

A MULTIFACETED EVALUATION STRATEGY
FOR THE FIELD OF CRIMINAL JUSTICE

by

PRINCE GEORGE'S COUNTY
CRIMINAL JUSTICE EVALUATION UNIT

Knowlton W. Johnson, Ph.D.
Research Director
Richard Tamberrino
Research Assistant
Karen Zuspan
Research Assistant

NCJ

JUL 29 1976

IN COLLABORATION WITH

ACQ

William D. Frazier
Criminal Justice Analyst
Prince George's County, Maryland

Institute of Criminal Justice and
Criminology
University of Maryland
College Park, Maryland

Region IV Planning Staff
Council of Governments
Washington, D.C.

Governor's Commission staff on
Law Enforcement and the Administration of Justice
Cockeysville, Maryland

June 1976

LOAN DOCUMENT

RETURN TO:
NCJRS
P. O. BOX 24036 S. W. POST OFFICE
WASHINGTON, D.C. 20024

35514 c.5
7/99C

LOAN DOCUMENT

CONTENTS

RETURN TO:

NCJRS

P. O. BOX 24036 S. W. POST OFFICE
WASHINGTON, D.C. 20024

FOREWORD

ACKNOWLEDGMENTS

PREFACE

- I PROBLEMS AND STRATEGIES USED TO EVALUATE CRIMINAL JUSTICE PROGRAM
 - A. TYPES OF EVALUATION BEING CONDUCTED IN CRIMINAL JUSTICE
 - 1. EFFORT EVALUATION
 - 2. PERFORMANCE EVALUATION
 - 3. ADEQUACY OF PERFORMANCE
 - 4. EFFICIENCY EVALUATION
 - B. EVALUATION PROBLEMS TO OVERCOME
 - C. SUMMARY AND OBJECTIVES
- II A MULTIFACETED EVALUATION STRATEGY
 - A. WHO DIMENSIONS: CJEU STAFFED WITH UNIVERSITY AND STUDENT INTERNS
 - B. WHAT DIMENSION: USE OF PROCESS EVALUATION
 - C. HOW DIMENSION: DECISION MAKER INVOLVEMENT AND REVIEW
 - D. SUMMARY
- III UNIVERSITY BASED EVALUATION AS A VIABLE STRATEGY IN CRIMINAL JUSTICE
 - A. UNIVERSITY - LOCAL GOVERNMENT LINKAGE: PHASE I
 - 1. CREATION OF PART-TIME STUDENT RESEARCH INTERN ROLES
 - 2. PROGRAM EVALUATION TRAINING
 - 3. STUDENT - AGENCY DECISION MAKERS CONTACT
 - 4. STUDENT COMMITMENT
 - B. ELEMENTS OF THE FRAMEWORK FOR PROCESS EVALUATION: PHASE II
 - 1. PROGRAM OBJECTIVES AND MEASURABLE OUTCOMES
 - 2. INTERNAL AND EXTERNAL PROGRAM PROCESSES
 - 3. CHARACTERISTICS OF THE TARGET POPULATION
 - C. DATA GENERATION STRATEGY: PHASE III
 - D. ANALYSIS STRATEGY: PHASE IV
 - 1. DEVELOPMENT OF OUTCOME MEASURES
 - 2. DISCOVERY OF IMPORTANT PROGRAM PROCESSES
 - E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V
- APPENDIX A: VALIDATION OF UNIVERSITY BASED PROGRAM EVALUATION: SEVEN EVALUATION STUDIES
 - A. CONSUMER AND COMMERCIAL FRAUD UNIT
 - B. COMMUNITY BASED CORRECTION PROGRAMS
 - C. RESOLUTIONAL DRUG PROGRAM
 - D. BASIC ENTRANCE LEVEL TRAINING FOR POLICE
 - E. CASE REVIEW PROCESS OF A FELONY COMPLAINT SCREENING UNIT
 - F. YOUTH SERVICES BUREAU
 - G. HALFWAY HOUSE FOR ADULT OFFENDERS
- APPENDIX B: GLOSSARY OF TECHNICAL TERMS
- BIBLIOGRAPHY

ACKNOWLEDGEMENTS

The development of this handbook could not have been accomplished without the assistance of numerous decision makers in the criminal justice agencies, which housed the LEAA funded programs being evaluated. The following agency personnel were most helpful and their cooperation and assistance have been appreciated:

Prince George's County Police

Chief John W. Rhoads
Major Franklin E. Thompson
Major Larry L. Shanks
Captain George P. Conner
Lieutenant William R. Roberts
Lieutenant Jack SanFelice

State's Attorney's Office

Honorable Arthur Marshall, Jr.
Mr. Vincent J. Weigle
Mr. Elias Silverstein
Mr. Austin A. Moyer
(Posthumously)

Department of Juvenile Services

Mr. Fred Thompson

Byram Group Home

Mr. Patrick T. Fleeharty

Caring Environments

Mr. James Gregory

Boys' Home

Father McKee

Family Homes, Inc.

Mr. Stanley S. Levy

Mr. Ted Sanza

OASIS Youth Service Bureau

Ms. Lorraine Woods

Second Genesis, Inc.

Alan M. Rochlin, Ph.D.
Sidney Shankman, MD
Mr. James Hendricks

Halfway House

Mr. James P. Godhard

PREFACE

Preparation of this handbook was financed through a grant #4033 RFS-2 which was awarded to Prince George's County from the Maryland Governor's Commission on Law Enforcement and the Administration of Justice. On a contract basis, University of Maryland's Institute of Criminal Justice and Criminology provided part-time personnel, one faculty member and two graduate students to staff a County based Criminal Justice Evaluation Unit. The primary function of the Unit was to assist the County's Criminal Justice Analyst in development, implementation and evaluation of LEAA funded programs. In addition, the Unit was to validate an innovative evaluation strategy and prepare in handbook form a description and sample products from such a strategy. Initiation for federal funds to support these activities was the result of University and local government concerted effort to increase the quantity and quality of information available for decision makers functioning at the State, Regional, County and local levels.

Decision makers at the local level will benefit from such information by having empirical evidence to assist them in upgrading daily program operations. County Government can use the additional information to assist in making decisions about criminal justice programs that are worthy of continual funding by the county. Regional and state level planners can use the evaluation data as justification for program allocation and future program development. Finally, the University gains entry into Criminal Justice Agencies for its faculty and students to conduct research.

The contents of this handbook include: Section I which discusses types of program evaluation methodologies most frequently used in criminal justice and an analysis of the critical program evaluation problems that have to be overcome. Section II presents a program evaluation strategy designed to combat such problems. Section III entails a detailed description of the various phases which make up the evaluation strategy being validated. Finally, in appendix A there are seven case studies resulting from the innovative evaluation unit presented to key decision makers functioning at the State, Regional, County and local levels.

I. PROBLEMS AND STRATEGIES USED TO EVALUATE CRIMINAL JUSTICE PROGRAM

Action programming in the criminal justice system has steadily increased since the late 1960's. Accompanying this increase in criminal justice action programs, the federal government has called for more accountability by asking state planning agencies to intensify their program monitoring and evaluation of selected funded projects.¹ Questions such as: What did the project do? How well did it do? How much were the stated objectives of the program realized? Did the program work? Are there any more efficient ways to attain the same benefits? are now being asked more frequently and more emphatically.

In the advent of a greater emphasis on program evaluation, this handbook offers an innovative evaluation strategy which has been validated in Prince George's County, Maryland. The material presented is the result of two years of work which entailed first, establishing a University staffed Criminal Justice Evaluation Unit at the County level. This enabled the county to use university resources (staff, students and computer facilities)

¹Several documents published by the Law Enforcement Assistance Administration discuss guidelines and requirements that pertain to monitoring and evaluation, Monitoring for Criminal Justice Planning Agencies, U.S. Department of Justice, Law Enforcement Assistance Administration, August 1, 1974; LEAA Guideline Manual, M4100.1, U.S. Department of Justice, Law Enforcement Assistance Administration, November 1, 1974; Intensive Evaluation For Criminal Justice Planning Agencies, U.S. Department of Justice, Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice, July, 1975

to conduct program evaluation. In return, the university was provided with a research environment in which to train students in areas of program development, monitoring and evaluation. Second, an alternative program methodology referred to as process evaluation has been validated on criminal justice programs operating at the county level. A third dimension of the evaluation strategy dealt with close involvement of decision makers in conducting the evaluation.

Over the validation period (August 1974 - June 1976), University staff and students have used process evaluation procedures in 20 projects which have involved 16 different criminal justice agencies in two urban counties. Eight of these projects involved programs funded by the Maryland Governor's Commission on Law Enforcement and the Administration of Justice to Prince George's County agencies.

The content of this handbook will be of interest to several different audiences, Supervisory Board Members, Project Managers, Monitoring and Evaluation Managers, Evaluators and University Professors and students. In Sections I and II, we present a discussion of types of program evaluation methodologies most frequently used in criminal justice, an analysis of the critical program evaluation problems that have to be overcome, and an overview of an evaluation strategy designed to combat such problems.

Section III, which will be of more interest to program and project evaluators with training in research methods, statistics and computer analysis, describes each of the five phases that make up the evaluation strategy being validated. Our intention is to present a step-by-step description and analysis of the phases and research procedure used when validating the process evaluation methodology being presented. Finally, in Appendix A seven

evaluation studies are presented which illustrate programs where the evaluation strategy being presented has been validated.

A. TYPES OF EVALUATION BEING CONDUCTED IN CRIMINAL JUSTICE

The purpose of evaluation is to measure the effects of a program against the goals originally set. This contributes to subsequent decision making about existing and future programs. Our review of past and present evaluation strategies uncovers four major types of evaluation used predominantly in the field of criminal justice. The descriptions presented below, originally discussed in Edward Suchman's Evaluative Research (1967), show that each is distinctive and relates to different questions that a particular method of evaluation can answer.

1. Effort Evaluation

Evaluations in this category have as their criterion of success the quantity of activity taken place. This represents an assessment of input or energy regardless of output. It intends to answer the question, "What did you do?". This type of evaluation is typically incorporated into project monitoring systems designed by funding sources to report on what took place over a three-month period.

2. Performance Evaluation

Performance or effect criteria measure the impact of effort rather than the effort itself. This requires a clear statement of one's objective - how much was accomplished relative to an immediate goal? Did any changes occur? Was the change the one intended? Performance can be measured on several levels: number of cases found, number hospitalized, number cured or rehabilitated. Performance standards often involve key validity assumptions; however, in general, evaluation of performance involves fewer assumptions than evaluation of effort.

This method of evaluation focuses on success or failure of a program and an appropriate research design with some means of control is necessary to adequately answer these questions. Regrettably, in the absence of appropriate design in criminal justice, these questions are answered simply by making value judgements based on hard data. Such measures as recidivism rate, crime rates, etc., are typically presented as measures of effectiveness.

3. Adequacy of Performance

This evaluation type refers to the degree to which effective performance is adequate for the total amount of need. For example, a crime prevention program may reduce crime by five percent. However, decision makers may have set a goal of 20 percent reduction. Using this method of evaluation, one might view the program as unsuccessful. Obviously, adequacy is a relative measure, depending upon how high decision makers set their goals. Evaluations of this type are frequently used to assess police programs.

4. Efficiency Evaluation

A positive answer to the question, "Does it work?" often gives rise to the follow-up question, "Is there a better way to attain the same results?". This question of efficiency is concerned with evaluating alternative paths of methods in terms of costs - in money, time, personnel, and public convenience. In a sense, it represents a ratio between effort and performance - output divided by input. In the field of criminal justice, efficiency evaluation is occasionally used in the evaluation of correctional programs where appropriate data can be collected such as reduction in recidivism (output) and the cost of treatment (input).

B. EVALUATION PROBLEMS TO OVERCOME

Some authorities such as CARO (1971) in his Readings in Evaluation Research have stated that the social and behavioral sciences have failed to measure up

to expectations in supplying either knowledge on which to base intervention programs or information on the success and failure of different types of action approaches. Other writers who contributed to this reader feel it is not only the lack of available knowledge, but also the viability of the evaluation strategies which affects utilization of results.

2

In regard to viable evaluation strategies, there are three major problem areas that the strategy being offered in this handbook attempts to overcome. They are:

3

- * the lack of collaboration between resource personnel (e.g. evaluators) and decision makers who may have some use for evaluation products.
- * the incompatibility of evaluation products with the user's needs.
- * decision maker's lack of awareness and understanding of program evaluation and its utility.

Questions are frequently being raised about the kinds of relationships which should be established between evaluation resource personnel and program staff. For example, do decision makers see the evaluator as competent and trustworthy? Does the evaluator understand the organizational environment in which the evaluation is being conducted? Can he communicate with various audiences who will be involved in the evaluation process? Does the evaluator have the ability to overcome barriers which are often present in the world of practice? There is extensive evidence to support the notion that affirmative answers to these questions usually lead to collaborative relationships between resource personnel and decision makers associated with action programs. Further,

2

See Schulberg, Herbert C. and Baker, Frank "Program Evaluation Models and Implementation of Research Findings", Chapter 6; Argyris, Chris "Creating Effective Research Relationships in Organizations", Chapter 9; and Weiss, Carol H. "Utilization of Evaluation: Toward a Comparative Study", Chapter 12, in CARO Francis G., Readings in Evaluation Research; Russell Sage Foundation, New York, 1971.

3

According to Eisenberg (1975) in his report on a conference dealing with Collaboration between Law Enforcement Executive and Social Scientists, Collaboration refers to the practice and process of working jointly with others in an endeavor where cooperation is expected to produce a higher quality product.

abundant documentation is available which shows collaboration rather than
adversary type relationships enhances utilization of research findings. ⁴

Unfortunately, in criminal justice there have been frequent reports that evaluators lack the expertise, and/or interpersonal skills to conduct program evaluation projects in an oftentimes obstinate environment. Further, trust relationships are often compromised in an effort to remain "objective" in a highly political climate. There seems to be a feeling that trustworthiness and scientific integrity are incompatible values. Our assumption is that this problem area is critical and should be addressed in developing an alternative evaluation strategy.

Horst et al (1974) and others point to more practical problems relating to the delivery of appropriate evaluation products to decision makers. Some of these problems which may cause ineffectiveness of program evaluation are:

- * Evaluations are not planned to support decision making.
- * The timing, format, and precision of evaluation studies are not geared to user needs.
- * Evaluation findings are not adequately communicated to decision makers.
- * Different evaluations of the same program are not comparable.
- * Evaluation fails to provide an cumulative and accurate body of evidence.
- * Evaluation studies often address unanswerable questions and thus produce inconclusive results.

The common thread which seem to run across these practical problems is the incompatibility of evaluation products with users of such products. One plausible reason for such problems existing in criminal justice is the heavy emphasis currently being placed on impact evaluation. Measuring program effectiveness is

4

Havelock (1973) has found that the relationship between resource personnel such as evaluators and decision makers is one key factor regarding whether research findings are utilized. Weidor et al (1975) and Adams (1975) also point to these problems in the field of criminal justice.

important, however, appropriate research designs are imperative for such questions to be answered. Unfortunately, evaluations seldom have either proper research designs or sampling procedures to address these kinds of questions. Further, evaluation is frequently conceptualized separately from action programs and also begins after the program is already in operation. In addition, there is usually no emphasis on generating information which may be helpful in improving program effectiveness. Thus, a second assumption is that an alternative evaluation methodology which provides results more in line with needs of operational agencies should be used to supplement impact evaluation efforts..

