort,
- (3) development of a history system which will track the history of a child's association with the welfare network, and
- (4) introduction of psychological data to the system.

4.4 DATA INPUT AND OUTPUT REPORTING

Briefly stated, CWIS gathers data from child-caring agencies at two points -- when a child enters the agency (during the initial "phase-in" of agencies, data on all children in care is entered as of the date the agency enters the CWIS system); and as periodic reviews are made (at least twice annually).

The data is then processed by CWIS' computer, issuing various types of "outputs":

Report Number and
Frequency of Issue

Description of Report

006R
Monthly

CITY BILL DOCUMENTATION. This report lists children in care and on suspended payment status in each agency facility or program; the lists are arranged in the format required for the monthly City Bill.

Purpose: This report may be used by voluntary agencies as a clerical time-saver in preparing the City Bill each month.

026R
Quarterly

ADOPTION STATUS FOR CHILDREN FREE FOR ADOPTION . . . PLAN IS ADOPTION. This statistical report identifies certain characteristics (age, ethnicity, sex and religion) of children free for adoption; it distinguishes between those for whom adoptive homes have and have not been identified.

Purpose: This report may be used to plan adoptive homefinding activities and to gain a more detailed understanding of the characteristics of children for whom adoption planning is pertinent.

027R
Quarterly

ADOPTION STATUS FOR CHILDREN NOT FREE FOR ADOPTION . . . PLAN IS ADOPTION. This statistical report identifies characteristics of children

with adoption plans who are not free for adoption; it also reviews the status of efforts to free the child.

Purpose: This report may be used to plan follow-up procedures for cases pending Court action and to gain a more detailed understanding of the characteristics of children for whom adoptive planning is pertinent.

029R
Frequency Not
Yet Determined

ADOPTION STATUS FOR CHILDREN IN PLACEMENT FOR WHOM THE PLAN IS ADOPTION. This report identifies by name those children whose characteristics are enumerated in reports 026R and 027R.

Purpose: This report may be used to identify children whose adoption plans can be expedited by taking action to free them for adoption or by finding adoptive homes for them.

040R
Semi-annually

CHILD INFORMATION SHEET. This report provides a non-coded summary of the latest information in the CWIS files concerning a particular child.

Purpose: This report may be used as a brief reference to pertinent data about the child which can be kept in the case record; it also serves as a source document for discovery of errors in the CWIS files which should be corrected.

046R,
047R
Monthly

CENSUS OF UNDER CARE POPULATION - A, B. These statistical reports identify children by age, ethnicity and current program. Census A also identifies children by sex; Census B identifies the percentage of age and ethnic groups within each program.

Purpose: These reports may be used over time to follow trends and forecast future levels of demand for foster care services.

048R
Quarterly

ANALYSIS OF CHILDREN . . . IN (INSTITUTIONS/ FOSTER HOMES) FOR WHOM OTHER PLACEMENT IS DESIRED. This set of two statistical reports identifies children by age, ethnicity, sex, current program and desired program.

Purpose: These reports may be used to anticipate transfer activities and to plan new services to limit the need for future transfers.

049R
Semi-annually

(1) CENSUS OF . . . CHILDREN WHO HAVE ENTERED CARE FROM (Date) TO (Date). This statistical report presents the characteristics of children who have been in care for various periods, e.g., ten to fifteen years, five to ten years, etc.

Purpose: This report may be used to compare the characteristics of children who have been in care for varying periods of time.

(2) CENSUS OF . . . CHILDREN WHO WILL REMAIN IN CARE UNTIL (Date). This statistical report presents the characteristics of children who will remain in care for various periods, e.g., at least six months, at least one year, etc.

Purpose: this report may be used to anticipate levels of extended agency activity and to plan for the future allocation of resources.

056R
Monthly

LOCATION AND COURT STATUS DETAIL. This statistical report presents information on the Court-adjudicated status of children now in placement.

Purpose: This report may be used to answer questions such as: How many children now in care have been adjudicated PINS or Delinquent or Abused or Neglected? How many of these children are in placement with voluntary agencies, and how many with SSC Direct Care Programs?

066R
067R
Monthly

AGENCY BIRTHDAY REPORTS. These lists of children who will soon celebrate a birthday indicate the age to be attained. 066R reports on children who will be 18; 067R reports on all children who will celebrate a birthday in a given month.

Purpose: These reports may be used as "tickler" lists for (a) making discharge plans or requesting extensions of care for those who will be 18; and (b) changing clothing allowances and foster home payments as children grow older.

076R
Monthly

FACILITIES ANALYSIS BY CENSUS TYPE. This statistical report summarizes the number of child care days administered, admissions, transfers-in, and discharges and transfers-out.

Purpose: This report, when expanded to include information about agency facilities and services, will be of use in reviewing agencies' ability to respond to changing demands for service.

086R
Monthly

FOSTER CARE POPULATION REPORT: Form M-284. This statistical report indicates the number of children admitted, discharged and transferred, by various categories each month.

Purpose: Form M-284 is compiled for use by the SSC Office of Program and Rates Analysis, which keeps track of key indicators of past and current foster care activity. Computer production of this report serves as a clerical time-saver.

096R
As Required

REQUEST FOR ANNUAL RE-AUTHORIZATION FORM W-853; SEMI-ANNUAL REVIEW FORM W-853F. These computer-printed face sheets of required agency reports include basic identifying information about the child and family reported on.

Purpose: The computer-printed W-853 and W-853F face sheets may be used as clerical time-savers in preparing these reports.

