

OBTS/CCH PROBLEM
IDENTIFICATION STUDY

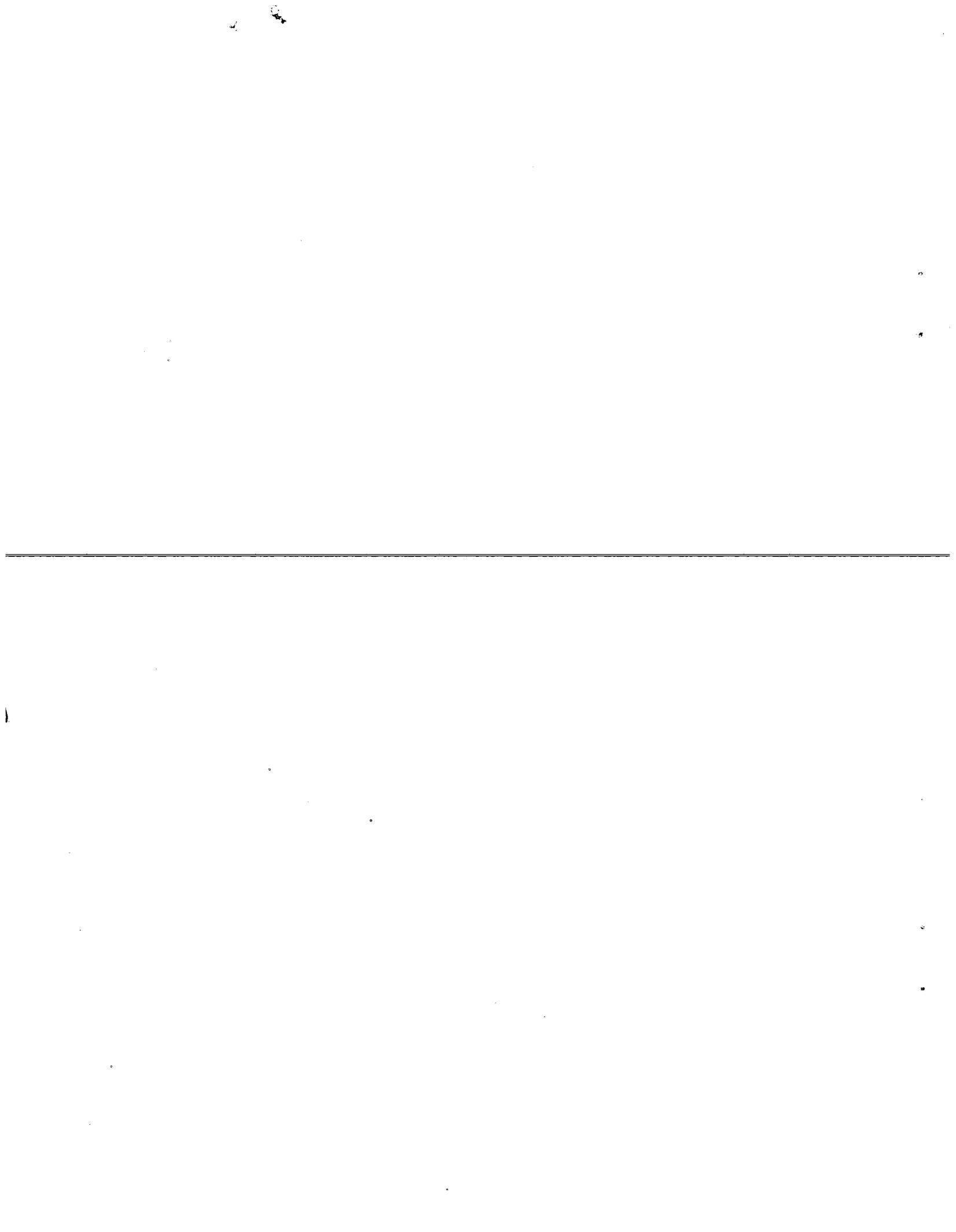
An Analysis of the Status of OBTS/CCH Development
in the States of Michigan, New York,
New Jersey and Ohio

Charles M. Friel
Eugene B. Freeman

Conducted:
March-May, 1976

Prepared for
The National Criminal Justice
Information and Statistics Service
Law Enforcement Assistance Administration
U.S. Department of Justice

413935
5930
L.P.



OBTS/CCH PROBLEM
IDENTIFICATION STUDY

Executive Summary

(A) Purpose and Method

Purpose

The purpose of this study was to describe the status of OBTS/CCH development in the states of Michigan, New Jersey, New York and Ohio, and to identify common developmental problems which significantly affect the design and implementation of such systems.

Methodology

Eleven developmental milestones were used as a yardstick in measuring the status of OBTS/CCH development in each of the four states. The milestones associated with OBTS development included:

- Whether the system is designed to collect all minimum OBTS data elements
- Whether the system is currently collecting all minimum OBTS data elements
- Whether a specific user has been identified to analyze the OBTS data base
- Whether a plan and procedure exists for the analysis and dissemination of OBTS data
- Whether a system has been developed to share OBTS data with other users

The milestones associated with CCH development include:

- Whether the system is designed to collect all minimum CCH data elements

- Whether the system is currently collecting all minimum CCH data elements
- Whether an operational master name index has been developed
- Whether the system can generate summary and detailed criminal histories on request
- Whether an interface has been established with NCIC/CCH
- Whether the system allows update and modification of records in NCIC/CCH

Field visits were made to each of the states to determine their status with respect to each of these 11 milestones, and to determine what problems the states encountered in achieving each milestone.* A problem checklist was prepared before the field visits containing 110 potential problems covering four problem areas; Administrative and Managerial, Inter-Governmental, Legal and Technical Problems.

The state's developmental status was analyzed in terms of its achievement of the milestones and the problems it encountered in accomplishing these milestones. In situations where a state had not as yet accomplished a particular milestone, projections were ascertained as to its expected time of completion.

(B) Results

State of Development

Table 1 describes the current state of OBTS/CCH development in each of the four states. The reader should not directly compare the states, since they vary considerably in the amount of time that they have been developing an OBTS/CCH system.

*The dates of these field visits were as follows: New Jersey, March 16-19; Ohio, March 23-25; New York, March 30-April 2; and Michigan, April 17-19 (1976).

Table 1
Critical OBTS/CCH Milestones*

Milestone	Michigan	New York	New Jersey	Ohio
OBTS				
• System designed to collect all minimum OBTS data elements	• OK	• OK	• OK	• Pending Creation of SAC
• System successfully collecting all minimum OBTS data elements	• No: Just a Few	• Pending Development by OCA	• OK	• No
• Specific user identified to analyze OBTS Data	• No	• OK (SAC still developing)	• OK (SAC)	• No
• Plan and procedure for analysis and dissemination of OBTS data	• No	• Developing	• In Draft Form	• No
• System to share OBTS data base with other users	• No	• OK	• No	• No
CCH				
• System designed to collect all minimum CCH data elements	• OK	• OK	• OK	• OK
• System successfully collecting all minimum CCH data elements	• 35-40% Disposition Reporting	• 75% Disposition Reporting	• 90% Disposition Reporting	• 45-50% Disposition Reporting
• Operational master name index	• OK	• Indirect Access via DCJS	• OK	• OK
• Generate summary and detailed criminal history on request	• OK	• OK	• Prototype Operational	• Detailed History
• NCIC/CCH interface established	• OK	• Pending Re-establishment	• Pending	• Pending
• Can update/modify records in NCIC/CCH	• OK	• Pending	• Pending	• Pending

*Data current as of: Michigan-April; New York-April; New Jersey-March; and Ohio-March; 1976.

Table 2 presents a list of the more common problems encountered by the states in the development of OBTS/CCH systems. While each state encountered unique difficulties, the problems listed in Table 2 represented common problems encountered by at least three of the four states.

Table 3 presents a list of recommendations pursuant to the problems encountered by the states. These recommendations tie directly to the problems encountered in accomplishing the milestones associated with OBTS and CCH.

(C) Organization of the Report

The remainder of this report is in several sections. Section A describes the purpose and methodology employed in the study while Sections B-E provide a brief scenario of the history and current state of OBTS/CCH development in each of the four states.

Section F presents a detailed analysis of the problems encountered by each of the states and Section G presents a summary of the recommendations.

In addition to this report there are several volumes of Supplemental Materials submitted by the states. These include OBTS/CCH planning documents, forms, examples of OBTS statistical documents, and so forth. These materials are referenced in the report but are not physically appended.

Table 2
Common Problems Associated with
OBTS/CCH Development

- 1) Difficulties in acquiring an adequate staff
 - 2) Underestimating the time necessary to build an adequate staff
 - 3) Budgetary and political problems that arise when OBTS/CCH is a component of a larger information system
 - 4) Lack of adequate resources in contributor agencies to support the collection of OBTS/CCH data
 - 5) The inability of state government to assume costs for both the final development and operation of an OBTS/CCH system
 - 6) Problems in developing adequate security and privacy procedures which are satisfactory to all contributors and users of the system
 - 7) Lack of stability in the CDS guidelines
 - 8) Technical problems in tracking multiple offenses and multiple dispositions on the same offender particularly in the absence of an adequate field staff and disposition monitoring system
 - 9) The separation and decentralization of personnel involved in the development and the operation of the system
 - 10) The absence of good documentation on CCH and OBTS applications
-

Table 3
Recommendations Pursuant to
OBTS/CCH Development

- 1) Adopt the use of OBTS/CCH preplanning grants
 - 2) Require greater emphasis in first year grant applications on the milestones associated with acquiring staff and starting up the project
 - 3) Greater emphasis should be given to the problems involved in the data acquisition component of an OBTS/CCH system
 - 4) States must clearly define the role of SAC in their OBTS/CCH system
 - 5) States must support an adequate field staff during the development and operation of the OBTS/CCH system
 - 6) States should be required to develop a system for monitoring the movement of OBTS/CCH paper
 - 7) A "Pullman Ticket" approach to the acquisition of OBTS/CCH dispositions should be discouraged
 - 8) States should adopt an active vs. passive strategy with respect to the acquisition of dispositions.
 - 9) Technical assistance should be given to states during the planning phase of OBTS/CCH
 - 10) LEAA should develop various OBTS/CCH media and educational materials
 - 11) Develop a generalized data base manager for use with OBTS data base
 - 12) LEAA should set up several regional OBTS/CCH workshops
 - 13) LEAA representatives should keep in closer contact with the individuals developing OBTS/CCH systems in the states
-

Table of Contents

<u>(A) Introduction</u>	1
Statement of the Problem	1
Methodology	1
<u>(B) New Jersey OBTS/CCH</u>	11
Administrative Organization	11
System Approach	11
System Operation	12
State of Development	17
Summary	26
<u>(C) Ohio OBTS/CCH</u>	28
Administrative Organization	28
System Approach	29
System Operation	29
State of Development	33
Summary	39
<u>(D) New York OBTS/CCH</u>	41
Administrative Organization	41
System Approach	42
System Operation	43
State of Development	45
Summary	52

Table of Contents (cont'd)

<u>(E) Michigan OBTS/CCH</u>	54
Administrative Organization	54
System Approach	56
System Operation	58
State of Development	60
Summary	63
<u>(F) Developmental Problems</u>	65
Administrative and Managerial Problems	66
Inter-Governmental Problems	71
Legal Problems	77
Technical Problems	79
Summary	85
<u>(G) Recommendations</u>	87
Appendix A: Minimum OBTS/CCH Data Elements	94

Several volumes of supplemental materials are referenced in this report but are not physically appended. This material includes:

- 1) Michigan OBTS/CCH Supplemental Materials
- 2) New York OBTS/CCH Supplemental Materials
- 3) New Jersey OBTS/CCH Supplemental Materials:
 Volumes A and B
- 4) Ohio OBTS/CCH Supplemental Materials

List of Tables

Table 1:	Organizational Logic of the OBTS/CCH Problem Checklist	4
Table 2:	Problem Checklist	5
Table 3:	New Jersey Critical Milestone Checklist	27
Table 4:	Ohio Critical Milestone Checklist	40
Table 5:	New York Critical Milestone Checklist	53
Table 6:	Michigan Critical Milestone Checklist	64
Table 7:	Administrative and Managerial Problems Checklist	67
Table 8:	Inter-Governmental Problems Checklist	72
Table 9:	Legal Problems Checklist	78
Table 10:	Technical Problems Checklist	80

List of Figures

Figure 1:	Serial and Parallel Approaches to the Development of Information and Statistical Systems	13
Figure 2:	New Jersey CDR Monitor System	16
Figure 3:	Tasks Preceding CCH Implementation in New Jersey	25
Figure 4:	Developmental Phases of the Ohio ACRS and OBTS/CCH System	31
Figure 5:	Current Ohio OBTS/CCH Disposition Reporting System	32
Figure 6:	Ohio OBTS/CCH Developmental Milestones	34
Figure 7:	New York CCH Disposition Reporting System	44
Figure 8:	New York System for Receipt and Processing of Arrest Information	46
Figure 9:	New York OBTS/CCH Developmental Milestones	49
Figure 10:	Michigan OBTS/CCH System	57
Figure 11:	Michigan OBTS/CCH Developmental Milestones	61

OBTS/CCH PROBLEM
IDENTIFICATION STUDY

Charles M. Friel
and
Eugene B. Freeman

(A) Introduction

Statement of the Problem

The purpose of this study is twofold. The primary goal is to examine the current state of development of the OBTS/CCH system in the states of Michigan, New Jersey, New York and Ohio. A secondary goal is to document the problems encountered by each state in developing OBTS/CCH.

Methodology

The researchers conducted an onsite visit in each of the survey states. The objectives were as follows:

- To gain a firsthand appreciation of the design and operation of the OBTS/CCH system in each state
- To determine the developmental status of each state in terms of critical milestones associated with the development of an OBTS/CCH system
- To identify and assess the various problems encountered by the state in the development of the OBTS/CCH system

Prior to visiting the survey states, a checklist of critical milestones was developed which could be used to assay the developmental status of an OBTS/CCH system. The milestones included in the list are considered the minimum objectives that must be met in developing a basic system.

The critical milestones associated with OBTS included:

- Whether the system is designed to collect the minimum OBTS data elements*

* c.f. Appendix A

- Whether the system is successfully collecting all the OBTS data elements*
- Whether a specific user has been identified to receive and analyze OBTS data
- Whether there is a plan and procedure for the analysis and publication of OBTS data
- Whether a system has been devised to share OBTS data with local, state and federal users

The critical milestones associated with CCH included:

- Whether the system is designed to receive the minimum data elements*
- Whether the system is currently acquiring all the minimum CCH data elements*
- Whether users can inquire of a master name index to determine the presence of a criminal history in the system
- Whether the user can be provided with a summary and detailed criminal history upon request
- Whether the state has entered criminal histories into the NCIS/CCH system
- Whether the state can update and/or modify criminal histories in NCIC/CCH

The primary objective in each onsite visit was to determine the developmental status to each of the OBTS/CCH milestones cited above. In some cases, the states had already achieved some of these. In others, the personnel responsible for the system could only indicate the approximate date when these milestones could be met. In still others, administrative personnel could not agree on exactly when these objectives could be met. In these situations, the lack of agreement stemmed from the fact that different individuals responsible for the system were not equally optimistic about the amount of time it would take to achieve certain objectives. In cases where there was substantial disagreement, the researchers attempted to identify an optimistic and pessimistic projection of the time it would take to accomplish the respective milestone.

* c.f. Appendix A

In order to determine the kinds of problems states encounter in developing an OBTS/CCH system, the researchers developed a problem checklist. As indicated in Table 1, the checklist covers four broad problem areas, including:

- Administrative and Managerial Problems
- Inter-Governmental Problems
- Legal Problems
- Technical Problems

Each problem area subsumes several problem categories and each problem category subsumes a number of specific problems. Table 2 indicates the specific problems included in each problem area and category.

During the field visits, the researchers attempted to determine the extent to which each state encountered the various problems included in the checklist.

The advantage of this technique is that it provides a common frame of reference within which to evaluate and compare the development of OBTS/CCH in each state. The disadvantage with the procedure is the difficulty of operationally defining what constitutes a problem. For purposes of this study, a problem was considered any encumbrance which significantly delayed the development of OBTS or CCH. If the state did not meet its projected milestones on time, the researchers attempted to determine what problems were associated with the delay. For example, if the state failed to achieve its projected milestone of providing criminal histories to NCIC/CCH, an attempt was made to determine those problems which contributed to the delay.

The problem checklist provides two useful indices pursuant to understanding the problems associated with the development of OBTS/CCH. By looking at the problems encountered by an individual state, one can determine whether the preponderance of these problems tends to fall within a single problem area or problem category. Similarly, comparing the various states across each problem can indicate which problems tend to be peculiar to a specific state and which problems tend to be commonly encountered by all states. Those problems encountered by more than one state provide a good index of the difficulties likely to be encountered by future CDS states.

In summary then, the methodology provides two insights into the development of OBTS/CCH. First, it provides an indication of when each of the four states will achieve the minimum operating criteria associated with OBTS and CCH. Secondly, it provides an index to the problems encountered in developing both systems.

TABLE 1
Organizational Logic of the OBTS/CCH
Problem Checklist

Problem Area	Problem Category
(A) Administrative & Managerial Problems	<ul style="list-style-type: none"> • Personnel • Field Staff & Training • Audit Procedures
(B) Inter-Governmental Problems	<ul style="list-style-type: none"> • Legislative Cycling • Relations with Police, Courts, & Corrections • Phasing from Federal to State Financing • Federal Rules & Guidelines
(C) Legal Problems	<ul style="list-style-type: none"> • Statutory Authority • Security & Privacy
(D) Technical Problems	<ul style="list-style-type: none"> • OBTS/CCH System Configuration • Use of Consultants • Facilities & Equipment • Interface with CDS program • OBTS/CCH System Requirements

TABLE 2
Problem Checklist

PROBLEM AREA Problem Category	PROBLEM AREA Problem Category
<p><u>ADMINISTRATIVE & MANAGERIAL PROBLEMS</u></p> <p><u>(A) Personnel</u></p> <ol style="list-style-type: none"> 1. Acquisition of qualified personnel 2. Matching OBTS/CCH personnel needs with existing State Civil Service System job descriptions 3. Civil Service salary levels sufficient to attract qualified individuals 4. Imbalance between project personnel and contractor personnel 5. Those responsible for implementation of system lacking direct authority to hire and fire personnel 6. Imbalance in the ratio of state funded to grant funded personnel 7. Abnormally high turnover rate 8. Inherited inadequate personnel from other agencies 9. Politicial interference in the hiring of personnel or in the selection of contractors 	<ol style="list-style-type: none"> 10. Personnel having little prior experience in criminal justice systems 11. Underestimated the time to build an adequate staff 12. Problems in recruiting specific skills. 13. State residency requirements limiting hiring 14. Lag time in filling positions 15. Balance among planning, implementing and operating personnel 16. Tenure problems <p><u>(B) Field Staff And Training</u></p> <ol style="list-style-type: none"> 1. Problems in recruiting quality field staff 2. Underestimated field staff needs 3. Field staff phased in too late 4. Underestimated the degree of field staff training required

TABLE 2 (cont'd)
Problem Checklist

PROBLEM AREA Problem Category	PROBLEM AREA Problem Category
<ol style="list-style-type: none"> 5. Problems due to separate field staff for UCR and OBTS 6. Problems in the geographic allocation of field staff 7. Turnover among field staff 8. Anticipate sufficient training and re-training cycles of field staff 9. Problems in acquiring vehicles for field staff 10. Insufficient travel and per diem expenses 11. Underestimate the degree of training and re-training of contributors 12. Security and privacy regulations impact work of field staff <p><u>(C) Audit Procedures</u></p> <ol style="list-style-type: none"> 1. Procedures to audit completeness of record 2. Procedures to check the reliability of the data 3. Audit problems due to contributor personnel turnover 4. Procedures to pre-screen data for extreme cases 	<ol style="list-style-type: none"> 5. Audit problems due to security and privacy regulations 6. CCH reliability standards constrain OBTS development <p><u>(D) Budgeting</u></p> <ol style="list-style-type: none"> 1. Budgetary overestimates 2. Budgetary underestimates 3. Problems in reallocating line items as need requires 4. Lack of guaranteed continual funding over specified time period 5. Major budgetary changes since program was initiated 6. Problems due to inflation 7. Problems in integrating budgets of various CDS components

TABLE 2 (cont'd)