Adams (1975) and Horst (1974) address a third problem area, decision makers level of understanding of program evaluation and its utility. Horst (1974) specifically states that those in charge of programs lack the motivation, understanding, ability or authority to act on evaluation measurements and comparisons of actual intervention activity, actual outcomes, and actual impact. In criminal justice various questions are being asked about the level of awareness and understanding of decision makers in planning agencies, government, and local criminal justice agencies. Such questions are:

- * Do decision makers understand how to create a favorable atmosphere for conducting program evaluation?
- * Is decision makers knowledge of research and procedures sufficient to adequately communicate with research personnel?
- * Do decision makers know how to interpret program evaluation results?
- * Do decision makers know how to utilize the program evaluation product as a management tool?

These questions lead to a third assumption that an alternative evaluation strategy should attempt to involve decision makers at the state, regional, county and local level in all phases of the evaluation.

C. SUMMARY AND OBJECTIVES

Literature and reports of personal experiences from criminal justice decision makers suggest that the need is not for evaluation per se, but rather for a multifaceted evaluation strategy which can provide the direction needed to improve program quality through effective completion of evaluation. With this purpose in mind, an evaluation strategy has been developed which is intended to realize the following immediate goals.

- * To foster positive relationships between program evaluators and decision makers who function at the state, regional, county and local levels.
- * To produce evaluation products that are compatible with the users environment.
- * To increase decision makers awareness and understanding of program evaluation and the utility of its results.

It is assumed that if these goals presented above are achieved at least in part, we will then be able to realize more policy relevant sets of goals, foster a favorable atmosphere for conducting future program evaluation and utilizing such results. Later, utilization can be realized to provide information for county official and agency heads in such ways as when making decisions about continual financial support for the program; when deciding about the extent and type of modification which could improve effectiveness; when developing new programs or when initiating research in other problem areas. An overview of the evaluation strategy with these goals follows with a detailed discussion appearing in Section III of this handbook.

II. A MULTIFACETED EVALUATION STRATEGY

Historically, criminal justice agencies have lacked necessary expertise to effectively conduct research to be used for policy development. Further, higher educational programs have not established structural linkages with criminal justice agencies which enable University professors and students to become involved in policy relevant research endeavors on a continuous basis. To deal with these organizational dilemmas, one major University and local government obtained a grant from the Maryland Governor's Commission on Law Enforcement and Administration of Justice to establish a University staffed Criminal Justice Evaluation Unit (CJEU) at the county level. Specifically, this grant provided means by which to implement a three dimensional evaluation strategy:

- * CJEU staffed with University Personnel and student research interns.
- * Validate an evaluation methodology.
- * Decision makers periodic involvement and review of program evaluation procedures and results.

Ronald Havelock's work (University of Michigan) in planning for innovation through dissemination and utilization of scientific knowledge provided the conceptual basis for development of this evaluation strategy.

A. WHO DIMENSION: CJEU staffed with University and student research interns.

Due to the proximity of the University of Maryland's criminal justice program to Prince George's County criminal justice agencies, faculty and student

research interns were designated as program evaluation resource personnel. We considered three ways of linking University staff and local government together:

- * Consultants.
- * Leave of absence on a full-time basis as local government employees.
- * Joint appointment where University personnel would be employed by both the University and a local government.

Both for practical and theoretical reasons, we chose the joint appointment alternative. This arrangement links the University to a local government by staffing a county criminal justice evaluation unit with University personnel.

The CJEU provides contractual services arranged through the County's criminal justice analyst between Prince George's County Office of Budget and Programming and the University of Maryland's Institute of Criminal Justice and Criminology. The University of Maryland provides one Professor (part-time) and two Research Assistants (1/2 time) to assist the County's Criminal Justice Analyst (coordinator of the unit) in a variety of functions that concern program review and evaluation.

Local government and criminal justice agencies benefit by having access to University resources such as research support personnel and computer facilities which are made available to University faculty and students enrolled in research courses. The University gains a naturalistic setting for its faculty and students to conduct research. Further, professional contacts established through this linkage can serve as guest lecturers in courses in Law Enforcement and Criminology.

Student research interns are also viewed as important CJEU personnel. Seniors or graduate students pursuing a criminal justice career are assigned

for one academic year to a decision maker who is responsible for the daily operations of some program or functional unit within a criminal justice agency. Running concurrently with these field research assignments is an extensive program evaluation training program in which each of these students participate. These course offerings are part of the curricula within the Institute of Criminal Justice and Criminology at the University of Maryland.

B. WHAT Dimension: Use of process evaluation.

In addition to grappling with the type of linkage to be established between resource and users systems, we are also concerned about the most appropriate type of program evaluation procedures to use. Currently, evaluation research is concerned with questions which can be answered by effort evaluation (What did you do?), performance evaluation (Were your efforts a success or a failure?) and efficiency evaluation (What is the cost-benefit ratio?). Although these types of evaluation research methodologies can and are being used in the field of criminal justice, we developed alternative procedures (process evaluation) that minimize disturbance to program activities and which produce results useful to decision makers functioning at the state, regional and local level. The analysis may be conducted at any time after a program or activity becomes operational provided a sufficient number of observations have been accumulated for computer analysis.

This type of research looks at the internal processes of a program or organization's operations as related to their outcome, such as the relationship between police officers demeanor and citizens satisfaction with police service.

5

See Johnson, R.W. (1974) for a detailed description of this research training.

Questions that pertain to success or failure and cause-effect are not addressed for they cannot be adequately answered on a post hoc basis. Instead, the process evaluation methodology being validated generates a detailed description of the dynamics of programs using goal attainment criteria as a yardstick rather than as measures of effectiveness. If decision makers in local criminal justice agencies use such information for program modification or program development, it only increases the probability that higher goal attainment will result. To actually substantiate a cause-effect relationship, the modification or new idea should be tested under experimental conditions with appropriate research designs. In addition, if county government officials use the information produced by process evaluation to determine the "worth" of programs, it should be recognized that results are descriptive and decisions are based on individual decision makers judgements as to whether their expectations are being met.

To develop and validate process evaluation procedures, eight, second and third year LEAA programs operating in Prince George's County during 1974-76 were designated as top priority. Evaluation products on seven of these programs are presented in Appendix A of this handbook. Unanticipated consequences prevented completion of an evaluation of the Special Operations Division housed in the County Police Department. During this time period student research interns, with the assistance of the CJEU staff, were provided an opportunity to also validate the process evaluation procedures on seven non-federally funded projects in the county. In addition, four process evaluation projects were completed in an adjacent county. In total, twenty process evaluation projects have been completed for decision makers in 16 criminal justice agencies. Results on the

6

University faculty assistance provided to these four projects was part of a course financed by the University.

LEAA funded projects have been reviewed by county governmental officials, regional planning unit staff and the Maryland Governor's commission staff.

The CJEU staff also provided other services to the Prince George's county. These services included:

- * Preparing reports from computer analysis of record data for county government officials to use in making decisions about continuing to fund programs after LEAA monies had been exhausted.
- * Assisting selected program managers in meeting special conditions of their grant by conducting pre and post computer analysis of their record data.
- * Developing program monitoring systems for first-year LEAA funded projects.
- * Assisting the county council in developing a plan for establishing community based treatment programs.
- * Assisting the regional planning unit in implementing JUSSIM, a computer simulation model designed for monitoring and planning purposes in the county.

C. HOW Dimension: Decision Maker Involvement and Review

A final dimension of our evaluation strategy was to involve decision makers functioning at the state, regional and local levels in periodic review of our evaluation procedures and results. Initially, decision makers at all levels assisted in identifying data elements which were policy relevant. These personnel were also involved in determining data collection procedures, finalizing questionnaires, telephone interviews and record data coding forms. In addition, local criminal justice personnel assisted in coordinating collection of data and reviewed results from the computer analysis (oral presentations) of the data. Most of the local decision makers were also involved in reviews of preliminary results (descriptive data) which further helped in identifying specific questions to be addressed by subsequent analysis.

Following the formal oral presentation of final process evaluation results, a written report was prepared for each evaluation project, with local decision makers given an opportunity to review these reports before any dissemination outside of the particular agency. In all projects, our effort to develop credibility, trusting relationships and increased awareness and understanding of the evaluation process did not interfere with reporting accurate interpretations of the data. Decision makers did not ask the CJEU staff to compromise scientific integrity by distorting or omitting parts of the data.

D. SUMMARY

This overview of an alternative evaluation strategy is three dimensional. One dimension is the creation of a University - local government linkage through the establishment of the criminal justice evaluation unit which provides research resources to programs operating at the county level. A second dimension entails using process evaluation methodology which yields results that provide vivid descriptions of program activities for state, regional and county planners and uncovers, for local agency decision makers, those activities which are significantly associated with high goal attainment. The final dimension of the strategy consists of periodic involvement and review by decision makers through all phases of the evaluation.

This multifaceted evaluation strategy directly addresses future direction offered by Twain et al (1970) in their publication entitled Research and Human Services: A Guide to Collaboration Program Development. These authors suggest that research is more likely to be utilized if:

- * It is directed to questions of real concern of practice fields.
- * The long-range strategy focuses on projected uses of both positive and negative findings.
- * Administrators and practitioners are directly involved in defining the problem and setting goals.

- * All participants and interested groups or individuals are consulted and kept informed at every step of the way.
- * The interests of the other agencies and the community are accommodated and broad support is obtained.

Our overall evaluation strategy focuses attention on each of the above concerns. A linkage between the evaluation staff and each federal project was created so that questions of importance could be potentially answered. Policy questions which were generated on each project seem to reflect agency interest in knowing about those processes which were important as well as those processes that were unimportant.

Involving key decision makers was given special attention. They played an important role in defining outcomes and processes to be studied. Of special importance was the cooperation which was given by all personnel affiliated with each validation project. It was quite apparent to the CJEU staff that each agency had made a decision to invest something in the research.

Even though the Unit has been in operation for only two years, we have received positive feedback about our evaluation strategy from other agencies that have become familiar with CJEU activities. Decision makers in other County and State operational agencies are aware of the evaluation strategy being presented and have supported initial interest for this type of research to be conducted in their respective agencies.

III. UNIVERSITY BASED EVALUATION AS A VIABLE STRATEGY IN CRIMINAL JUSTICE

In generating information potentially useful to decision makers, a series of phases in the research process must be anticipated to ensure that policy relevant concerns are addressed. This section provides a description and an analysis of these phases which make up the evaluation strategy being presented in this handbook. Emphasis is on the applicability of using University staff and students to conduct process evaluation of seven key criminal justice programs funded by the Maryland Governor's Commission on Law Enforcement and the Administration of Justice.

These programs represent various funding categories that appear in Maryland's Comprehensive Plan for administering LEAA funds. In each of these program evaluation projects, the following five phases were completed:

7

Listed below are those seven programs and total costs for the entire three year award period.

-Basic Entrance Level Police Training	163,230
-Felony Complaint Screening Unit (Second year in operation)	117,010*
-Consumer and Commercial Fraud Unit	190,135
-Youth Service Bureau	103,272
-Residential Treatment Drug Program	796,419
-Community Based Treatment Programs for Delinquents	401,446**
-Half-Way House for Adult Offenders	429,105

*This cost figure for the Felony Complaint Screening Unit is for only two years of funding.

**The three year expenditures listed is for two group homes which have received LEAA funds. Other private operated homes were also included in the evaluation.

- * Placement of student research interns into agencies where programs are operating.
- * Development of an evaluation framework.
 - a. Identification of a target population and its characteristics.
 - b. Identification of measurable outcomes which stem from objectives (explicit or implicit)
 - c. Identification of important internal and external processes of programs.
- * Generation of evaluation data which stress the collection of reliable and valid information.
- * Analysis of evaluation data which incorporate the use of appropriate statistical procedures.
- * Demonstration of how process evaluation findings can be used by decision makers in both local agencies and county government.

The time frame for completion of these phases is eight months, the length of an academic year not including vacation periods. After serving for approximately one month in a research intern role, students began to meet with agency decision makers to identify data elements which are later measured and analyzed. This phase, which takes another month, leads into questionnaire and interview construction. These activities should only take two months, however, we found that limited experience in performing these tasks sometimes extend their completion to as much as four months. Data collection and data analysis takes another two months with oral and written presentation being completed in two to four weeks.

A. University - LOCAL GOVERNMENT LINKAGE: PHASE I

The evaluation strategy being proposed assumes that limited resources, research personnel, computer facilities and money to elicit such services- create a situation where University staff and students can assist in conducting evaluation of key programs operating at the county level. When involving the University in policy relevant research projects, it is important that the following requirement be considered.

- * Create part-time student research intern roles in agencies linked to a University based research unit such as the criminal justice evaluation unit.
- * Provide student research interns with proper evaluation research training in a University setting.
- * Maintain continuous contact with parent-agency decision makers and complete several products periodically.
- * Establish commitment of University involvement for duration of the project.

1. Creation of Part-Time Student Research Intern Roles

During the validation years of the evaluation strategy being presented University staff and student research intern roles were created establishing a liaison between the University and specific key agencies directly linked to the program being evaluated. University staff involvement in program evaluation at the county level was legitimized by the establishment of the Criminal Justice Evaluation Unit previously described. In conjunction with the evaluation activities being conducted by the CJEU staff, students were designated as principal investigators with the CJEU faculty member serving as director of each evaluation project. Students assigned to each of the programs being evaluated had been exposed to the parent agency during the previous summer, or the CJEU staff had previously established a relationship with specific decision makers in the parent agency.

Four of the seven evaluations of LEAA funded action programs were conducted by only one undergraduate research intern and an undergraduate assistant. A graduate student conducted the entire evaluation of the residential drug program alone and the Felony Complaint Screening Unit evaluation was conducted by one undergraduate and one graduate research intern; two parent agencies, the States Attorney's Office and the County Police Department participated in this evaluation. Due to one research intern relinquishing her role as the manager of the Consumer and

Commercial Fraud evaluation, one CJEU research assistant and an undergraduate assistant completed this project.

From the experience of conducting the previously mentioned evaluation projects, it was demonstrated that students can assume research intern roles in operational agencies. In conjunction with effort of the CJEU staff, they were able to further establish and maintain collaborative relationships with decision makers housed in criminal justice agencies. On all validation projects, the student research interns conducted themselves in a professional manner with agency heads, program managers and operational personnel, a requisite to getting necessary assistance to complete the evaluation project. When problems did arise, the close relationship which existed between the University based CJEU staff and agency decision makers provided a favorable atmosphere for speedy resolutions.

One problem that emerged consistantly over the validation years was the disproportionate amount of work for personnel assigned to each project. In order not to overwork interns and the CJEU staff, future evaluation teams comprised of several student research interns would be more feasible. Team coordination of evaluation activities should be closely supervised for often-times scheduling problems arise among students who work and go to school. Further, it is imperative that the project director assume total responsibility for checking tasks completed at all phases of the evaluation. Since such research activities as questionnaire construction, interviewing, computer analysis, and interpretation of data are new experiences for students, errors in judgements are frequently made.

2. Program Evaluation Training

In defining student research roles, it is also important that the research activities be closely linked to the students academic studies. Such a linkage

provides structure and background in research training for the completion of the required research tasks. Courses in statistics and research methods help prepare individuals for program evaluation. However, additional evaluative research training, either in the classroom or on tutorial bases is necessary when conducting policy relevant evaluations that adhere to fundamental scientific principles.