108R
Semi-annually

CHILD REGISTER. This list of all children in the agency's care provides detailed descriptive information about each child and the program provided for him/her in a concise, coded format.

Purpose: The Child Register may be used by agency managers to identify children with particular characteristics and may also serve as a source document for compiling special reviews of children with certain characteristics.

119R
Monthly

CASEWORKER DATA ACTIVITY REPORT. This list of all children in an individual caseload (a) identifies those who appear on the latest Form W-853/853F topsheet, Child Information Sheet, or Agency Birthday Report produced by CWIS and (b) indicates when the Form B Review Information is past due at CWIS.

Purpose: This report may be used (a) as a "tickler" list of children for whom a Form W-853/853F will be due in the coming month, and (b) when returned to CWIS, to verify the status of each child in the caseload who does not appear on the worker's Form D that month. It also

serves as an inventory of CWIS output documents which should have been received by the caseworker.

4.5 FACILITIES REQUIREMENTS

The Child Welfare Information System is currently operating in a batch mode on an IBM 360, Model 40 running under DOS. The CWIS Source Program language is COBOL. Client population of 24,000 children in placement requires approximately 12-18 hours per month for file maintenance and 50-70 hours per month for reporting.

5.0 THE CHILDATA SYSTEM

5.1 HISTORY AND SCOPE

The Council for Community Services in collaboration with representatives of twenty-six child care agencies were responsible for the development of the Childata system.

Together with agency representatives and computer companies the Council staff engaged in a two year study to determine the needs of the users; the definition of terms; the reports to be generated and the methods and procedures for handling and processing the data.

Over \$100,000.00 of private foundation money was expended in order to develop a preliminary system and initiate a pilot test of Childata.

The objective of the system is to improve care of children in the Chicago Area through the local child care agencies by being able to provide them with timely and appropriate information about clients, agency caseloads and community services.

5.2 SIGNIFICANT USERS

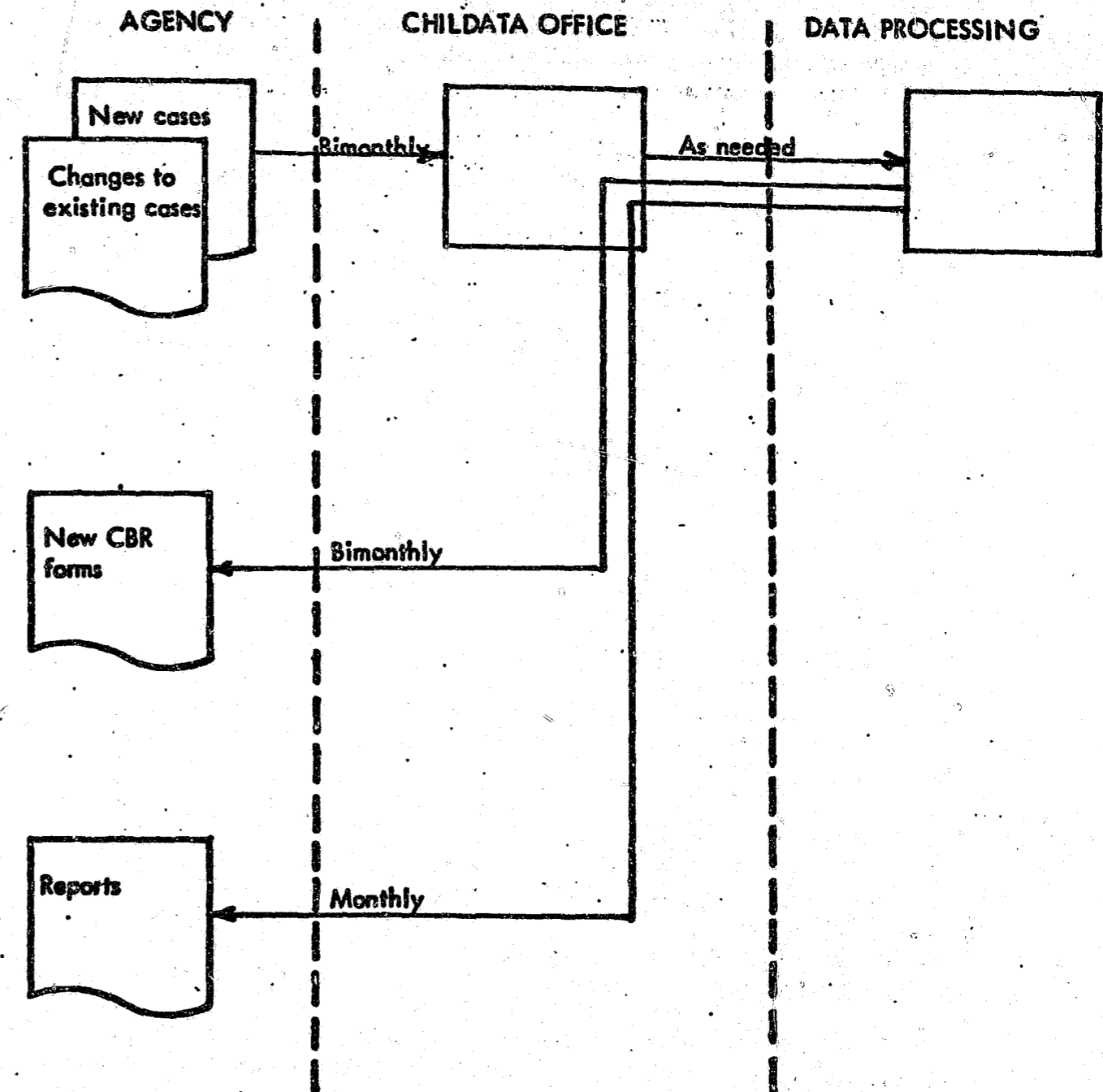
The Childata system is currently used by four agencies in the greater metropolitan Chicago Area:

- The Jewish Children's Bureau
- Chicago Child Care
- Mary Bartelme Homes
- Laurence Hall - Randal House

5.3 SYSTEM OVERVIEW

When a client is admitted to an agency, the social worker responsible fills out an initial CBR form (black ink). The forms are collected by the individual who is responsible for Childata within the agency. The forms are sent to the Childata office bi-monthly. A green ink CBR is printed by the computer with the original information inputted and returned to the agency (one copy to the caseworker and the other to the statistical clerk). Changes in status or corrected errors are simply circled on the caseworker's copy of the document and inputted into the system. A new document is produced and the cycle is completed. Once a month, the reports are printed and sent to the agency. The following figure is a diagrammatic representation of the Childata system.

CHILDATA SYSTEM FLOWCHART



5.4 DATA INPUT AND OUTPUT REPORTING

Data is initially collected when a client is accepted for service by an agency participating in the Childata system. The data primarily falls into three categories:

- child data
- family data
- administrative data

The data elements included under the first category include: client name, case number, type case, birthdate, sex, religion, handicap, race/color, spanish/american descent and family and sibling identifiers.

It should be noted that although the system is structured to accept a unique family and sibling identifier, no current use is being made of this data.

Those appearing in the second category include: reason for referral, including both the client's current view and the worker's current view, current guardians, whereabouts of natural parents (father and mother), presence of parent/surrogate, relationship of father surrogate to child, relationship of mother surrogate to child, parent's marital status, family income, number of persons in family, poverty status, number of family members seen, siblings serviced now or past, county of residence and local area of residence.

Lastly, administrative data which is collected includes: program, opening status, date opened, date review due, CFC functional budgeting, financial support, caseload, worker assigned to the case, other workers assigned to the case, IDC and FS identification number, IDC and FS region, IDC and FS billing, court determination, insurance and government programs, living arrangements prior to acceptance, and county of court jurisdiction.

It should also be noted that although the system is codified with four opening status codes (new client, reopen from prior year, reopen from this year, transfer in) there are no linkages within the context of the system by which clients which have re-entered the system can be correlated with their past files. However, since all client information is stored indefinitely on magnetic tape, said data could theoretically be retrieved if special computer programs were developed. At the present time, each agency serving the client must fill out an initial CBR-1 document and therefore assign him a different identifier.

CONTINUED

2 OF 3

5.4 DATA INPUT AND OUTPUT REPORTING

Data is initially collected when a client is accepted for service by an agency participating in the Childata system. The data primarily falls into three categories:

- child data
- family data
- administrative data

The data elements included under the first category include: client name, case number, type case, birthdate, sex, religion, handicap, race/color, spanish/american descent and family and sibling identifiers.

It should be noted that although the system is structured to accept a unique family and sibling identifier, no current use is being made of this data.

Those appearing in the second category include: reason for referral, including both the client's current view and the worker's current view, current guardians, whereabouts of natural parents (father and mother), presence of parent/surrogate, relationship of father surrogate to child, relationship of mother surrogate to child, parent's marital status, family income, number of persons in family, poverty status, number of family members seen, siblings serviced now or past, county of residence and local area of residence.

Lastly, administrative data which is collected includes: program, opening status, date opened, date review due, CFC functional budgeting, financial support, caseload, worker assigned to the case, other workers assigned to the case, IDC and FS identification number, IDC and FS region, IDC and FS billing, court determination, insurance and government programs, living arrangements prior to acceptance, and county of court jurisdiction.

It should also be noted that although the system is codified with four opening status codes (new client, reopen from prior year, reopen from this year, transfer in) there are no linkages within the context of the system by which clients which have re-entered the system can be correlated with their past files. However, since all client information is stored indefinitely on magnetic tape, said data could theoretically be retrieved if special computer programs were developed. At the present time, each agency serving the client must fill out an initial CBR-1 document and therefore assign him a different identifier.

The client, therefore, has multiple files, depending upon the number of agencies, and there are, therefore, no linkages by which all the information in the Childata system can be accumulated for any given client.

Each time a new CBR-1 document is produced, the following case information is generated:

Age at opening, family type, current age, length of service to date, length of time in current whereabouts, status of reporting this case to IDC and FS.

The system also produces a number of reports for the case manager, including:

<u>Report</u>	<u>Purpose</u>
E	To provide agency management with documentation of all changes in placement to better track the movement of clients through the agency's array of services and placements.
F	To verify case transfers to other departments, other programs, or other workers within the agency.
G	To provide each caseworker and his supervisor a list of current cases.
P	To present case information which may assist in locating adoptive homes for children, and also shed light on some of the characteristics of the children awaiting placement.

The Childata System has the capability of tracking the client during the aftercare period. Aftercare is handled as any other coded program on the CBR-1 document and processed in a similar fashion.

Termination information is recorded on the client's file and includes:

- to whom discharged
- reason for discharge
- outcome

A report is also produced which lists the cases closed by age, with date closed, length of service, to whom discharged - and reason for, program, problem, age and service goal at opening and closing, outcome, satisfaction with present arrangement, and whereabouts.