Problem Checklist

<p>PROBLEM AREA</p> <p>Problem Category</p>	<p>PROBLEM AREA</p> <p>Problem Category</p>
<p><u>INTER-GOVERNMENTAL PROBLEMS</u></p> <p><u>(A) Legislative Cycling</u></p> <ol style="list-style-type: none"> 1. Problems due to biennial legislative cycle 2. Federal fiscal year out of phase with the state legislative year 3. Acquisition of match funding or other revenues from the legislature 4. Competition with other state agencies developing similar informational or statistical systems 5. Problems in gaining support for the OBTS/CCH system in the legislature 6. Necessary to rejustify the OBTS/CCH system for successive funding 7. Problems because OBTS/CCH is a component of a larger information system's budget 8. Changes in the political composition of the legislature 	<ol style="list-style-type: none"> 9. Problems due to changes in Governor or other elected state official 10. Change in chief executive officer of the agency responsible for developing the OBTS/CCH system 11. Change in the Federal fiscal year <p><u>(B) Relations With Police Courts And Corrections</u></p> <ol style="list-style-type: none"> 1. Contributor agencies lacking adequate personnel 2. Problems due to separation of powers doctrine 3. Problems due to political differences between state and local users and contributors 4. Miscalculated or underestimated users or contributors 5. OBTS/CCH system oversold to contributors and users 6. Was OBTS/CCH system misperceived as duplication of effort by contributors 7. Contributors concern of accountability 8. Authority to compel submission of data by contributor

TABLE 2 (cont'd)
Problem Checklist

PROBLEM AREA Problem Category	PROBLEM AREA Problem Category
9. Acquisition of adequate disposition information 10. Interface OBTS/CCH with OBSCIS or SJIS 11. Interface with regional CJIS	6. Continuation assurance from LEAA 7. Communication between LEAA and Regional Office 8. NCIC/CCH Interface 9. Lack of technical guidance by LEAA
<u>(C) Phasing Of System From Federal To State Financing</u>	<u>LEGAL PROBLEMS</u>
1. Legislative support for long term funding 2. Plan for transition from LEAA to total state funding 3. Personnel retrenchment when state assumes financing 4. Calculation of cost of state financing	<u>(A) Statutory Authority</u> 1. Statutory authority for operation of OBTS/CCH 2. Statutory authority to collect data for OBTS/CCH 3. Problems with Advisory Board 4. State laws currently in conflict with purpose of the OBTS/CCH 5. Existing state laws adversely affect the interstate exchange of any OBTS or CCH data
<u>(D) Federal Rules And Guidelines</u>	<u>(B) Security And Privacy</u>
1. Problems in requesting grant extensions 2. Reversion of matching funds 3. Lack of specificity in CDS guidelines 4. Lack of stability of CDS guidelines 5. Policy differences between LEAA and FBI funding	1. State laws affecting security and privacy constrain the development of the system

TABLE 2 (cont'd)
Problem Checklist

<p>PROBLEM AREA</p> <p>Problem Category</p>	<p>PROBLEM AREA</p> <p>Problem Category</p>
<ol style="list-style-type: none"> 2. Shared versus dedicated issue affect system's development 3. Problems due to pending security and privacy legislation in Congress 4. Problems in developing state security and privacy plan 5. Suits pending regarding the privacy rights of individuals 	<ol style="list-style-type: none"> 8. Problems in record conversion 9. Problems with single-state/multi-state approach to a national system
<p><u>TECHNICAL PROBLEMS</u></p> <p><u>(A) OBTS/CCH System Configurations</u></p> <ol style="list-style-type: none"> 1. Problems in relating OBTS and CCH components 2. Assumptions about OBTS and CCH compatibility 3. Setting priorities between the OBTS and CCH 4. Lack of output specifications for the OBTS 5. Problems in tracking multiple offenses and dispositions 6. Changes in penal or procedural law affecting design of system 7. Problems with current data element definitions 	<p><u>(B) Use of Consultants</u></p> <ol style="list-style-type: none"> 1. Problems with consultants 2. State regulations constrained selection of qualified consultant 3. Inherit a contractor from a related system 4. Problems because contractor was another state agency 5. Problems in transferring part of system from another state. <p><u>(C) Facilities and Equipment</u></p> <ol style="list-style-type: none"> 1. Problems in acquiring adequate facilities 2. Problems in acquiring equipment 3. Existing equipment constraining future development

TABLE 2 (cont'd)
Problem Checklist

PROBLEM AREA Problem Category	
4. Problems in hardware configuration compatibility 5. Miscalculated the time within which the system would become obsolete 6. Problems with the telephone company 7. Budgetary flexibility in purchasing equipment 8. Facilities do not allow centralization of personnel	

(B) New Jersey OBTS/CCHAdministrative Organization

In New Jersey, the CDS program is located in the Department of Law and Public Safety, administered by the Attorney General. The Department is composed of several divisions, including the Division of Law, Division of Criminal Justice, Division of State Police and the Division of Systems and Communications. This latter Division is responsible for the development and operation of New Jersey's Statewide Communications Information System (SCIS). SCIS includes a number of criminal justice statistical and information systems, including state level NCIC files, interface with the FBI NCIC files, in-state message switching and communication with NLETS, statewide Master Name Index, Court Disposition Monitoring System, Criminal Investigation Section Records Management, Uniform Crime Reporting, Fingerprint Analysis and OBTS/CCH*.

Although the Division is the principal OBTS/CCH grantee, actual development involves the efforts of a number of state and local criminal justice agencies, principally the State Bureau of Identification (SBI) of the Division of State Police. SBI is responsible for the acquisition and maintenance of the OBTS/CCH data base, including editing and auditing functions to assure its accuracy and validity.

The Division of Systems and Communications is responsible for the computer storage, retrieval, analysis and dissemination of the OBTS/CCH data base and the development of the CCH inquiry system, including operation of the interface between state users and the NCIC/CCH. The Criminal Justice Data Analysis Center, located within the Division of Systems and Communications, is responsible for analysis and dissemination of OBTS data.

System Approach

Development of an OBTS/CCH system involves two distinct endeavors. First, it requires the acquisition of the data base. Second, a system must be designed with two functional capabilities; the dissemination of CCH information to inquiring users and the analysis of OBTS data.

*c.f., New Jersey Comprehensive Data Systems Plan, Volume B, New Jersey OBTS/CCH Supplemental Material, Tab A, pp. 3-8.

As outlined in Figure 1, there are various procedural approaches to accomplish these two objectives. One could first develop the data base and then design a computer system for its storage, retrieval, analysis and dissemination. The opposite approach would be the design of the computer system first, then acquire the data base. Both of these approaches may be identified as Serial Approaches since they require the development of one aspect of the OBTS/CCH system before pursuing the next.

An alternate approach involves simultaneous development of the data base and the computer system, which might be called a Parallel Approach. This approach characterizes the development of the New Jersey OBTS/CCH system.

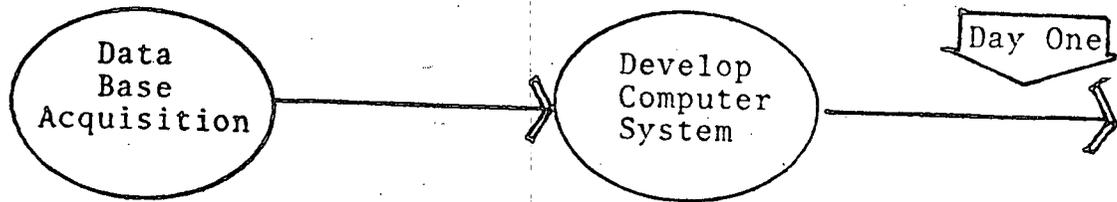
Since the inception of the OBTS/CCH system, the SBI has collected and converted OBTS/CCH records while simultaneously developing a supporting computer system. Since 1972, 4 million OBTS/CCH records have been amassed containing arrest and disposition data on approximately 200,000 persons processed in the state over a four year period. During the same period, the Division of Systems and Communications has developed a supporting computer system for the data base. As these two developmental efforts come together on "day-one" implementation, the New Jersey OBTS/CCH system will not only be an operational OBTS/CCH system but will have an actuarial data base reflecting five years of arrests and dispositional activity.*

System Operation

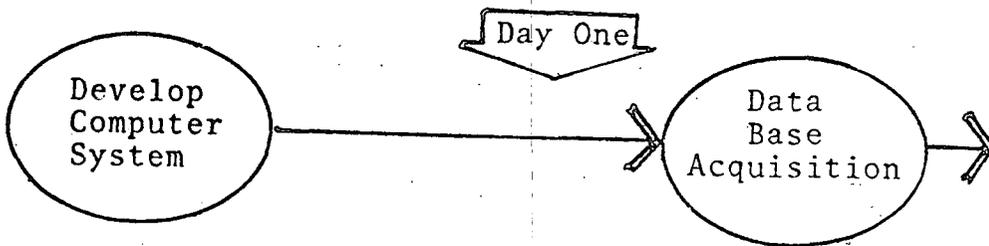
The heart of the New Jersey OBTS/CCH is the Court Disposition Reporting System (CDR). This system is an outgrowth of efforts begun in the late 1960's to develop a comprehensive system of criminal justice information and statistics. The CDR system was developed jointly by the Administrative Office of Courts (AOC) and the Division of State Police and was designed with the support and assistance of representatives from all levels of the New Jersey criminal justice system.

CDR is a system for the collection of transactional information on defendants and offenders processed through all levels of the criminal justice system. It is administered by SBI which has been statutorily mandated to collect such information and to prepare statistical reports on crime and the administration of criminal justice for the Governor and the Legislature. Statutory authority for the collection of this information is contained in several statutes, including a mandatory fingerprint

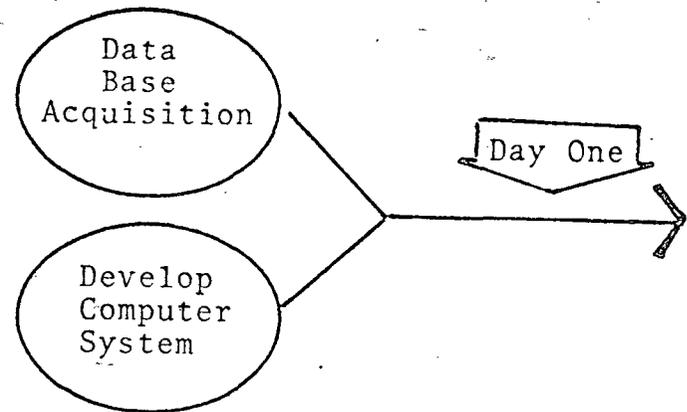
*c.f. New Jersey OBTS/CCH Discretionary Grant Applications, New Jersey OBTS/CCH Supplemental Materials, Volume B., Tabs B-D.



TYPE A



TYPE B



PARALLEL APPROACH

SERIAL APPROACHES

Figure 1. Serial and Parallel Approaches to the Development of Information and Statistical Systems

law as well as a prosecutor and court disposition reporting law. (c.f. NJS 24:4-21, 53:1-13.2, 53:1-15, 53:1-18 and 18a)

The CDR involves eight forms used to collect OBTS/CCH data:*

- Uniform Complaint-Summons Report (CDR-1)
- Uniform Complaint-Warrant Report (CDR-2)
- County Prosecutor Criminal Disposition Report (CDR-3)
- County Clerk Criminal Disposition Report (CDR-4)
- County Clerk Change of Criminal Disposition Report (CDR-5)
- County Probation Department Disposition Report (CDR-6)
- Conditional Discharge Final Disposition Report (CDR-7)
- Custody/Supervision Status Report (CDR-8)

Complaint Summons and Complaint Warrant (CDR-1&2). Both forms are initiated by an arrest and used to collect dispositional data from the proceedings of the court of first instance on all disorderly persons and indicted cases. The choice of form is a function of the nature of the arrest. Information on charges, pleas, bail and prosecuting attorney and defense counsel information is entered on these forms with a copy transmitted to SBI.

County Prosecutor Criminal Disposition Report (CDR-3). If the Complaint Summons or Complaint Warrant indicates that the case will be referred to the prosecutor, SBI forwards a CDR-3 to the county prosecutor. This form notifies the prosecutor of the pending case and provides a mechanism for him to return the appropriate disposition information to SBI.

County Clerk Criminal Disposition Report (CDR-4). If the prosecutor indicates on the CDR-3 that the case will be taken to trial, SBI forwards CDR-4 to the appropriate court. This

*New Jersey Court Disposition Reporting Manual, Division of State Police, 1972. c.f. Tab E in Volume B of New Jersey OBTS/CCH Supplemental Material for copies of these forms.

form is then used by the clerk to transmit plea, disposition and sentencing data to SBI.

County Clerk Change of Criminal Disposition Report (CDR-5). This report is generated by the clerk and is a mechanism for changing a prior disposition submitted to SBI pursuant to appeals, motions for a new trial, petition for change of sentence and so forth.

County Probation Department Disposition Report (CDR-6). If an offender is probated (as will be noted on the CDR-4), the probation department will be sent CDR-6. This form is returned to SBI providing probation disposition information as well as administrative information for the Administrative Office of Courts.

Conditional Discharge Final Disposition Report (CDR-7). In cases where a defendant has been placed on conditional discharge, SBI will forward CDR-7 to the appropriate court. This form provides for the transmission of conditional discharge disposition information to the OBTS/CCH data base.

Custody/Supervision Status Report (CDR-8). If an individual is sentenced to a period of confinement, CDR-8 is initiated by the Department of Corrections for recording final disposition. This form is forwarded to SBI indicating how the offender finally exited the system, i.e., completed, paroled, escaped, commutation of sentence, etc. Figure 2 outlines the flow of information between SBI and the various criminal justice agencies involved in the CDR system.

The New Jersey approach to the collection of OBTS/CCH data is a centralized approach, as opposed to a "Pullman Ticket" approach. As outlined in the attached Figure, SBI maintains a central control on the gathering of OBTS/CCH data by forwarding to the appropriate agency the specific form to be completed on each offender being processed by that agency.

An alternative approach is a "Pullman Ticket" system in which a single snapout form follows the offender through the system, the appropriate portion of the form being forwarded to the state repository as the offender moves through the system. The "Pullman Ticket" system is a decentralized approach, since the state identification bureau becomes a passive repository rather than an active gatherer of information. This approach, or variations of it, characterize the approach now being used in several CDS states. Based upon observations in other states, there is probably a direct relationship between the degree to which the collection system is centralized and the completeness of reporting.

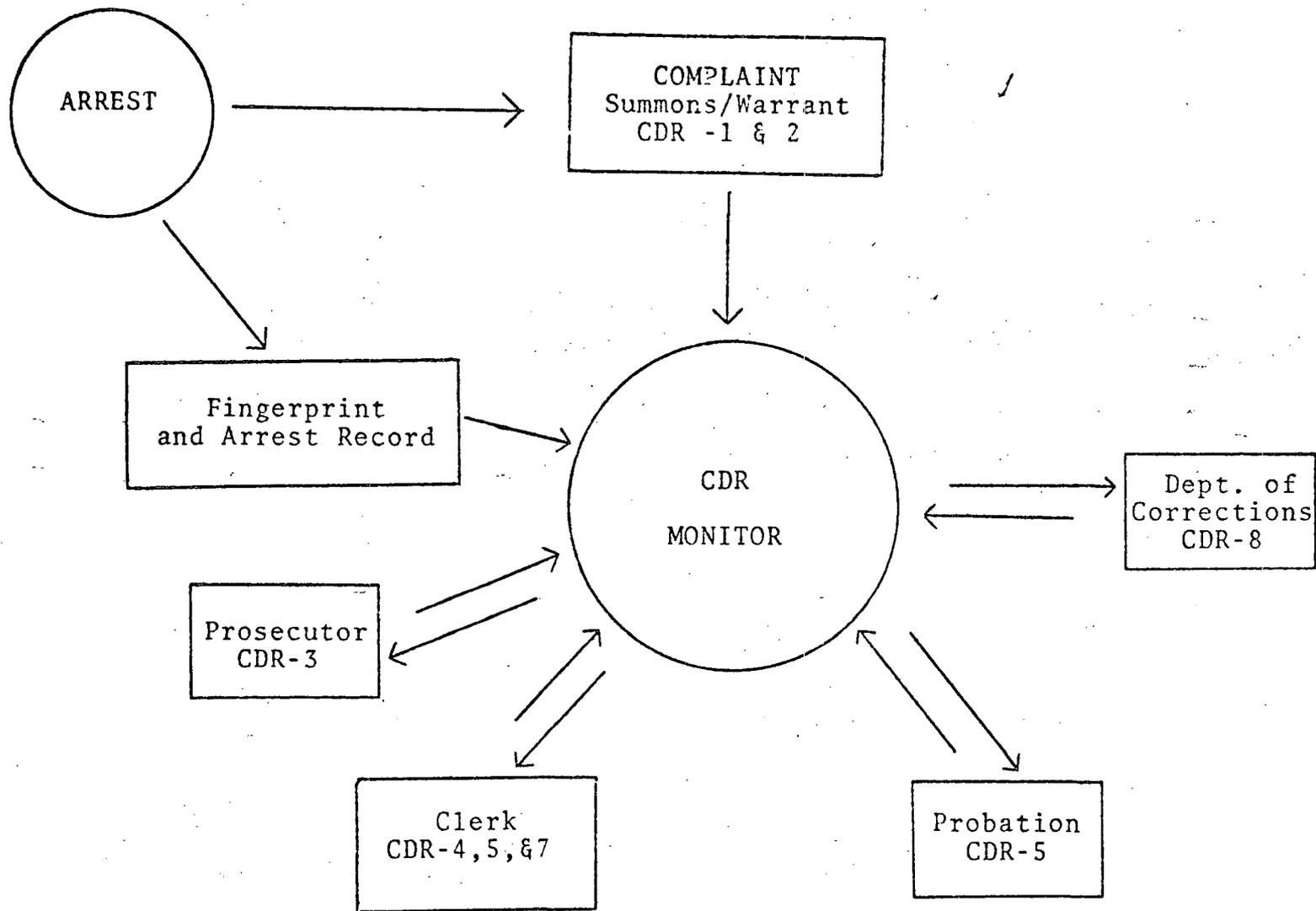


Figure 2. New Jersey CDR Monitor System

In order to track the great volume of paper-flow in the New Jersey CDR system, the State has developed a computerized monitoring system known as the CDR Monitor. As each CDR form is received by SBI, its receipt is entered into the Monitor and the Monitor automatically forwards the next form to the appropriate criminal justice agency. The Monitor notes which dispositional forms are outstanding and is programmed to list all outstanding information by associated criminal justice agency. This unique feature of the CDR Monitor acts as an alert system to the field staff who can then query individual criminal justice agencies that are delinquent in submitting dispositional data.

Without question, the researchers feel that the New Jersey CDR system and specifically the CDR Monitor are a unique contribution to the development of OBTS/CCH technology. The success of this data acquisition system seems to be a product of three factors including:

- The fact that the SBI forwards the appropriate form for each offender to the appropriate criminal justice agency as opposed to depending upon the transmission of that form between criminal justice agencies,
- The fact that the state does monitor delinquent dispositional reporting on a case by case basis,
- The fact that the system has statutory authority and was created through the joint effort of the Administrative Office of Courts and the Division of State Police.

State of Development

A three-day field visit was conducted in New Jersey on March 16-19, 1976. At that time, the State had already received two years funding under the CDS Program and was awaiting approval of its third year grant application. The State has made significant strides both in the development of an OBTS/CCH data base as well as a computer system for its storage, analysis and dissemination.

OBTS Development. At the time of the field visit, New Jersey had already been collecting OBTS data for several years. Examination of the CDR forms used to collect OBTS data indicates that the system is designed to collect all minimum OBTS data elements as prescribed in the CDS guidelines. (c.f. New Jersey Supplemental Material, Volume 2, Tab E)

While it may be relatively simple to design a system to collect all minimum data elements, it is quite difficult to operate a system with complete reporting of these data elements. It is hard to determine the completeness of reporting in any OBTS system, since an incomplete record can indicate either a failure to report or the fact that an individual has not been completely processed through a given point of the criminal justice system.

In New Jersey, the best index as to the completeness of OBTS reporting is the error rate of the relational edits conducted on the OBTS data base. In the New Jersey system, incoming CDR forms are verified, encoded, keypunched and placed on magnetic tape. Periodically, these tapes are relationally edited, assembling into one block all information pertaining to a given offender. The edit is designed to identify incomplete records. For example, if the edit discovers a Prosecutor Criminal Disposition Report on offender X, it is programmed to require that a Complaint Summons or a Complaint Warrant report have also been filed on the same individual. If this information cannot be found, the record is rejected as incomplete. Similarly, if correctional commitment information is found on an individual but no trial court information, then the record is similarly rejected.

Based upon the relational edits conducted on the 1972-1974 data base, it is estimated that OBTS reporting is approximately 90% complete. This is considered an exceptionally high rate of return considering the number of agencies involved in submitting data and the fact that the system has only been in operation a few years.

A word of caution should be mentioned concerning the completeness of the OBTS data base. Since the CDR system does not distinguish between CCH and OBTS data at the point of collection, the error rate based upon relational edits is the same for OBTS and CCH. The error rate is an index of the completeness of CDR forms which is not the same as the completeness of OBTS and CCH data elements. In fact, both OBTS and CCH data elements are contained on each CDR form.