To fulfill this requirement the research director of the Criminal Justice Evaluation Unit, a University of Maryland faculty member, taught several courses which provided necessary skills to advanced seniors and graduate students who assumed student research intern roles. One course offered in the fall semester was designed to expose students to various evaluation methodologies, especially process evaluation, and to the operational aspects of the LEAA delivery system. In the spring semester a second course was offered which dealt with program evaluation as it related to the internal dynamics of operational agencies. Emphasis was placed on interpersonal skills needed to conduct research in a complex organizational environment. In addition, special seminars were held throughout the academic year which facilitated close coordination between the CJEU staff and student research interns.

3. Student-Agency Decision Makers Contact

A third requirement of University involvement in policy-relevant research is that continuous contact must be maintained with agency decision makers throughout the duration of the project. The need for decision makers to be aware and involved in all activities being conducted in his area of responsibility is an important requisite for successful completion of program evaluations. Further, since program evaluation on a part-time basis usually must be spread out over an extended period of time, it was found that the completion of small descriptive

products, either during the first semester or early second semester, was necessary to maintain decision makers interest in the primary process evaluation projects. Such add-on functions varied across parent agencies in which program evaluations were being conducted. For example, student research intern and CJEU staff conducted a computer analysis of record data which fulfilled a LEAA special grant condition of the Felony Complaint Screening Unit. For the Half-Way House director, the student research intern, in conjunction with the CJEU staff's evaluation report to the county government, completed a community survey of businessmen and citizens who either worked or lived close to the treatment facility. These types of evaluation services were well received and facilitated continued cooperation in getting necessary data for process evaluation.

4. Student Commitment

Student commitment toward completion of the evaluation projects being conducted by a research unit such as the CJEU is a final requirement worth noting. First, student interns should agree to be involved in an evaluation project for one academic year, and second, agree to finish a project even though the completion date may extend beyond the normal school year. These commitments are crucial in order not to jeopardize student research roles in operational agencies. Further, it is necessary to try and avoid circumstances which generate additional work for a part-time research entity such as the CJEU. With the exception of one evaluation project, student research interns completed assigned tasks and were available during the summer to answer questions that the CJEU staff might have when finalizing the final reports for dissemination. In the exceptional case, the student research intern decided to relinquish her role in the States Attorney's Office, and hence, forced the CJEU staff to complete the evaluation of the Consumer and Commercial Fraud Unit.

In summary, the initial phase of the evaluation strategy being presented entails creating part-time student research intern roles in agencies linked to a University based research unit such as the Criminal Justice Evaluation Unit. These students received special evaluation training which served as partial fulfillment of their academic requirements as well as providing necessary skills to be involved in policy relevant evaluation projects. University staff and students maintained continuous contact with agency decision makers while conducting program evaluation activities. In order not to jeopardize decision makers confidence and trust in University staff and students, commitments from all involved persons were deemed imperative.

Such a University - Criminal Justice agency linkage, as is described above, is designed to create a favorable atmosphere for conducting evaluation products for decision makers at state, regional, county, and local levels. A step-by-step description of the process evaluation methodology used to generate such results follows:

B. ELEMENTS OF THE FRAMEWORK FOR PROCESS EVALUATION: PHASE II

Identifying data elements to be considered in the analysis stage is an important phase of all research. Through observation, reading, and meetings with agency decision makers, data elements were compiled which fit into four categories of information. These four types of elements listed below comprised the framework for process evaluation.

- * Identification of policy relevant program objective from which measureable outcomes can be generated.
- * Identification of the dynamics of the program (program processes) which are being evaluated.

- * Identification of the environmental factors (external program processes) which may affect program goal attainment.
- * Identification of the characteristics of the population which should be considered in the analysis.

Student research interns played a major role in this set of activities.

Using qualitative information gathered by the students from observations and meetings with decision makers, the CJEU staff finalized the frameworks which included those measurable data elements that were policy relevant. This phase of the evaluation extended over approximately two months.

A more descriptive analysis of each of these categories of data elements is discussed below. Although each class of elements is presented as a sequential developmental process, in reality the development of the framework for each project was an integrative one.

1. Program Objectives and Measurable Outcomes

One of the first tasks to complete is identifying program objectives, both explicit and implicit. Explicit objectives refer to the stated ends to be achieved by the program. For the validation projects being presented, this type of objective appeared in grant applications submitted for funding by the Maryland Governor's Commission on Law Enforcement and the Administration of Justice. Implicit objectives are those ends which were realized after program implementation. Typically stated objectives in grant applications were either too general or were means oriented rather than ends, therefore, measurable objectives that were identified on each validation project were predominantly implicit statements of what the program was intended to accomplish.

Most importantly implicit objectives were used because appropriate data for computer analysis could not always be obtained from the primary target population that the programs were intended to affect. For example, in the evaluation of the

residential drug program, insufficient number of terminated clients caused a shift in attention to residents still in treatment and thus limited the selection of objectives that pertained to behavior and attitudes of residents still in the program.

Another example was in regard to the Felony Complaint Screening Unit evaluation. Early in the project it was found impossible to obtain data from felony defendants who were the primary target population of this program. Therefore, the evaluation was shifted to the case review process program component which involved police officers. Hence, this alternative target population required formulation of implicit objectives of only one aspect of the FCSU operation.

Identifying measurable objectives serves as a basis for developing outcome measures which can be used as criteria for evaluating the dynamics of each program. The term "outcome" has been purposely used instead of "measures of effectiveness" for this latter criteria is used to determine success or failure of programs, an intensive evaluation endeavor which can only be realized with appropriate research designs.⁸ Conversely, the process evaluation methodology being validated presents a detailed description of a program using outcome measures as yardsticks or points of references. That is, selection of policy-relevant outcome criteria provides a basis for determining which aspects of programs are associated with high or low goal attainment, and also detects program processes not associated with criteria designated to measure end accomplishments.

2. Internal and External Program Processes

A second set of activities is to identify processes that describe the internal dynamics of program operation as well as those processes present in the environment. Internal processes are program attributes or activities over which agency decision

⁸ See Weidman et al (1975) for a discussion of research designs that are appropriate for intensive evaluation.

makers have control and thus are directly manipulable. External program processes are those kinetic aspects of the organization or community environment that could influence program goal attainment but over which decision makers usually have no direct control.

Identification of policy relevant internal processes are critical to process evaluation. These data elements provide a basis for identifying those program attributes or activities which are associated with goal attainment. It is especially important to include processes which are assumed to be necessary aspects of a program. These preconceived assumptions may be questioned by uncovering that specific process variables, such as clients length of stay, are not related linearly to goal attainment criteria. For example, when using family adjustment as the outcome criterion, it was found that former clients who had remained in the youth service bureau's program from one to four months reported significantly higher adjustment than those who stayed less than one month or more than four months in the program. Such results should provide decision makers with empirical guidance when making programmatic changes.

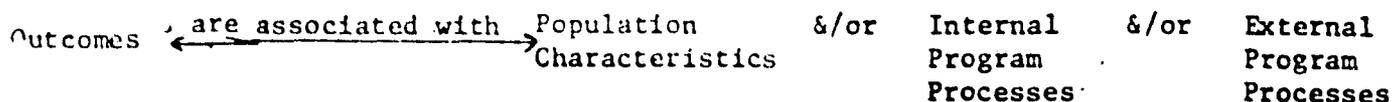
In the validation projects, student research interns, CJEU staff, and agency decision makers identified measurable elements of both classes of processes which were deemed policy relevant. It was found that those projects where processes were grouped together conceptually were more manageable in subsequent phases of the evaluation than those projects where the program was viewed as one dimension. For example, the dynamics of the Youth Service Bureau program was divided into three distinct groups of processes-programmatic policy processes, processes of the client-YSB relationship, and employment assistance considerations. Three groups of factors external to the program included parental and peer pressure concerns, involvement in community activities, and the dynamics of client-police contact while in the program. Policy relevant data elements were identified for each dimension, and later data was collected either from records or clients were asked a series of questions that generated

the necessary data. In the analysis and interpretation state of the evaluation, it was evident that subclasses of information were more manageable than in those projects where programs had been conceived as one class of processes.

3. Characteristics of the Target Population

Identifying population characteristics to be considered in the analysis stage marks the final class of data elements needed to complete the evaluation framework. This class of elements defines unique aspects of the unit of analysis such as individuals, cases, or organizations. A common denominator of individuals, cases, or organizations, is that the information describes the population before it becomes associated with the program being evaluated.

This class of data elements serves three main purposes in the evaluation. First, specific characteristics may be found in the analysis to be important criteria for initial screening or placement of clients into particular treatment modalities; such was the case in the evaluation of the residential drug program. Second, specific characteristics may define various subgroups which respond differently to the program. In most of the validation studies being discussed, population characteristics such as age of clients placed conditions on the association between program processes and outcome criteria. Third, characteristics can be used to determine the extent to which a non random sample is representative of the total population. In four of the validation projects, characteristics of those individuals who were included in the evaluation were compared with those not included. This increases the policy relevance of the evaluation findings. Thus, Phase II can be summarized by a simple formula which characterizes the interrelatedness of elements included in an evaluation framework.



In each of the seven validation projects, our initial task involved identifying data elements for each of these categories. Subsequent phases of the evaluation include generating data on each of the elements, analyzing relationships between variables found in each category and identifying ways in which results can be utilized by decision makers at the state, regional, county and local levels.

C. DATA GENERATION STRATEGY: PHASE III

Phase III of the process evaluation methodology being presented concerns generation of data for outcomes, internal program processes, environmental factors and population characteristics. Listed below are the sequence of steps that were followed in each of the evaluation projects.

- * Identify Source of Data
- * Select Data Collection Technique(s)
- * Develop Measures for Data Elements
- * Pretest Research Instruments
- * Collect Data
- * Construct Code Book
- * Establish Coder Reliability
- * Transfer Coded Responses to Computer Cards

The major concern in this phase was to generate data for computer analysis which represent reliable and valid indicators of reality. Table 2 presents a description of the various sources of data, techniques used for collecting and sizes of the sample, and total target population associated with each validation project. An analysis of data generation for each of these validation projects reveals the dynamics of this evaluation phase.

TABLE 2:

DESCRIPTION OF DATA SOURCES, METHOD OF DATA COLLECTION
AND SIZE OF SAMPLE AND POPULATION BY LEAA FUNDED PROGRAMS

LEAA Program	Source of Data	Data Collection Method	Sample Size	Population Size
<u>FIRST YEAR VALIDATION PROJECTS</u>				
Consumer and Commercial Fraud Unit	-Record -Fraud Victims	-Coding Form -Telephone Interview	54	90
Group Homes	-Residents	-Self Administered Questionnaire	46	49
Residential Drug Program	-Residents	-Self Administered Questionnaire	68	68
<u>SECOND YEAR VALIDATION PROJECTS</u>				
Basic Entrance Level Training for Police	-Records -Police Graduates	-Questionnaire -Coding Form	62	62
Case Review Process of a Felony Complaint Screening Unit	-County Police Officers	-Mailed Questionnaire -Telephone Interview	72	92
Youth Services Bureau	-Record -Terminated Clients	-Coding Form -Telephone Interview	49	163
Half-Way House	-Records -Terminated Ex-Offenders	-Coding Form -Telephone Interview	51	163

An examination of Table 2 reveals that sources of data were both records and individuals. Unfortunately, record information from most projects were non-existent or of limited use. The most frequent problems were missing information or data

consisted primarily of background characteristics on the primary target population. Further, record keeping was often not uniform and thus data was difficult to retrieve even when agency personnel assisted in reconstructing problematic aspects of the records. Those programs that had maintained records which were of some use, had periodically transferred particular data elements from records to a log sheet. This enabled the CJEU and research interns to easily prepare this information for computer analysis.

Data collected directly from program participants were the most relevant for evaluation purposes. Using this source of data, specific data of interest were generated by questionnaire or telephone interview techniques. Although more time is expended in collecting information directly from individuals, it was found that cooperation from agency personnel in each of the seven validation projects created ideal conditions for collection of such data. In some agencies work schedules were altered in order for questionnaires to be administered under optimum conditions. In the County police department, decision makers personally notified supervisors in the same agency or administrators in other agencies that the CJEU staff and students would be delivering questionnaires or contacting their personnel by telephone. In agencies where confidentiality was important, counselors placed each telephone call and then turned the conversation over to interviewers. In short, without agency cooperation in collecting necessary data for analysis, it would have been impossible to meet evaluation deadlines.

Another important consideration in program evaluation is type and size of samples from which data can be obtained. Looking at Table 2, one can see the sample variation of the seven programs being evaluated. In all validation projects, the sample size was considered small but representative. For example,

in several of the projects all or nearly all of the target population participated in the evaluation. In other evaluations, such as the Youth Service Bureau, approximately one-third of the target population could be contacted for an interview. However, when comparing record data available on former clients who were interviewed with those not interviewed, only minimal differences were found. In the case of the Felony Complaint Screening Unit evaluation, random samples procedures were used to select officers for the study.

The most problematic step in the data generation phase of each evaluation project was step 3 of our data generation, developing measures for various data elements. This set of activities consumed from two to four of the nine month academic year with the CJEU staff having to provide more input than time allowed. In retrospect, students with several research courses were not equipped with necessary skills to construct questionnaires and interviews. Instead of the CJEU staff working independently with each project, structured classes should have been held to facilitate the development of research instruments.

Data collecting and coding involved approximately one month in March of each validation year. First, research instruments were pretested and then data collected from the designated samples selected for each evaluation project. Assistance was provided for these activities by assigning one or two undergraduates to each project. In cases where data were collected by telephone interview, several pretests per interviewer were made to familiarize individuals with potential problems. It was imperative that interviewers for a given project use the same lead-in statements and probes.

The last set of data generation activities, processing of data, took several weeks. First, a detailed codebook was constructed for each project to serve as a guide in identifying information on computer cards. Second, data which were

transferred onto optical scanning sheets were checked for coding errors by having a different coder recode a 10 percent sample, with less than one percent error being tolerated. Third, these data were machine punched onto computer cards and printed out to be crossed checked with the original optical scanning sheets for incompatible or missing codes. At the completion of this task, data were prepared for computer analysis.

D. ANALYSIS STRATEGY: PHASE IV

In the field of criminal justice, analysis of data collected for evaluative research purposes is typically the weakest link in the research process. It is not uncommon to find reported results simply presented as frequencies, percentages, or averages on single data elements. Combinations of data elements on the basis of empirical justification and checks for spurious affects are nearly nonexistent.

In an effort to develop a feasible analysis strategy with substance, we have validated a two stage strategy which places emphasis on:

- * constructing summated outcome measures using factor analysis
- * uncovering statistically significant relationships between outcome and process measures while controlling for possible spuriousness.

Adoption of such an analysis strategy presumes that the user is somewhat familiar with computer analysis and has had some training in statistical manipulation of data.

For the initial validation of this analysis strategy using the seven projects being discussed, the UNIVAC 1106 and 1108 computers housed at the University of Maryland were available through computer time set aside for research courses. A prepackage system of computer programs called Statistical Package for the Social Science (SPSS) was used for each step of the analysis to be presented. SPSS is being used nationally at nearly 600 installations including conversions to almost 20 different types of computers. Other well known packages such as the Biomedical Computer Programs (BMD) were available; however, student research

interns had prior exposure to SPSS in introductory methodology courses, thus making this package more desirable for our validation. Its documentation is straight forward and requires little training to operate.