At the state level, the following reports are produced:

<u>Report</u>	<u>Purpose</u>
A	For reporting caseload and turnover to IDC and FS and the Council
B	For reporting the whereabouts of clients to the IDC and FS and the Council
L	For billing the IDC and FS for reimbursement for group care: to provide up to date financial information on reimbursement cases; to provide an "accounts receivable" list for foster home cases.

The Childata System provides program management information at basically three levels:

- Agency
- Agency grouping
- State

At the agency level, the following operational reports are produced:

<u>Report</u>	<u>Purpose</u>
A	For agency statistical reporting of caseload and turnover to outside organizations and for internal agency caseload accounting, and as an input to manpower allocation.
B	For agency statistical reporting of caseload by type, location (whereabouts) to outside organizations and for caseload accounting.
C	To identify the children served, and their characteristics, where another agency or agencies also has responsibility for care.

Report

Purpose

D	To provide an overview of the volume and flow of cases into and out of programs/departments.
R	For reference to provide an up to date record of the full current contents of the master file on each case.
R-P	To provide program/departments heads with case distribution and selected characteristics - by program/department.
S	To identify the cases added, with selected client characteristics and service information.
T	To identify the cases terminated with selected client characteristics and service information.
OO	To reveal the characteristics of children being placed in adoptive homes.

6.0 SIGNIFICANT LOCAL SYSTEMS

6.1 LOS ANGELES COUNTY JUSTICE COMPUTER CENTER

6.1.1 Proposed Juvenile Offender Information System

The Los Angeles County Probation Department is currently considering development of a Juvenile Offender Information System (JOINS) to be run at the Justice Computer Center. At the present time, this effort is the definition phase of the project development cycle. It is anticipated that general and detailed design of JOINS will not begin for some six to eight months, depending on resource availability and possible federal funding participation.

In general, the need for such a system has been established based on the following criteria:

- From 100,000 to 120,000 children per year are arrested : by the local law enforcement agencies in Los Angeles County;
- Approximately 50% of these children come under the jurisdiction of the Los Angeles County Probation Department.
- The only available information facility is the Manual Central Juvenile Index, which contains arrest data for juveniles. This facility is operated by the Los Angeles County Sheriff and case records are simply indices, containing juvenile's name, birthdate, referral source, charge, mother's name, and agency disposition.
- The Los Angeles County Probation Department does have authority for informal supervision of children for whom no petition is filed for a period of up to six months.
- There exists no juvenile information system within the department which can handle the information management functions of intake, referral, case tracking and service delivery.

6.1.2 Major Justice Applications

The Automated Jail Information System (AJIS) is used principally to track adult jail bookings and movement within the criminal justice system. AJIS contains a few hard-core juveniles, aged sixteen and up, accused of crimes such as rape, murder, armed robbery, etc. This system is currently being evaluated for its potential use in tracking juveniles within detention centers, farms, and jails. AJIS is basically an on-line people inventory system.

The second important system which is currently operational is AUTO INDEX, which contains arrest date ('priors') for adults within Los Angeles County. The Los Angeles County Probation Department has already had discussions with respect to possible use for juveniles, but met considerable resistance to including juvenile arrest data with adults. This system is also on-line and is used principally by local law enforcement agencies within Los Angeles County.

6.1.3 Facilities Available

The Juvenile and Engineering Computer Center has two IBM 370/158 central processing units, each with two million bytes of main memory running under OSMVT/HASP. The justice processor uses FASTER as the telecommunications monitor to drive a variety of terminals in emulation mode. TSO (an interactive communications program) is being used strictly for program maintenance and is not used for interactive applications. Information Management System/360 (IBM's data base management system) is being utilized on-line as needed on the engineering processor. Facilities available are quite adequate for any information system which might be implemented by the Diversion Planning and Evaluation System Project.

6.1.4 Liaison Requirements

Implementation of a Diversion Planning and Evaluation Data System, utilizing Los Angeles County Data Processing Department resources, will require the following future co-ordinations:

- Before Los Angeles County Data Processing will seriously consider development, operation or maintenance of a Diversion Project data system, a county law enforcement sponsor must be found who will pay for manpower and machine resources utilized. An alternate approach would be to develop an agreement between the Los Angeles Regional Criminal Justice Planning Board and the County Board of Supervisors to cover system implementation costs.
- At such a time as a potential tracking system has been selected, co-ordination should take place with Ray Hamamoto, Chief of the Justice Computer Centers, who is ultimately responsible for both systems operations and maintenance. Such a discussion should focus on the impact of Diversion Project software on Justice Center operations.

6.2 DRUG ABUSE PROGRAM TRACKING SYSTEM (DAP)

The Drug Abuse Program Tracking System was implemented during 1974 by the Drug Abuse Program office of the Los Angeles County Department of Health services. This system serves as an information base for planning, evaluation, and research of various drug treatment programs.

DAP currently tracks approximately 9,000 clients, 40% of whom are juveniles. Data input is from fifty-nine agencies involved with various drug treatment programs and services. More than one-fifth of the juvenile clients are referred as a result of diversion by local law enforcement agencies.

Two input documents are utilized in DAP for data collection. The first of these, an admission report, is filled out upon intake and referral and contains:

- Client/agency identification and demographic data
- History of drug usage data
- Sociological, economic, and legal data
- Client disposition and reporting agency, if client was referred.

The second input document, a Status/Discharge Report, is completed on a monthly basis by the responsible reporting agency and contains the following data:

- Client/Agency Identification
- Reporting Period ('From' and 'To' dates)
- Client disposition during month
- Units of service received during month (in 24 hour modalities)
- Drug treatment approach (service type)
- Number of client contacts and with which staff categories
- Legal status
- New arrests (by type)
- Urinalysis results

Data from the above documents is keypunched and input to create a tape file data base which is subsequently processed with SPSS (Statistical Package for the Social Sciences) producing a wide variety of outputs, including cross-tabulation and correlation analysis. These reports are then summarized and used for evaluation of the various drug treatment programs.