Another area of interest involves the accuracy of the data base. The New Jersey Criminal Justice Data Analysis Center has conducted a study on the accuracy and completeness of data by comparing the information on CDR source documents with corresponding computer output. This comparison shows an overall error rate of 4.3%. The error rate varied from as low as 1.1% for the County Prosecutor Criminal Disposition Report to as high as 6.5% for the Complain Warrant Report. In most cases, the errors involved illegible entries made by contributing agencies coupled with the fact that the Data Reduction Unit works with Xerox

duplications made from carbon copies of the source document.*

Another index of the accuracy of the OBTS data base is the logical edit performed on the data base. An editing routine has been developed to determine inconsistencies in the information recorded on source documents. For example, the logical edit will reject a record where the date of indictment precedes the date of arrest. Similarly, records with the same state identification number must have the same race, sex, date of birth and other offender identifiers.

Based upon the logical edits conducted on data collected from 1972-1974, the estimated rate of error is 0.3%.

A critical milestone in the development of an OBTS system involves the identification of a user of the OBTS data base. In New Jersey, the primary consumer of the OBTS data base is the Criminal Justice Data Analysis Center. The Center is located in the Division of Systems and Communications and is currently staffed by a Chief and supporting clerical personnel. To date, the Center has published a number of studies utilizing the existing OBTS data base, including:**

- "A Response to the Commission on the Review of National Policy Towards Gambling"
- "Disposition of Drug Arrests - 1973"
- "Breakdown of Sentences Received for 1973 Convicted Offenses"
- "Arrests and Dispositions for Male vs. Female Offenders"
- "Analysis of New Jersey 1974 Bank Robbery Arrests Ajudicated by Local and County Courts"
- "A Study of Bail Practices in New Jersey"
- "Career Criminals/Frequency of Arrests in New Jersey"

Another milestone used to assay the state of development of the OBTS system was the presence of a plan for the analysis and

*c.f. An Audit of the Accuracy and Comprehensiveness of the OBTS/CCH Data Base, Data Analysis Center, New Jersey OBTS/CCH Supplemental Material, Volume A, Tab I.

**c.f. Tabs B-H and Tab J, New Jersey OBTS/CCH Supplemental Material, Volume A.

dissemination of OBTS data. At the time of the field visit, no formal plan or procedure had been approved and disseminated. However, the Director of the Data Analysis Center had developed a detailed memorandum to the CDS Coordinating Committee containing a suggested format for an annual report of OBTS data. (Memo dated 12/12/75)* This proposal contains an indepth description of the various ways that OBTS data could be configured. In addition, the various outputs are prioritized relative to their utility to different users in the state.

The draft proposal primarily addresses output formats and does not address required computer software necessary for the analysis of the data base. In discussing this matter during the field visit, it became apparent that most of the analyses performed on the OBTS data base to date have required computer programming on an ad hoc basis. It was recommended that the State consider development of an OBTS statistical analytic package that could be used to perform most of the routine and ad hoc analyses including a Data Base Management package and supporting statistical routines.

Inquiries were also made as to the State's plan to share the OBTS data base with local, state and federal users as well as academic researchers. At the time of the visitation, the State had no plans in this regard but was quite willing to share the data and subsequent analyses with any and all interested users.

CCH Development. At the time of the visit, the State of New Jersey had been collecting CCH data for several years. Since the same system is used to collect OBTS and CCH, many of the remarks included in the discussion of CCH will echo what has already been said concerning OBTS.

As with OBTS, the CCH system is designed to collect all minimum CCH data elements as prescribed in the CDS guidelines. Since OBTS and CCH are derived from a common data base, the completeness of reporting for CCH is the same as OBTS (approximately 90%). As mentioned above, the index to completeness, namely the relational edit, relates CDR forms and not individual elements in the data base. Since the same forms contain both OBTS and CCH data, the completeness of reporting is the same for both systems.

One of the components of the New Jersey SCIS is a computerized Master Name Index. The development of this index is a spinoff of the arrest segment of the CDR system. Since 1972,

*c.f. Annual OBTS/CCH Report, Data Analysis Center, New Jersey OBTS/CCH Supplemental Material, Volume A, Tab A.

the state has converted identification information on arrestees to a Master Name Index. While the data base for this system existed at the time of the field visit, online access by local users will not be available until statewide access to CCH is made available. Since the computerized Master Name Index will serve as a pointer system to the CCH system, it will only be made available to local users when the CCH system is implemented.

Although the State has been collecting CCH data since 1972, at the time of the visit, the State did not provide local users with online access to criminal history summaries. Before this capability can exist, several obstacles must be overcome which will at best consume the remainder of 1976. At the time of the visit, seven tasks remained to be completed prior to implementation of CCH, including:

- Complete the relational edits on the 1972-1975 OBTS/CCH data base,
- Complete development and testing of CCH communication software,
- Await completion of a new building to house the Division of Systems and Communications located on the grounds of the Division of State Police Headquarters,
- Relocate personnel and hardware to the new location,
- Reconfigure the SCIS computer system to accommodate the implementation of OBTS/CCH,
- Test the new configuration,
- Verify data released from the OBTS/CCH data base.

At the time of the visit, relational edits were being conducted on OBTS/CCH data collected in 1972-1973. As will be recalled, these edits involve assembling the information transmitted on various CDR source documents for a given offender. As of March of 1976, the Division of Systems and Communications had conducted a preliminary relational edit on the 1972-1973 data base and SBI was conducting field work to complete those records which were found to be incomplete. It was estimated that the relational edits for the 1972-1975 data base would probably be complete as early as June or as late as September of 1976.

Two problems contribute to the delay in completing the relational edits. First, to conduct a relational edit on the millions of records involved consumes considerable computer time. Given the fact that the current computer configuration supporting the SCIS is about maximized, available time to conduct the relational edits is somewhat limited. Secondly, when a record is rejected as incomplete, it requires examination of the CDR source documents which in turn may require the field staff to contact the contributing agency.

In March, the Division had about completed all the software necessary to support an online CCH system. A prototype CCH system was operational for test purposes and the researchers were able to query a master name index and receive criminal history summaries online. (c.f. attached history) The systems and programming staff of the Division estimated that the software for the CCH system could be completed and tested as early as May or as late as July of 1976.

One of the perplexing and uncontrolled variables affecting the implementation of CCH is a new building being constructed at the Headquarters of the Division of State Police. This facility will accommodate the Division of Systems and Communications as well as the Records and Identification Section of the Division of State Police. Although the building is contracted for completion in December of 1976, it should have been completed in January of 1976, except for difficulties that arose between the primary contractor and a subcontractor. Since implementation of the CCH system is absolutely contingent upon moving into the new building, implementation could be delayed through December of 1976. Although negotiations between the State, the contractor and the subcontractor were going on at the time of the visit, there was no clear indication as to when the building would be completed.

The CCH system will not be implemented until the Division has moved the existing system to the new location. In order to complete the move, the Division will have to create a backup system to maintain current operations while the existing system is moved to the new location. This will involve uncoupling a IBM-370-145 and substituting an emergency IBM-360-40 to maintain the system. The 145 currently supporting the system will be moved to the new building and a patch will be built so that both systems can run in parallel to assure that the 145 in the new building is capable of taking over the system. It is estimated that this move can be accomplished in approximately 45 days. Thus, if the building was ready for occupation as of September, the physical move could be completed by November of 1976.

The current SCIS computer system is operating at full capacity. This system supports a number of criminal justice information systems, including the New Jersey NCIC, NLETS, instate message switching, Driver's License and Motor Vehicle Registration and a Court Docketing System, etc. As presently configured, the system could not take on the added burden of supporting an online CCH system. Therefore, when SCIS is relocated in the new facility, a dual system will be created. One system designed to support the master name index, the CDR Monitor, the fingerprint search system and the criminal investigation system and the other to support the New Jersey NCIC, NLETS, Driver's License and Motor Vehicle Identification and the OBTS/CCH

COMPUTERIZED CRIMINAL HISTORY SUMMARY RECORD

IDENT SBI 200001A FBI 2746E FPC 66C1CNCODIDH001P4P0
 NAM ROBERTS,ROBIN J SEX M RAC W POB NJ DOB 021321
 HGT 404 WGT 404 EYE BRO HAI BRO SKN LCT BLU 1234567
 INU HG21718957 MRN MFR
 SOC 404040404 HFP A 0 17 W III 23L 18 00 II SS
 S LS 5 C U- 3 1

ADDITIONAL IDENTIFIERS ARMED AND DANDEROUS

TOTAL ARRESTS - 003

CHARGES	CONVICTIONS	CONDITIONAL DISCHARGE	OFFENSE
01		YES	ROBBERY
01	YES		DANGEROUS DRUGS
01			SMUGGLING
01			KIDNAPPING
01			EXTORTION
01			LARCENY
01			STOLEN PROPERTY
01			OBSTRUCTING THE POLICE
01			BRIBERY

LAST ARREST STATUS (INCLUDED ABOVE) -

010173 AGCY NJ0120600

CBN 10356

PAGE TO FOLLOW

COMPUTERIZED CRIMINAL HISTORY SUMMARY RECORD

LAST CUSTODY STATUS -

AGCY NJ020013G

CBN 000575

STATUS 407 LIT CONDRELREV SLE TOT STATE SID

END OF CCH SUMMARY RECORD

system. Although the software to support this dual configuration was essentially written at the time of the visit, it was anticipated that approximately three months would be required to complete the change to a dual configuration. Therefore, if the Division took occupancy of the new facility in September, it would take approximately three months to complete the conversion, putting off the implementation date of CCH until January of 1977.

Fortunately, the testing of the computer software to support the dual configuration can be completed before the move actually takes place and was not considered a major factor affecting the implementation date of CCH.

A final factor that could significantly affect the development of CCH involves the final verification of the reliability of the OBTS/CCH data base. As of March of 1976, the Director of Records and Identification wanted to have each criminal history checked against the RAP sheet before it could be released to the CCH data base for online use. Considering that the current data base exceeds 4 million records, this could significantly delay the implementation of CCH. It is possible however, that this verification could be done on a sampling basis and if this study proves the data base significantly accurate, the need to verify each record could be obviated. It was recommended that the State consider some sampling scheme to verify the accuracy of the data since verification of every record would involve considerable cost and delay.

Figure 3 presents a milestone schedule of the seven tasks which must be accomplished prior to implementing online access to CCH. The expected implementation date is January 1977 at which time demonstration terminals will be activated at the Division of State Police and at several remote locations. During 1977, a network of user terminals will be implaced throughout the State.

Another milestone used to gauge the development of CCH is whether the State had entered criminal histories into the NCIC/CCH system. The Division of Systems and Communications had submitted a load tape to the FBI in December of 1975. Due to various processing problems, the tape was returned and a second tape was sent to the FBI in February of 1976 and was being processed at the time of the visit.

Presuming that this second tape presented no processing problems, the State envisioned sending a final load tape to the FBI as soon as the relational edits can be completed on the 1972-1975 OBTS/CCH data base. It was anticipated that this could be completed as early as June or as late as September of 1976. With the submission of this load tape in the summer of 1976, New Jersey will commence on line entry and update of CCH information on all individuals arrested in the State over a four-year period.

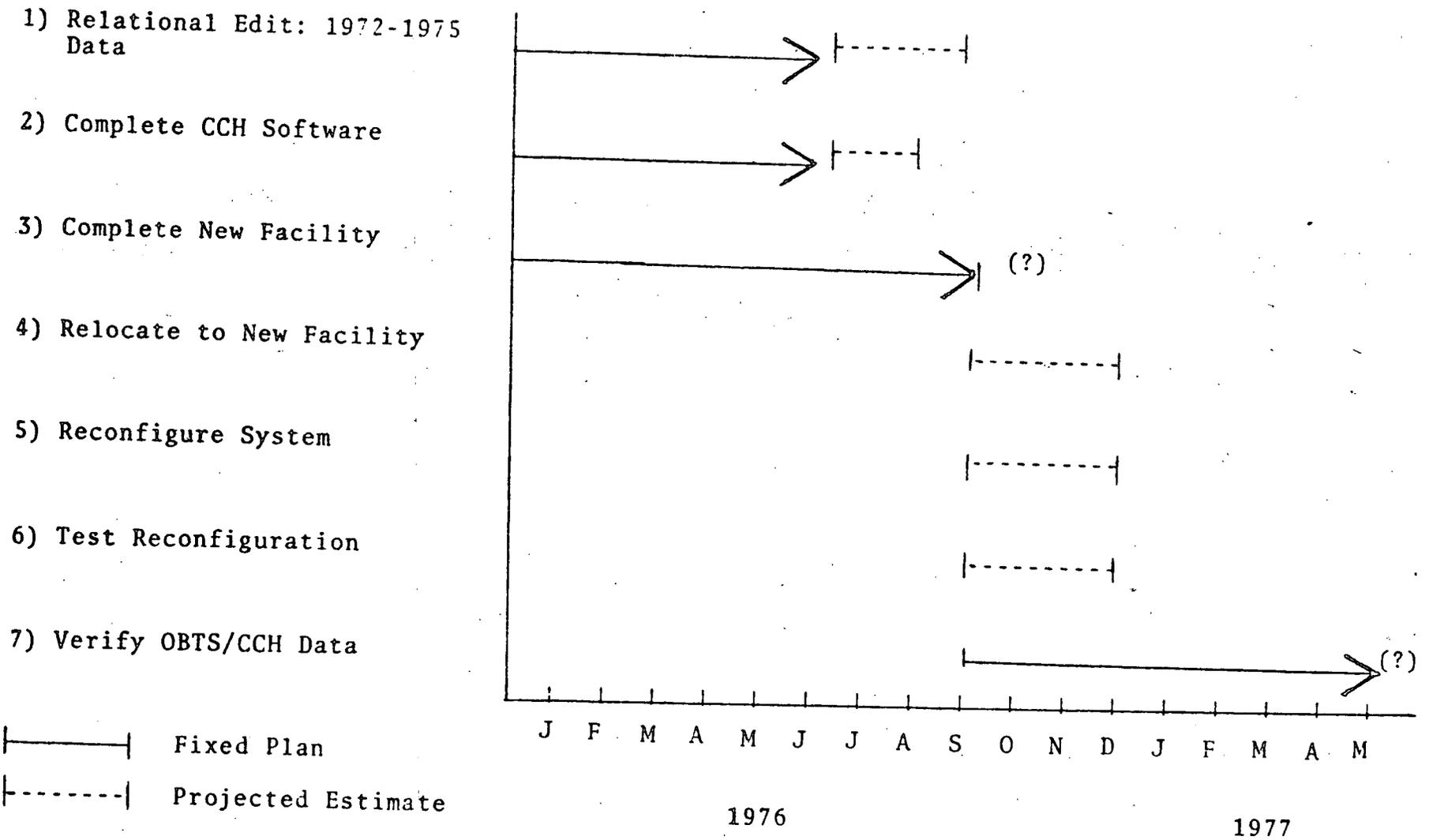


Figure 3. Tasks Preceding CCH Implementation in New Jersey*

*Data current as of March, 1976.

Summary

Table 3 summarizes the current status of the New Jersey OBTS/CCH system with respect to the 11 critical milestones associated with OBTS and CCH development.

TABLE 3
New Jersey Critical Milestone
Checklist *

Milestone	Status
<u>OBTS</u>	
• System designed to collect all minimum OBTS data elements	OK
• System successfully collecting all minimum OBTS data elements	OK
• Specific user identified to analyze OBTS data	OK - SAC
• Plan and procedure for analysis and dissemination of OBTS data	In Draft Form
• System to share OBTS data base with other users	No
<u>CCH</u>	
• System designed to collect all minimum CCH data elements	OK
• System successfully collecting all minimum CCH data elements	90% Disposition Reporting
• Operational master name index	OK
• Generate summary and detailed criminal history on request	Prototype operational: Full system in 1977
• NCIC/CCH interface established	Pending
• Can update/modify records in NCIC/CCH	Pending

*Data current as of March, 1976.

(C) OHIO OBTS/CCH

Administrative Organization

In Ohio the CDS Program is located in the Administration of Justice Division (viz. the Ohio SPA) which is under the Ohio Department of Development. The AJD designated the Ohio Bureau of Criminal Identification and Investigation (BCI&I), which is within the Attorney General's Office, as the principal OBTS/CCH grantee. The Department of Administration Data Processing Center was awarded block funds to design and program the OBTS/CCH Component for the BCI&I. Within the State Data Center, a dedicated Criminal Justice Data Center (CJDC) was established to provide computing services for all Criminal Justice agencies.

When the OBTS/CCH component is fully tested and implemented, the operational control of the system will be under the BCI&I systems staff. All modifications, upgrades, and maintenance will be the responsibility of BCI&I.

A Criminal Justice Information System (CJIS) Steering Committee, composed of public officials who use the system, and representatives of citizen groups has been appointed by the Governor and is currently in operation.

During the late 1960's, with the assistance of a federal grant under the Highway Safety Act, Ohio implemented an automated vehicle registration and driver license systems (LEADS) which is under the management control of the State Highway Patrol. During the past few years additional capabilities were incorporated including: Stolen Vehicles, Missing Persons, Stolen Articles, and Wanted Persons. The system is interfaced with NCIC, NLETS and over 300 local and state criminal justice agencies.

In early 1971, with the aid of an LEAA grant, the Bureau of Criminal Identification and Investigation (BCI&I) added a computerized Master Name Index to the LEADS System. During late 1972 the BCI&I received another grant to convert criminal history records to machine readable format which became known as the Automated Criminal History Record System (ACRS) of Ohio.

Since 1973 the ACRS has provided Ohio criminal justice agencies (mostly police) with CCH information through the LEADS communication network via administrative message switching. At the present time, there are

four basic files in the ACRS. As of January, 1976, the following number of records were contained in the files: Name File (245,900), Number File (425,937), Master Name Index (202,000), Criminal Histories (210,000).

In addition, approximately six thousand fingerprint cards are being received on a monthly basis.

System Approach

Realizing the benefit of an automated criminal history system, Ohio submitted a CDS Action Plan and a grant for first year funding to implement the OBTS/CCH Component in 1973. The Ohio approach to the OBTS/CCH implementation was to utilize the past effort in ACRS as the building block for the future OBTS/CCH. This approach, however, required the complete reprogramming of the ACRS in order to meet the requirements and expanded data needs of OBTS/CCH and to integrate with the LEADS Univac equipment.

Ohio received their first year CDS funds in 1974 and began development of the OBTS/CCH Component. These funds as well as subsequent CDS funds have been utilized primarily for data conversion of CCH. The detail design and programming of the OBTS/CCH is being accomplished by the State Data Center utilizing state block grant funds. The computer system design and programming is being accomplished in a very effective manner. However, there has been little, if any, emphasis placed on acquisition of OBTS data. The Ohio system fits the Serial Approach: Type B as described previously; development of the computer system first, then design of a system for data base acquisition.

OBTS data acquisition will be achieved by submission from local and/or regional CJIS systems as they become operational and on-line with the State CJIS system. A firm action plan providing detailed information concerning implementation of regional systems was not available at the time of this study.

System Operation

The ACRS has been modified to meet the requirements of an on-line interface with the NCIC/CCH. This is an interim CCH system that will be phased out completely when the new OBTS/CCH (Ohio CJIS) becomes operational.

There exists within the BCI&I two basic systems at this time; (1) An on-line computerized ACRS which supports the day-to-day operational needs of over 300 users and (2) A batch (tape) system that is being maintained to collect and process OBTS/CCH information for later utilization as the data base for the new on-line OBTS/CCH system (Ohio CJIS).

The basic system configuration associated with the developmental phases of ACRS and OBTS/CCH is presented in the flow diagram in Figure 4.

The Fingerprint card and disposition form (if final) are received, edited and input to the ACRS on-line and batch OBTS/CCH (1).

Data conversion clerks receive edits and input this information which builds both data bases (2).

Information is processed each day and a complete criminal history is printed out (for each input or update) which includes all new information (3).

Daily CCH printouts are again edited by data conversion clerks. If in error, it is returned for re-processing (4).

If all the data is correctly displayed on the new CCH printout it is then filed appropriately in the manual computer generated RAP sheet file (5).

The previous (or old) computer generated RAP sheet is then destroyed (6).

The ACRS system now in use (7) will phase out when the new OBTS/CCH system is implemented (8).

The Ohio OBTS/CCH collects and stores disposition information based on an existing manual disposition reporting system that is adequate in content for CCH but does not record the transactional needs of a true OBTS. A system flow of the disposition information is presented in Figure 5.

At the time of arrest a fingerprint card and Final Disposition Report (Form 2-71) is prepared by the police agency making the arrest. If the disposition is final at the arrest level both forms are forwarded to the BCI for processing (1).*

* c.f. Ohio OBTS/CCH Supplemental Materials, Tab A, for copies of Forms used to support Ohio ACRS and developing OBTS/CCH Systems.

