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PLANNING AND IMPLEMENTATION
OF COMPREHENSIVE CRIMINAL JUSTICE
INFORMATION SYSTEMS

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The development of Information Systems for Criminal Justice Agencies began in earnest with the passage of the Omnibus Crime Control and Safe Streets Act in 1968. Early funding emphasis at both the State and Federal level was in the police area. Project SEARCH, with its original focus on the police sector, is an illustration of major funding activity beginning in 1969. Other LEAA and State Planning Agency funding during 1969, 1970 and 1971 was sporadic, and principally for a variety of police applications; occasionally including projects in the courts' and corrections' area. My reference to the early funding pattern of information systems is meant to illustrate the lack of coordinated planning. There were, of course, many sound subsystems developed, but with few exceptions they were fragmented from the needs of the total criminal justice system.

In conjunction with the statewide plan required by LEAA, some states started planning projects to define Comprehensive Criminal Justice Information Systems. To date, however, only about eight states have definitely followed such an approach; and currently, there are five states which have made definite commitments in systems development. Utah is one of these and the one with which I am most familiar. I will discuss the Utah approach later in this paper.

The Computerized Criminal Histories project started by SEARCH in 1969 was designed for operational police use. In the course of implementing the CCH project it was recognized that communication with courts and corrections was essential. Consequently the evolution of SEARCH has been from strictly police application to the criminal justice system in its entirety. The agencies which house the computerized criminal histories are gradually branching out to include the needs of the total criminal justice system, regardless of their orientation.

The Comprehensive Data Systems Program announced by LEAA in May of 1972 provides a major impetus toward establishing a coordinated planning approach. The funding requirements for the CDS Program should encourage a trend for Comprehensive Criminal Justice Information System Planning. The CDS Program was previously described in detail at this Symposium by Mr. George Hall of LEAA.

Twenty-one state CDS plans have been prepared and others are currently in progress. This does not mean that the *Planning Process* has been completed in 21 states. In my view, the success of implementing these plans will be directly related to the manner in which the planning process occurred. Specifically, if the planning process did not provide for decision-making within the political process the success of actual implementation will be questionable.

In a Comprehensive Criminal Justice Information System, the mechanisms for obtaining local inputs to a central file as well as meeting local management information needs must be included in the total planning process. The Comprehensive Data Systems approach stops short of accomplishing this objective. For example, the Uniform Crime Report is dependent upon data elements that support local systems, consequently, a comprehensive criminal justice information system approach would include a mechanism to obtain Uniform Crime Report data as a by-product of the local system.

The rationale for this approach may be illustrated by reference to the Uniform Crime Report. In order to meet the data requirements for the UCR there are two basic options: One is to add to the existing system which results in duplication; the second is to integrate it into one data capture process to satisfy local, state and federal requirements. Since a Comprehensive Criminal Justice Information System effort should be equipped to provide for the design of an integrated system, it naturally follows that local level management information needs should be anticipated and incor-

porated into the over-all system.

In my view, planning and implementing information systems for criminal justice agencies is now moving toward a coordinated, comprehensive approach. By Comprehensive Criminal Justice Information System, I mean a system, that at the operational level, has jurisdictional authority and provides services to all agencies in the criminal justice system. For example, such a system would maintain central files to meet the needs of police, courts, and correctional agencies.

There is increasing support for such an approach; the National Governors' Conference in its policy positions of June 1972 stated:

> [Agencies should implement the ...] "Development of mandatory statistical data collection and analysis for all components of the criminal justice system including Police Administration, court caseload, correctional data, and expenditures of state and local governments for criminal justice institutions."[1]

Other agencies and organizations, such as LEAA, the National Association of State Information Systems (NASIS), the FBI, the International Association of Chiefs of Police (IACP), and SEARCH, also recognize and support this trend. I shall briefly discuss major considerations pertinent to the preparation of a Comprehensive Criminal Justice Information Systems Plan, and highlight principal issues associated with this implementation.