This phase of the evaluation was highly structured during both years of our validation. Formal classroom sessions involved computer illustrations and discussions of analysis techniques being used on each project. CJEU research assistants with computer analysis experience were also available to assist student research interns during each step of the analysis. At critical stages of the analysis, the CJEU research director conducted a detailed review of the procedures and computer output generated on each project. He also assisted in setting up computer programs for subsequent steps in the analysis. Table 3 presents a step-by-step description of the analysis strategy.

An inspection of Table 3 reveals our analysis strategy to be more extensive than most. The first step is to make final error checks by examining frequency distributions on the four classes of data elements previously discussed--outcome indicators, population characteristics, program process measures, and environmental factors. We also found this information to be of interest to decision makers in county government and in each agency housing LEAA funded programs being evaluated. Good discussions were generated by presenting population characteristics and process variable frequencies in table form.

1. Development of Outcome Measures

Stage one of our analysis strategy included steps 2-4 presented in Table 3. Initially, questions purported to measure various dimensions of an outcome are submitted to factor analysis, a procedure useful when analyzing self-reported attitudes and behavior. Results from this analysis uncover those questions which can be combined together as more reliable and valid outcome indices. These procedures also help reduce the amount of information for subsequent analyses.

TABLE 3

Analysis Strategy for Process Evaluation

Step	Description	Purpose	Analysis Procedure Illustration
1.	Generate frequency distribution on all gathered data	<ul style="list-style-type: none"> - Serves as an error check - Provides a description of the data 	<ul style="list-style-type: none"> - Frequencies - Histograms
STAGE I			
2.	Discover outcome measures that are similar	<ul style="list-style-type: none"> - To reduce redundancy - To increase reliability of outcomes 	<ul style="list-style-type: none"> - Factor analysis - Scatter grams/plots
3.	Construct outcome indices (one index for each set of outcomes found in Step 2)	<ul style="list-style-type: none"> - To establish reliable and valid outcome measures - To reduce the number of computer runs 	<ul style="list-style-type: none"> - Sum up item values or weight each item (multiple value X factor loading and then sum) - Use SPSS computer procedures to construct change indicators
4.	Generate frequency distribution on developed outcome indices	<ul style="list-style-type: none"> - Again serves as an error check - Provides description of outcome indices for subsequent analysis 	<ul style="list-style-type: none"> - Frequencies - Histograms
STAGE II			
5.	Discover significant relationships between process measures and outcome indices	<ul style="list-style-type: none"> - Serves to identify key processes which may be manipulated and thus effect some policy relevant outcome 	<ul style="list-style-type: none"> - Analysis of variance - Two-way cross classification analysis - Bivariate Correlation Analysis
6.	Discover significant relationships between process measures and outcome indices with control measures (i.e. environmental and population characteristics)	<ul style="list-style-type: none"> - Aids in making decisions about which measures may produce spurious effects 	<ul style="list-style-type: none"> - Parametric correlation - Nonparametric correlations
7.	Discover significant relationships between relevant process measures and outcomes while considering control measures	<ul style="list-style-type: none"> - Serves to partial out effects of spurious relationships - Also helps determine most relevant process-outcome relationships within sub-groups of the population 	<ul style="list-style-type: none"> - Analysis of co-variance - Three-way cross classification - Multiple regression - Partial correlation

Usage of factor analysis can be illustrated by attempts to develop reliable and valid measures for family adjustment of clients who had terminated their participation in the Youth Service Bureau. Originally ten questions were asked to determine conflict between clients and other family members. These interview questions were factor analyzed using a varimax rotated factor matrix as the terminal solution.⁹ To select the best group of indicators to be later summed up to measure family adjustment, three criteria were used:

- Items with factor loadings which exceed .40
- Items that attempt to load on only one factor
- Items which appear content-wise to measure the same outcome

This analysis revealed that only four questions or items dealing with client-parent conflict could be summed up to form a family adjustment index.

If other sets of items are included in an analysis as measures of a second or third outcome, these items are also factor analyzed, one set per analysis. The final factor analysis includes all sets of items analyzed together, a final check to see whether selected items "cluster" together in the same way. This increases the investigator's confidence that the best set of indicators are selected for subsequent analysis.

Step four of the analysis strategy simply entails summing values of the items discovered by factor analysis as measuring the same outcome. In cases where there is missing data, SPSS provides routines to substitute mean or median values in place of the missing responses. The analyst may decide to sum up values of those items assuming that each item is of equal importance. The importance of items can be determined, however, by examining the extent to which factor loadings are similar. If some items selected for the summated score appear much more important than others, (higher factor loadings) the

⁹ See Nie, Norman H. et al C.H. Hull, J.C. Jenkins, K. Steinbrenner, D.H. Brent McGraw-Hill Book Company for an excellent discussion of this procedure.

analyst may decide to weight each item by multiplying the factor loading (or betas when using SPSS) by the value of each item to be summed. A summated score consisting of these new computed item values increases the validity of the outcome measure. In our validation studies weighted factor loading were only assigned to item values in the drug program evaluation.

To complete stage one of the analysis strategy, frequency distributions are generated for each summated outcome index. It is important to recognize that these outcome measures are only yardsticks by which to evaluate the affects of program processes introduced in subsequent analysis. In lieu of this purpose, we want to develop indices with scores that are normally distributed over the entire range of possible values for a particular measure. In the oral and written presentations of our evaluation findings, we discussed table displays of all indices with the type of questions that made up each summated score. These outcome measures were used to describe respondents feelings and behavioral measures of goal attainment.

2. Discovery of Important Program Processes

Stage two of our analysis strategy involves uncovering statistically significant relationships between outcomes and internal program process measures while controlling for characteristics of the sample and the environment. Often policy statements are based on the bivariate analysis results, a practice not in the best interest of policy formulation. The analysis may be in error if findings are presented to a decision maker without first controlling for possible spurious effects of individual and environmental factors.

Referring back to Table 3 we find in step five of our strategy that the bivariate relationship between processes and outcomes can be determined by

procedures such as two-way cross classification analysis (cross tabulation) or one-way analysis of variance (ANOVA). Cross classification analysis is appropriate when the sample size is sufficiently large to prevent empty cells from appearing in cross tabulation, and there is a small number of categories (values) in each outcome measure. One-way analysis of variance (ANOVA) is used with smaller samples and when the outcome measure meets the continuous data requirement (ordinal or interval level of measurement).

In our validation of the seven projects, small samples dictated the initial use of ANOVA. In this analysis the computer generated mean scores on the outcome measure of interest for each specified category of a given program process variable. These mean differences between various categories of process measures were analyzed for statistical significance using the F statistic. Using again the example of family adjustment and differences between types of treatment, mean adjustment scores can be computed on all of the clients who received only group counseling can be generated. By analyzing the variation of adjustment scores within and between each of these groups receiving different treatment, the level of significance of this difference can be determined using the F statistic as the criterion.

When working with target populations, the analyst should not forget that the F statistic shows the extent to which observed differences found in a probability sample can be generalized to the population from which it is a part. Further, in many cases the F statistic cannot be used because of its inability to meet the "homogeneity of variance" assumption of the analysis of variance. In the validation projects, student research interns were confronted frequently with large variance discrepancies across categories of process variables; consequently, statistical significance was used as a secondary

criterion. When appropriate however, the F statistic helped to increase confidence regarding the reliability of significant differences which were uncovered in our sample.

In addition to giving the analyst clues to the association of specific processes with outcome measures, step five of the analysis strategy aided in making decisions as to how to recode process variables so that there would be sufficient numbers of cases per category to be policy relevant, especially where the sample was small. An example of this use is "length of stay" in the treatment program being evaluated. When length of stay is broken down into six categories, ranging from one month to six months, assume that the ANOVA computer run determines that there are only two residents who had been in the group home or half-way house for three months; this group is too small to have any policy relevance. In this situation the analyst examines the mean adjustment scores and places these cases into either two or four month categories, depending upon the similarity of the mean score.

Step six of our analysis strategy is really a bridge to step seven. Its purpose is to provide, through the use of a bivariate correlational technique, an empirical rationale for which characteristics of the sample and environment can be selected as control variables. ANOVA can be used in case of nominal level characteristics such as "type of crime". If a characteristic is discovered to be significantly related to either an outcome or process variable, then it is selected as a control to be considered in step seven. Occasionally, characteristics will emerge as nonsignificant, yet the analyst will decide to consider it as a control on basic assumptions held by decision makers about the importance of this characteristic, or because evidence of curvilinearity appears to have had affected its correlation with other variables.

The final step in our analysis strategy entails examining the relationship between important process measures and outcomes while controlling for the effects of other process and/or key characteristics of the sample and environment. The main purpose of this step is to enhance the policy relevance of those process-outcome relationships found in step five. Specifically, consideration of controls may increase confidence that the original relationships are real, or it may simply help to determine the conditions upon which program processes are most relevant.

Decision rules used to determine the most appropriate procedures for introducing control variables into the analysis were sample size, statistical skills of principal investigators and research background of key decision makers. In six of the seven validation studies, a three-way classification analysis was selected as an appropriate procedure; it compares average outcome differences by process variables while controlling for a single individual characteristic or other policy variable. This technique is appropriate for small samples and results are easily produced by computer subprograms such as SPSS's crossbreak subroutine. Experience is needed to accurately interpret the computer output, however, results can be presented in a straight forward way to decision makers who have little research background.

In addition to increased confidence that other variables are not contaminating original relationships between outcomes and program processes, a three-way classification analysis may yield three types of conditional relationships. First, in some cases the introduction of a control variable specified conditions under which the original relationship was most pronounced. For example, when the investigator assigned to the Consumer and Commercial Fraud Unit gave tips to victims about how to prevent future "rip-offs",

males were found to have higher satisfaction with the Unit than females who had been given tips by the investigator. A second conditional relationship is where the original relationship completely disappears when a control variable is introduced. For instance, in the half-way house evaluation, it was found that only among 17-25 year old ex-residents, higher job adjustment was associated with individual having been able to share their problems with staff.

A final conditional relationship which occasionally emerges is that nonsignificant original relationships become significant when a control variable is considered, such was the case in the evaluation of the Felony Complaint Screening Unit. That is, initially, we found no association between perceived case review propensity and amount of praise given to officers by the Unit staff. However, controlling for police assignments revealed that praise did make a difference in officers perceived propensity of the case review process among detectives assigned to the Bureau of Criminal Investigation, but not those policemen working at the district level of the department.

Another analysis procedure used in the drug program evaluation to control for spuriousness on a set of variables was partial correlation. This technique may be used to determine the influence that a particular process measure has on program outcomes while controlling for several other variables simultaneously. The decision to use a more sophisticated analysis procedure was due to an adequate sample size and highly correlated process variables which could cause spuriousness. In addition, the student research intern's statistical skills were sufficient to use such a technique and the key decision maker's research background was adequate to interpret output from the multivariate procedure.

Completion of stage two of our analysis strategy for our validation projects revealed that meaningful findings can emerge from process evaluation procedures. In the oral and written presentations of evaluation findings decision makers quickly grasped our display of results from both stages one and two. Suggestions were made in the oral presentation about additional relationships which should have been analyzed, most of which were completed and incorporated into the final written report of the validation project results. In addition, there was discussion of other process variables that we failed to identify but which could be included in future evaluation projects

In the first year of validating our process evaluation methodology, little time was allowed for discussion regarding how results could be utilized, a problem which was corrected in all oral presentations for the second year. A general presentation of ways in which evaluation findings emerging from each of the validation project might be used follows.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V

Phase V of our evaluation strategy represents the ultimate objective of this alternative evaluation approach being presented. We want the strategy to be a vehicle for generating evaluation findings which will be used by those decision makers who are directly or indirectly affiliated with a particular LEAA funded program. Such agency personnel are Project Directors, Head Administrators, County Budget Director, Criminal Justice Analyst, Executive and Legislative Officials who are involved in setting criminal justice program policy.

1. Data Utilization by Local Criminal Justice Agencies

Decision makers in agencies where LEAA funded programs are being evaluated will benefit the most from an evaluation of program processes. According

to Twain (1970), there are four potential usages which seem appropriate for this group of decision makers. Process evaluation findings may:

- offer support to continue emphasizing the importance of specific program processes
- identify processes which need modification
- offer new direction for future program development
- serve as a springboard for future research

* Data Support for Current Program Emphasis

In all operating programs, personnel assume that some activities are more important than others, and thus place heavier emphasis on these perceived important aspects of the program. Where a process evaluation uncovers these processes are associated with goal attainment criteria, then evaluation results should support continued emphasis on such aspects of the program. Whether increased emphasis is in order can be determined by examining the amount of emphasis currently being placed on program processes, especially the descriptive data that pertains to process variables.

For example, in the basic entrance level police training evaluation, training personnel indicated that Instructors' enthusiasm was viewed as extremely important, and hence they placed heavy emphasis on this quality. Data supporting this emphasis was uncovered by finding that graduates who had performed better in class, had reported higher recall and benefit from training also remembered Instructors being enthusiastic. An inspection of descriptive data on graduates' reports of enthusiasm of Prince George's County Instructors as compared to Guest Instructors, revealed that substantially more of Prince George's County Instructors were viewed as enthusiastic than were Guest Instructors. Hence, our research suggestion, agreed upon by decision makers, resulted in a decision to monitoring Guest Instructors more closely.

* Empirical Guidance for Program Modification and Program Development

Frequently, process evaluation findings assists in identifying aspects of programs that need modifying. That is, program processes which are sometimes overlooked, may be associated with goal attainment. An example of this data usage emerged in the presentation of our findings from the Consumer and Commercial Fraud Unit evaluation. This evaluation revealed that fraud victims who had been informed of the final disposition of their case reported higher satisfaction with the Unit's performance than those not receiving notification. An inspection of the frequency distribution regarding notification of final case disposition revealed that thirty percent of the victims indicated they were not informed, a percentage that the State's Attorney's stated was too high and subsequently would be corrected. Such a position, taken by an agency head illustrates where modification can be made to enhance goal attainment.

Potential usages of results in a third area is the development of new ideas for evaluation findings. For example, in our evaluation of various processes operating in group homes, we found that length of stay of residents was not related to adjustment in their family setting. This finding was the basis for suggesting that future group homes in Prince George's County consider minimum and/or maximum length of stay periods rather than indeterminate periods.

* Process Evaluation Serving as a Springboard for Future Research

Final usages of process evaluation that were discussed with decision makers were in regard to future research activities. One possible stimulus for future evaluation may result from findings which are based on a limited sample size and subsequently seen as inconclusive. An example of inconclusive findings emerged in the Youth Service Bureau Evaluation. Here, we found that the number of youth attending school was too small to use the school adjustment

criteria as a reference point to evaluate program processes. In the future a replication using a larger sample of this subgroup of former clients should prove to be policy relevant.

Another need for further research which emerged in several of our final presentations was that results can serve as clues to other policy relevant process variables which were initially overlooked. In our discussion of evaluation finding with Second Genesis Therapeutic Community for example, it became evident that residents perceived rejection resulting from disciplinary tools of the program may be related to program outcomes of interests, benefit of program, peer cohesion and community adjustment. In that meeting, plans were made to incorporate this process variable into a process evaluation to be conducted by Second Genesis research staff involving four of their residential facilities.