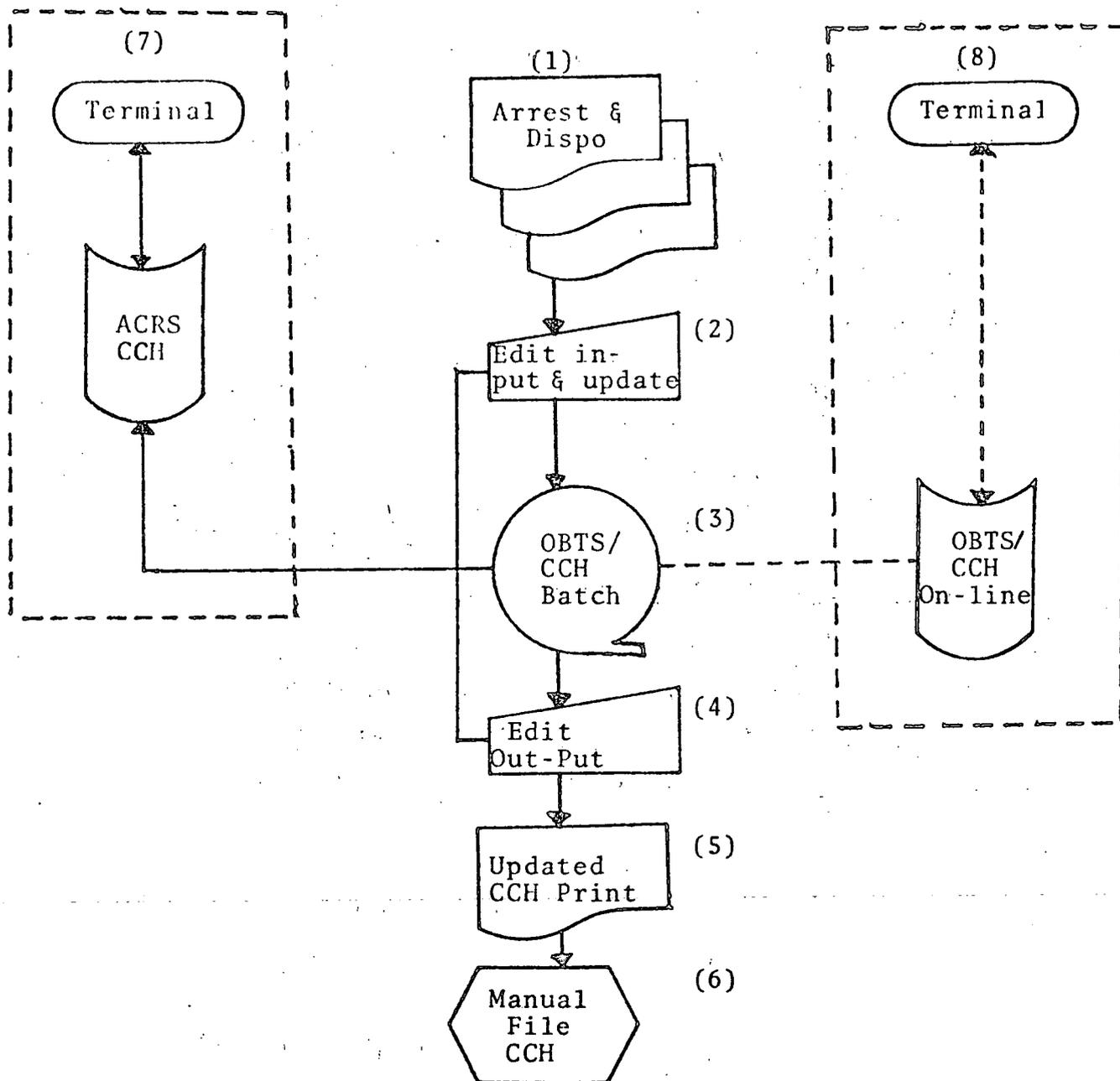


Figure 4 Developmental Phases of the Ohio ACRS and OBTS/CCH Systems

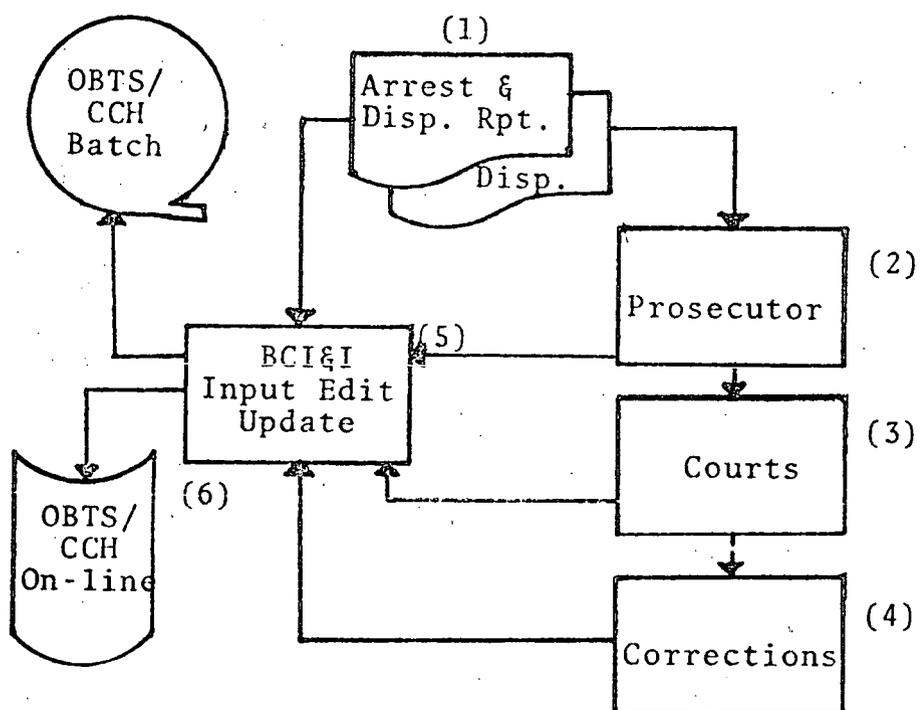


Figure 5 Current Ohio OBTS/CCH System Operation

In the event that prosecution is appropriate, the police agency sends the Form 2-71 to the prosecutor along with the arrest information. If a final disposition is reached at the prosecution level, the Form 2-71 is completed by the prosecutor and sent to the BCI&I for processing (2).

If court action is to be taken, the prosecutor sends Form 2-71 to the court for completion and forwarding to the BCI&I for processing (3).

All institutions in the state of Ohio are required to submit to the BCI an institutional disposition form. It is required to be submitted when the following events occur (4).

- Final release
- Parole
- Declared parole violator
- Returned parole violator
- Escapees
- Deceased subjects
- Transfers

State of Development

At the time of the visit (March 23-25, 1976), Ohio was terminating its second year of CDS funding and its major effort involved redesign of the ACRS to accommodate the informational requirements of OBTS/CCH. The milestone schedule included on the following page indicates the projected development of OBTS/CCH.

CCH Development. The computer system is designed to acquire, store and retrieve all CCH data elements. Arrest reporting in the state is very comprehensive.

Disposition reporting is being accomplished through an existing manual system that provides the basic CCH dispositions but does not include the transactional data specifications for OBTS. Even though the Ohio Revised Code requires the police, prosecution, courts and correctional agencies to report the final disposition on each offender, the responsible agencies are

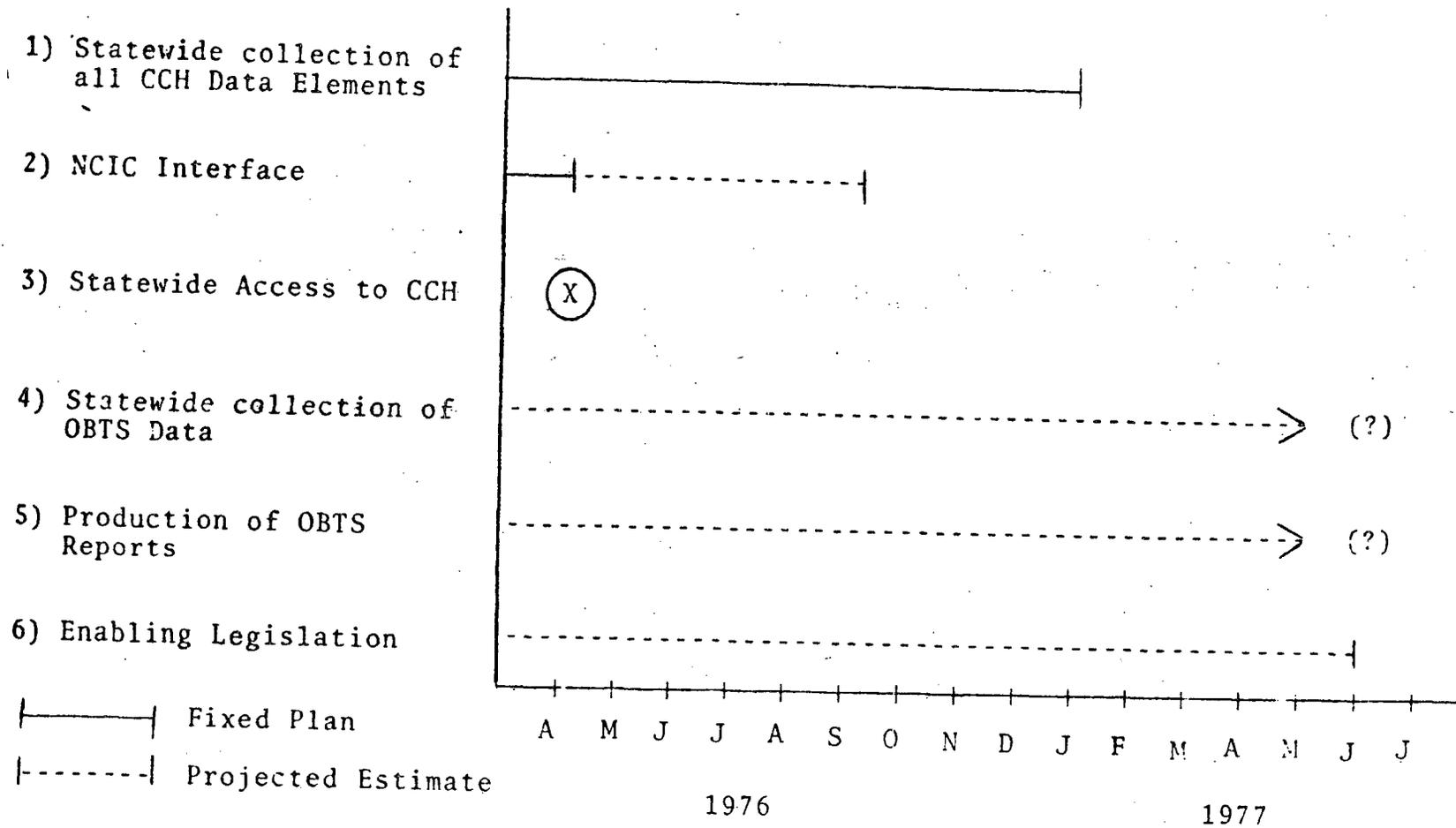


Figure 6. Ohio OBTS/CCH Developmental Milestones*
 (X) completed at the time of visit)

*Data current as of March, 1976.

negligent in reporting these dispositions. The current disposition reporting rate is estimated between 40% to 50% of the cases processed by the system.

Disposition reporting could be improved greatly with a disposition monitoring system to track the disposition paper flow and to ensure that each responsible agency did in fact complete and forward the appropriate disposition to the BCI&I. An adequate field staff to follow up disposition information would also enhance the collection effort.

A test load tape was sent to the FBI in late 1975 for checkout and audit. The errors were such that it could not be accepted. A second tape was sent to the FBI in March, 1976, and was being audited at the time of visit. The on-line NCIC up-date module had been thoroughly checked out to ensure immediate interface when the tape was acceptable. An on-line capability was estimated as early as May, 1976, provided the load tape was acceptable.

Presently, ACRS provides Ohio users with CCH information (c.f. attached example of an Ohio Criminal History Record). However, this system has been under substantial revision to accommodate NCIC/CCH formatting requirements and to accommodate the addition of OBTS data to the CCH data base. The OBTS/CCH system currently in development will be ready to begin final testing in July, 1976. In September, 1976, the final BCI&I acceptance testing will commence. In November, 1976, prototype field testing with remote uses will begin and a fully operational OBTS/CCH computer system will be available to all users in February, 1977.

OBTS Development. Presently, the only OBTS data elements being gathered are those that are redundant with the required CCH data elements.

The Ohio SPA (AJD) is in the process of requesting funds to establish a Statistical Analysis Center which will be responsible for the development of forms and procedures for the acquisition of OBTS data. They will, in addition, specify the requirements for the retrieval and analysis of OBTS data. Since the development of OBTS is dependent upon the establishment of a Statistical Analysis Center, there is currently no clear indication as to when an OBTS reporting system will evolve.

Problems and Successes. The initial one-year grant for OBTS/CCH was extended to eighteen months due to an over optimistic

STATE OF OHIO OFFICE OF THE ATTORNEY GENERAL
 BUREAU OF CRIMINAL IDENTIFICATION & INVESTIGATION (OHBCI0000)
 P.O. BOX 365, LONDON, OHIO 43140 (614-852-2556 OR 614-466-2816)
 BCI NO/9999999 CRIMINAL HISTORY RECORD AS OF 03-01-76

IDENTIFICATION DATA. NAM/RECORD, FICTITIOUS DOB/02-11-31

FPC/09 09 09 09 09 SEX/M HGT/6-03 EYE/BLU FBI/167897759 DRE/00-00-00
 09 09 09 09 09 RAC/W WGT/213 HAI/BLN SOC/999-99-9999 DLU/06-00-00
 HFP/ 9 S 1 U III 9 POB/NY SMT/TAT CHEST MNU/ AS-19369851 HCC/02 (CI/
 S 1 U III 9 ICC/TAT CHEST BUFFALO -RECORD CHALLENGED
 MULTI STATE OFFENDER LKA/238 PROSPECT SEDALIA OH

ADDITIONAL IDENTIFICATION DATA.

AKA/DIXON, FRANK EDWARD. JOHNSON, THOMAS FREDERICK. BILLINGS, MARK RICHARD.
 DOB/02-02-23
 SOC/222-22-2222, 444-44-4444
 MNU/OR-123456789, AS-002211443, AF-123456789, OP-4567891011, LO-222222222
 SMT/TAT LF ARM, TAT RF ARM, SC L WRIST
 HFP/13S 1 U 000 13
 S 2 U 000 14
 FPC/08 08 08 08 08
 08 08 08 08 08

CYCLE/01. DOA/12-31-72 NAME USED/RECORD, FICTITIOUS

ARREST DATA.	AGENCY/OH PD HICKSVILLE	ARREST NO/1234
DOO/12-31-72	01/ATTEMPT TO COMMIT BURGLARY 2911.12	DISPOSITION/TURNED OVER TO ANOTHER AGENCY
DOO/12-31-72	02/DRIVING UNDER INFLUENCE LIQUOR 4511.19	DISPOSITION/TURNED OVER TO ANOTHER AGENCY
		OTHER/OH SO HICKS COUNTY

JUDICIAL DATA.	AGENCY/COURT UNKNOWN	COURT NO/CR 2466
12-31-72	01/BURGLARY ATTEMPT TO COMMIT 2911.12	DISPOSITION/CONVICTED SUSPENDED SENTENCE/30D CONFINEMENT/30D PROBATION/2Y FINE/200 OTHER/CT COST
12-31-72	02/DRIVING UNDER INFLUENCE LIQUOR 4511.19	DISPOSITION/SEE COUNT 01

SUPPLEMENTAL DATA.	AGENCY/CO CRT HICKS	COURT NO/CR 2466
01-15-73	01-02	DISPOSITION/CONVICTED SUSPENDED SENTENCE/20D PROBATION/1Y

CUSTODY DATA.	AGENCY/OH ST REFORMATORY	INSTITUTION NO/OR-1234
01-04-73	A	STATUS/RECEIVED
01-15-73	B	AGENCY/ADULT PAROLE AUTHORITY INSTITUTION NO/OR-5678 STATUS/PAROLED

CYCLE/02. DOA/12-31-72 NAME USED/RECORD, FICTITIOUS

ARREST DATA.	AGENCY/OH PD HICKSVILLE	ARREST NO/1234
DOO/11-15-74	01/DRIVING UNDER INFLUENCE	DISPOSITION/HELD

LIQUOR

4511.19

DOB/00-00-00 02/THROW AT OR FROM MV
2909.12

DISPOSITION/HELD

JUDICIAL DATA AGENCY/COURT UNKNOWN
01-21-75 01/DRIVING UNDER INFLUENCE
LIQUOR
4511.19

COURT NO/CR 1234
DISPOSITION/CONVICTED
SUSPENDED SENTENCE/
CONFINEMENT/300
PROBATION/
FINE/200
OTHER/CT COST

01-21-75 02/THROW AT OR FROM MV
2909.12

DISPOSITION/SEE COUNT 01

END OF REPORT. REFER QUESTIONS TO AGENCY CONTRIBUTING DATA.

estimate of the time necessary to actually hire and have adequate staff on board to start the project.

The acquisition of new computer hardware caused considerable delay in the system design. This was due to not knowing what vendor would be the supplying firm.

A very serious problem exists in coordinating the efforts of the State Data Center and BCI&I since the two agencies are 50 miles apart.

The lack of a more definite plan for the acquisition of OBTS information will cause future delays in the development of a true OBTS/CCH System.

The strengths of the Ohio system are in its computer system. The Ohio Criminal Justice Data Center (CJDC) is located in the centralized State data center. Computer operations, programming staff and computer hardware is housed on the 7th floor of the State Public Administration Building, downtown Columbus, Ohio. Security for the operation is provided by the State Highway Patrol on a 24-hour basis.

The hardware configuration consists of 3 UNIVAC 1106-1's and one IBM 370-155. The UNIVAC 1106-1's are totally dedicated to criminal justice applications, and the IBM 370-155 provides other state data processing needs. The BCI&I, which has operational control of the OBTS/CCH application, is located in London, Ohio and interfaces with the CJDC by a Remote Job Entry (RJE) device.

The consolidation of all criminal justice applications under one functional center has enhanced the development and implementation of the OBTS/CCH by providing:

- Better utilization of systems and operations personnel,
- A more effective use of the LEADS communication network,
- Economy of space and a more effective facilities security arrangement.

Utilization of the UNIVAC Data Base Management System (DMS-1100) for all CJIS applications provides for a more economic operation in eliminating redundancy of the old file structured system. In addition, the new concept:

- Reduces storage requirements and system access time,
- Provides for more flexibility in data base expansion and in responding to ad-hoc requirements.

The standards and programming languages used makes the Ohio CJIS computer system a good candidate for a technology transfer to a state which has a similar hardware configuration.

Summary

Table 4 presents a summary of the status of the Ohio OBTS/CCH system with respect to the five critical milestones for OBTS and the six critical milestones for CCH.

TABLE 4
Ohio Critical Milestone
Checklist*

Milestone	Status
<u>OBTS</u>	
• System designed to collect all minimum OBTS data elements	Pending creation of SAC
• System successfully collecting all minimum OBTS data elements	No
• Specific user identified to analyze OBTS data	No
• Plan and procedure for analysis and dissemination of OBTS data	No
• System to share OBTS data base with other users	No
<u>CCH</u>	
• System designed to collect all minimum CCH data elements	OK
• System successfully collecting all minimum CCH data elements	45-50% Disposition Reporting
• Operational master name index	OK
• Generate summary and detailed criminal history on request	Detailed History
• NCIC/CCH interface established	Pending
• Can update/modify records in NCIC/CCH	Pending

*Data current as of March, 1976.

(D) NEW YORK OBTS/CCHAdministrative Organization

The New York Identification and Intelligence System (NYSIIS) was created in 1963 to develop an automated system for the collection, maintenance, and dissemination of criminal history records pertaining to all New York State defendants arrested for finger-printable crimes.

In 1973 the State Legislature created a new agency known as the Division of Criminal Justice Services (DCJS).^{*} This action consolidated the functions of the Bureau of Municipal Police, NYSIIS and the State Planning Agency. DCJS is situated in the Executive Department, and brings together most of the State's planning, program development, grant-in-aid, standard-setting and service functions in the criminal justice area.

The various functions and services of DCJS are provided through four units:

- The Identification and Information Service (IIS) provides identification services to criminal justice agencies and other authorized recipients.
- The Office of Planning and Program Assistance is the State's approved planning unit servicing criminal justice agencies throughout the State. This agency administers funds received by the State under LEAA.
- The Crime Control Planning Board, composed of representatives of state and local units of governments, criminal justice professionals and citizens, and assists in the coordination of planning activities relating to criminal justice.
- The Bureau of Municipal Police provides a variety of services to local law enforcement agencies such as training courses, planning and management analysis assistance, and conducts research studies on request.

* c.f. Sections 835-845, Article 35: New York State Executive Law as Ammended.

During the period from 1963 to 1972 NYSIIS (later DCJS) was involved in the development and implementation of a computerized criminal history system. The system design was based on the early SEARCH Technical Reports, NCIC requirements and state and local information needs. Funding for this endeavor was provided from both state and federal sources.