Planning, all to frequently, is equated with the formal steps of a research activity and creation of written documents. To view planning in this way, i.e., to make it distinct and remote from the managing process, severely limits the potential benefit to those with operational responsibility. Planning should be seen as a total management strategy, not as a separate scientific process. I wish to suggest that the planning process, to be successful, must relate to the political process at every stage of development. The planning, implementation and operational process is not as symetrical as we might wish. The very best criminal justice information system is not susceptible to being arbitrarily constructed, nor can it be constructed on an exclusively scientific basis. The failure to recognize this fact is not unique to those who are involved in designing criminal justice information systems. In a world in which everything is allegedly scientific, planners in all areas of endeavor fall victim to this approach.

Do not succumb to the temptation to imagine that you can invent an ideal criminal justice information system without involving the principal beneficiaries and subjecting the design to thorough review within the political arena where you propose to operate. In this regard, the point I wish to emphasize is that implementation is a difficult task only if decision-making has not been modified by the planning process. If the major issues have not been resolved in planning, plan implementation will be difficult if not impossible. Where complex issues are involved, as they are in a Criminal Justice Information System, implementation can only be assured through extensive analysis, tedious dialogue, and decision-making. Such an approach will help clarify the issues, as well as to focus attention on matters upon which real differences exist; it is in this context that political judgments are necessary.

To address the specific subject of interest to this audience, I shall outline some major considerations in the development of a Comprehensive Criminal Justice Information System Plan. My observations result from actual experience in developing the Utah plan. Systems planning is the process by which potential projects are identified, evaluated, and placed in priority for later development. A completed systems planning report should include such items as:

1. Definitions of goals and objectives for approved information systems.
2. Identification of the developmental projects with suggested priorities.
3. Segmentation of large projects into workable modules or sub-projects which can be implemented individually and later integrated into a larger system.
4. Provisions for coordination of multiple projects as well as provisions for individual project monitoring and control.
5. Estimates of equipment, software, and personnel required to complete development of approved projects.
6. Estimates of the time and costs required to complete the activities identified in the plan.
7. Identification of expected benefits from each project.
8. Legislation and procedures to insure system privacy and security.
9. Mandatory reporting legislation.
10. Provisions for the on-going funding of the system.

I wish to emphasize that the completed plan represents a snapshot in time and should be continuously updated and revised as additional information is gathered.

The initial step in preparing a systems plan is a thorough examination of existing capabilities. Such an examination should include:

1. The status and current operational costs for existing sub-systems.
2. Document manual files being used.
3. Document automated files being used.
4. Document sub-systems currently under development.
5. Identification of problem areas.

I will briefly summarize the major problems identified in Utah. In all probability these prob-

lems will also exist in other jurisdictions.

— There was a definite lack of planning coordination among the various law enforcement agencies throughout the State. This problem appeared to stem from the lack of an interagency coordinating mechanism rather than from a lack of interest in planning and coordination by the various agencies.

— In too many instances, the individual agencies were not familiar with the functions performed by other law enforcement agencies which would have contact with a criminal or suspect. The result was production of incomplete and inaccurate records, a lack of continuity in correctional programs, and action decisions being made on data which was imperfect.

— Such information as socio-economic data was frequently collected by several different correctional agencies. An effective plan did not exist for the sharing of data files by the agencies.

— An effective process for program evaluation did not exist within most agencies.

— Legal constraints existed relative to the dissemination of historical information. For example, a large portion of the information relative to juveniles was regarded as confidential and thus release of it was highly restricted.

— Many of the existing manual processes were frequently inadequate because of incomplete definition of the systems and existence of little, if any, documentation describing the processes and decision requirements, and because of files which contained forms which were not compatible with files in other agencies and automated data capture requirements.

— Existing systems had frequently been designed and developed without considering the needs of other agencies which might benefit from the capabilities of the systems.

A thorough examination of existing sub-system capabilities will assist in determining new system requirements. Goals and objectives should be carefully defined during this phase of the planning process. The scope of the new system should address the needs of planning, evaluation, research, operations, and administration.

Following identification of system goals and objectives, the details of development must be determined. This should include a careful delineation of priorities. Establishing priorities is extremely important at this point in order to insure development continuity.