DAP is written in FORTRAN and runs on an IBM 360/91 at the UCLA data center. The tracking system consists of approximately 9000 lines of source code which process data input, produce exception messages and produce the client data base for program analysis. This system does have the capability of locating a client by his identification code (initials and date of birth) or reporting agency code.

6.3 DEPARTMENT OF HEALTH SERVICES, MENTAL HEALTH SERVICES, PATIENT TRACKING SYSTEM

6.3.1 System Background

The State Department of Mental Hygiene requires the systematic collection and reporting of patient transactions within local mental health services agencies. These include: a) numbers of admissions; b) numbers of discharges; c) units of service; and d) characteristics of patients served. Additionally, the State Department of Mental Hygiene has mandated a cost reporting system under which costs (units of service) must be reported by age and problem of the patient. These components make up the Mental Health Services' Patient Tracking System.

With respect to the reporting of patient transactions, Mental Health Services has established a patient record file. With respect to the mandated cost reporting system, Mental Health Services has implemented the state sponsored Cost Reporting/Data Collection System (CR/DC) and its related policies.

6.3.2 Patient Record File

The computerized Patient Record File is both an evaluation tool and a management instrument. It is used to conduct cohort studies within the Short-Dayle Mental Health System over extended periods of time. Currently, there are over 500,000 transactions (admissions) on the file. The present rate of growth of these transactions approximates 120,000 per year.

This file contains the patient characteristics, including the census tract of his residency and detailed treatment history, including the costs of treatment. Since its inception in July, 1969, the file has undergone several major revisions. The most important revision was the inclusion of cost data on all patient transactions. The file is also the source of all patient description reports, including the patient characteristic data presented in the County's Patient and Service Statistics Reports.

6.3.2 Patient and Service Statistics Reports

As a by-product of the Patient Record File processing, a series of statistical tables are generated by the computer. These tables include: 1) the recorded characteristics of the patients, displayed by the location where service was rendered and by the Mental Health District in which the patient resides; and 2) selected census data, vital statistics, morbidity statistics and probation statistics. The tables are used by the Mental Health Services to study and evaluate treatment patterns and patient characteristics, including geographical factors in treatment. They are also a major source of information used in Mental Health Planning.

Other tables display:

- Patients for longitudinal studies by specified characteristics.
- Admissions, discharges, caseloads, and service by reporting unit for specified periods of time.
- Admissions, units of service and costs by types of problem and age group.
- Admissions data by Mental Health District and census tract.
- Total and average units of service by Mental Health District and reporting units.
- The types and amount of indirect service performed by category of professional.
- Mean units of service by nine selected patient variables--
Mental Health District patient residence, age, legal status at entry, legal status at exit, marital status, problem area, diagnostic category, sex and race.

6.3.3 Cost Reporting/Data Collection System

The Cost Reporting/Data Collection System is a fiscally-oriented management tool, developed by the state, and intended to provide reimbursement for community Mental Health Services. In its operational mode (both automated and manual) CR/DC consists of four main processes:

- Planning-Budgeting
- Claims Reporting and Reimbursement

- Cost Reporting
- Management Reporting

Management information is also gathered through CR/DC by tying the flow of funds to the submission of data on the level and type of services provided by local providers. This data is part of the required claims data. Reimbursement is based on a calculated provisional rate based on budgeted cost per unit of service for each provider. Total annual reimbursements are adjusted to actual cost based on a year-end cost report.

6.3.4 Hardware/Software Requirements

The Patient Tracking System's components are written in PLI and are run on an IBM 360/20 disk-oriented processor. Current source documentation is geared to Mental Health reporting units and categories of service.

7.0 UNITED COMMUNITY EFFORTS, EXTENSION ZERO STAFF SUPPORT, CLIENT TRACKING AND EVALUATION SYSTEM

7.1 HISTORY AND SCOPE

Since 1968, United Community Efforts in East Los Angeles has operated the Extension Zero Staff Support, Client Tracking, and Evaluation System to track and control the movement of clients through their outreach, counseling, training, and employment programs.

7.2 SIGNIFICANT USERS

The United Community Efforts, Extension Zero Staff Support, Client Tracking and Evaluation System is currently used by the administration staff of that organization as a management and program monitoring tool and by the professional staff to implement new operating standards (administrative policies).

7.3 SYSTEM OVERVIEW

The United Community Efforts, Extension Zero Staff Support, Client Tracking and Evaluation System has been designed to serve the specific needs of line, administrative and evaluation staff in an individual and timely way. It operates in the following manner.

Each vocational instructor, job placement counselor and social worker is instructed to dial a telephone operator, actually a data secretary at United Community Efforts, to report daily operations. (It is estimated that 150 persons input data in this fashion). The data secretary, assisted by computer printouts and a decision tree-oriented operation manual, asks all necessary questions during this conversation. Instead of doing paperwork, staff dictate all information needed for program operations and evaluation to the data secretary.

At any time, staff can call the data secretary and receive an up-to-date client progress report. This verbal report includes co-ordinative information from all agencies, programs, departments, and employees working with a special client. With the information obtained from this report, staff are expected to react quickly and effectively to meet the individual needs of their clients.