When the CDS guidelines were issued, the NYSIIS system was enhanced to meet the NCIC requirements.

In 1974 New York submitted their Comprehensive Data Systems Plan. Soon after its approval by LEAA a grant application was submitted to incorporate the expanded requirements of OBTS into the existing CCH system. First year funding was awarded and progress is currently underway to modify the existing systems to meet the guidelines and specifications of the OBTS/CCH system.

The adaptation of the CDS guidelines has necessitated however a major redesign of New York's criminal justice data collection system. This new approach will involve the participation of every segment of the criminal justice community in the State and will require:

- Development of an improved court disposition reporting system in all 62 counties,
- Expansion of the present data communication system to DCJS,
- Enhancement of the computerized criminal history data base,
- Development of a probation information system,
- Enhancement of the parole and correctional information system.

System Approach

DCJS presently operates a computerized criminal history system based on submissions from over 600 law enforcement agencies within New York State, the Judicial Conference, and the Department of Correctional Services (DOCS). Its primary output is a criminal history record which is produced for every individual arrested for a finger-printable offense within the state. This record must be submitted to the appropriate court prior to the arraignment of the arrestee.

The flow diagram on the next page depicts the basic procedures now in effect to provide CCH dispositions to DCJS.

The police provide DCJS with a pre-numbered fingerprint card and a completed disposition form (JC-501) if the final disposition has been determined at this point. JC-501 and the fingerprint card have the same unique pre-assigned number.*

If the case is referred to the prosecutor, the JC-501 is detached by the police and sent to the prosecutor with the arrest report. If the case is to go to court, the prosecutor forwards the JC-501 to the court, or if final, to DCJS.

The court receives the JC-501 from the prosecutor. The court disposition is completed and sent to DCJS for entry into CCH.

At prescribed intervals DCJS provides the Office of Court Administration (OCA) a tape of all records having no dispositions. These are researched and if needed, new JC-501's are prepared to account for missing dispositions. This is then sent to DCJS for updating records.

Periodically, the probation/parole and institutional divisions of the Department of Correctional Services submit appropriate information to DCJS for OBTS/CCH update on all individuals received or released.

This system has deficiencies such as incomplete data elements, incomplete reporting, and lack of timely reporting. These deficiencies are known however, and corrective action is being taken.

System Operation

When an arrest is made, the defendants prints are taken in triplicate. One set of prints stays with the arresting agency, two sets are forwarded to DCJS. DCJS then forwards one set to the FBI.

The initial identification is accomplished utilizing facsimile information and is later verified against the original when received through the mail.

The vast majority of fingerprint cards are transmitted via an extensive facsimile network through terminals located in every large metropolitan center (N.B.-Small agencies are serviced through the mail). At present there are over 48 facsimile terminals installed in 28 separate locations throughout the State.

* c.f. New York Supplemental Material, Volume A, TAB E for copies of these forms.

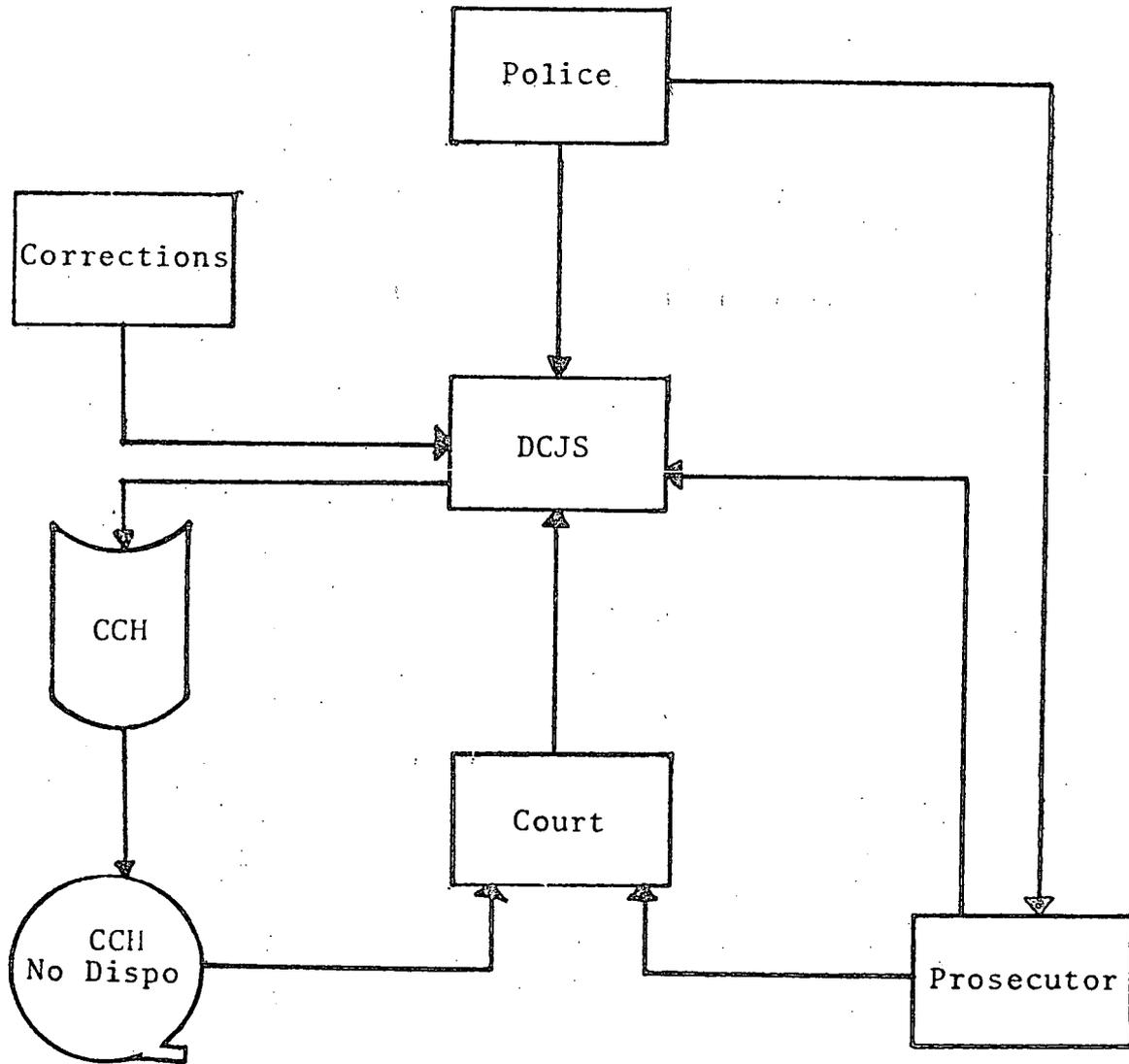


Figure 7 New York CCH Disposition Reporting System

All information on the fingerprint card is entered into the criminal history system using on-line terminals. This information is used to identify the offender, update his prior record if one exists, or create a new criminal history record on the individual.

One of the fingerprint cards contains a unique pre-printed "Court Control Number" and has attached to it a second form, the JC-501, Initial Court Report of Criminal Cases which carries the same court control number as the fingerprint card. This number is used to track the offender through the court process.

Upon receipt of the fingerprint card (viz. mail/facsimile) a name search is made. If no identification is made, the print is classified and then a search is made on classification data. If no record is on file, a manual search is conducted.

In all cases the wanted file is also searched and if a hit is made the record is updated and a rap sheet is prepared and forwarded to the submitting agency via on-line print-facsimile and/or by mail. The flow diagram on the following page outlines this procedure in detail.

State of Development

A field visit was conducted in New York on March 30-April 2, 1976. At the time the state was in its first year of CDS funding but had previously received federal block and state funds for CCH development under the original SEARCH concept.

CCH Development. For the past several years New York has been very successful in the collection and recording of all fingerprintable crime within the state. Disposition information is approximately 75% complete and action is being taken to raise this to an even more acceptable percentage.

The New York system allows agency access to the CCH data base only through a human interface at DCJS. In New York, fingerprints are transmitted over a facsimile transmission network with a minimum of a three-hour turn-around for both the identification record and a copy of the associated criminal history. This service satisfies the needs of most inquiring agencies. Direct inquiries and requests can be made through the control terminal at DCJS if needed.

At one time New York had established a CCH interface with NCIC. However, due to problems associated with NCIC compliance with New York State law regarding sealing and purging of records, the State chose to discontinue this interface.

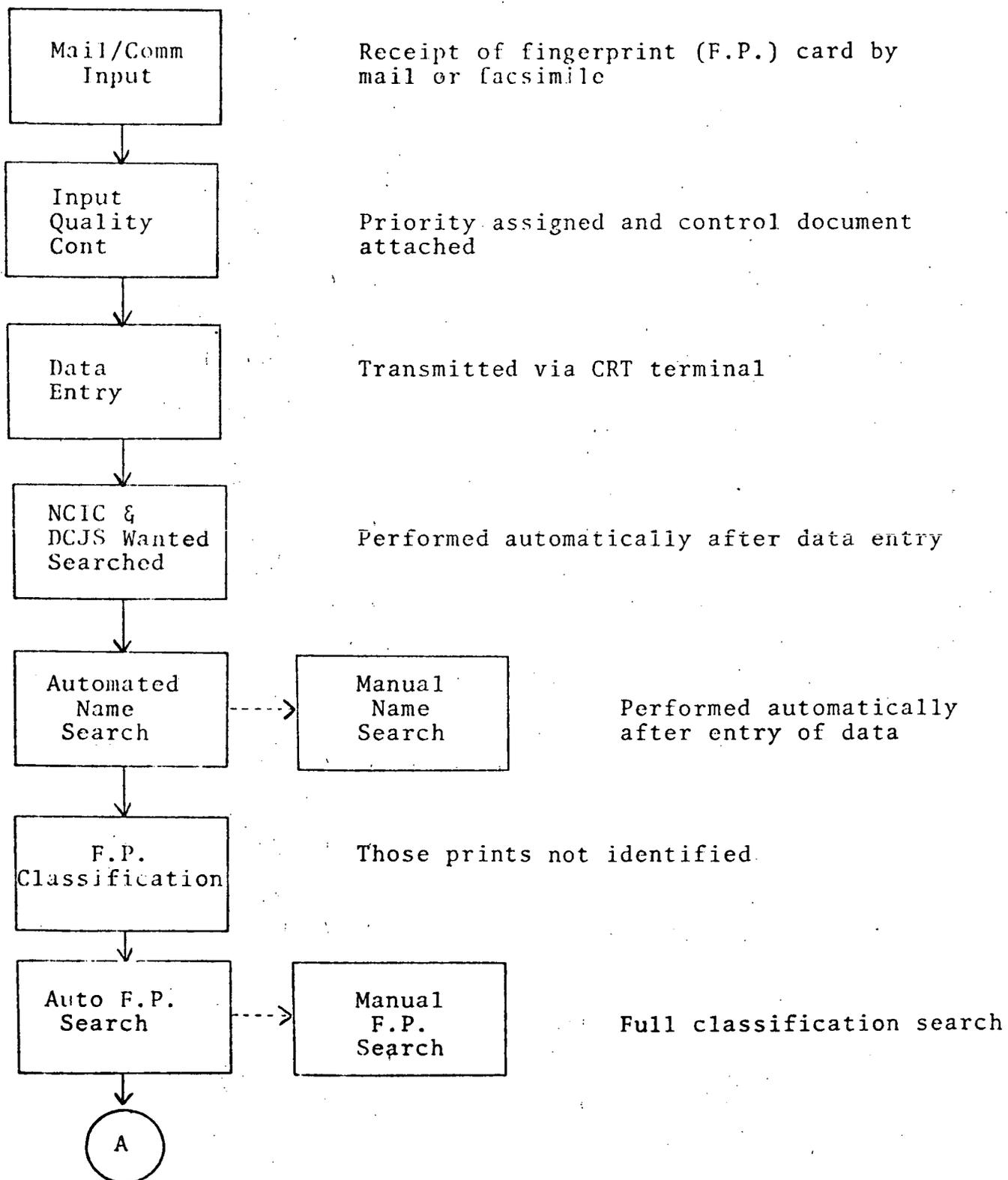


Figure 8. New York System for Receipt and Processing of Arrest Information

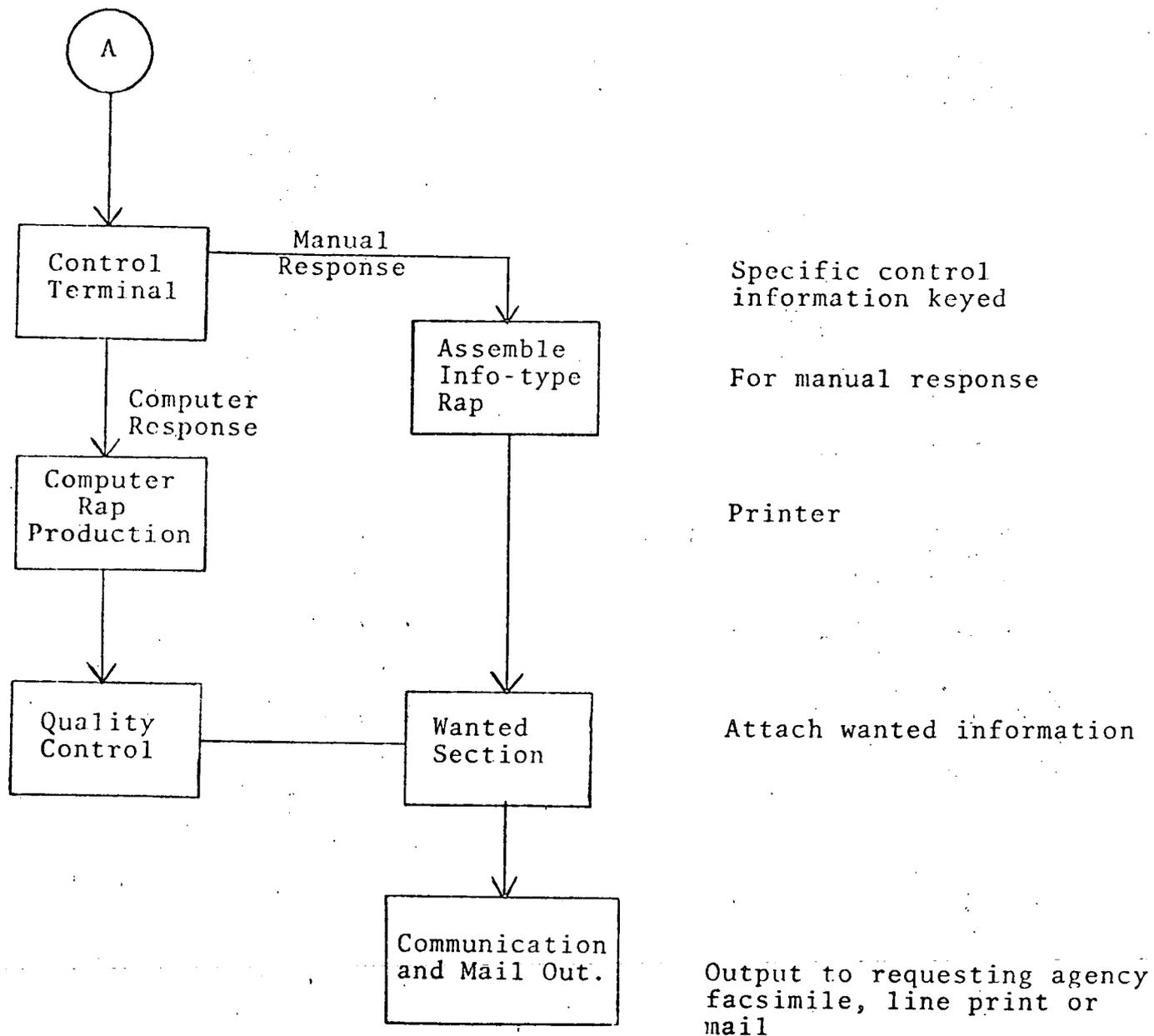


Figure 8 (con't.) New York System for the Receipt and Processing of Arrest Information

With the recent resolution of this problem, along with a change in state administration, positive steps are being taken with NCIC to reestablish the NCIC/CCH interface. Software changes requiring approximately six months of effort will be required.

New York presently has over one million criminal histories on computer. They have been meeting with the FBI to determine the most appropriate methodology for accepting this very large file.

OBTS Development. New York is now in the process of developing an OBTS data acquisition system that will function under the supervision of the Office of Court Administration (OCA). It will be the court's responsibility to track and monitor all dispositions starting at the judicial phase (c.f. Figure 9).

The planned OBTS data acquisition system will be initiated with the receipt by DCJS of an arrest report (fingerprint card). Upon appropriate CCH processing of the arrest, an extract of the current arrest event will be transmitted to OCA. The arrest record will be appropriately identified to ensure accurate reporting of related event information on the offender.

The arresting agency presents all facts of the arrest to the prosecutor who either accepts or dismisses, or accepts portions of the event. If he chooses to dismiss, it is so reported, the file updated and the case is closed. If he chooses either of the other alternatives, the defendant will be delivered for arraignment.

Arraignment data will be recorded by the clerk of court. This information is reported to DCJS through OCA and the files updated. The case then proceeds through the remaining phase of the court process with each completed decision being reported to OCA, and by OCA to DCJS. The final court disposition is handled in a similar manner.

Upon conviction, DCJS will automatically generate a criminal history to the court for use in the pre-sentence investigation. The result of the sentence will be reported to DCJS through OCA. Should the sentence include incarceration, DCJS will forward a criminal history to the appropriate institution. Subsequent correctional information will be reported directly to DCJS by DOCS.

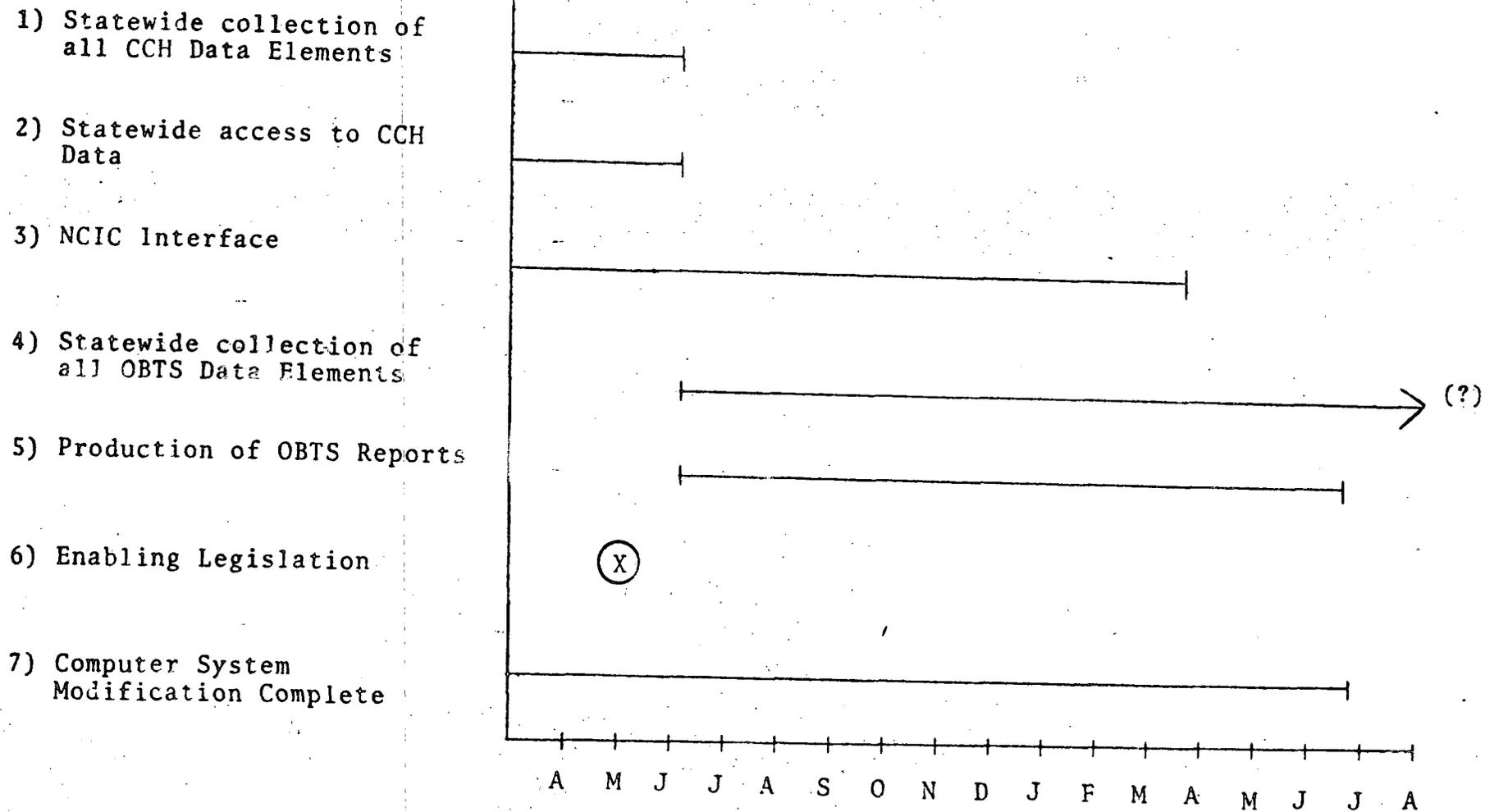


Figure 9. New York OBTS/CCH Developmental Milestones*
 (X completed at the time of visit)

*Data current as of April, 1976.