MAJOR DESIGN AND IMPLEMENTATION CONSIDERATIONS

A Comprehensive Criminal Justice Information System should be conceptually designed, with an initial emphasis on user management requirements, in order to function as an integrated complete system, rather than a fragmented series of smaller systems. One could not describe any state's Criminal Justice System as a well-organized integrated system capable of a rapid, coordinated response to a stimulus. However, an operationally integrated information system for criminal justice permits decision-makers to examine the system as a complete unit, in spite of its traditional fragmentation.

In addition to a knowledge of goals, objectives, and information requirements, design of the integrated system involves key considerations which deserve careful evaluation to insure the feasibility and flexibility of the system's implementation.

— While the potential of systems cost savings and the value of an integrated information system are undeniable, the total system must be, to the maximum extent possible, capable of providing service to individual agencies without infringement upon the management rights of those agencies. Information intended only for specific agencies must be produced for, and be available to, only those specific agencies.

— Further, detail system design activities should have as a priority objective service to individual (especially local) agencies in terms of administrative aid and workload reduction, with local agency participation emphasized in the definition of the specific nature of such service.

— Such a system will transcend organizational boundaries and governmental levels, and will therefore require a high degree of cooperation among the participating agencies. During the detailed development phases the requirements of each agency must be carefully researched, and although some compromises will necessarily occur, the mandatory requirements of each agency must be provided for within the limitations of cost/benefit analyses.

— The goals and objectives imply a complex and justifiably costly system which will require significant development time prior to final implementation and total integration.

— Funding capabilities must be considered and should include state and local government commitments from their own sources as well as State Planning Agency funding priorities.

-- The fields of criminal justice and information

systems technology are dynamic by their nature, and it should be expected that the Omnibus Crime Control and Safe Streets Act will accelerate the pace of change. An attempt to implement this complex system as a single unit might result in significant system obsolescence prior to completion of implementation.

— Manpower and skill-level resources appropriate to a project of this nature are severely limited, both nationally and locally. Particular care should be taken not to underestimate the extremely vital requirement for project management, control and monitoring skills as these relate to the complexity, scope, magnitude, and cost of the implied development effort, including the requirement to effect the interagency cooperation and coordination essential to the success of the effort.

Considerations pertaining to the ongoing operations of a Comprehensive Criminal Justice Information System are frequently overlooked in the planning process. I want to emphasize that failure to address key operational issues early in the planning process will jeopardize future success. Key areas that must be considered are:

A. Organizational placement and structure of development staff:

1. Should not be attached to operational criminal justice agency;
2. Should be funded by State legislative appropriation;
3. Should have legislative authority to operate; and
4. Should have a governing board represented by all segments of the system.

B. Staff configuration should:

1. Insure that the development staff has the capability to:

   a. Execute and coordinate development;
   b. Analyze and interpret statistical data;
   c. Provide technical assistance to user agencies; and
   d. Provide on-going support for the system.

Experienced systems support is critical to the design and implementation of systems of this complexity. Not only must team members have the technical and state-of-the-art skills in systems design and advanced computer concepts, but certain team members must also have interagency and intra-agency knowledge so that considerations from all aspects are evaluated and designed properly. The lack of technical expertise in the design of such a complex system would probably result in an inefficient and costly system, and one that does not produce the final products dictated by the system's objectives. On the other hand, a lack of expertise in the various criminal justice areas would allow development of systems which, although technically correct and efficient from an electronic data processing point of view, would in all probability not satisfy the actual information needs of criminal justice agencies.

C. Privacy and security:

1. Adequate privacy and security legislation should be passed.
2. Administrative regulations should be developed and enforced.
3. Physical security should be examined and upgraded if necessary.
4. Management control of the system must be maintained.
5. Software and hardware should have built-in safeguards.

D. Funding

1. Insure that users are aware of future funding that the system will require.
2. Develop a funding plan for current and future support of the system. (Necessary regardless of whether Federal funds are used or not.)
3. Obtain commitments on future funding support from appropriate funding sources.

REFERENCES

1. *Policy Positions of the NGC*, p. 6, June 1972.

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