

# USE OF AN ON-LINE COMPUTER INFORMATION SYSTEM IN MANAGEMENT OF VOLUNTEER PROGRAMMING IN THE CRIMINAL JUSTICE SYSTEMS

Robin I. Milstead  
Research Social Scientist  
Battelle Columbus Laboratories

W. David Penniman  
Associate Chief  
Battelle Columbus Laboratories

The use of probation, parole, and other community-based corrections programs as means of facilitating treatment and rehabilitation of offenders began as a volunteer movement in the eighteen hundreds.<sup>1</sup> However, the use of volunteers in courts and corrections has only recently received national impetus. The number of volunteer programs in courts and corrections has increased phenomenally from a few experimental programs in juvenile courts in the early 1960's to over 2000 programs in courts, institutions, and other community-based corrections programs in 1971.<sup>2</sup>

The rapid growth in volunteerism has created several information needs. Local program coordinators and court administrators need assistance in recruitment, selection, training, assignment, and evaluation efforts. State coordinators have difficulty in maintaining up-to-date information on new and established programs. State LEAA planning agencies need accurate appraisals of current and projected programs for planning purposes. National agencies, e.g., LEAA, YDDPA, and National Center on Voluntary Action, seek data on use of volunteers, successful programs, and impact on the offender and community-at-large for purposes of budgetary planning and information dissemination projects.

The National Information Center on Volunteerism has performed a vital function in responding to requests from agencies on all levels of government and from persons in the community attempting to establish new programs and improve existing volunteer programs in courts, parole, probation, institutions, and other community-based corrections programs. However, the estimated present and projected magnitude of requests for information and consultation combined with the increasing number of volunteer programs mandate a systematic, computerized approach for maintaining an information

system capable of providing up-to-date data to local, state, and national planners and managers of volunteer programs.

This paper presents a brief description of a plan for the development of a Volunteers In Courts and Corrections Information Retrieval System (VICCIRS). The research study selected to implement the plan involves (1) establishment and maintenance of an up-to-date, comprehensive data base for volunteer programs and (2) establishment and maintenance of an on-line retrieval system to provide rapid access and easy availability of data by remote computer terminals. Primary users of the retrieval system would include state planners of LEAA monies and state correctional departments, state coordinators of volunteer programs, and local coordinators of volunteer programs. Secondary users of VICCIRS would include (1) national agencies seeking descriptive information in such areas as the status of the volunteer movement, impact of volunteer programs upon recidivism, and the use of volunteers to utilize community resources for preventing crime and delinquency, (2) community leaders attempting to establish volunteer programs and improve existing ones, and (3) interested citizens requesting information on volunteerism as potential participants in the correctional process.

## BENEFITS OF VICCIRS

VICCIRS would be action-oriented to meet the operational needs of volunteer managers and criminal justice program planners. In this respect, VICCIRS represents a computerized form of technical assistance in that it would combine both quantitative and qualitative information appropriate to efficient and effective conduct of volunteer programming in the various criminal justice systems.

In addition, VICCIRS would utilize results and resources of other past and present LEAA projects, e.g., the thesaurus of criminal justice terms, the national survey of criminal justice agencies, the national survey of jails, and other LEAA funded projects.

Benefits of VICCIRS to users would include the following capabilities:

- Provision of up-to-date, comprehensive information on volunteer programs for managerial decisions.
- Facilitation of coordination of volunteer programs within each state and locality
- Justification of budget requests for support of volunteer programs
- Determination of geographic areas for development or implementation of volunteer programs
- Provision of data for a directory of volunteer programs
- Facilitation of compilation of selected statistics on county, district, state, region, or national level of volunteer programs

It is noted that the indirect benefits of VICCIRS are perhaps more essential to the rehabilitative process. As more information flows more efficiently, volunteer programs should improve. This would lead to better rehabilitation program efforts and more effective relationships of volunteers and offenders. Thus, the information flow and residual benefits begin at VICCIRS and filter through policy and planning levels and administrative and coordination levels to the line level of the direct providers of volunteer services and the receivers of services, i.e., juvenile and adult offenders. This conceptualization of VICCIRS information flow is illustrated in Figure 1.