Additionally, the system monitors each client's progress. It verifies that the client is seeing the correct staff person, receiving the proper services, regularly attending the program, and otherwise progressing according to the staff person's plan. If a problem develops, the data secretary, prompted by the computer, notifies the staff person to take action. During subsequent daily conversations, the data secretary continues to follow-up until the problem is resolved.

As required, client status reports and policy control letters are printed and sent to all staff persons reporting to the system. In addition, agency staff are notified when client related action is needed, and supervisors when action cannot be or has not been taken. If the supervisor is unable to correct the problem, the data secretary then notifies the supervisor's superior. If necessary, this sequential notification continues up the administrative chain-of-command until corrective action is taken.

Information necessary for administration of program operations is also compiled by the System. At both the local management and all other administrative levels, the System provides definitive reports, depicting individual cases where client services were not readily obtainable. It also specifies why services were not provided, together with recommendations for solving such problems. These reviews are used to reveal inconsistencies in agency or community programs, identify stumbling blocks in procedure, and isolate other factors impeding the progress desired.

When information is incomplete or incorrect, the data secretary, assisted by the computer, solves the difficulty while speaking with the staff person responsible for providing the information. This daily interaction between the staff person and the data secretary provides a forum for eliminating data problems.

From an evaluation viewpoint, the System provides the capability to collect longitudinal data to review the achievement of program goals on a continuous basis, to isolate program elements that result in positive outcomes, and to evaluate the cost effectiveness of programs in relation to differential client behavior (i.e., sustained employment or non-recidivism).

7.4 DATA INPUT AND OUTPUT REPORTING

Data input to the United Community Efforts' System is done primarily by phone and includes the following data categories:

- Client Demographic Data
- Agency Identification Data
- Client Disposition Data
- Service Delivery Data
- Caseworker Activity Data

This data is subsequently processed and produces a series of statistical reports, including client status reports, policy control letters, staff activity reports and client characteristics reports.

The United Community Efforts' System is run on an IBM 360/50 at a local service bureau.

8.0 EXTENSION ZERO, STAFF SUPPORT, CLIENT TRACKING AND EVALUATION SYSTEM

8.1 SYSTEM SCOPE

As described in Section 7.0 of this report, operation of Extension Zero involves the utilization of two technological systems, one telephonic and the other, information processing. Both systems use standard equipment which is readily available.

The telephonic system includes only that equipment which has already been installed to support normal agency operations. The information processing system utilizes a flexible software package (Meta-compiler) designed for broad application in criminal justice, manpower training and employment, and other human-service agencies. The information processing system is designed to operate in interactive or batch mode on an IBM 360/50.

8.2 SYSTEM USERS

In addition to the United Community Efforts utilization of the system to track and control the movement of their clients through their outreach, counseling, training and employment program; the Extension Zero System has been utilized by the Los Angeles City schools to accomplish similar goals. The Extension Zero System has also been implemented in a criminal justice environment. In Los Angeles County, one of the Probation Department's area offices has utilized the System to keep track of cases entering, moving through, and leaving the probation program during any month.

8.3 SYSTEM CAPABILITIES¹

According to Extension Zero Systems documentation, the primary objective of their System is to facilitate the achievement of agency goals in a more expeditious and cost effective manner. To attain these goals, the System provides the user with the following capabilities.

- Operates with or without sophisticated on-site hardware.
- Articulates the data needs of line, administrative, and research staff.
- Collects data without burdening staff with "computer paperwork"; thereby freeing staff for direct services to clients. It also provides administrators with the capability to eliminate a considerable portion of the organization's "regular paperwork".

1) The capabilities statements outlined in this Section of the report were extracted from Extension Zero Systems' capability documentation.

- Collects accurate data through an efficient, flexible and comprehensive verbal process that utilizes decision-trees to exhaust the semantic capabilities of field staff to perceive client behavior
- Stores information in a longitudinal (not point-in-time or summary) manner. This storage capability is a prerequisite for developing definitive action policies and for executing in-depth program evaluation.
- Monitors line staff operations.
- Notifies staff on a client-by-client basis when administrative policies need to be executed and provides systematic follow-up to insure that those policies have been implemented; thereby freeing staff for direct service to clients. Co-ordination of field staff activities, including the delivery of human services provided by various programs or agencies, is implicit in these policies.
- Identifies program problems and client needs, facilitates the implementation of new services to meet these needs, and quickly measures the ability of these new services to produce the desired results.
- Accelerates the program development process (initial measurement, analysis of data, development of new policy, implementation of policy, measurement of effects, analysis of data, modification of development of new policy, etc.) by facilitating on-going research and evaluation that is a viable and integral part of program operations.
- Produces automatic periodic assessments of program performance on two evaluative levels: primary-goal achievement (overall performance measures, i.e., favorable departure, sustained training or employment, nonrecidivism) and secondary-goal achievement (program elements or variables that directly or indirectly cause clients to achieve the primary-goals, i.e., measures of type, activity intensity, relevancy, and sequence of program elements or services provided to clients).
- Links diverse types of human service agencies (criminal justice, manpower training and employment, health services, welfare, etc.) into a single co-ordinated human-service delivery-system.

APPENDIX B:
INFORMATION SYSTEM
REQUIREMENTS SPECIFICATION
SUPPLEMENT
MARCH, 1975

Prepared for:
DIVERSION PLANNING AND EVALUATION SYSTEM PROJECT
STEERING COMMITTEE

Prepared by:
MOTT-MCDONALD ASSOCIATES, INC.
2755 NORTH BUTLER ST.
ORANGE, CALIFORNIA 92665
714/637-1649

SYSTEM COMPARISONS

INTRODUCTION

This supplement has been prepared by the Diversion Planning and Evaluation System Project (DPESP) staff for the purpose of comparing the candidate Case Data and Evaluation Systems surveyed. Figure I represents a summary comparison tabulation of the original eight systems surveyed. These are compared on the twelve operational and documentation factors approved by the DPESP Steering Committee.