2. Governmental Use of Process Evaluation Findings

Other decision makers who might benefit from process evaluation results include county government officials, and planners at the regional and state level. In regard to county government, data can be viewed as additional descriptive information about the dynamics of programs and subsequently can assist when deciding whether to award continued funding for specific programs. Further, the extent to which agency decision makers use process evaluation results to improve their program could be designated as one criteria for making funding decisions. That is, when programs of various kinds are having to compete for scarce financial resources, agencies who conduct and use evaluation findings to enhance goals attainments should receive credit for such efforts. As previously stated, process evaluation procedures are used on a post hoc basis with no control groups, consequently questions concerning

success or failure cannot be adequately answered. It is imperative that County decision makers recognize that interpretation of results is value laden.

One critical issue which had to be resolved in providing policy relevant information to county government was timing of finished evaluation products. In Prince George's County, county budget decisions are made in March and the CJEU process evaluations results on third year LEAA projects are completed in late May or early June, the end of an academic year. In order to provide the County with evaluation results in early spring the CJEU evaluated key second year LEAA funded programs, thus generating findings for County use the following year. Realizing this change from evaluating third year LEAA funded programs to evaluating the processes of second year projects, the CJEU staff will be able to provide information for both local agency decision makers and Prince George's County.

Another set of governmental agencies which can profit from CJEU evaluation efforts is the Regional and State level planning agencies. Although the evaluation results generated over the past two years were not intended to be used for funding decisions at these levels of government, evaluation projects do provide additional documentation for over two million dollars of LEAA funds awarded to Prince George's County. This information is especially important since LEAA is calling for more accountability at the State level.

3. Concluding Statement

This detailed description and analysis of our five phased evaluation strategy serves primarily as a "cookbook" for using University students to conduct program evaluation. On the other hand, the process evaluation methodology being presented has more general use, provided an agency has personnel with research backgrounds and funds for computer analysis of data. If such personnel and

resources are available, then this "how to do it" presentation coupled with a short training course, should provide adequate guidance for criminal justice agencies and governmental planning staffs to conduct program evaluation as described in this handbook. In any advent, when implementing either the entire evaluation strategy or simply using the process evaluation procedures, one should recognize that the strategy is designed to supplement intensive evaluation, not replace attempts to assess the effectiveness of programs.

APPENDIX A

VALIDATION OF UNIVERSITY BASED PROGRAM EVALUATION: SEVEN EVALUATION STUDIES

In the 1970's there have been an increasing amount of discussion about evaluation of action programs in criminal justice. Several handbooks previously mentioned are available regarding how to design monitoring and intensive evaluation projects and numerous evaluation studies have been presented in report form to LEAA, SPA's and RPU's across the nation. Unfortunately, publications that discuss evaluation strategies fail to include "how to do it" examples. Further, no published collection of evaluation studies in criminal justice exist that can serve as a guide for evaluating various types of programs.

In light of these voids, the purpose of including the following program evaluation studies is two fold. First, these studies illustrates work products from a specific evaluation strategy being validated. Second, they represent a collection of evaluation studies that may be useful to various audiences interested in program evaluation.

Evaluation of seven LEAA funded action programs are being presented for the purposes stated above. Each evaluation project, coordinating agency and principal investigator are listed below.

<u>Coordinating Agencies</u>	<u>Evaluations Projects Completed During the 1974-75 Academic Yr.</u>	<u>Principal Investigators</u>
-Prince George's County State's Attorney's Office	Consumer and Commercial Fraud Unit Evaluation	-Mr. Jersey M. Green, Undergraduate Research Intern -Mr. Richard A. Tamberino, CJEU Research Assistant
-Dept. of Juvenile Services	An Evaluation of 8 selected Prince George's County Homes for Delinquent youth	-Ms. Linda A. White, Undergraduate Research Intern
-Second Genesis, Inc.	Prince George's County Second Genesis Therapeutic Community Evaluation	-Mr. Thomas M. Browne, Graduate Research Intern

Evaluations Projects Completed During the 1975-76 Academic Yr.

-Prince George's County Police	Basic Entrance Level Police Training Program Evaluation	-Mr. Thomas Meachem, Undergraduate Research Intern
-Prince George's County Police	An Evaluation of Case Reviews conducted by the Felony Complaint Screening Unit	-Mr. Jersey M. Green, Undergraduate Research Intern
-Prince George's County State's Attorney's Office		-Mr. Mark Kleinsorge, Graduate Research Intern
-OASIS Youth Services Bureau	OASIS Youth Service Bureau Evaluation	-Mr. David Celeste, Jr., Graduate Research Intern
-Adult Probation and Parole	Prince George's County Halfway House Evaluation	-Ms. Rosemary Leonard, Undergraduate Research Intern

These projects were closely monitored by the Criminal Justice Evaluation Unit Research Director during each of five evaluation phases completed by the principal investigators. Periodic reviews were conducted for each work product, especially during the research instrument construction and data analysis phases of the evaluations. The research director also assumed responsibility for revising each final evaluation report and disseminating these products to agency decision makers for review. Through telephone conversations or scheduled meetings, decision maker's comments were obtained and incorporated into the report which was presented to County government officials, Region IV and Governor's Commission staff. With slight modification and exclusion of tables, these evaluation reports are being presented in this handbook.

I. CONSUMER AND COMMERCIAL FRAUD UNIT EVALUATION:

A. INTRODUCTION: UNIVERSITY INVOLVEMENT IN EVALUATING PRINCE
GEORGES COUNTY'S CONSUMER AND COMMERCIAL FRAUD UNIT

Beginning in 1972 a Consumer and Commercial Fraud (CCF) Unit was established within the States Attorney's Office located in Prince Georges County, Maryland. Financial support was obtained through LEAA's block monies which were awarded by the Maryland Governor's Commission on Law Enforcement and the Administration of Justice. The CCF Unit was composed of one full-time investigator, an attorney and one secretary. On occasion legal interns assisted in responding to initial complaints of potential fraud victims. All complaints were either referred to other agencies such as the Consumer Protection Agency, or processed to determine whether there was sufficient evidence to warrant an arrest.

In the fall of 1974, the Prince Georges County's Criminal Justice Evaluation Unit (CJEU) staff which is comprised of county and University of Maryland personnel and students began an evaluation of the CCF activities. The initial phase of the CCF evaluation strategy entailed creating new part-time, non-paid, research roles in the agency where specific programs need evaluating. In the States Attorney's Office, the student researcher role was linked to the chief investigator in charge of the Consumer and Commercial

Fraud Unit. Time schedules were set during the first semester. However, because of the unanticipated circumstances (student researcher left the project), changes in the "game plan" were made. The CJEU staff with the assistance of several students taking an independent research course completed the evaluation.

B. DEVELOPMENT OF THE EVALUATION FRAMEWORK: PHASE II

During Phase II of the evaluation, outcomes were developed from the implicit objectives of the CCF unit, a strategy which was based on data collected directly from citizens who had lodged a complaint to the CCF unit. Although four outcomes were initially derived from policy relevant objectives, only three of these outcomes were deemed significant in the analysis stage. They were:

- * client satisfaction with CCF unit service
- * CCF propensity to reduce client's fear of being victimized
- * client cooperation in controlling future fraudulent crimes

Internal and external processes were identified next, with emphasis on the process which could be directly affected by the States Attorney's Office. We were interested in examining the Association between investigator's attitude and demeanor, number of days in which cases are opened, and type of restitution and the stated outcomes.

Through a mutual decision of the SAO and the CJEU research staff, the target population consisted of all those clients who had contact with the CJEU over a 22-month operation period, beginning May 1973. These citizens were allegedly victims of some fraudulent act.

Initially, the CJEU staff reviewed CCF reporting forms to determine the number of clients who were handled by the LEAA funded investigator. This

investigator was consulted for any pertinent information which was missing.

Upon completion of this procedure, there were 109 clients identified for

possible inclusion in the study. Population characteristics of interest were:

- * Age
- * Sex
- * Race
- * Area of Residence
- * Occupation
- * Victimization History
- * Previous Contact w/SAO
- * Prior Knowledge of CCF Unit
- * Relationship with the accused

To summarize our evaluation framework for the CCF Unit study, Table 1 presents the four classes of data elements discussed above.

TABLE I
EVALUATION FRAMEWORK FOR THE CCF UNIT

Outcomes	Internal Processes	Characteristic of Victim	External Process (Environmental Factors)
Client Satisfaction with CCF Unit service	Degree of investigator's understanding interest	Age Sex	Source of Referral
CCF Propensity to Reduce Client's Fear of being victimized	No. of Face to Face contacts	Race	
	No. of telephone contacts	Area of Residence	
	No. of tips offered by investigator	Occupation Victimization History	
Client cooperation in controlling future fraudulent crimes	No. of hours investigated	Previous Contact with SAO	
	No. of days case open	Prior knowledge of CCF Unit	
	Informed of the final result of the investigation	Relationship with the Accused	
	Action taken by the Investigator		
	Type of restitution		

C. DATA GENERATION STRATEGY: PHASE III

The third phase of the evaluation strategy deals with generating data which answers the policy relevant questions of interest. Since the evaluation of the CCFU occurs after the unit had been in operation for two years, a one-shot, post-hoc research design was deemed most appropriate. This design, which only involves those fraud victims who have lodged complaints with the CCFU (no control group) allows one to evaluate the dynamics of the unit with minimal disturbance to day to day operations.

Initially the 16 out-of-state clients were eliminated for the University of Maryland telephone tie-line operates only in the state of Maryland. Some clients could not be reached due to changes of address, most of whom were victims who registered in 1973. Some people were not available when an interviewer called, and several of the victims refused the interview. Of the total population identified (109), 54 were interviewed, 29 could not be contacted and 16, who were not in-state residents, were not considered for inclusion. This means of a possible 93 in-state victims called, approximately 60 percent were interviewed. In comparing those victims interviewed with those in-state people not interviewed, we can say that the sample obtained tends to be representative of the population according to sex, residential area, type of crime, dispositions and restitution.

Information included in the interview pertained to the stated outcomes, internal operation of the Fraud Unit, and characteristics of the victims. Step by step procedures used to generate such data for the CCF evaluation are listed below:

Activities	Description
Identify source of data	Records and fraud victims
Develop measures of program processes and outcomes	Specific questions which fraud victims answered
Select data collection prodedures	Telephone interview
Prétest research instruments tested in the telephone interview	
Collect Data	
Construct code book	
Establish coder reliability	
Keypunch data onto computer cards Stage I	Questionnaires randomly checked for mistakes in coding.
Keypunch data	Machine punching utilized
Establish coder reliability Stage II	Data processed through lister to identify more mistakes
Stage III	Preliminary computer runs to generate distribution for final error check

The major concern in this phase is to generate data for computer analysis which represented reliable and valid indicators of reality. One advantage in using the pretest to establish reliability was to train the three interviewers in administering the interview. Consistent coding of the respondents across three interviewers was also checked after all interview and record data were collected. Less than 1 percent error was found. Machine punching the data was also a factor in reducing the number of errors. A final check in establishing reliability in this data generation phase was through the first preliminary computer run, which located coded responses that were outside of the ranges of possible responses.

D. ANALYSIS STRATEGY: PHASE IV

1. Development of Reliable Outcome Measures

In the analysis phase, CJEU staff and student researchers built, using a factor analysis procedure, reliable and valid scales for the three outcomes measures which were identified as important policy concerns. Factor analysis helps uncover specific interview questions which seem to measure the same outcome. Five questions clustered together to measure fraud victims' satisfaction with the CCF unit, three questions were uncovered as being good indicators of victims future cooperation with the CCF unit. Responses to each of these sets of questions were summed up to form a single index for each of the outcomes of interest.

In general:

- * Most of the fraud victims were satisfied with the Unit, with 23 percent being very satisfied and only 12 percent expressing low satisfaction.
- * Most victims felt that the Unit reduced their fear of crime.
- * Large majority stated that they would definitely assist in controlling future fraudulent crimes.

Although the distributions of these outcome indices were skewed, there were sufficient variation to warrant their inclusion as yardsticks to evaluation the dynamics of the Consumer and Commercial Fraud Unit.

2. Description of Unit Activities (Program Processes)

In addition to describing victim's satisfaction, level of fear and cooperativeness in the future, we asked the respondents questions about how the principal investigator handled their complaint. Record data were also examined which described the amount and type of action taken for each of the cases concerning the 54 victims interviewed. A partial description of

these data are listed below.

- * A large percentage felt that the investigator was understanding, was interested in their complaint and did not make them feel like they were wasting the investigator's time.
- * One-third stated that he also offered them tips on how to prevent them from being victimized.
- * Thirty percent were not notified of the final disposition. Forty-four percent said that they had been notified and 26 percent said that their case was still pending.
- * Thirty-five percent of the cases were processed by the Unit within one week, 35 percent were closed in one to four weeks and 30 percent remained opened from one to fourteen months.
- * One-third of the victims had received restitution in the form of money or services and 17 percent did not receive such payments. Record data showed that one-half of the cases were still pending or no restitution information had been recorded.

3. Discovery of Unit Activities Which are Related to Outcomes Indices

Important findings which emerged from our attempts to uncover certain statistical significant relationships between unit activities and program outcomes comprised the final stage of our analysis strategy. An analysis of variance procedure was used to uncover differences in average outcome scores across subgroups of victims who had different experiences as to how the CCF handled their case (process variables--e.g., different number of contacts with the unit's investigator). To increase our confidence that any significant findings were not being affected by other variables, we controlled for sex of the victim and type of crime, two variables which were found to be highly correlated with several of our outcomes. Listed below are results of these analyses.

- * Fraud victims who reported that the unit investigator was both understanding and interested in their case were more

satisfied, felt that the Unit could reduce fear and would cooperate in controlling future crime more than those victims who felt the investigator was not understanding and interested.

- * When there were more than two face-to-face contacts, client satisfaction became significantly higher.
- * When there were more than two telephone contacts, client satisfaction became significantly higher.
- * When controlling for sex and type of crime, we found that:
 - the number of telephone contacts with male clients influenced satisfaction more than female clients satisfaction.
 - both the number of telephone and face-to-face contacts with male clients seemed to influence future cooperation in controlling fraudulent crime more than with female clients.
- * When the fraud investigator gave tips about how to prevent future "rip-offs," male victims were found to be more satisfied and also perceived the unit's propensity to reduce their fear of crime greater than female victims.
- * Fraud victims who reported that they had been informed of the final disposition expressed significantly higher satisfaction with the Unit than those victims who had not been notified.
- * Whether or not victims received restitution was not significantly related to any of the outcomes.

No other significant relationships appeared. However, a general trend appeared in the relationship between these processes and other program outcomes. It seems that when telephone and face-to-face contact increase future cooperation and CCFU propensity to reduce fear also increases. It also appears that with more investigative hours, higher degrees of future cooperation and perspectives of the CCFU propensity to reduce the fear of crime also occur.

Looking at the number of days of investigation, we see slightly different relationships. As the number of days exceeded seven but remained open less than 28 days, clients satisfaction increased significantly. Further, although the relationship is not significant for any other outcomes, we see the same trend occurring with these outcomes, i.e., clients were more satisfied, expected to cooperate more in the future and perceived higher the CCFU's propensity to reduce fear of crime when their case remained open between 7 and 28 days.