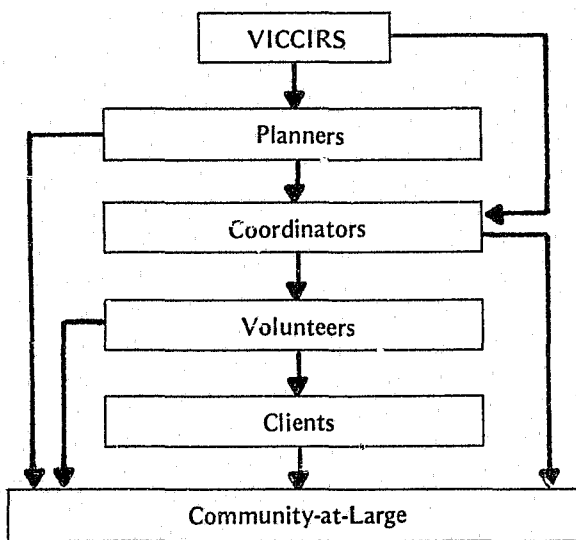


Figure 1. VICCIRS INFORMATION FLOW

Lastly, third order benefits would result from VICCIRS usage in that community resources would be more universally utilized in combatting crime and delinquency and, thus, providing (1) a more enlightened citizenry, (2) reduction in costs of correctional systems, (3) focus of attention on offender needs and community resources, and (4) a more positive image of LEAA projects among the general public.

The above benefits and additional benefits are related to VICCIRS users in Table 1.

## A PLAN FOR DEVELOPMENT OF VICCIRS

Development of a Volunteers in Courts and Corrections Information Retrieval System would involve three major clusters of work tasks.

Cluster I would involve a comprehensive survey of criminal justice agencies concerned with rehabilitating juvenile and adult offenders. These agencies would include courts, probation departments, detention centers, jails, state and federal institutions, parole departments, halfway houses, and other community-based correctional systems. Non-correctional agencies such as welfare departments and youth bureaus which handle juvenile offenders would also be included in the survey.

The objectives of Cluster I would be (1) to identify existing and planned volunteer programs in courts and corrections, and (2) to establish a comprehensive, descriptive data base of volunteer programs.

Cluster II would involve development of key information on needs of model programs and methodological subject areas. The data about model programs would expand the "program locator series" of the National Information Center on Volunteerism (NICOV) to a more sophisticated, up-to-date, comprehensive system. The data about methodological subject areas would provide information on funding, volunteer recruitment, training, staff training, and other relevant subject areas. The data base developed in Cluster II would be designed for interface with the data base of Cluster I. Cluster I data would be collected from individual volunteer programs and incorporated into the Cluster II data. Individual, exemplary programs of Cluster I would be identified and cross-referenced by accession numbers with programs in the Cluster II data base. Thus, the user identifies a program in Cluster II and retrieves more detailed information about the program from the data base of Cluster I.

Objectives of Cluster II include (1) to develop pre-formulated responses to common questions based on NICOV's experience, (2) to identify exemplary programs, and (3) to coordinate Cluster I data with the Cluster II data base.

The information retrieval system would be developed as Cluster III. Objectives of Cluster III would include (1) to develop an on-line retrieval system of volunteer program information, (2) to develop a User's Guide for use by nontechnical persons, and (3) to coordinate VICCIRS with other

TABLE 1. BENEFITS OF VOLUNTEERS IN COURTS AND CORRECTIONS INFORMATION RETRIEVAL SYSTEM

<i>Benefits of VICCIRS</i>	<i>VICCIRS users</i>					
	<i>State Coordinator</i>	<i>State Corrections Planners</i>	<i>State LEAA Planners</i>	<i>Local Coordinator</i>	<i>National Agencies</i>	<i>Interested Citizens</i>
Provide comprehensive information on volunteer programs	✓	✓	✓	✓	✓	✓
Facilitate coordination of volunteer programs within each state	✓					
Justify budget requests for support of volunteer program	✓	✓	✓	✓	✓	
Plan more effectively for in-service training and recruitment of volunteers	✓			✓		
Determine areas for development or implementation of volunteer program	✓	✓	✓		✓	
Facilitate scheduling of consultative visits to program area	✓				✓	
Utilize information from other courts and states to solve problems specific to county or state volunteer program	✓			✓	✓	
Facilitate scheduling or evaluation of program	✓				✓	
Share success and failure experiences among court programs	✓			✓	✓	
Facilitate compilation of selected statistics for county, district, state, region, nation e.g., cross referencing data items	✓	✓	✓	✓	✓	
Compile directory of volunteer programs	✓	✓		✓	✓	✓
Provide assistance in searching and compiling data for special assignments				✓	✓	
Complement other statistical data and information centers, e.g., LEAA		✓	✓		✓	

appropriate information systems, e.g., the National Criminal Justice Reference Service (NCJRS).