Figures II, III and IV then compare the two systems receiving the highest scores as a result of the first comparison in respect to information requirements satisfied, reporting requirements satisfied, and estimated operating costs.

Based on the findings of the Project Team as reported in the Requirements Specifications and this Supplement, the Steering Committee chose the Kansas City, Youth Service Bureau's Client Action; Characteristics, Tracking and Record Updating System (CACTUS) for transfer to Los Angeles County for Project purposes.

**SUMMARY COMPARISON TABULATION OF
CURRENT SYSTEMS SURVEYED**

FIGURE I

Figure I represents a summary comparison tabulation of the eight Case Data and Evaluation systems surveyed. Each system was assigned a raw score based on merit for each comparison factor: 1 = poor, 2 = fair, 3 = good, 4 = excellent. Comparison factors were weighted from the most desirable (adequate documentation) through the least important (input forms format). The results of extending raw and weighted scores are a rank order of systems surveyed which is itemized as follows:

System	Raw Score	Weighted Score
CACTUS	36	239
CCPIS	33	224
JIS	30	213
JURIS	31	209
CWIS	25	172
CHILDATA	24	169
DAP	22	151
*EXTENSTON ZERO	12	78

*Refer to Note 1, Section V, Case Data and Evaluation System Requirements Specifications.

COMPARISON FACTORS	WEIGHTING FACTOR	SYSTEMS SURVEYED							
		CCPIS	CHILDATA	CWIS	JURIS	CACTUS	DAP	EXTENSION ZERO	JIS
ADEQUATE DOCUMENTATION	12	2	2	2	2	3	2	1	4
SECURITY & CONFIDENTIALITY	11	3	4	3	4	3	2	1	3
DATA BASE SCOPE	10	3	3	2	2	4	3	1	2
SYSTEM FLEXIBILITY	9	3	1	3	1	2	2	1	1
HIGHEST LEVEL OF OPERABILITY	8	4	1	2	3	3	2	1	2
TRACKING CONTINUITY	7	4	2	2	4	3	1	1	4
SYSTEM COMPONENTS	6	2	2	1	3	4	2	1	3
REPORT TIMELINESS	5	3	2	2	4	3	1	1	4
EXCEPTION MONITORING	4	3	2	3	3	3	1	1	3
REPORT FLEXIBILITY	3	2	2	2	2	3	3	1	2
FILE FLEXIBILITY	2	1	1	1	1	2	1	1	1
FORMS INPUT	1	3	2	2	2	3	2	1	1
TOTAL SCORES	RAW:	33	24	25	31	36	22	12	30
	WEIGHTED:	224	169	172	209	239	151	78	213

INFORMATION REQUIREMENTS

COMPARISON

FIGURE II

CLIENT BACKGROUND DATA

	CACTUS	CCPIS
CLIENT'S NAME	X	X
CLIENT'S ALIAS OR AKA		
CLIENT'S CURRENT LIVING ADDRESS	X	
CLIENT'S DATE OF BIRTH	X	X
CLIENT'S SEX	X	X
CLIENT'S RACE/ETHNIC GROUP	X	X
CLIENT'S LIVING WITH STATUS	X	X
CLIENT'S IN SCHOOL/WORKING/ UNEMPLOYED STATUS	X	
CENSUS TRACT OF CLIENT'S RESIDENCE	X	
CLIENT'S RELIGION		X
CLIENT'S PRIOR CONTACT: AGENCY	X	X
CLIENT'S PRIOR CONTACT: REASON	X	X
CLIENT'S PRIOR CONTACT: DISPOSITION	X	X
CLIENT'S MEDICAL PROFILE: PHYSICAL HANDICAPS		X

CLIENT BACKGROUND DATA

	CACTUS	CCPIS
CLIENT'S MEDICAL PROFILE: NON-PHYSICAL HANDICAPS		X
CLIENT'S MEDICAL PROFILE: DIAGNOSED BY	X	
CLIENT'S MEDICAL PROFILE: DATE OF DIAGNOSIS	X	
CLIENT'S EDUCATIONAL PROFILE: LAST GRADE LEVEL ATTAINED	X	
CLIENT'S EDUCATIONAL PROFILE: DATE OF MOST RECENT ENROLLMENT		
CLIENT'S EDUCATIONAL PROFILE: ACADEMIC EVALUATION		X
CLIENT'S EDUCATIONAL PROFILE: SOCIOLOGICAL EVALUATION		
CLIENT'S EDUCATIONAL PROFILE: SOURCE OF EVALUATION DATA	X	
CLIENT'S ECONOMIC PROFILE: RELATIVE FAMILY INCOME		
CLIENT'S ECONOMIC PROFILE: CLIENT'S INCOME		
CLIENT'S ECONOMIC PROFILE: JOB CLASS - HEAD OF FAMILY		
CLIENT'S ECONOMIC PROFILE: JOB CLASS - CLIENT		
CLIENT'S ECONOMIC PROFILE: RELATIONSHIP TO FAMILY SUPPORT		X