In addition to the preceding results which stem directly from our quantitative analysis, several observations are worth noting:

- * As in most criminal justice agencies keeping accurate and policy relevant information on certain measures of effectiveness, unit activities, and case history needs much more attention by the States Attorney's Office. Unfortunately, there is insufficient personnel to devote adequate time to completing these tasks.
- * It also was observed that appropriate mechanisms need to be established to insure close coordination of information with other key agencies such as the Consumer Protection Agency.
- * In addition, it was evident that the volume of complaints were disproportionate to personnel available to handle such cases.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V

Potential use of findings from process evaluation is the most important phase of our evaluation strategy. The findings uncovered by the process evaluation could either support the present direction, suggest program modification or development or state a need for future research.

Potential use of such findings regarding the States Attorney's Consumer and Commercial Fraud Unit operations are as follows: Each suggestion is followed by the specific result(s)

- * Results should help justify continued funding by the County.
 - Investigator's demeanor was found to be supportive and thus advantageous when concerned with providing good service to the public.
 - More telephone contact and face-to-face contact was associated with higher levels of client satisfaction and cooperation and hence suggests program modification and/or program development.
- * The male investigator should reevaluate how he deals with female victims or a female should be added to the unit.
 - Results show that the number of telephone contacts with male clients influenced satisfaction more than female client's satisfaction.
 - Both the number of telephone and face-to-face contacts with male clients seemed to influence future cooperation in controlling fraudulent crime more than with female clients.
- * It was found that notification of final disposition is an important consideration, consequently it is suggested that policy guidelines be formulated to insure that all complainants be informed about what happened to their case.
- * If reduction of the fear of crime is important, then the unit should add a program component which concentrates on helping prevent future "rip-offs."
 - Approximately one-third said that the investigator offered them tips on how to prevent them from being victims of future frauds. This data seems to suggest an expansion of the CCFU to include a prevention component which concentrates on such activities or education.
- * Suggestions as how to combat problems which were observed by the CJEU staff are as follows:
 - First, more accurate and policy relevant information should be generated on LEAA funded projects such as the CCF unit if part-time research roles would be built into the initial grants. Such a person could be responsible for developing a detailed monitoring system with technical assistance from the CJEU staff, Region IV and the Maryland Governor's Commission. In addition, this person could coordinate collection of data and analysis of these data for quarterly reports.

- In regards to closer coordination between the CCF unit and other agencies, a series of meetings could be held to formulate policy guidelines that pertain to referral. Further, if a fraud prevention component were deemed feasible, the Consumer Protection Agency personnel should be involved in planning and implementing specific fraud prevention programs.

- Our observation that the volume of fraud complaints is disproportionate to personnel available to handle such cases suggests the unit should be expanded to insure that victims of these types of crimes receive quality services.

II. AN EVALUATION OF A SELECTED COMMUNITY-BASED TREATMENT PROGRAM IN PRINCE GEORGES COUNTY

A. INTRODUCTION: UNIVERSITY INVOLVEMENT IN EVALUATING COMMUNITY-BASED CORRECTIONAL PROGRAMS FOR DELINQUENT YOUTHS

To assist the Department of Juvenile Services (DJS) in their efforts to provide better services in Prince Georges County, the Institute of Criminal Justice and Criminology at the University of Maryland established a working relationship that was beneficial to both organizations. In September 1974, one student research intern who was participating in a one year evaluative research training program was assigned to work with the County's Criminal Justice Evaluation Unit in conducting a process evaluation on two LEAA funded group homes. Although desirable planning sessions revealed that an evaluation which focused on all youth who had resided in these homes over the funded period was not possible with the limited staff. It was also realized in the beginning of this project that unless a home had maintained informal contact with former residents, it would be extremely difficult to locate these youths in a follow-up study. In light of these anticipated problems, we expanded the number of homes to eight by including other

non-federally funded residents, both group and intensive foster care homes, into our project. Intensive foster homes have married couples placed in homes and counseling is provided by a professional staff on a part-time basis. This alternative enabled us to involve enough youth in the evaluation to validate the process evaluation procedures described earlier.

B. ELEMENTS OF THE FRAMEWORK FOR PROCESS EVALUATION: PHASE II

The target population consisted of those youths residing in three group homes and five intensive foster care homes, a total of 49 youths. Of these 49, 46 completed the questionnaire which was designed specifically for youth who were residents in these community-based treatment programs. The age of residents ranged from 12 to 18 years of age, none had completed high school and 18 residents were presently not enrolled in school. A majority of the residents were white males who were not working. Six community-based treatment homes housed boys and two were homes for girls.

After several meetings with key decision makers, it was decided that three of the explicit objectives which were stated in the two federally funded group home applications could be measured. However, that only two reliable and valid outcome measures could be considered as policy relevant: acclimation to the counseling program and adjustment to one's family while still in the program.

After meetings with home directors and the director of DJS's Community Service Division in P.C. county, seven internal program processes (activities) were identified as being relevant for investigation:

- * How often the counselors suggest ways to handle a particular situation.
- * How often youth tried the suggestion that was given by counselors.

- * How often counselors give help when needed by the youth.
- * Strictness of the counselor.
- * Whether youths were placed in a group or intensive foster home.
- * How freely youth feel they can speak.
- * Length of stay in home.

Several environmental factors (external process variables) were also taken into consideration.

- * Source of referral.
- * Whether or not youths natural parents live together.
- * Whether or not parents want youth to return home.

Table I summarizes all data elements included in these four classes of variables.

TABLE I
EVALUATION FRAMEWORK FOR PRINCE GEORGE'S COUNTY'S
COMMUNITY-BASED TREATMENT PROGRAM

Outcomes	Characteristic	Internal Processes of the Program	External Processes of the Program
Resident's Acclimation to the Counseling Program	Age	Youths speaking freely with Counselors	Source of Referral
	Race		Parents living together
	Sex	Counselors suggest solution to situations	Parents and Rejection
Resident's Adjustment to their family While still in the Program	School Grade Completed	Frequency of Counselors help	
	Employment	Frequency of Youth's Acting on Counselors Suggestions	
	School Attendance	Strictness of Counselor	
		Type of Program	
		Length of Stay in Home	

C. DATA GENERATION STRATEGY - PHASE III

All the data elements presented in Phase II were operationalized and measured by using a short questionnaire administered to residents by the student research intern and an undergraduate assistant. Where appropriate, questions from previous criminal justice research were utilized (e.g., evaluation instruments prepared by the Governor's Commission and Region IV staff). In most cases, however, data elements necessary for conducting process evaluation had to be developed by the research intern along with the assistance of the Criminal Justice Evaluation Unit. Table II presents a description of Phase III data generation activities.

TABLE II
DATA GENERATION STRATEGY

Activities	Description
Develop Measures of Program Processes and Outcomes	*Questionnaire contained 47 questions, most of which were close ended
Pre-test Research Instruments	*Questionnaire given to six residents of a shelter home in another county
Collect Data	*Researchers distributed questionnaires to eight homes (three group and five intensive foster homes) one at a time and remained at the home to give instructions and answer questions
Construct Codebook	
Establish Coder Reliability Stage I	*10% of the questionnaires randomly checked for mistakes in coding
Keypunch Data	*Data keypunched on computer cards, one card per observation
Establish Coder Reliability Stages 2 and 3	*Data processed through lister to identify more coding mistakes *Preliminary computer runs to generate distribution for final error check

D. ANALYSIS OF DATA _ PHASE IV

The analysis strategy used in this validation study consists of a sequence of steps which make up a two stage analysis process: 1) constructing composite outcome measures using factor analysis procedures and 2) uncovering statistical significant relationships between outcome and process measures while controlling for other data elements such as background characteristics.

1. Development of Reliable Outcome Measures

In stage one, factor analysis was used to build reliable and valid measures of our outcomes which were identified in the evaluation framework as important policy concerns. Factor analysis helps uncover specific questionnaire items which seem to measure the same outcome. Youth acclimation to counseling index consists of seven questions which is intended to measure the extent to which counseling and counselors help them to act better and whether the youth liked the counseling program and its counselors. Our youth adjustment to family index consists of three questionnaire item which dealt with the amount of tension existing between youth and parents, closeness of youth to their brothers and sisters, and the extent to which the youth wanted to return home after completion of the treatment program. Responses to each of these sets of questions were summed up to form single indices for each of the outcome of interest

The two outcomes are intended to be viewed as yardsticks by which we can evaluate the relative importance of various processes of community-based treatment programs under study. The distribution of the two outcome scales, were found to be normally distributed across the entire range of possible scores.

2. Description of Unit Activities (Program Processes)

In this evaluation dealing with the dynamics of treatment programs residents reported the following information about their stay in the programs under investigation.

- * Over half of the youths (52%) felt that they could say anything to their counselor.

- * Over half (54%) felt that counselors suggested solutions to situations very often.
- * Over half of the youths (63%) felt that the counselor helped most or all the time.
- * Over half (51%) never or only sometimes acted on the counselors suggestions.
- * From record data it was found that one quarter of the sample had been in their respective homes for twelve or more months

3. Discovery of Unit Activities Which Are Related to Program Outcomes

Important findings which emerged from our attempts to uncover certain statistical significant relationships between home activities and program outcomes comprised the final stage of our analysis strategy. An analysis of variance procedure was used to uncover differences in average outcome scale scores across subgroups of residents who had different experiences in community-based treatment programs. To increase our confidence that findings were not being affected by other variables, we controlled for sex of the resident, type of facility, and length of stay, three variables which were found to be correlated with several of our outcomes and process variables. Listed below are the important results which emerged from these analyses:

- * Those who feel they can speak very freely with counselors are more acclimated than those who feel they cannot speak very freely.
- * Most acclimation occurs when counselors suggestions are frequent. Least acclimation occurs when the counselors never suggest any solutions.
- * Both group and intensive foster homes housed youth are on an average acclimated to counseling; however, those youths residing in group homes are more acclimated to counseling than those youths in intensive foster homes. When controlling for the sex of residents, this difference between types of homes diminishes among girls.
- * Females who feel counselors help more than half the time are more acclimated than males who are more acclimated when the counselors are of help more than half the time.

- * Among 12-15 year old youths, length of stay makes no difference in acclimation to counseling. While 16-18 year old youths who stay longer than six months become more acclimated to counseling.
- * Youth who stated that they tried counselors suggestions very often or at least one-half the time tend to have more adjusted relationships with their families.
- * Youths who reported that counselors degree of strictness was about right had on the average more adjusted relationships with their families.

In addition to the preceeding results which stem directly from our quantitative analysis, several observations are worth noting:

- * In several of the group homes it was observed that staff personnel had to spend a considerable amount of time trying to get their home approved for special exception to zoning regulation. Time spent on such tasks reduces the amount of time available for youth residing in the homes.
- * It was also observed that staff who work in the community-based treatment program "burn out" quickly, especially in a group home setting.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V

Potential use of findings from process evaluation constitutes the most important phase of the evaluation strategy. The findings uncovered by the process evaluation either support the present direction, suggests program modification, program development or needs for future research.

- * Results should help justify continued funding by the County.
 - Majority felt they could speak freely with counselors.
 - Counselors suggest solutions.
 - Counselors are available for assistance.
- * Training counselors in different response techniques including development of helping skills and increasing the suggestion capacity of counselors.

- The more freely the youths feel they can speak to the counselors the more satisfied they are with the program.
- Youth who stated that they had tried counselors suggestions very often or at least one-half the time tend to have more adjusted relationships with their families.
- * Modification in the strictness of counselors - youths who reported that counselors degree of strictness was about right had on the average more adjusted relationships with their families.
- * Length of stay for 12-15 year olds could be altered to fit the program needs - within this age group, we found no relationship between length of stay and the two program outcomes, acclimation to the counseling program and adjustment to the family.
- * Further research endeavors
 - Analyses of similar processes in other programs (not included in this analysis).
 - Further research to answer questions concerning the roles of female and male counselors.
 - Questionnaire for the counselors regarding their perceptions of adjustment and acclimation.
 - Replication using a larger sample who have terminated.
 - Specific policy relevant concerns for future consideration:
 - * Being able to determine the impact of different types of treatment.
 - * Determining the relationship between how parents interact with their children and program outcomes.
- * Suggestions as how to combat problems which were observed by the CJEU staff are as follows:
 - Having to be overly concerned about getting community-based treatment programs established should not overburden staff personnel. This is a governmental responsibility. The appropriate government official should concentrate on this problem by expending time and energy to creating conditions in the county which are favorable to implementation of community-based treatment programs. A plan should be developed that shows where homes are currently located, problems incurred in previous attempts to implement these programs, and empirical data collected on this problem which can be used to make implementation easier.
 - In regards to staff "burning out" quickly, several community-based treatment programs are trying to develop staff schedules which allow more time away from the home.

III. AN EVALUATION OF SECOND GENESIS THERAPEUTIC COMMUNITY

A. INTRODUCTION: SECOND GENESIS - UNIVERSITY LINKAGE

In August, 1974, the Governor's Commission awarded a grant to Prince George's County to form a Criminal Justice Evaluation Unit which contracted the Institute of Criminal Justice and Criminology of the University of Maryland for technical assistance. This grant allowed for the validation of alternative evaluation procedures on key third year federally funded criminal justice programs in Prince George's County. Subsequently, Second Genesis was selected as a program for evaluation since they were in the third and final contract year of their grant.

From October to December a series of meetings with the CJEU staff and Second Genesis personnel resulted in commitments to proceed with a process evaluation of the Second Genesis program. It was established that an analysis of overall adjustment to all phases of the program would prove more feasible than an analysis of one specific problem such as absconding from the program.

In January 1975, one graduate research intern was assigned to Second Genesis as the principal investigator on the evaluation project. One of the major tasks of the research intern was to become familiar with the structure and dynamics of the program. In accomplishing this task he performed a number of additional

functions which brought him into close contact with staff and residents of the facility. These add-on functions eventually led to residents electing him to serve in Second Genesis's Alumni Association. In addition, the intern assisted the CJEU in analyzing record data for County use when making decisions about the allocation of county funds to this program after termination of LEAA monies.

B. DEVELOPMENT OF THE EVALUATION FRAMEWORK: PHASE II

Residents in the Second Genesis facility located in this county were chosen as a target population. All 68 residents were selected as subjects because the entire population of the facility provides a sample of members from all phases and levels of the program. Subjects length of stay in the facility ranged from one to twenty-one months with a mean stay of nine months, while age of subjects ranged from 14 to 32 years, with a mean age of 22 years. This dispersion allows for a broad range of opinions and feelings concerning all levels of the program

The development of measurable outcomes measures, which stem from the explicit objectives stated in the grant, required the collection of data on graduates of Second Genesis. This task was not feasible at the time of this validation study for there were too few graduates for a reliable sample size on which the processes of the program could be evaluated. Therefore, an alternative plan was used which considered outcomes that stemmed from the implicit objectives of the program, a strategy which could be based on data collected from those residents of the Prince George's facility in the Spring of 1975. Of the five outcomes considered, three were found to be reliable and valid in the analysis stage which will be discussed later. These outcomes which were used in subsequent analyses are as follows:

- * Residents peer cohesion
- * Residents perceived benefits received from the main tools used in the program, encounter sessions and contracts
- * Residents adjustment to the therapeutic community (TC)

The following activities (program processes) were identified in meetings with the student research intern and the Director of Second Genesis:

1. Dynamics of Second Genesis

- * Interaction with peers at various levels in the program
 - Peer above
 - Peer below
 - Own Peer
 - Re-entry
- * Rejection by peers or staff
- * Amount of peer help for a problem
- * Amount of peer suggestions
- * Amount of peer care displayed for each other
- * Amount of staff help for a problem
- * Amount of staff suggestion
- * Amount of staff care for residents
- * Association with persons on major learning experiences (contract)
- * Time in program
- * Times on major learning experiences (contracts)
- * Times absconded from facility
- * Participation in encounters

2. External Processes (environmental factors)

- * Amount of contact with police while in the program
- * Legal pressure to remain in the program

To summarize our evaluation framework for the Second Genesis evaluation, Table 1 on the following page presents the four classes of data elements discussed above.