The survey instrument developed in Cluster I could be utilized to update VICCIRS periodically. It is suggested that updating of the data base be scheduled quarterly for occasional status changes in volunteer programs on an as needed basis and biannually for total updating through questionnaire re-administration.

To facilitate use by nontechnical persons, the information system would be structured to

respond to English-word searches of the data base. A User's Guide would also be developed specifically for dialog usage. The guide would include (1) a listing of the line elements, i.e., major categories or titles of aggregate data subjects, (2) a thesaurus of terms to accommodate searching of similar legal definitions, treatment modalities, and program scopes, (3) instructions for assessing and managing information, e.g., cross referencing subject areas, and (4) description of the information system capabilities and limitations.

## TASK AREAS

The research program to develop VICCIRS is planned to follow the flow chart shown in Figure 2. This would be modified as necessary during the conduct of the study.

Initial project tasks include development of a detailed operations management plan. State planners would be selected and utilized as project advisors. They would contribute throughout the project especially in validation of survey responses, selection of states for on-line testing of VICCIRS, and formulation of recommendations for national implementation of VICCIRS.

Developmental tasks are grouped into three clusters for planning purposes.

### CLUSTER I

Cluster I is comprised of the data collection tasks directed specifically toward individual volunteer programs. Tasks necessary to this goal include:

- o Construct questionnaire
- o Develop survey and administration plan
- o Test and revise questionnaire
- o Administer mail survey
- o Administer follow-up mail survey
- o Monitor returns
- o Make site visits.

### CLUSTER II

Cluster II involves data collection directed toward model programs and methodology. Tasks include:

- o Selection of model program criteria
- o Identify model programs
- o Develop data format
- o Collect data
- o Make site visits
- o Cross-reference data.

### CLUSTER III

Cluster III is directed toward the development of the retrieval system and the successful implementation of that system including user training. Tasks include:

- o Develop data retrieval formats
- o Establish interaction with other systems
- o Develop user guide
- o Prepare data for entry
- o Load files
- o Train operators in selected states
- o Revise system and guide.

Additional activities to be conducted as a part of the overall study would include:

- o Assessment of pilot study
- o Recommendations
- o Final report.

## SYSTEM DESCRIPTION

### BASIS-70

The information storage and retrieval system to be used will be a tailored version of Battelle's on-line interactive system called BASIS-70. This system is the product of a project initiated at Battelle several years ago and has been applied in numerous projects at Battelle. BASIS-70 represents a blend of the most current in computer technology and the experience of Battelle's information scientists in developing manual and automated systems over the last 20 years.

The system operates on a Control Data 6400 computer and provides immediate access to large files of information via a standard telephone and terminals which can be set up almost anywhere.

This system is currently used by various agencies, including the Department of Transportation, Environmental Protection Agency, Department of Defense, and the Price Commission.

### VICCIRS

A brief sample of the search dialog is presented in Figure 3. This example is taken from a prototype file for VICCIRS and shows how a number of search parameters can be specified quite easily to form a complex search strategy. The system relies on a minimum of commands and is built primarily around user entry of keywords. Note that the line numbers of keywords, once entered, may be used in place of those keywords from then on. The basic commands for the system are as follows:

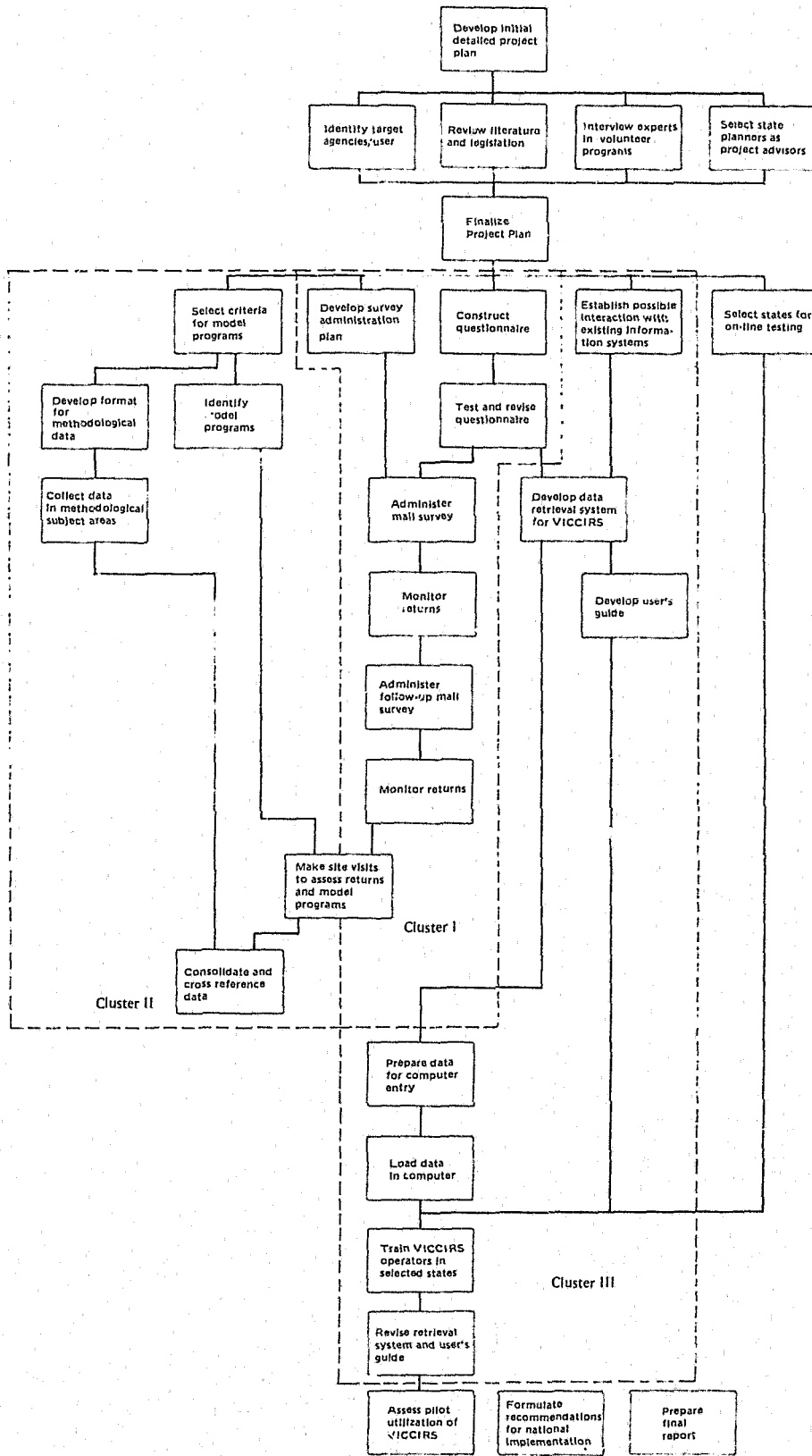
PRIMARY	1/ STATE, HAWAII	
	2/ ST YEAR, 1968	search parameters
	3/ (1 AND 2)	search combination
SECONDARY	4/ DISPLAY	request to see records
	5/ LIST ALL	request to see previous search strategy
	6/ STATE,*	request to see portion of index
	7/ RESTART	request for new file
	8/ QUIT	request to exit

The components shown in the example of Figure 3 are representative of the elements anticipated as essential for this file. They include twenty-five elements which can be displayed at the computer terminal or printed off-line. Most of these elements can be used as search parameters as well.

### SYSTEM BENEFITS

There can be several benefits to an on-line system such as the one just described. One obvious

Figure 2. TASK AREAS



example is that of remote access. A file stored in this manner can be made available instantly to widely dispersed users. A benefit that is somewhat less obvious, but perhaps more important, is the stimulation to thought that rapid information manipulation can bring about. With the ability to group and regroup programs or concepts in rapid succession, the process of hypothesis formulation and testing is drastically shortened. The data bases become not only an information source, but also a research tool for the users.

In one case, last year, a scientist at Battelle used the system to store task analysis data in a social service setting. He was able to formulate and test his hypotheses using the on-line system for data compilation. We feel this type of intellectual stimulation offers as much promise as the more traditional benefits of rapid retrieval, remote access, rapid update, and complex search capability.

In summary, the ancient Greek god, Prometheus, gave man the gift of fire which facilitated technological development. Through the centuries, technology has enabled man to leave the cave behind and build complex metropolitan habitats. Technology has placed man on the floor of the

ocean and the surface of the moon. It is appropriate that technology also be applied to solving man's social problems as well as facilitating his physical convenience and scientific discovery.

The information system discussed here is not a panacea to the operational problems intrinsic to volunteer programming in the criminal justice systems, nor is VICCIRS meant to displace interpersonal relationships, nor dehumanize crime prevention processes. It is a technological tool for managers analogous to a slide rule for engineers, or a crucible for chemists. VICCIRS is designed to serve the needs of planners of national criminal justice systems, managers of state volunteer programming, implementers of local programs, and providers of humanized services on the volunteer-to-client level. As such, VICCIRS provides a constructive, feasible approach to one of contemporary society's greatest problems.