The implementation of OBTS will begin in high crime and metropolitan areas first and will be expanded into other areas of the state as time and resources permit. The first area of implementation will be New York City. The present schedule for manual implementation of OBTS is:

- Brooklyn operational June 15, 1976
- Manhattan operational July 15, 1976
- Bronx operational August 15, 1976
- Queens operational September 15, 1976

By January, 1977, most metropolitan areas in the State will be operational in a manual mode. By December, 1977, the State's OBTS/CCH will meet the CDS standards but 100% implementation will be some time in the distant future.

New York is presently publishing a Quarterly Crime Statistical Report which present transactional statistics derived from the existing CCH data base.* It is not complete, however, since all OBTS data elements are not being collected at this time nor are all the dispositions being collected at this time (i.e. approximately 75% complete).

The hiring of a Statistical Analysis Center (SAC) administrator in May, 1976 will help enhance the completeness and quality of the present report and its compatibility with other state and national criminal justice statistical programs. Under the SAC, New York should have an ever-improving OBTS system with complete OBTS output evolving over the next year or so as the data acquisition system permits.

Problems and Successes. New York State was one of the first states to attempt the automation of criminal records. Their pioneer start in the area resulted in a system configuration that did not always adhere to developing national guidelines. This necessitated an on-going implementation and redesign activity that was not only time consuming but very costly.

New York's developmental effort has also been significantly affected by inadequate anticipation of computer hardware needs. The frequent upgrade and change in hardware configuration has added many delays to the program's development. New York serves

* c.f. New York State Felony Processing New York OBTS/CCH Supplemental Material, TAB A.

as an example of the dictum that when an agency does not have total control of hardware procurement, costly conversion efforts are generally experienced.

The recent mandatory economy moves in New York City in particular, and in the State in general, have generated very serious problems in hiring staff even though federal funds have been available. Projected staff costs to the city and state is a very important factor in the process of authorizing new positions.

Another problem in New York that appears to be common among several states is the inherent delay in getting a new program such as OBTS going. Common obstacles include:

- ⊙ Getting new positions authorized by state and local civil service agencies
- ⊙ Hiring competent staff and acquiring adequate facilities and equipment
- ⊙ Establishing an effective coordination council to deal with the many agencies involved in a massive program such as OBTS
- ⊙ Establishing an acceptable plan for information analysis and exchange. This includes both horizontal and vertical exchanges at local, state and national levels.

A unique contribution to CCH technology developed in New York is their facsimile transmission system. The DCJS has installed facsimile equipment in key areas throughout New York State. Using this equipment police agencies are able to transmit arrest fingerprints for identification purposes via telephone lines and within three hours receive the prior criminal history information needed by the arraigning magistrate in setting bail, release or recognizance, temporary commitment to jail, etc.

At this time, the network includes 22 major New York police agencies and the New York City criminal court system. These agencies alone submitted approximately 216,000 fingerprint documents over this system in a one-year period.

The reliability of the system and a 24-hour service commitment by DCJS has greatly promoted the goal of reducing duplicative identification bureaus at the local and regional levels. New York City is almost totally dependent on this service and will revert to

local identification only when excessive delays are caused through power failure or some extraordinary computer problem at DCJS. The reliability of the state system will be greatly enhanced when implementation is complete on the duplex Burroughs 7700 computers and a back up power source.

The New York facsimile system does represent an interesting and potentially valuable contribution to CCH technology. With the successful development of automatic fingerprint scanning and identification on the horizon, the fundamental obstacle to criminal identification will be the overland transmission to the print. Facsimile transmission as developed in New York, represents a viable alternative to conventional transit through the U.S. Postal Service.

Summary

Table 5 presents a summary of the status of the New York OBTS/CCH system with respect to the five critical milestones associated with OBTS and the six associated with CCH.

TABLE 5
New York Critical Milestone
Checklist*

Milestone	Status
<u>OBTS</u>	
• System designed to collect all minimum data elements	OK
• System successfully collecting all minimum OBTS data elements	Pending Development by OCA
• Specific user identified to analyze OBTS data	OK: SAC Still Developing
• Plan and procedure for analysis and dissemination of OBTS data	Developing
• System to share OBTS data base with other users	OK
<u>CCH</u>	
• System designed to collect all minimum CCH data elements	OK
• System successfully collecting all minimum CCH data elements	75% Disposition Reporting
• Operational master name index	Indirect access through DCJS
• Generate summary and detailed criminal history on request	OK
• NCIC/CCH interface established	Established, discontinued pending re-establishment
• Can update/modify records in NCIC/CCH	Pending

*Data current as of April, 1976.

(E) Michigan OBTS/CCHAdministrative Organization

In Michigan, the CDS Program is the responsibility of the Office of Criminal Justice Programs (OCJP), the state SPA. The program is the direct responsibility of an administrator appointed by the Governor. The Michigan State police who have operational responsibility for the Criminal Justice Data Center and the Law Enforcement Information Network (LEIN), has been designated the prime OBTS/CCH grantee.*

The actual development of OBTS/CCH involves five state level departments and many local agencies. The State agencies involved are: Department of State Police, Department of Attorney General, Supreme Court, Department of Corrections and Office of Youth Services. Each of these departments is designated as a functional statistical center and will be responsible for data collection, audit, quality control, functional analysis, etc., and direct support of the State level analysis center, located in OCJP. The statistical information flow from police, prosecution, courts and corrections will be through the designated centers to the state's Criminal Justice Data Center.

The State Police are responsible for the computer storage, retrieval and dissemination of OBTS data.

History of LEIN. Michigan became involved in the automation of police information during the early part of 1967. A committee known as the "LEIN Advisory Committee" was established to oversee the establishment of a computer assisted telecommunications network consisting initially of 80 teletype terminals located in various municipal police, sheriff and state police posts throughout the State. The central computer is located at the Michigan State Police headquarters in East Lansing.

As the systems traffic increased, so did the need to add computer and communications hardware. In 1970 a second B-5500 Burroughs computer was installed. Later, as a result of participation in automating criminal histories, a third B-5500 was added.

In 1974 it was apparent that new hardware would be needed because of increased traffic load and slow response time. The three B-5500 were replaced with two B-6700. These new units were in place and operational in December, 1974.

* The Michigan Criminal Justice Data Center was established by Executive Order 1972-3 and became active as a special data processing center on May 8, 1972.

The original LEIN system has grown from the original 80 teletype terminals and one computer to a system with well over 200 terminals located throughout the State. LEIN interfaces with NLETS, NCIC and a regional system known as Automated Law Enforcement Communications System (ALECS) which permits an on-line interface among eight mid-western states including Michigan, Ohio, Indiana, Illinois, Kentucky, Wisconsin, Missouri and Iowa.

This interstate network allows for any of the participating states to:

- Transmit or receive administration messages from any one of the participating states.
- Make "on-line" inquiries into the computerized vehicle registration files of each state on the system.
- Make "on-line" inquiries into the computerized driver license file of each participating state.

The LEIN System is available 24 hours a day, seven days a week to all users, and handles over 100,000 messages daily, indicating wide acceptance of the system among Michigan Law Enforcement Agencies.

CDS Impact Michigan's CCH System from the early days of Project SEARCH, was totally police oriented as were most all systems prior to the LEAA issuance of the CDS guidelines. The new OBTS/CCH concepts at first reading did not appear to have too great an impact on the existing CCH System. However, after more detailed examination, it was determined that not only would there be a need for a complete redesign of the existing computer system but a complete re-organization in the operational area as well. This was necessary in order to effectively intergrate all the criminal justice agencies essential to a viable OBTS system.

Michigan, having been a participant in the early Project SEARCH CCH demonstration realized the benefits associated with such a program, and immediately took the necessary steps to conform to the CDS guidelines. A CDS Plan was submitted and approval was received in June, 1974.

Since June, 1974, Michigan has established the Office of Criminal Justice Programs which is responsible for the CDS function, upgraded the computer hardware and redesigned the computer software to accommodate OBTS/CCH. In addition, the State has been in the process of developing a Judicial and Correctional System that will provide the disposition and correctional data to fulfill the OBTS data requirements.

System Approach

The Michigan OBTS/CCH is a component of the LEIN system described above. All criminal justice applications are housed in a functional computer center known as The Criminal Justice Data Center (CJDS). This center is located at the State Police Headquarters and is totally controlled and operated by State Police employees.

The Records & Identification (R & I) Division of the State Police, located in another part of East Lansing, handles all the information flow for the OBTS/CCH component. This is accomplished with CRT terminals on-line. As of May 1, 1975, R & I had started entering the "daily mail" on the day received. Conversion of old records was being accomplished only as time would permit. In the spring of 1976 they had over 200,000 criminal histories on computer and available to authorized users.

The system has an on-line interface with NLETS, NCIC, 200 Michigan Criminal Justice Agencies and 300 terminals associated through the ALECS system described above. Information available to system users, in addition to OBTS/CCH data, includes:

- Wants & Warrants
- Stolen, Impounded and Wanted Vehicles
- Traffic and UCR Statistics
- Driver Records
- Vehicle Registrations

The average traffic load from and to these files approximates 100,000 messages a day.

Even though the OBTS/CCH computer system has been modified to accept and process OBTS data, it is at this time still functioning as a police CCH system. The approach that Michigan took to acquire OBTS data (viz., Basic Michigan Court System: BMCS, and the Corrections Management Information System: CMIS) did not keep pace with the OBTS/CCH computer system modifications and, therefore, the modified system cannot be effectively utilized.

The data flow to the Michigan CCH is still through the police agencies. It is the arresting agency's responsibility to follow a case to final disposition and report this information back to the R & I for CCH update. This is accomplished on a form identical to the one used

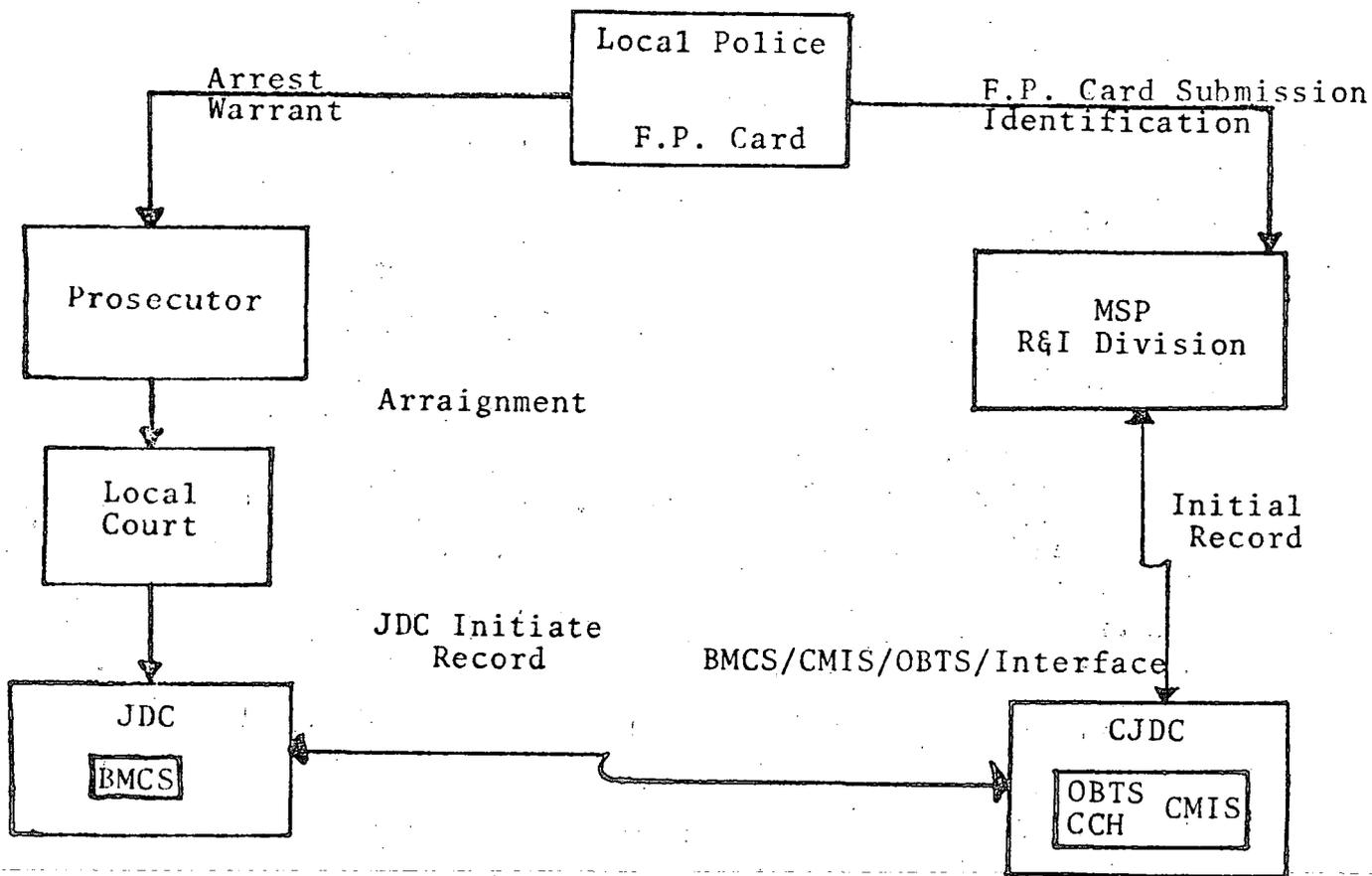


Figure 10 Michigan Planned OBTS/CCH System

by the FBI on UCR disposition.

Unfortunately, Michigan does not have a field team of any sort to assist or train the local agencies in disposition reporting. The only policing of missing disposition data is accomplished through the use of a summary rap sheet that is forwarded back to the arresting agency for completion and return to the R & I. In addition to this, an "Open case" report is prepared and forwarded to each agency which is supposed to be completed and returned to R & I. This method has not proven satisfactory since out of 191,000 records there were 60,000 missing and/or pending dispositions (32%).

Data will continue to be received in this manner until such time that the BMCS and CMIS are operational and properly interfaced, at which time OBTS/CCH data will be received directly from the originating agencies.

System Operation

Michigan is somewhat similar to Ohio, in that they have an operational NCIC/CCH system serving many agencies throughout the state and a proposed OBTS/CCH system that should become a reality within the next 12 to 18 months. As stated earlier, the OBTS/CCH software has been modified to meet all the requirements of the "classic" OBTS/CCH. However, the data acquisition component of the total system has lagged far behind for various reasons including:

- Issues relating to security and privacy and problems emanating from the constitutional doctrine of the separation of powers (viz., Judicial vs. Executive Control of the system)
- The courts committed all their resources to accomplish internal tasks such as automated docketing and calendaring, which has caused the OBTS data acquisition component to be delayed.
- Over commitment to automation of the Judicial and Correctional components vs. manual data collection as the initial data acquisition method.

The feeling now in Michigan is that with a new state Privacy and Security Plan being prepared and soon to be implemented, progress toward the ultimate OBTS/CCH goals will move more rapidly.

Michigan recently re-designed and put into use a new pre-numbered fingerprint card. This card will be the key that ties the OBTS/CCH System together. In addition, the

new card enhances the existing CCH system in that it will provide more information and has a pre-numbered tear-off (same as the fingerprint card) which will be the key in tracking dispositions through the court.

Until such time that the BMCS and CMIS becomes operational the CCH system will function as it has in the past with all disposition activity flowing through the arresting agency to CJDC. The modified system will function as follows when all interfaces are completed.

Arrest The arresting agency will enter the arrest information on the MSP pre-numbered fingerprint card and the tear strip which has an identical number, and forward this information to the prosecutor's office at the time of warrant request.

Warrant The Prosecutor enters the control number from the tear strip onto the warrant. The sequence of charges as listed on the warrant is indicated on the tear strip as item numbers. The tear strip is checked for each charge included on the warrant and any change of charge or dismissal is so indicated.

If more than one warrant is issued the item number on the warrant and tear strip must be adjusted so that each item number on the tear strip is unique. The tear strip is taken back to arresting agency's office.

Fingerprint Card Submission The arresting agency transfers the tear strip entry to the fingerprint card. The fingerprint card is then submitted to R & I for processing and identification. The tear strip can then be destroyed by the arresting agency.

R & I Initiates Record Following positive identification, R & I establishes and/or updates an existing record. The card is used to enter arrest and warrant information into the system. The control number is used as a tracking number until a SID is assigned.

JDC Initiates Record Following arraignment the warrant is used to enter information into the BMCS data base at JDC. The following information is entered:

- Control Number
- Name of Offender
- ORI

- Date of Arrest
- Charge
- Warrant Statute
- Item Number

BMCS/CJDC Interface The identification information from CJDC to BMCS is matched with the information previously entered into BMCS from the Warrant. If the information matches, the record is established and the OBTS/CCH record is updated on-line as the offender moves through the criminal justice system.

CMIS/CJDC Interface If the final disposition of the defendant requires correctional supervision, a record is established in CMIS, which jointly resides in CJDC. The CMIS automatically updates OBTS/CCH when the offender exits the system.

State of Development

The milestone schedule on the next page indicate the projected development of the Michigan OBTS/CCH System at the time of the visit. (April 27-29, 1976).

CCH Development Michigan has been involved in the collection and conversion of CCH data since the early project SEARCH demonstration during 1970-71. Since 1974 they have converted over 200,000 CCH records and at the time of the visit they were operating a very smooth, efficient CCH system.

Michigan has had an on-line interface with NCIC since late 1974. They have now reached a point where they process all incoming mail containing arrest information the day it is received. The average message traffic between the NCIC and the Michigan LEIN system is approaching 200,000 transactions per month.

State-wide access to the Michigan LEIN System started in the late 1960's and as new files were added such as CCH, access was permitted based on each agency meeting state and national privacy and security requirements.

OBTS Development Michigan has elected to acquire OBTS data through two automated systems now under development, viz. the basic Michigan Court System located in the Supreme Court Judicial Data Center and a Correctional

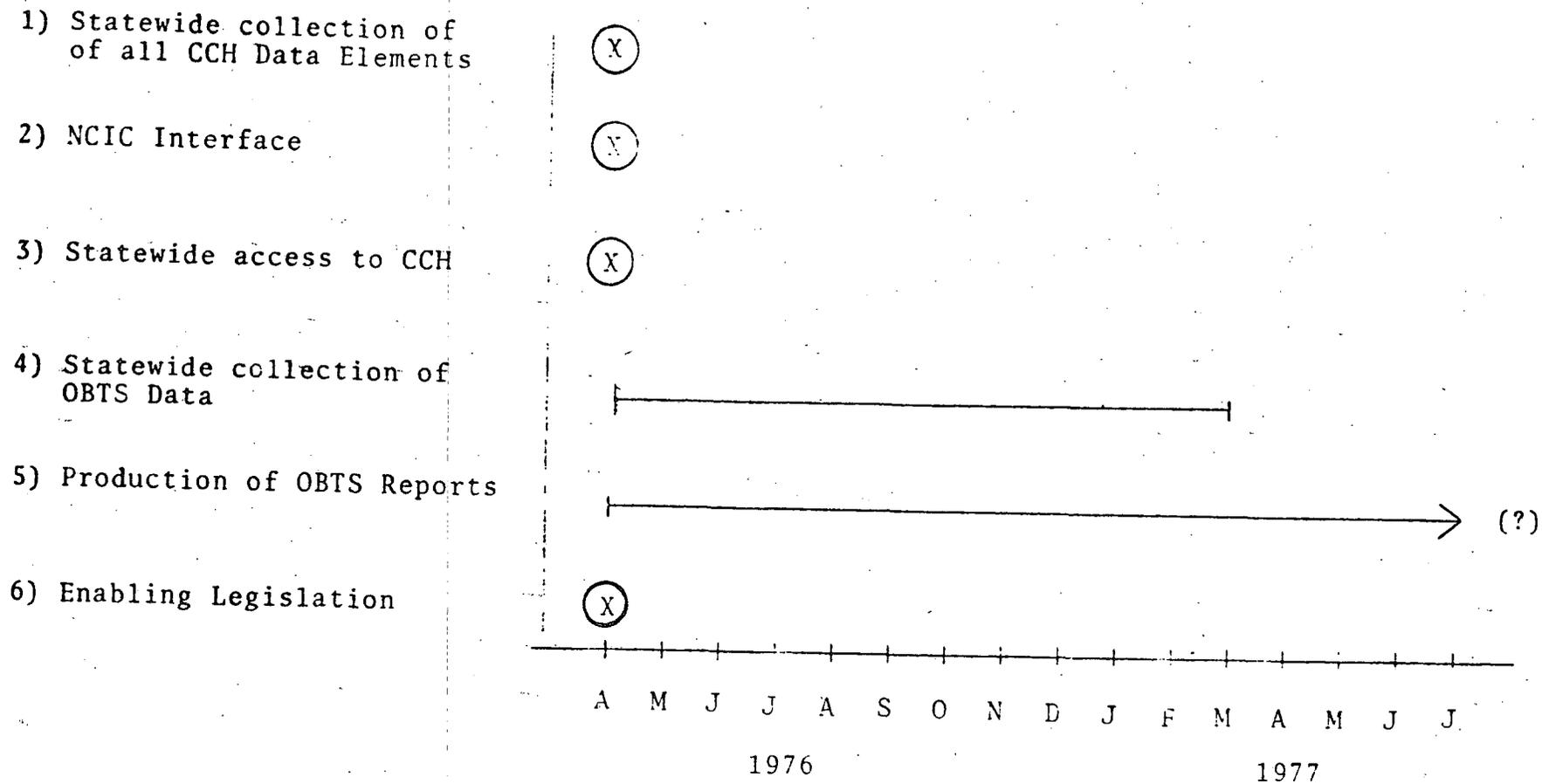


Figure 11. Michigan OBTS/CCH Developmental Milestones*
 (X completed at the time of visit)

*Data current as of April, 1976.