C. DATA GENERATION STRATEGY - PHASE III

A 113 item questionnaire was devised with the assistance of James Hendricks, Regional Director of the program to measure data elements which appear in the evaluation framework. The student research intern generated items to measure peer cohesion, residents communication with staff, attitude toward program and

TABLE I

Evaluation Framework for Second Genesis

<u>Program Outcomes</u>	<u>Characteristics of Residents</u>	<u>Internal Program Processes</u>	<u>External Program Processes</u>
	Age	Interaction with peers at various levels in the Program	Amt. of contact with police while in Program
	Race	Peer above	
	Sex	Peer below	Legal pressure to remain in Program
	Level of Education achieved	Own peer	
	# of jobs in past 2 years, prior to entry into Program	Re-entry	
	Hobbies	Rejection by Peer	
	Type of Drug used	Staff	
Residents Perceived Benefits Received From the Program	Offense which got resident into Program	Person on Contract	
Residents Adjustment to the Therapeutic Community (TC)	Number of drug Programs attended in addition to Second Genesis	Amount of peer help for a problem	
Residents peer cohesion	Living conditions at home	Amount of peer suggestions	
	Neighborhood environment at home	Amt. of peer care displayed for each other	
	Relations with	Amt. of staff help for a problem	
	(a) Mother	Amt. of staff suggestions	
	(b) Father	Amt. of staff care for residents	
	(c) Sisters and/or Brothers	Association with person on Contract	
	Times expelled from school	Time in Program	
	Conduct in School	Times of Contract	
	Number of family moves since a child	Times absconded from facility	
	Number of schools attended in past 4 years	Participation in encounters	
		Participation in General Meetings	

acceptance and understanding the therapeutic tools of the program. A previously validated community adjustment scale (Copes, 1971) was included to measure residents adjustment to the therapeutic community.

The questionnaire was pre-tested on a random selection of residents from one of the Second Genesis facilities in Virginia. Ambiguities and inconsistencies in the questionnaire were discussed with these residents, with appropriate modification made before administering to residents in the Prince George's County facility. Pre-testing provided not only a test of the clarity of the questions and of the correctness of interpretation put upon them by the respondent, but also offered the possibility of discovering new aspects of adjustment not anticipated in the planning stage. The revised questionnaire was divided into four sections and administered to the 68 residents of the Prince George's facility in the main lounge of the facility. This allowed all residents to complete the test under standardized testing conditions.

Following completion of the survey, questionnaires were coded by the research intern, using a codebook prepared especially for the Second Genesis project. The codebook serves as a guide for transferring responses to questions to an Optical computer sheet for which IBM cards are machine punched. Rechecking 10 percent sample of the questionnaire established coder reliability with less than one percent error. After checking the punched output from the Lister printout, the data was properly prepared for computer analysis.

D. ANALYSIS OF DATA - PHASE IV

1. Development of Reliable Outcome Measures

In the analysis phase, the student researcher built, using a factor analysis procedure, reliable and valid indices for the three outcomes (Perceived Benefit, Community Adjustment, Peer Cohesion) which were identified as yardsticks to

evaluate the program processes. Factor analysis helps uncover specific questions which seem to measure the same outcome. Five questions clustered together to measure perceived benefit and community adjustment, while four questions clustered together to measure peer cohesion. Responses to each of these sets of questions were summed up to form a single score for each of the outcomes of interest.

The peer cohesion and TC adjustment indices proved to be evenly distributed across most of the range of possible scores for each index. The perceived index was found to be skewed, 75 percent of the residents reported a relatively high degree of benefit for the program, however, there was enough variation across the 68 residents to warrant its inclusion as an outcome criteria.

2. Description of Residents Experience in Program Activities

In addition to describing resident's perceived benefit, community adjustment and peer cohesion, we asked the respondents questions about the extent and nature of their experience at Second Genesis. A description of those processes which were found to be important in subsequent analysis are listed below.

- * It was found that 46 percent of the residents reported peers being helpful in solving their problems and 56 percent indicated that the staff was helpful. A large percentage of the residents felt that both other residents and the staff cared a lot about them as individuals.
- * The amount of interaction with peers was found to vary within and between the major stages of the program. Fifty-six percent of the residents reported high interaction with peers who were at the same stage of the program and 46 percent indicated high interaction with peers in the immediate level above them. On the other hand, only 28 and 30 percent respectively reported high interaction with peer below them or in the re-entry stage of the program.
- * Seventy-five percent of the residents had felt some rejection both by their peers and by staff with 26 and 28 percent respectively reporting being rejected a lot by peers and staff.
- * Fifty-four percent of the residents reported being on contract, a disciplinary tool, at least once during their stay at Second Genesis.
- * Thirty percent of the residents had absconded from the program at least once, but all had returned.

3. Discovery of Program Activities which are related to Program Outcomes

Stage two of the analysis strategy pertains to uncovering statistically significant relationships between outcomes and measures of residents experience at Second Genesis while controlling for characteristics of the sample and the environment. A partial correlation procedure was used to determine the importance of each process while controlling for other significant variables. Only those processes which reach significance and reflect stable partial correlation coefficients are reported.

* The importance of peer helping each other

-A partial correlation of .46 indicates that peer help with problems is associated with well-adjusted TC environment.

* Interaction with peers as an important program process

-Interaction with peers in the same stage of the program produced a partial correlation of .27 with perceived benefit with tools of the program, the more interaction the more benefit received from the tools of the program.

-A significant partial correlation of .24 attests to the benefits received when interaction is fostered with peers in the higher structures of the program.

-When residents higher up are looking out for those below them, adjustment will be fostered at a more rapid rate. A partial correlation of +.34 for interaction with peers below attests to this fact.

-Amount of interaction with peers on the same level in the program was related to peer cohesion (partial correlation coefficient of .36).

* Rejection by peers as an inhibitor to goal attainment

-A partial correlation of -.27, shows that the less rejection by peers the greater the perceived benefits of the program.

-Less rejection by persons on contract is also associated with high TC adjustment as shown by a partial correlation of -.32.

* The importance of hobbies in Second Genesis

-A partial correlation coefficient of .23 revealed that the more hobbies residents have the higher peer cohesion.

- * Number of siblings and past neighborhood environment as policy relevant variables

-Residents with strong relationships with siblings also reported higher benefit received from the tools of the program (partial correlation of .26).

-Residents who entered the program from stable neighborhood environments reported more positive TC adjustment than those who had come from less stable environments (.30 partial correlation).

- * It should be noted that residents relationship with peers, but not with staff was found to be associated with goal attainment criteria.
- * In addition, whether residents had absconded from the program was found not to be an inhibitor to goal attainment.

In addition to the preceding results which stem directly from our quantitative analysis, one point regarding follow-up is worth noting:

- * Currently (1976), Second Genesis is having two client follow-up studies conducted which has included an array of questions pertaining to community reintegration. In addition to self-reported involvement with drugs and/or the Criminal Justice system, the reliability of the results may be enhanced by cross checking these data with official records.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS - PHASE V

Potential use of findings from process evaluation is the most important phase of our evaluation strategy. The findings uncovered by the process evaluation could either support the present direction, suggest program modification or development or state a need for future research.

Potential use of such findings regarding Second Genesis operations are as follow : Each suggestion is followed by the specific result that we feel justifies our suggestion.

- * Staff personnel could encourage peers to help each other and increase the contacts which residents have with each other.
- A partial correlation of .46 indicates that peer help with problems is associated with a well-adjusted TC environment.
- Interaction with peers at all stages was found to be related to one or more of the outcomes: perceived benefits, TC adjustment and peer cohesion.

- * Seminars relating to appropriate behavior during encounters and other situations where issues are discussed could serve as mechanisms to insure that less rejection and more appropriate criticism is offered. Rejection by peers, staff and persons on contract was found to be associated with TC adjustment.

- * Personnel could increase the number of hobby related activities to help the individual develop new habits and interests to deter him from engaging in irresponsible behavior when he is released from the program.

- * Variables such as strong relationships with siblings and having lived in a stable neighborhood prior to entering Second Genesis could be used as criteria which offers program personnel an extra dimension for selection and job assignment.
 - Sibling relationships was found to be a policy relevant background variable.

 - Residents who enter the program from stable neighborhood environments is associated with positive TC adjustment (.30 partial correlation).

- * Future research efforts should concentrate on the nature of rejection by peers, staff and persons on contract. This would include additional questions pertaining to rejection that persons received while on major learning experiences (contracts), questions which were not reflected in the original questionnaire. Further, a future evaluation should include other Second Genesis facilities so that variations across facilities could be analysed. Other variables which may emerge as important in future research are the affect of (1) Director's management style (stern vs flexible), (2) Staff changes, and (3) Differential involvement of residents across phases of the program.

- * If deemed feasible, client follow-up studies which attempts to collect self-reported information on involvement with the Criminal Justice system should be cross validated with both FBI listings and local court data. We have found that significant discrepancies even exist between FBI information and local court data.

IV. BASIC ENTRANCE LEVEL TRAINING: A PROCESS EVALUATION

A. INTRODUCTION: UNIVERSITY INVOLVEMENT IN EVALUATING THE BASIC ENTRANCE LEVEL TRAINING PROGRAM

The Criminal Justice Evaluating Unit (CJEU), in cooperation with the Prince George's County Police Training Division, conducted a process evaluation of their federally funded BELT Program. The BELT Program provides an opportunity for personnel in police agencies which are unable to afford their own training academy to receive the minimum number of hours of basic entrance level training which is mandated by the Maryland State Training Commission. Such agencies in Prince George's County have first priority with other local jurisdictions outside of the county being considered when class enrollment has not reached its capacity size.

The purpose for acquiring training funding from the Maryland Governor's Commission on Law Enforcement and the Administration of Justice was to supplement the County's efforts to assist smaller police agencies to meet the State Training Commission mandate. For the past three years these funds have been spent to finance two instructor's positions and one clerk typist to handle basic entrance level training classes. Over these three years, 8 training sessions were completed with 292 police officer's graduating.

Evaluation of the program began in June, 1975, when a student research intern was assigned to PGC Police. The student served as an extension of the CJEU staff in an internship status. The responsibility of the student was to manage evaluation activities for the CJEU staff and to become familiar with the dynamics of the BELT for the purpose of tasks to be performed in Phases II and III of the evaluation.

B. ELEMENTS OF THE FRAMEWORK FOR PROCESS EVALUATION: PHASE II

During Phase II of the evaluation, training outcomes were developed from viable objectives which were identified by Prince George's County training staff and the CJEU staff. A strategy was based on data collected directly from police officers who were graduates of sessions which ran from 10/74 to 12/74; 4/75 to 6/75; and from 10/75 to 12/75 respectively. Although various outcomes could be derived, seven were deemed significant in the analysis stage. They were:

- * Classroom performance as measured by test score results
- * Recall of Law Enforcement and Human Relation Training (two outcomes)
- * General benefit of Law Enforcement and Human Relation Training (2 outcomes)
- * Utilization of Law Enforcement and Human Relation Training (two outcomes)

Internal and external processes were identified next, with emphasis on the processes which could be directly manipulated by the Training Division of the Prince George's County Police. These included:

- * Quality of P.G. Co. Instruction (9 questions)
- * Quality of Guest Instruction (9 questions)
- * Teaching Method (3 types)
- * Adequacy of the Amount of Time Spent on Law Enforcement and Human Relation Course Content
- * Individual Initiative (3 questions)
- * Repetition of Training
- * Training Atmosphere
- * Time and Distance Travel to Training
- * Work or Family Problems while Attending Training

Although our primary emphasis was placed on providing information that may be useful to the police, the Maryland State Training Commission could also benefit from the results of the evaluation in that they control the designated number of hours officers must take in the various subject areas.

The target population consisted of all officers who attended the three stated training sessions. This provided a sample size of 122 officers, of which 62 remained after the following graduates were not considered.

- * All non-municipal police officers, such as Armed Services law enforcement personnel

- * All officers whose departments were outside a radius of 30 miles from the training center (due to limitations of resources)
- * Those persons who are no longer employed by their respective departments, for one reason or another

With the assistance of Training Division personnel, all other police officers who had attended these sessions were contacted and subsequently returned a questionnaire which was developed specifically for this evaluation. Officers who returned questionnaires with missing information were contacted personally and the information logged. Police officers' characteristics which were of interest for subsequent analysis were as follows:

- * Department (and its size) from which the officers came
- * Law enforcement experience
- * Marital status
- * Education
- * Attitude prior to training

It can be noted from this information that a wide variety of recruits were included in the study done. The majority (50%) of the officers, as expected with a recruit class, had no previous experience. Officers from fourteen participating departments were included in our sample with the P.G. Sheriffs Office having the most men included (30%), 28% each from both the various municipalities and MNCPPC and the remainder from the University of Maryland (12%). Attitudes for training prior to attendance were relatively positive with approximately 86% of the officers falling in the "good" category. Finally, most officers had attained at least a high school education (42%), however, 43% indicated that they were in college at some stage and 15% had a Bachelor's degree.

C. DATA GENERATION STRATEGY: PHASE III

The third phase of the evaluation strategy deals with generating data which

answers the policy relevant questions of interest. Since the evaluation of the BELT occurs in its third year of LEAA funding, a one-shot, post-hoc research design was deemed most appropriate. This design, which only involves those officers who received training (no control group) allows one to evaluate the dynamics of the unit without any disturbance of day-to-day operations. Step-by-step procedures used to generate data for this evaluation are listed below:

Activities	Description
Identify source of data.....	Training and graduate records
Develop measures of program processes and outcomes.....	Specific questions on questionnaire
Select data collection procedures.....	Deliver and pick up questionnaire through the office of the various local Chiefs of Police
Pre-test research instruments.....	Tested on five University of Maryland police officers of an earlier BELT session
Collect data	
Construct codebook	
Establish coder reliability, Stage I.....	Questionnaires randomly checked for mistakes in coding
Keypunch data onto computer cards Establish Coder Reliability	
Stage II.....	Data processed through lister to identify more mistakes
Stage III.....	Preliminary computer run to generate distribution for final error check

The major concern in this phase was to generate data for computer analysis which represented reliable and valid indicators of reality. One advantage in using the pre-test was to establish face validity of the questionnaire. Further, coding was cross-checked with only 1% error being tolerated. Machine punching the data was also a factor in reducing the number of mistakes. A final check in establishing validity in this data generation phase was through the first preliminary computer run, which located codes that were outside of the ranges of possible responses.