- 1 Becker, Dorothy G., Augustus, John (1785-1859), "Encyclopedia of Social Work," Edited by Harry L. Lurie, National Association of Social Workers, 1965, p. 98.
- 2 "Vital Statistics on Volunteers In Courts" prepared by the National Information Center on Volunteers In Courts, Boulder, Colorado. August, 1970.

Query: I would like information on volunteer programs which serve juvenile clientele of a city level court in a large metropolitan city in the East North Central area of the U. S.

Search Sequence	Reference Notes
09/17/71 LOGGED IN AT 15.13.42. WITH USER-ID CO EQUIP/PORT 61/04 COMMAND- ATTACH, BASOI, KROHNITEST,- 15.14.12.ATTACH,BASOI, KROHNITEST. COMMAND- BASIS.	A--the user logs in
(PHASE I) BASIS 70 IS ON LINE! DO YOU DESIRE OPERATING INSTRUCTIONS? TYPE YES OR NO/NO PLEASE ENTER YOUR LAST NAME, /MILSTEAD ENTER THE NAME OF DATA BASE TO BE SEARCHED. / VOL ENTER YOUR SEARCH ONE TERM AT A TIME. 1/ CT LEVEL, CITY 1 ITEMS 2/ GEO LOC, EAST NORTH CENTRAL 9 ITEMS 3/ POP SIZE, 300,000 - 499,999 3 ITEMS 4/ SUB KW, JUV 6 ITEMS 5/ (1 AND 2 AND 3 AND 4) 1 ITEM	B--on-line orientation C--the user chooses a data base to search D--the user enters search terms
ENTER YOUR REQUEST 6/ DISPLAY 5 WHAT FIELDS DO YOU WANT TO SEE? ENTER FIELD NUMBERS SEPARATED BY COMMAS OR ALL / ALL	E--the user constructs a logical combination of search items--and as's to display information F--the user selects specific information for printing
PROGRAMS FROM THE VOLUNTEER DATA BASE ARE . . . ITEM 1 PROG NAME: VOLUNTEERS IN PROBATION, INC. (4) PROG ADD.:KEITH J. Leenhouts, 200 WASHIN GTON SQUARE PLAZA, ROYAL OAK, MICHIGAN 4 8067 GEO LOC: EAST NORTH CENTRAL STATE: MICHIGAN STATE,C/S:MICHIGAN,OAKLAND STATE,CITY:MICHIGAN,ROYAL JAKS NUMBER OF CTS WITH VOL PROGS:35 SETTING:OPEN,PROB** CT TYPE:JUV CT LEVEL:CITY START YEAR:1960 SUB KW:JUV*MALE-FEM*PROB*VOL*PRIVATEL Y/*ONE-TO-ONE*CITY** ADM OF VOL PROG:VOL PROG COORD:PRIVATE PROG COORD ADD.:KEITH J. Leenhouts, DIRECTOR, PROJECT MISDERMEANENT FOUNDATION, INC., 200 WASHINGTON SQUARE PLAZA, ROYAL OAKS, MICHIGAN 48067 STATE VOL COORD:DR. EARNECT SHELLEY, INGRAM CO UNTY JUVENILE COURT, 600 LESHER PLACE, L ANSING, MICHIGAN 48912 POP SIZE:690250 CLIENT LEG AGE:JUV TYP OF SCREENING:ASSOC*INTERVIEW*PROF**	G--the system prints the designated information
NO OF VOLS:100 VOL RELATIONSHIP:ONE-TO-ONE CASE HOURS:5-10 VOL/CL MATCHING:NOT AVAILABLE VOL SERVICES:ASST PROB OFF*PROF*CLERICAL*AD MIM*TESTING** VOL KEYWORDS:MALE-FEM*ALL*MIDDLE**	
FINISHED WITH PRINTOUT. CONTINUE ENTERING SEARCH TERMS. 6/ (QUIT) BASIF 70 HAS ENJOYED SERVING YOU. DO YOU HAVE ANY COMMENTS? YES:NO/NO (DONT FORGET TO "LOGOUT." BEFORE DISCONNECTING.) GOODBYE . . . . .	

FIGURE 3. SAMPLE QUERY OF VOLUNTEER PROGRAM DATA BASE





**END**