Management Information System which will be co-located in the Criminal Justice Data Center with OBTS/CCH. The earliest firm estimate as to when all OBTS data elements will begin to be received is June, 1977. The correctional system is scheduled to be operational within the current year.

The Statistical Analysis Center in Michigan is a function of the Office of Criminal Justice Planning. The state does not presently have a systematic method for the analysis and dissemination of OBTS data. The five principal state level agencies (viz., Police, Attorney General, Corrections, court and social services) who have been designated functional statistical centers are responsible for:

- Defining state and local OBTS data analysis requirements
- Providing technical assistance and OBTS data analysis to local agencies
- Providing quality control assistance to state and local agencies
- Assisting OCJP (SAC) in establishing OBTS data requirements and standards
- Providing OCJP with the necessary OBTS data for comprehensive analysis

The only statistical report presently being published on a state-wide basis is the Annual UCR Report.

Since the actual acquisition of OBTS data is scheduled for June, 1977, a viable OBTS output is not anticipated in the near future.

Problems and Successes A major problem experienced in Michigan was the selection of a local consultant firm to design and program the OBTS/CCH computer system. After 18 months of effort and a threatened law suit, the consultant firm was dismissed and then it took another year to straighten out the mess. There was definitely a lack of proper supervision over the consultant by State employees. This has been corrected and the programs are now running effectively and efficiently.

The approach of developing a state-wide automated court system to provide OBTS/CCH disposition data and the trade off problems involving courts needs vs. OBTS needs is still causing excessive delays in data acquisition.

There has been a major problem in trying to hire and retain good coders and terminal operators. Personnel turnover seems to stem from low salaries and no chance of advancement. These conditions cause considerable delay in the records conversion effort.

Michigan has taken the omnibus approach to the development and implementation of a totally automated OBTS/CCH throughout the state. This, of course, is the ultimate goal of any state in the CDS program. However, to accomplish such a massive task in a reasonable time period would require unlimited personnel and financial resources, along with an iron-clad set of priorities to insure that all segments of the system develop at the designated pace. This just cannot happen in the decentralized geopolitical environment that makes up our municipal, county, state and national governments.

It is the opinion of the study team that a more economical, and effective approach would have been to implement a more simplified manual data acquisition system that could be batch processed and at the same time work out the inherent problems of information exchange among branches of government prior to setting things in "concrete", as is generally required with on-line automated systems. If Michigan does successfully bring on-line all segments (police, courts, corrections) of the OBTS/CCH system they will certainly have developed a "model" to be observed by new states in the CDS program.

Michigan's approach to the acquisition of OBTS data will not provide a viable statistical output for several years since data base acquisition commences when other computer systems (BMCS and CMIS) are operational. It will then require several years of data accumulation to insure reliable statistics. Had they commenced data collection in parallel with computer systems development, a reliable data base would at this time be usable and viable.

Summary

Table 6 summarizes the current status of the Michigan OBTS/CCH system with respect to the five critical milestones associated with OBTS development and the six associated with CCH development.

TABLE 6
Michigan Critical Milestone
Checklist*

Milestone	Status
<u>OBTS</u>	
• System designed to collect all minimum OBTS data elements	OK
• System successfully collecting all minimum OBTS data elements	No: a few
• Specific user identified to analyze OBTS data	No
• Plan and procedure for analysis and dissemination of OBTS data	No
• System to share OBTS data base with other users	No
<u>CCH</u>	
• System designed to collect all minimum CCH data elements	OK
• System successfully collecting all minimum CCH data elements	35-40% Dis-position reporting
• Operational master name index	OK
• Generate summary and detailed criminal history on request	OK
• NCIC/CCH interface established	OK
• Can update/modify records in NCIC/CCH	OK

*Data current as of April, 1976.

(F) Developmental Problems

The purpose of this study was to describe the status of OBTS/CCH in Michigan, New Jersey, New York and Ohio. A secondary goal was to pinpoint problems associated with the development of such systems.

It was anticipated that two kinds of problems would be encountered; unique and common. Unique problems refer to those difficulties experienced by one state, not encountered by others. Common problems refer to those difficulties experienced by two or more of the states.

Prior to visiting the states, the researchers developed a problem checklist of 110 problems that might be encountered in developing an OBTS/CCH system. The checklist covered four problem areas:

- Administrative and Managerial Problems
- Inter-Governmental Problems
- Legal Problems
- Technical Problems

Each problem area includes several problem categories, and each problem category subsumes a number of specific problems, as indicated in Tables 1 and 2.

During each visit, the state's progress was examined with respect to each of the 110 problems on the checklist. The state was considered as having had difficulty in a particular area if that problem caused a delay in the accomplishment of any of the critical milestones associated with the development of an OBTS/CCH system.

For example, if a state found it difficult to hire qualified personnel, but this difficulty did not delay the accomplishment of any of the critical milestones, then it would not be considered a significant problem. However, if the program suffered high personnel turnover and this caused a delay in the accomplishment of any of the critical milestones, then it would be considered a significant developmental problem.

Tables 7 through 10 indicate the problems encountered by each of the four states across the 110 problems included in the checklist. For purposes of interpretation, (Y)

indicates that, yes, the state did encounter significant difficulties in this problem area. The symbol (YY) indicates that, yes, the state experienced very serious difficulties in this problem area. The symbol (N) indicates that the state encountered no significant difficulty in the associated problem area while the symbol (NA) indicates that the problem area is not applicable to the particular state.

The percentage of states that encountered significant difficulties in each problem area is indicated on the right hand side of the table. For purposes of interpretation, 25% is considered a unique problem. However if two or more states had difficulty with a particular problem (50% or more), then the problem would be considered common to the development of an OBTS/CCH system.

Administrative and Managerial Problems

As indicated in Table 7, this problem area includes three problem categories:

- Personnel
- Field Staff and Training
- Audit Procedures

Personnel. Of all the problems included in the checklist the states experienced more difficulty in this area than in any other. These difficulties stemmed from two issues: (1) Not allowing sufficient time in their implementation plan to acquire an adequate staff and (2) Finding qualified personnel willing to work at the salary levels provided by the state.

Commonly, states do not allow sufficient time to build a staff. Frequently, state CDS plans and first year grants indicate that the staff will be on board within a month or so and that by the end of the first year the state will be accomplishing some of the critical milestones associated with OBTS/CCH development.

More frequently than not, the states were still acquiring staff at the end of the first grant year. To some extent, these delays were caused by tardiness in allocating LEAA funds, but to a much greater extent they are caused by the difficulty in finding qualified personnel.

With the exception of New York state, salaries offered

TABLE 7

Administrative and Managerial Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
<u>(A) Personnel</u>					
1. Acquisition of qualified personnel	Y	Y	N	YY	75%
2. Matching OBTS/CCH personnel needs with existing State Civil Service System job descriptions	N	N	N	YY	25%
3. Civil Service salary levels sufficient to attract qualified individuals	N	Y	N	Y	50%
4. Imbalance between project personnel and contractor personnel	Y	N	N	N	25%
5. Those responsible for implementation of system lacking direct authority to hire and fire personnel	N	N	N	N	-0-
6. Imbalance in the ratio of state funded to grant funded personnel	N	N	N	N	-0-
7. Abnormally high turnover rate	N	N	N	Y	25%
8. Inherited inadequate personnel from other agencies	N	N	N	N	-0-

TABLE 7 (cont'd)

Administrative and Managerial Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
9. Political interference in the hiring of personnel or in the selection of contractors	N	N	N	N	-0-
10. Personnel having little prior experience in criminal justice systems	N	Y	N	Y	50%
11. Under-estimated the time to build an adequate staff	YY	YY	N	YY	75%
12. Problems in recruiting specific skills.	Y	Y	N	Y	75%
13. State residency requirements limiting hiring	Y	N	N	N	25%
14. Lag time in filling positions	Y	N	N	YY	50%
15. Balance among planning, implementing and operating personnel	YY	N	N	YY	50%
16. Tenure problems	N	N	N	N	-0-

TABLE 7 (cont'd)

Administrative and Managerial Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
<u>(B) Field Staff And Training</u>					
1. Problems in recruiting quality field staff	NA: Michigan has no field staff	N	N	NA	-0-
2. Underestimated field staff needs		Y	N	YY	50%
3. Field staff phased in too late		N	N	Y	25%
4. Underestimated the degree of field staff training required		N	N	NA	-0-
5. Problems due to separate field staff for UCR and OBTS		N	N	NA	-0-
6. Problems in the geographic allocation of field staff		N	N	NA	-0-
7. Turnover among field staff		N	N	N	-0-
8. Anticipating sufficient training and retraining cycles of field staff		N	N	N	-0-
9. Problems in acquiring vehicles for field staff		N	N	Y	25%
10. Insufficient travel and per diem expenses		N	N	Y	25%

TABLE 7 (cont'd)
 Administrative and Managerial Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
11. Underestimate the degree of training and retraining of contributors	NA	N	N	YY	25%
12. Security and privacy regulations impact work of field staff	NA	Y	N	N	25%
<u>(C) Audit Procedures</u>					
1. Auditing completeness of record	N	N	N	N	-0-
2. Checking the reliability of the data	N	N	N	N	-0-
3. Contributor personnel turnover	N	N	N	N	-0-
4. Procedures to pre-screen data for extreme cases	N	N	N	N	-0-
5. Audit problems due to security and privacy regulations	N	N	N	N	-0-
6. CCH security standards constraining OBTS development	N	N	N	N	-0-

by the three other states were not truly competitive with those of private industry.

The states also underestimate the lag time between spotting personnel needs and filling positions. Unfortunately, in some states there is a significant lag time in approving positions which can suspend the development of an entire OBTS/CCH system.

Half the states encountered problems in striking the proper balance among the skills in their staff. These states overestimated the requirements for planners and systems analysts and underestimated the need for field staff personnel.

Field Staff and Training. The only common problem encountered in this category was a tendency to underestimate the need for a field staff. The State of Michigan has no field staff and depends upon written communication with local justice agencies to resolve difficulties in coding data, acquisition and so forth. New Jersey and Ohio both felt that they had significantly underestimated the field staff necessary to ensure the implementation of OBTS/CCH, and strongly recommended that states dedicate a significant portion of their resources to this staff function.

Audit Procedures. None of the states indicated significant problems involved in auditing the reliability or validity of the OBTS/CCH data. In part, this is because the states have not developed extensive audit systems. New Jersey, which probably has the most sophisticated audit and monitoring system in the country, didn't encounter many audit problems. These are routinely handled by their CDR Monitor system.

Inter-Governmental Problems

Included in this problem area are four problem categories as indicated in Table 8:

- Legislative Cycling
- Relations with Police, Courts and Corrections
- Phasing from Federal to State Financing
- Federal Rules and Guidelines

Legislative Cycling. The only significant problem encountered in this area involved situations where the OBTS/CCH system was a component of a larger information system's budget. This was the case in Michigan, New Jersey and Ohio. In these states the development of OBTS/CCH does not take place in a fiscal vacuum. On the contrary, the system's development must

TABLE 8
Intergovernmental Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
<u>(A) Legislative Cycling</u>					
1. Problems due to biennial legislative cycle	N	N	N	N	-0-
2. Federal fiscal year out of phase with the state legislative year	N	Y	N	N	25%
3. Acquisition of match funding or other revenues from the legislature	N	N	N	N	-0-
4. Competition with other state agencies developing similar informational or statistical systems	N	N	N	N	-0-
5. Problems in gaining support for the OBTS/CCH system in the legislature	N	N	N	N	-0-
6. Necessary to rejustify the OBTS/CCH system for successive funding	Y	N	N	N	25%
7. Problems because OBTS/CCH is a component of a larger information system's budget	Y	Y	N	YY	75%
8. Changes in the political composition of the legislature	N	N	N	N	-0-
9. Problems due to changes in Governor or other elected state official	N	N	YY	N	25%

TABLE 8 (cont'd)

Intergovernmental Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
10. Change in chief executive officer of the agency responsible for developing the OBTS/CCH system	N	N	N	N	-0-
11. Change in the Federal fiscal year	N	N	N	N	-0-
<u>(B) Relations With Police, Courts And Corrections</u>					
1. Contributor agencies lacking adequate personnel	YY	N	Y	Y	75%
2. Problems due to separation of powers doctrine	YY	N	N	Y	50%
3. Problems due to political differences between state and local users and contributors	Y	N	N	N	25%
4. Miscalculated or underestimated users or contributors	N	N	N	N	-0-
5. OBTS/CCH system oversold to contributors and users	N	N	N	N	-0-
6. OBTS/CCH system misperceived as duplication of effort by contributors	N	N	N	N	-0-
7. Contributors concern for accountability	YY	N	Y	N	50%

TABLE 8 (cont'd)
Intergovernmental Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
8. Lack authority to compel submission of data by contributor	YY	N	N	N	25%
9. Lack acquisition of adequate disposition information	N	N	N	YY	25%
10. Interface OBTS/CCH with OBSCIS or SJIS	N	N	N	Y	25%
11. Interface with regional CJIS	N	N	N	Y	25%
<u>(C) Phasing Of System From Federal To State Financing</u>					
1. Lack legislative support for long term funding	N	Y	N	N	25%
2. Lack plan for transition from LLAA to total state funding	N	Y	N	N	25%
3. Personnel retrenchment when state assumes financing	Y	Y	N	Y	75%
4. Miscalculation of cost of state financing	N	N	N	N	-0-
<u>(D) Federal Rules And Guidelines</u>					
1. Problems in requesting grant extensions	Y	Y	N	N	50%
2. Reversion of matching funds	N	N	N	N	-0-

TABLE 8 (cont'd)
Intergovernmental Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
3. Lack of specificity in CDS guidelines	N	Y	N	YY	50%
4. Lack of stability of CDS guidelines	N	Y	Y	Y	75%
5. Policy differences between LEAA and FBI funding	N	Y	N	N	25%
6. Continuation assurance from LEAA	N	Y	N	Y	50%
7. Communication between LEAA and Regional Office	N	YY	N	N	25%
8. NCIC/CCH Interface	N	N	YY	N	25%
9. Lack of technical guidance by LEAA	N	Y	N	Y	50%

be paced with the developmental cycling and budgeting of a larger information system.

This causes problems since the accomplishment of OBTS/CCH critical milestones must sometimes take a back seat to other developmental priorities. Personnel are frequently shared across several projects, taxing the momentum of the OBTS/CCH developmental effort.

Relations with Police, Courts and Corrections. As indicated in Table 8, three common problems emerged in the area. Three of the states encountered significant difficulty in implementing OBTS/CCH data collection efforts because contributing agencies lacked adequate personnel to support the system. It was found that, while local agencies wanted to participate in the program, they frequently lacked physical and staff resources to dedicate to the data collection effort. This factor, coupled with the fact that the states generally underestimated the need for field staff, compounded the problem.

Two of the states experienced difficulties stemming from the separation of powers doctrine; specifically in transferring dispositional data from the judicial branch to the executive. In Michigan, this problem has stymied the development of OBTS/CCH and until a proper rapprochement can be established, the system will be in limbo.

The fear of accountability seems to be a problem that seriously affects OBTS/CCH. Some contributors are reticent to participate in the program because they fear the data may be used to pinpoint their own administrative inadequacies.

It is not uncommon to find states underestimating the magnitude of this difficulty. They too frequently assume that the passage of a mandatory reporting law and the creation of a steering committee will eradicate all such anxieties. The truth however, is that the people responsible for developing OBTS/CCH must create a variety of tools to lessen the contributors' concern. Individual contact through field staff, regional workshops, the development of audio-visual presentations and simplified brochures, and other explanatory documents can all contribute to diffusing this issue.

Phasing of System from Federal to State Financing. The outstanding problem in this area concerns the loss of personnel when the state assumes financial responsibility for OBTS/CCH. Michigan, New Jersey and Ohio were all concerned as to whether the state would pick up all the staff required to complete the development of the OBTS/CCH system.

The states had not considered in detail the problem of

shifting from federal to state support. This was not from lack of interest but because most of their time was involved in the day to day development of the system.

The current crisis in state financing coupled with the general trend to underestimate the time required to build an OBTS/CCH system has precipitated a situation in which the state may have to assume financial responsibility for the system while it is still going through major developmental phases.

This is a grave strategic problem because the initial program concept specified LEAA support for development shifting to state support for operations.

The writers feels that it is critical for the state to realistically examine the time required to develop a system so that when federal funding is phased out, the state will only be assuming the burden of operational costs, not continued developmental costs. It is quite possible that, if OBTS/CCH planners miscalculate this factor, the state may not be able to continue the development with the result that the OBTS/CCH concept will be abandoned.

Federal Rules and Guidelines. Both Michigan and New Jersey experienced developmental difficulties requiring grant extensions. This was partly because they underestimated the amount of time necessary to start up the project and partly because of delays in processing grant applications at the federal level.

Notwithstanding who's at fault, the problem is a significant one. Frequently, the state must begin development of its second year grant application while only six months into the first year grant. Having slipped on achieving first year milestones, the state must project second year milestones without an adequate experiential basis to make reliable projections. Requesting extensions as a way of catching up and projecting second and third year milestones without having accomplished first and second year objectives contributes to an increasingly less realistic planning process.

Legal Problems

As indicated in Table 9, this problem area includes the following categories:

- Statutory Authority
- Security and Privacy

Statutory Authority. Both Ohio and Michigan experienced

TABLE 9
Legal Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
<u>(A) Statutory Authority</u>					
1. Statutory authority for operation of OBTS/CCH	Y	N	N	Y	50%
2. Statutory authority to collect data for OBTS/CCH	Y	N	N	Y	50%
3. Problems with Advisory Board	N	N	N	N	-0-
4. State laws currently in conflict with purpose of the OBTS/CCH	N	N	N	N	-0-
5. Existing state laws adversely affect the interstate exchange of any OBTS or CCH data	N	N	N	N	-0-
<u>(B) Security And Privacy</u>					
1. State laws affecting security and privacy constrain the development of the system	N	N	Y	N	25%
2. Shared versus dedicated issue affect system's development	N	N	N	Y	25%
3. Problems due to pending security and privacy legislation in Congress	N	N	Y	Y	50%
4. Problems in developing state security and privacy plan	YY	N	Y	Y	75%
5. Suits pending regarding the privacy rights of individuals	N	N	N	N	-0-

problems because they lacked enabling legislation specifying who is responsible for the development and operation of the OBTS/CCH system. In Michigan, where the existing legislation is less than comprehensive, this has proved particularly problematic since judicial, correctional and law enforcement systems are being evolved simultaneously without clear statutory specification as to who's responsible to coordinate and administer the overall system. In the absence of such a legislative mandate, the resolution of these problems has been left to the political arena, significantly retarding the development of the system.

Security and Privacy. Both New York and Ohio indicated that the development of their systems was affected by pending security and privacy legislation in the Congress. Both states were reticent to advance their systems in some areas until the national posture concerning security and privacy was clarified.

Similarly, Michigan, New York and Ohio have encountered internal difficulties in developing an acceptable security and privacy plan which meets the concerns and needs of their respective criminal justice communities. The absence of such a plan has enhanced contributor concern over accountability and has dampened the enthusiasm of many justice agencies to participate in the disposition reporting system.

Technical Problems

As indicated in Table 10, this area includes the following categories:

- OBTS/CCH System Configurations
- Use of Consultants
- Facilities and Equipment
- Interface with CDS Programs
- OBTS/CCH Requirements

OBTS/CCH System Configurations. As indicated in Table 10, three common problems emerged in this area. Both Michigan and New Jersey have experienced problems in establishing priorities for the development of OBTS and CCH. In Michigan, for example, OBTS/CCH was built upon the previous LEIN system, and it is not surprising therefore that the primary emphasis has been on law enforcement applications. The CCH component is highly developed but the OBTS component is virtually non-existent.