INFORMATION REQUIREMENTS

COMPARISON

FIGURE II

CLIENT INTAKE DATA

	CACTUS	CCPIS
CONTACT OR REFERRAL SOURCE	X	X
CONTACT OR REFERRAL REASON	X	X
CENSUS TRACT OF OFFENSE OR CLIENT CONTACT	X	
REFERRAL SOURCE ALTERNATIVE TO DIVERSION		
REFERRAL DATE (TO DIVERSION PROJECT)	X	
CLIENT CONTACT DATE FOR INTAKE SCREENING	X	
INTAKE DISPOSITION FOR CLIENT ACCEPTANCE/REJECTION	X	
INTAKE DISPOSITION DATE	X	
INTAKE STATION IDENTIFICATION	X	
CLIENT ROUTING: ASSESSMENT AGENCY	X	X
CLIENT ROUTING: ASSESSMENT COMPLETION DATE	X	
CLIENT CASE NUMBER	X	X

INFORMATION REQUIREMENTS

COMPARISON

FIGURE II.

CLIENT ASSESSMENT DATA

	CACTUS	CCPIS
OVERALL GOAL (IN TERMS OF EXPECTED OUTCOMES)		X
CLIENT PROBLEM: IDENTIFICATION	X	
CLIENT PROBLEM: CAUSE		
CLIENT PROBLEM: SEVERITY	X	
SERVICE PLAN: PROVISION TYPE	X	X
SERVICE PLAN: PROVIDER IDENTIFICATION	X	
SERVICE PLAN: ANTICIPATED SERVICE INITIATION DATE		
SERVICE PLAN: ANTICIPATED SERVICE TERMINATION DATE		X
SERVICE PLAN: RELATIONSHIPS TO IDENTIFIED PROBLEMS	X	
SERVICE PLAN: MEASURES OF ANTICIPATED UNITS OF SERVICE		
ESTIMATED DATE OF OVERALL GOAL ACHIEVEMENT	X	
CASE MANAGER IDENTIFICATION	X	

INFORMATION REQUIREMENTS

COMPARISON

FIGURE II

CASE MONITORING DATA

	CACTUS	CCPIS
CURRENT PROBLEM STATUS BY LEVEL OF SEVERITY		
CURRENT SERVICE STATUS BY DEGREE OF COMPLETION	X	X
REVISED SERVICE COMPLETION DATES	X	
METHOD OF SERVICE PROVISION	X	
MODE OF SERVICE PROVISION	X	
UNITS OF SERVICE EXPENDED TO DATE	X	
EFFECTIVE DATE OF CURRENT PROBLEM AND SERVICE STATUS	X	X
ANTICIPATED TARGET REVIEW DATES	X	X

INFORMATION REQUIREMENTS
COMPARISON
FIGURE II

INFORMATION REQUIREMENTS
COMPARISON
FIGURE II

CLIENT EXIT DATA

	CACTUS	CCPIS
STATUS OF IDENTIFIED PROBLEMS AT CLOSURE	X	
STATUS OF SERVICES PROVIDED AT CLOSURE	X	X
CLIENT TERMINATION DATE	X	X
CLIENT TERMINATION REASON	X	X
STATUS OF OVERALL CLIENT GOAL (ACTUAL/EXPECTED)	X	
CLIENT EXIT PROGNOSIS		
CLIENT DISCHARGE CODE	X	X

DATA ELEMENT COMPARISON
SUMMARY

	CACTUS	CCPIS
CLIENT BACKGROUND DATA	15	13
CLIENT INTAKE DATA	11	4
CLIENT ASSESSMENT DATA	7	3
CASE MONITORING DATA	7	3
CLIENT EXIT DATA	6	4

FIGURE III

REPORTING REQUIREMENTS
COMPARISON

	CACTUS	CCPIS
CASE RECORD SUMMARY REPORT	X	X
DATA COLLECTION TURNAROUND DOCUMENT		X
CASEWORKER'S CASELOAD LISTING	X	X
CLIENT ACTIVITY LISTING - CLIENT CENSUS STATUS	X	X
DATA ENTRY EXCEPTION REPORTS	X	X
CLIENT CONTACT/REVIEW LISTS	X	X
CASEWORKER REMINDER MESSAGES	X	X
CLIENT REGISTER - DATA BASE ROSTER	X	X
ANALYSES OF SERVICE LOADING	X	X
TIME FLOWS BETWEEN SIGNIFICANT EVENTS	X	
ANALYSIS OF CASE CLOSING OUTCOMES	X	X
MEASURES OF SERVICE RESOURCES EXPENDED	X	

FIGURE IV
OPERATING COSTS COMPARISON

OPERATION COSTS
SUMMARY

	CACTUS		CCPIS	
	ITEM DESCRIPTIONS	TOTAL MONTHLY COST	ITEM DESCRIPTIONS	TOTAL MONTHLY COST
ACTIVE CLIENT BASE	1300 CHILDREN	-----	15000 CHILDREN	-----
LABOR	1 DATA CONTROL CLERK	\$450.00	DATA CONTROL PERSONNEL	NOT AVAILABLE*
HARDWARE	IBM SYSTEM 3 RENTAL	\$300.00	BURROUGHS B4700 RENTAL	\$800.00
CONTRACT SUPPORT	KEY PUNCH AND VERIFY 5000 CARDS/MONTH	\$250.00	DATA ENTRY PERSONNEL	NOT AVAILABLE*
	SPECIAL FORMS, CARDS, PRINTING, ETC.	\$ 40.00	SPECIAL FORMS, CARDS, PRINTING, ETC.	NOT AVAILABLE*

* NOTE - Items performed internally by State personnel
Budget breakdown not available for CCPIS application.

END