TABLE 10
 Technical Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
<u>(A) OBTS/CCH System Configurations</u>					
1. Problems in relating OBTS and CCH components	N	N	N	Y	25%
2. Assumptions about OBTS and CCH compatibility	N	N	N	N	-0-
3. Setting priorities between the OBTS and CCH	Y	Y	N	N	50%
4. Lack of output specifications for the OBTS	N	Y	N	Y	50%
5. Problems in tracking multiple offenses and dispositions	YY	N	Y	YY	75%
6. Changes in penal or procedural law affecting design of system	N	N	N	N	-0-
7. Problems with current data element definitions	N	N	N	N	-0-
8. Problems in record conversion	N	N	N	Y	25%
9. Problems with single-state/multi-state approach to a national system	N	N	N	N	-0-
<u>(B) Use Of Consultants</u>					
1. Problems with consultants	YY	N	N	N	25%
2. State regulations constrained selection of qualified consultant	Y	N	N	N	25%

TABLE 10 (cont'd)
 Technical Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
3. Inherit a contractor from a related system	YY	N	N	N	25%
4. Problems because contractor was another state agency	N	N	N	N	-0-
5. Problems in transferring part of system from another state	N	N	N	N	-0-
<u>(C) Facilities And Equipment</u>					
1. Problems in acquiring adequate facilities	N	YY	N	Y	50%
2. Problems in acquiring equipment	N	N	N	Y	25%
3. Existing equipment constraining future development	N	Y	N	Y	50%
4. Problems in hardware configuration compatibility	N	Y	N	Y	50%
5. Miscalculated the time within which the system would become obsolete	N	N	N	Y	25%
6. Problems with telecommunications	N	N	N	N	-0-
7. Budgetary flexibility in purchasing equipment	N	N	N	N	-0-
8. Facilities do not allow centralization of personnel	Y	YY	N	YY	75%

TABLE 10 (cont'd)
 Technical Problems Checklist

Problem Area	Mich.	N.J.	N.Y.	Ohio	Total
9. Development and operation of system not under same personnel	YY	Y	N	YY	75%
<u>(D) Interface With CDS Programs</u>					
1. Setting developmental priorities among CDS components	Y	N	N	Y	50%
2. Role of the SAC in OBTS/CCH system	N	N	N	N	-0-
3. Problems because OBTS/CCH included in CDS program	N	N	N	N	-0-
<u>(E) OBTS/CCH Requirements</u>					
1. Problems with OBTS/CCH data elements and definitions	N	N	N	N	-0-
2. Ambiguities in the existing documentation that cause conflicts between the OBTS and CCH concepts	N	N	N	N	-0-
3. Over emphasis on input versus output in the OBTS/CCH concept	Y	Y	Y	Y	100%
4. Identification of ultimate user for OBTS data	Y	Y	Y	Y	100%
5. Identification of users of the CCH system	N	N	N	Y	50%

Another factor that has probably contributed to the lack of OBTS development is the absence of detailed documentation on the use of OBTS data. While SEARCH Technical Reports 3, 4 and 5 briefly allude to some OBTS applications, there is no documentation which presents a comprehensive picture of OBTS applications. While the utility of CCH is highly apparent, the failure of many planners to understand the utility of OBTS data has probably contributed to its receiving secondary developmental priority.

A tough problem encountered by three of the states involves simultaneous tracking of multiple offenses and multiple dispositions. Since an offender can be involved in many arrests, charged with multiple crimes and be tried in various courts, multiple tracking and proper recording becomes a very complex problem. This problem is enhanced in states which lack two resources:

- Adequate field staff
- A system to monitor the flow of OBTS/CCH paper

Without these two essential tools, it is not surprising that Michigan and Ohio experience serious problems in tracking multiple offenses and multiple dispositions on a single offender.

Use of Consultants. Although the use of consultants was not found to be a common problem among the four states, it would only be fair to mention that in Michigan the nonfeasance of a contractor significantly contributed to many of their developmental problems. This contractor was inherited from a related effort and after an extensive expenditure of resources failed to produce a viable system. This, coupled with subsequent litigation, drastically affected the state's capacity to accomplish critical OBTS/CCH milestones.

Facilities and Equipment. New Jersey and Ohio both experienced frustrating difficulties in finding adequate accommodations for their staff. In New Jersey this problem was partially solved through the purchase of trailer houses to accommodate coding, planning and supervisory personnel.

A related problem involves the inability to centralize project personnel. In New Jersey this problem is being remedied by the construction of a single facility which will house both the identification function as well as the computer system.

Based upon the experience gained in the four states we feel strongly that, to the extent possible, personnel associated with OBTS/CCH development should be centralized. Apparently when decentralized, the project personnel begin to deal with

each other bureaucratically, competing for available resources, priorities and so forth.

Hardware has been a problem in both New Jersey and Ohio. In both states the hardware used to support OBTS/CCH also supports other informational systems. Underestimating the life cycle of existing hardware as well as hardware compatibility problems have contributed to delays in achieving OBTS/CCH milestones.

Many problems evolve when the development and operation of the system is not under the same personnel. In New Jersey and Ohio, identification bureaus are responsible for the aggregation of the data, whereas a state data processing agency is responsible for the actual operation of the system. In Michigan the problem is more complex with the courts, corrections and law enforcement all simultaneously responsible for the acquisition of data while the operation of the system is under still another agency.

Without question separation of responsibility for development and operation of the system contributes to political problems. If at all possible we would recommend that a state designate one agency as responsible both for system development and operation. Although this may not be politically feasible, keeping the number of agencies involved in development and operation to a minimum will probably reduce the political frictions that seem inherent in the alternative approach.

Interface with CDS Programs. The CDS Program subsumes a variety of developmental efforts including:

- CCH
- OBTS
- SAC
- UCR
- Management and Administrative Statistics

Presumably a state CDS plan indicates how these components will be coordinated. However, since it is not likely that all components will be developed and operated by the same agency it's quite conceivable that coordination problems will be encountered.

Both Michigan and Ohio experienced difficulties in setting priorities among the various components of the CDS program. In these two states CCH has been given the first priority, OBTS

only secondary emphasis.

OBTS/CCH Requirements. All the states visited indicated that they had problems because the OBTS/CCH concept primarily emphasizes input, not applications. As mentioned previously there is almost a total absence of good documentation on why a state should collect OBTS data, who the users of such data would be and how OBTS data should be statistically prepared. The states were unanimous in expressing a need for such documentation.

While the identification of CCH users should not be so much of a problem, both Michigan and Ohio have found the issue to be troublesome. Difficulties in preparing adequate security and privacy plans coupled with the reticence of some agencies to participate in the system because of fear of accountability contributed to the problem of identifying appropriate CCH users.

Summary

As indicated in Tables 7 through 10 the four states encountered problems in a variety of areas. Some of these problems have been solved handily while others remain quite perplexing.

In our judgment the common problems that seem to be the most serious are:

- Difficulties in acquiring an adequate staff
- Underestimating the time necessary to build an adequate staff
- Budgetary and political problems that arise when OBTS/CCH is a component of a larger information system
- Lack of adequate resources in contributor agencies to support the collection of OBTS/CCH data
- The inability of state government to assume costs for both the final development and operation of an OBTS/CCH system
- Problems in developing adequate security and privacy procedures which are satisfactory to all contributors and users of the system
- Lack of stability in the CDS guidelines

- Technical problems in tracking multiple offenses and multiple dispositions on the same offender particularly in the absence of an adequate field staff and disposition monitoring system
- The separation and decentralization of personnel involved in the development and the operation of the system
- The absence of good documentation on CCH and OBTS applications

(G) Recommendations

The logic of this study involves three steps:

- o Examine the state of OBTS/CCH development in four CDS states
- o Determine what common problems delay the accomplishment of critical OBTS/CCH milestones.
- o Develop a series of recommendations which will help new states overcome these common obstacles

Sections B-E present a brief description of the status of OBTS/CCH in the four states examined. Section F presents a summary of the common problems encountered. This section will present a series of recommendations designed to deal with such common problems.

Adopt the use of OBTS/CCH preplanning grants.

All four states underestimated what was involved in hiring a staff and bringing the project up during the first year. To develop an adequate first year plan requires some staff activity prior to submitting the first OBTS/CCH grant. Unfortunately in some states, there is no planning staff until the first year grant is awarded. Thus, the "first year OBTS/CCH dilemma".

The use of preplanning grants would allow a state to thoroughly examine what's involved in developing an OBTS/CCH system. This would greatly enhance the reliability of the milestone projections and cost estimates included in subsequent grant applications. In all probability, the cost of preplanning grants would be less than the money wasted by poor planning and procrastination in the development of the OBTS/CCH system.

Require greater emphasis in first year grant applications on the milestones associated with acquiring staff and starting up the project.

The LEAA regional offices should encourage the states to specify in more detail the steps involved in acquiring staff and starting up the first year of an OBTS/CCH effort. This planning emphasis coupled with technical assistance from individuals with some developmental experience should add significant realism to the state's planning and reduce the

considerable frustration experienced when one underestimates the many tasks involved in getting the project underway.

Greater emphasis should be given to the problems involved in the data acquisition component of an OBTS/CCH system.

An OBTS system has two major components:

- A system for the acquisition of data
- A system for the storage and dissemination of information

It is apparent that most states underestimate the problems involved in the acquisition of the OBTS/CCH data base. Unfortunately, too much emphasis in terms of financial and personnel resources have been dedicated to the development of computer systems to store and disseminate information. Such a computer system without an adequate data base is not an OBTS/CCH system. Simply developing a computer system and waiting passively for a state mandatory reporting law to encourage the creation of a data base will not work.

A state must develop positive and aggressive strategies to acquire the OBTS/CCH data, monitor and actively followup incomplete records. To do this, a state must have a field staff and some monitoring capability to track offenders, multiple offenses and missing dispositions through the criminal justice system.

States must clearly define the role of SAC in their OBTS/CCH system.

During the planning process, a state should clearly delineate what the role of the SAC will play in the development and operation of the OBTS/CCH system. Creating the SAC simply to fulfill CDS requirements creates more problems than it solves.

There is probably no ideal role for SAC. In different states, the SAC will have to fulfill different functions and take on different kinds of responsibility. One administrative alternative is to have the SAC actively involved in the planning and development of the OBTS component of the system. At the other end of the spectrum, the SAC may only provide analytic support and not have any responsibility for the planning or operation of the OBTS system.

While one of these strategies may be better than the other, the more important issue is for the state to determine whatever role will be played by the SAC early in the development of the OBTS/CCH system. Leaving the role of SAC ambiguous frustrates the SAC staff, wastes money and contributes to the bureaucratic confusion involved in developing an effective statistical capability in the state.

States must support an adequate field staff during the development and operation of the OBTS/CCH system.

States commonly underestimate the need for field staff during the developmental stages of the OBTS/CCH system. Typically, the approach taken is too rational. Planners optimistically assume that because there is a mandatory reporting law, all agencies will complete appropriate forms and forward them to a central repository.

The fact is, things don't work this way at the operational level. Forms developed by planners are not always clear to contributors. While those responsible for developing the project feel that its implementation is very important, that view may not be shared by contributors. For an analyst, the problem of missing data may be serious, but for a contributor tardiness in submitting disposition data may not be considered serious at all.

The writers feel strongly that the absence of an adequate field staff will significantly contribute to the demise of an OBTS/CCH system. While their role is critical during the developmental phases, they are still necessary once a system is operational. During the early years of operation, it is expected that slight modifications will be made in reporting procedures. A field staff will be necessary to assure that these changes can be understood by the contributor and that proper compliance is achieved.

States should be required to develop a system for monitoring the movement of OBTS/CCH paper.

The success of an OBTS/CCH will depend upon the state's ability to monitor from a single location the movement of all offenders and offenses involved in the OBTS/CCH system. Without an adequate monitoring system, little can be done to followup incomplete disposition reporting. If the agency responsible for the storage and dissemination of OBTS/CCH data

perceives its primary responsibility to keep the computer system functioning, then the quality of the data becomes only secondary. The system must have the capacity to know what information is outstanding and have the resources to acquire this information in an orderly fashion.

In this regard, the writers strongly encourage states to examine in detail the New Jersey CDR Monitoring System. We believe this to be an excellent approach to maintaining control of the data base, and one that could be successfully transferred at a great cost savings to a new state.

A "Pullman Ticket" approach to the acquisition of OBTS/CCH dispositions should be discouraged.

One approach to acquiring OBTS/CCH data is to have a single form follow the offender and as decisions are made about his case, have portions of the record removed and forwarded to a central repository.

Although political necessities may require a state to adopt such a Pullman Ticket approach, or some variant thereof, the disadvantages of this approach from the point of view of data control far outweigh its advantages. This approach creates problems in monitoring the movement of offenders and usually enhances the amount of missing data in the data base.

State should adopt an active vs. passive strategy with respect to the acquisition of dispositions.

Probably the most sensitive measure of the success of an OBTS/CCH system is the percentage of disposition reporting. A sophisticated computer system for the storage and dissemination of a data base which is only 30% complete is a rather inadequate OBTS/CCH system.

A sound OBTS/CCH data base will not happen by itself. Someone in the state must assume active responsibility for assuring the completeness of disposition reporting. No one authority can be recommended to take on this responsibility. In some states, this might be the central data processing agency. In others, it might be the state police, while in still others, it may be the judiciary.

The important issue is not who takes responsibility for assuring disposition reporting but the fact that the responsibility is taken. The goal of OBTS/CCH is the production of meaningful information for the criminal justice community. If the data base which produces this information is inaccurate and incomplete, then the primary goal of the OBTS/CCH system is not achieved, regardless of the sophistication of the systems involved.

Technical assistance should be given to states during the planning phase of OBTS/CCH.

There is very little available written material concerning OBTS/CCH technology. In the absence of documents describing alternative approaches to systems development, problems and strategies in data acquisition, implementation of security and privacy standards, and so forth, it is strongly recommended that LEAA provide technical assistance to states when they begin OBTS/CCH planning. Certainly individuals in OBTS/CCH states could provide sage counsel to sister states just beginning development. Experienced individuals are also available in the public sector.

LEAA should construct a roster of skilled consultants who could work with states during the preliminary planning process. The initial investment in this technical assistance service will cost far less than the money wasted due to inadequate initial planning.

LEAA should develop various OBTS/CCH media and educational materials.

The states visited were unanimous in expressing the need for written and visual materials concerning the OBTS/CCH concept. The concept itself is not simple and not easily understood by a less than enthusiastic listener. The SEARCH technical documents only skim the surface and the CDS guidelines are certainly not the kind of material one would pass around in the state for general educational purposes.

Considering the investment that LEAA has made in the OBTS/CCH program, it certainly would be cost effective to produce various media and educational materials to explain the concept, its development and applications. In this regard, the writers would encourage consideration of the following kinds of materials:

- A motion picture or 35-millimeter audio slide presentation explaining the OBTS/CCH concept designed for general use in the states to educate people as to the goals and aspirations of the system
- A detailed applications manual describing the various uses for the OBTS data base
- A detailed description of the uses of CCH data
- A manual describing various strategies for the acquisition of disposition information
- Concept paper describing various systems approaches to the design of an OBTS/CCH system with specific reference to the relationship between the data acquisition component and the storage and dissemination component
- Documentation on forms, procedures, software, etc. that have been developed for OBTS/CCH which could be transferred into other states.

Develop a generalized data base manager for use with OBTS data base.

While many states are attempting to acquire an OBTS data base, most have not developed procedures to manipulate and analyze this information for statistical purposes. Since many of the useful analyses of the OBTS data base would be common from state to state, it is recommended that LEAA develop a generalized data base manager which could be used by the various states for the production of common OBTS analyses.

The availability of such a tool would be most useful and considering the transferability of such software, it would probably be most cost effective as well.

LEAA should set up several regional OBTS/CCH workshops.

Apparently, it is not uncommon for a state to develop an OBTS/CCH system without reference to what has been attempted in other states. The philosophy of approach and design of the system is frequently more responsive to internal constraints in the state than available OBTS/CCH technology in the nation.

In order to provide better communications among those responsible for developing such systems, it is recommended that LEAA conduct a series of workshops to encourage the exchange of ideas and experiences. These workshops would not involve the formal presentation of papers. On the contrary, it is encouraged that the format be informal and that the participants be encouraged to exchange information concerning problems, procedures, assumptions, technologies, and so forth, that would enhance an overall understanding of the OBTS/CCH concept and its development.

LEAA representatives should keep in closer contact with the individuals developing OBTS/CCH systems in the states.

Representatives of the states visited lamented the fact that LEAA-Washington only infrequently contacted them with respect to OBTS/CCH development. Further, they mentioned that when contact is made, it usually involves formal aspects of grant processing as opposed to material accomplishments in the development of the system.

Appreciating the manpower limitations of LEAA, the writers would still encourage that the National Criminal Justice Information and Statistic Service maintain routine contact and conduct periodic visitations with OBTS/CCH states. It is recommended that these contacts correlate with the state's accomplishment of the 11 critical milestones associated with OBTS/CCH development. Responsive monitoring by LEAA with respect to these critical milestones would not only enhance the image of LEAA but would also bolster the confidence of states in their attempts to construct criminal justice information and statistical systems.

Appendix A

Minimum OBTS/CCH

Data Elements

As Recommended by the National Advisory Commission
on Criminal Justice Standards and Goals

Report: Criminal Justice System, pp. 100-101

Minimum OBTS/CCH Data Elements

OBTSCCHIdentification ElementsIdentification Segment

State Identification No.

FBI No.-----

State Record No.

Sex-----

Race-----

Date of Birth-----

Message Key

Originating Agency

FBI Identification No.

Name

Sex

Race

Place of Birth

Date of Birth

Height

Weight

Color of Eyes

Color of Hair

Skin Tone

Scars, Marks, Tattoos, etc.

Social Security No.

Miscellaneous Identification No.

Fingerprint Classification

Identification Comments

State Establishing Record

Date Record Established

Date of Latest Update

Police/Prosecutor ElementsArrest Segment

Arresting Agency No.

Sequence Letter-----

Date of Arrest-----

Charged Offense--Most Serious-----

Police Disposition-----

Prosecutor Disposition

Police/Prosecutor Disposition Date

Message Key

Arrest Agency Identifier

Date of Birth

State Identification No.

FBI Identification No.

Name Arrestee Used

Sequency Letter

Date of Arrest

Arrest Charge No.

Date of Offense

Statute Citation

General Offense Character

Arrest Offense--Numeric

Arrest Offense--Literal

Arrest Disposition--Numeric

Additional Arrest Disposition

Data

Minimum OBTS/CCH Data Elements

OBTSCCHLower Criminal Court ElementsJudicial Segment

Court Identification No.	Message Key
Initial Appearance Date	Agency Identifier
Disposition Date	State Identification No.
Charged Offense (Most Serious)-----	FBI Identification No.
	Sequence Letter
	Date of Arrest
	Court Count No.
	Court Disposition Date
	Statute Citation
	General Offense Character
	Court Offense Classification--
	Numeric
	Court Offense Classification--
	Literal
Lower Court Disposition-----	Court Disposition--Numeric
Release Action	Sequence Suspended
Release Action Date	Confinement
Final Charge (Most Serious)	Probation
Type of Charge	Fine
Plea (At Trial)	Other Court Sentence Provisions--
Type of Trial	Literal
Date of Sentence	Other Court Sentence Provisions--
Type of Sentence	Numeric
Confinement Term (Days)	Date Case Appealed
Probation Term (Months)	On Bail Pending Results of
Type of Counsel	Appeal

County Prosecutor
Grand Jury Elements

Supplemental Segment

Prosecutor Identification No.
Date of Filing
Type of Filing
Filing Procedure
Date of Arraignment
Charged Offense (Most Serious)
Initial Plea

Message Key
Agency Identifier
State Identification No.
FBI Identification No.
Sequence Letter
Date of Arrest
Court Count No.
Court (Chief Executive) Dis-
position Date

Minimum OBTS/CCH Data Elements

OBTS

Release Action
Release Action Date

Felony Trial Elements

Court Identification No.
Trial Date
Trial Type
Final Plea
Trial Ending/Disposition Date
Final Charge (Most Serious)
Type of Charge
Court Disposition

Sentence Date

Sentence Type

Confinement--Prison (Years)
Confinement--Jail (Days)
Probation (Months)
Type of Counsel

Corrections Elements

Agency Identifier
Receiving Agency
Date Received
Status
Date of Exit
Exit

GCH

Court (Chief Executive) Dis-
position
Sentence Suspended
Confinement
Probation
Fine
Other Court Sentence Provisions--
Literal
Other Court Sentence Provisions--
Numeric

Custody--Supervision Segment

Message Key
Agency Identifier
State Identification No.
FBI Identification No.
Sequence Letter
Date of Arrest
Status Change Character
Custody or Supervision Status
Starting Date
Custody or Supervision Status--
Numeric
Custody or Supervision Status--
Literal Extended