D. AN ANALYSIS STRATEGY: PHASE IV

1. Development of Reliable Training Outcome Measures

In the analysis stage, the student research intern and the CJEU staff built, using factor analysis procedures, reliable and valid indices for six of the seven outcomes which were identified as important policy concerns. Factor analysis can help to uncover specific questionnaire items which seem to measure the same outcome. In addition, this procedure assists in reducing a large number of items to several summated indices which can be used in subsequent analyses.

Initially in the questionnaire, officers indicated the extent to which they could recall, could benefit in general and could use training received in a variety of blocks of instruction for six subject areas: Police Role, Law and Courts, Police Science and Investigation, Traffic Law and Investigation, Staff Services and Special Skills. Within the first three subject areas, it was assumed that responses may be different for blocks of instructions which was covered in one session and those blocks that covered two or more sessions. Therefore the six subject areas were expanded to nine areas of training. To reduce the number of questionnaire items (officers responses to the amount of recall, benefit and utilization of each block of instruction), summated indices were constructed for each of the nine areas of training, nine measures for recall, nine for benefit and nine for utilization.

To further reduce the amount of data, three separate factor analyses were performed for recall, benefit and utilization, with each analysis including nine measures. Based on these analyses, measures for four of the nine areas of training clustered together for recall, benefit and utilization respectively. These training areas were Laws and Courts, Police Science/Investigation (one session blocks), Police Science/Investigation (two or more sessions per block) and Traffic Law/Investigation. In order to form single indices, these four

measures were summed up as an index for recall of law enforcement training, for benefit of law enforcement training and for utilization of law enforcement training.

A second set of three outcomes were constructed from the Police Role areas of training. The factor analyses revealed that those blocks of instruction which entailed two or more sessions were inversely related to law enforcement training outcomes and were dissimilar to Police Role instruction which were covered in one session. Therefore response to those blocks of instructions involving two or more sessions were used to measure recall of human relation training and benefit and utilization of such training.

The seventh outcome measure, classroom performance, was measured by final exam scores, an exam which covered all subject areas. These scores correlated highly (.85) with officers average test scores over ten exams completed on selected blocks of instruction.

It is important to recognize that these outcome measures are only yardsticks by which to evaluate the affects of program processes which are introduced in subsequent analyses. In lieu of this purpose, we want to develop indices with scores that are normally distributed over the entire range of possible values for a particular measure.

In general the distribution of the seven training outcomes are normally distributed across desirable ends of each index. As expected recall and benefit of both law enforcement and human relation training are higher than utilization, with human relation training being used on an average the least.

45 percent of the officers completing B work and 37 percent performing at an A level.

A factor analysis performed on these seven training outcomes revealed several interesting findings. First, the classroom performance outcome was found unrelated to recall, benefit and utilization of law enforcement training. Second, it was uncovered that classroom performance was also not associated with benefit of human relation training and inversely related to recall and utilization of such training, the higher the grade the lower recall and utilization of human relation training. In addition the higher the utilization of both areas of training the more recall and perceived benefit of training, with human relation training being the least related to utilization. It should be noted that these findings are descriptive and should not be interpreted as cause-effect relationships.

2. Description of Training Experiences Reported by BELT Graduates

Although it was noted earlier that training funds were allocated for two full time professional personnel and one full time secretary, this allocation was based on the number of platform and administrative manhours per training session. In actuality 10 Prince George's County Police Instructors are utilized to provide the 300+ hour training program, this requires approximately four-hundred Prince George Police Instructor platform hours, i.e. administration, preparation, instruction, etc., per session. Additionally, Associate Instructor manhours, thirty Guest Lectures totalling 224 hours, assisted as specialists in such subject areas as Firearms Training on the range and other relevant Law Enforcement subjects. Thus, approximately 600+ Instructor manpower hours are utilized to implement BELT.

To further describe the activities of these instructors, graduates included in this study were asked questions concerning both the Prince George's Police instructors and outside (guest) instructors performance.

It can be noted that:

* In regard to Quality of Instruction:

- Graduates perceived Prince George's County instructors not having enough time to teach their subject, 26 percent saying few had enough time and 27 percent saying some had enough time, as did guest instructors, 13 percent and 26 percent in the respective categories.
- 84 percent of graduates felt few Prince George's County instructors wasted time in class as compared to 52 percent for the guest instructors.
- The majority of graduates, 52 percent, felt nearly all of the Prince George's County instructors were enthusiastic in their presentation; however, only 24 percent felt the same about guest instructors.
- The majority, 95 percent and 79 percent, respectively stated that PG instructors and guest instructors added some related experiences to their presentations.
- Graduates stated that questions raised in class were sufficiently answered by nearly all instructors (73 percent for Prince George's and 50 percent for guests)
- A majority of graduates felts nearly all of both Prince George's County and guest instructors knew their subjects (74 percent and 58 percent respectively).
- Graduates thought that nearly all of both types of instructors came prepared for class (81 percent and 55 percent respectively).
- 47 percent of the graduates reported that nearly all of Prince George's County instructors created a relaxed atmosphere in training, while 45 percent of the graduates indicated that guest instructors created a relaxing atmosphere.

-53 percent of the graduates stated that nearly all of Prince George's County instructors were available after class for questions as compared to only 27 percent of the graduates reporting this for guest instructors.

* Information on Graduates' Individual Initiative shows that the majority of graduates:

-studies with classmates outside of class at least a little (53 percent).

-had informal contact with the Training Supervision (58 percent) and spent more than 1 hour studying outside of class (83 percent).

* Further information on other training indicates that:

-Although the majority of the graduates preferred a relaxed training academy atmosphere (71 percent) in actuality they felt there was a mixed atmosphere (47 percent reporting a definite middle of the road atmosphere between tense and relaxed).

3. Discovery of Training Activities which are Related to Outcomes

Important findings which emerged from our attempts to uncover certain statistically significant relationships between unit activities and the policy relevant outcomes comprised the final stage of our analysis strategy. An analysis of variance procedure was used to uncover differences in average outcome index scores across subgroups of officers who had different experiences in the training program. To increase our confidence that other variables such as characteristics of officers were not affecting these relationships, we identified spuriousness through examining correlations of these variables with both officers reports of their experiences in the training program and the outcome measures. We also reviewed results from an analysis of variance analysis using individual characteristics.

Based on the analyses, we controlled for the affect of the size of the department and use of training back home while examining the association between training experiences and classroom performance, Recall and Benefit of Training¹ Listed below are the results of these analyses:

*Grades were consistently higher:

- When Prince George's County instructors had enough time to present the subject, this was especially true with graduates from departments having 25 to 49 personnel. There were no differences for guest instructors.
- When guest instructors were considered to be enthusiastic in their presentations. This was more prevalent with departments with less than 25 personnel.
- When nearly all guest instructors came in prepared among graduates from departments with 25 or less personnel.
- When Prince George's County instructors availability after class was not limited.
- When the material presented was consistent.

*When controlling for size of department grades were consistently higher among officers from smaller departments when instructors answered questions sufficiently. This is apparent by the increase in grade scores for those graduates from departments with less then 49 personnel in relation to guest instructors and for departments with between 26 and 50 personnel for Prince George's County instructors.

Thus, it can be stated that graduates training performance as measured by their final grades are consistently higher when instructors have sufficient enough time to present the material, are enthusiastic in their presentations, are available after class, answer questions sufficiently in class, are prepared for class and are consistent in the way they present the materials. These relationships are strong in relation to specific sized departments, but in general, smaller departments (50 personnel or less) seem to have better performances when the proceeding criteria are met.

¹ The final analysis consisted of a procedure called crossbreak, a sub-program of SPSS computer statistical package.

*In analyzing the graduates perceived recall of and benefit from the training with the graduates own report of their training experiences, the following relationships were uncovered.

-The more enthusiastic the instructors, both Prince George's County and guests, the higher the graduates recall of Law Enforcement course content and the higher perceived benefit from both Law Enforcement and Human Relations Courses. Among officers from the Sheriff's Department, differences in law enforcement recall was most pronounced across degrees of guest instructor enthusiasm, the more enthusiastic the higher recall.

Among graduates from departments with less than 25 personnel, the relationship between perceived benefit of human relations training and enthusiasm of Prince George's County instructors was most pronounced, the higher perceived benefit the more enthusiastic the Prince George's County instructors were perceived.

-Among graduates from the Sheriff's Department the more knowledgeable all instructors seemed to the graduates the higher the perceived benefit from the Law Enforcement Course Content.

-Graduates who reported more guest instructors created a relaxed atmosphere also indicated higher recall in both the Law Enforcement and Human Relations course areas.

From this analysis of associations between recall and perceived benefit of training, it was found that those officers who reported the most benefit from both Law Enforcement and Human Relation training consistently indicated that nearly all of the instructors were enthusiastic about their subject matter. In addition, instructors being more knowledgeable seem to have made an impression on department sheriffs, for benefit of law enforcement training was higher when most of the instructors were seen as knowledgeable. Officers who stated that they could recall a substantial amount of the training also remembered Guest Instructors creating a relaxed atmosphere.

In general these findings suggest that police training may be more effective if it can leave a favorable impression in the minds of the officers being trained. Instructors' enthusiasm, knowledge and supportiveness by creating a relaxed atmosphere appear to be several aspects of the training which are important.

* In addition to the preceding results which stem from our quantitative analysis, several observations are worth noting:

- The PGC training Division, as in most police departments that receive federal funds, should begin during the first year of the grant to record information that will be useful in continual upgrading of training program. For example, developing detailed profiles on participants prior to entering the academy may be useful to staff and instructors when trying to make general concepts more applicable to "back home operations". Also, if it is assumed that student motivation is necessary for optimum learning, then data could be collected periodically throughout the training period which identifies who and why some students have a motivation problem. If the same reasons appear over a number of training sessions, then appropriate modifications could be made.

In the field of law enforcement, it has also been found that training effect on attitudes is equally important as its impact on knowledge. For instance, officers may gain additional knowledge from subjects covered in the Police Role in Society blocks of instruction, however the attitude of officers toward community relations may not have been effected. Thus, in order to know this fact, data should be recorded which reflects training impact on officers' attitude toward such subject areas.

In conclusion, if such an extensive monitoring system is deemed useful to the training staff, then it is imperative to record this information so that it is easily retrieveable for analysis. Some LEAA funded programs have developed a log sheet so that information can be transferred periodically from various forms to a single coding form.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V

Potential use of findings from process evaluation is the most important phase of our evaluation strategy. The findings uncovered by the process evaluation could either support the present direction, suggest program modification or development, or state a need for future research. Examples of potential uses of such findings are as follows with suggestions based on specific results of the process evaluation.

* Support for continuation of funding for BELT

-- It was found that officers reported, on the average, substantial recall, benefit and utilization of both law enforcement and human relation training.

-- PGC training division has provided more training than the mandated training requirements.

* Although evidence supports continuation of BELT there are training improvements which can be made

If grades are to be a reliable and valid indicator of training performance, then tests and exams have to be reconstructed so as to correlate highly with outside criteria such as recall and utilization of training.

* It was found that the final exam was not related to recall or utilization of law enforcement training and inversely related to recall and utilization of human relation training subjects, the higher grades the lower recall and utilization of human relation training.

especially guest instructors.

-Attention should be placed on the quality of instruction, / The evaluation of instructors role in reference to classroom performance, recall and benefit of training suggests that attributes such as enthusiasm, availability, answering questions sufficiently, and consistency could improve classroom performance. Further, the process evaluation findings suggest that aspects of the training, such as enthusiastic and knowledgeable instructors, leaves a favorable impression on officers and thus creates conditions where training would be seen as more beneficial.

-It is also suggested that the PGC training division closely monitor guest instructors to be assured that a relaxed atmosphere is maintained, a training requisite which has been found to be associated with recall of training material.

* It was found that where nearly all guest instructors were seen as creating a relaxed atmosphere, graduates reported higher recall of training material than when it was indicated only one-half or less of these instructors had created such a training condition.

- * A large majority of the graduates reported that they desired a relaxed training atmosphere.
- It appears to be consistent across all outcomes that particular types or sizes of departments respond differently to instructors and to course material. Need input from participating departments prior to training may serve to increase the effectiveness of the training. In addition, the development of training modules which are based on departmental needs could increase training effectiveness. This would entail a training design which provides a core of essential subjects in which all trainees would be involved and then have various training modules from which trainees or their agency heads could make selections based on specific needs of the "job back home".
- One training dimension which was overlooked in this evaluation was the importance of maintaining military bearing while in training. In future evaluations, the association between outcome measures, e.g. classroom performance and the dynamics of military bearing activities should be considered.
- * Suggestions in regard to the observations are as follows
 - To remedy the data collection problems, the PGC training division could consider the following suggestions:
 - * Allow a student to gather and record such data as a paid intern.
 - * Place a cadet with such interest in this position to acquire exposure to the various evaluation and monitoring activities of the training section.
 - * Work closer with the planning and research division in activities such as test construction, training evaluation and monitoring.

V. AN EVALUATION OF THE CASE REVIEW PROCESS CONDUCTED
BY FELONY COMPLAINT SCREENING UNIT (FCSU)

A. INTRODUCTION: UNIVERSITY INVOLVEMENT IN EVALUATING PRINCE GEORGE'S
COUNTY'S FELONY COMPLAINT SCREENING UNIT

Beginning in 1975 a Felony Complaint Screening Unit was established within the States Attorney's Office located in Prince George's County, Maryland. Financial support was obtained through LEAA's block monies which were awarded by the Maryland Governor's Commission on Law Enforcement and the Administration of Justice. Currently the FCSU is composed of one full-time attorney, one full-time investigator, one full-time para-legal person (to be hired later) and one secretary. The FCSU is designed to screen all felony cases for prosecutorial merit which have been brought by police officers to the attention of the States Attorney's Office. Cases are assessed to determine whether they should be prosecuted in the District or Circuit Court, or if evidence is sufficient to warrant a prosecution at all.

The present evaluation concerns the affects of the FCSU mandate on the working relationship between the States Attorney's Office and the Prince George's County Police. This evaluation follows the completion of a seven month long "before-and-after" study of the FCSU's effectiveness.

In the fall of 1975, the Prince George's County's Criminal Justice Evaluation Unit (CJEU) staff which is comprised of county and University of Maryland personnel and students began the evaluation of FCSU activities described herein. The initial phase of the FCSU evaluation strategy entailed creating new part-time, non-paid research roles in the agency where specific programs needed evaluating. In the State's Attorney's Office, the student researcher role was linked to the attorney in charge of the Felony Complaint Screening Unit. Time schedules for implementing the evaluation were set during the first semester of a two semester educational program. The CJEU staff with the assistance of several students taking an independent research course completed the evaluation. In addition, one of the student researchers was directly associated with the Director of Planning and Research of the Prince George's County Police Department, from which the target population was eventually selected. The Director's position as a representative of the Fraternal Order of Police also provided a means for developing an essential rapport between members of the CJEU evaluation staff and the County police department.

B. ELEMENTS OF THE FRAMEWORK FOR PROCESS EVALUATION: PHASE II

During Phase II of the evaluation, outcomes were developed from the implicit objectives of the FCSU case review process, a strategy which was based on data collected from the on-going FCSU case review process. Although four outcomes were initially derived from policy relevant objectives, only two of these outcomes were deemed significant in the analysis stage. They were:

- * case review proficiency as perceived by the police officers
- * actual need for the FCSU as perceived by the police officers

Internal and external process were identified next, with emphasis on the process which could be directly affected by the State's Attorney's Office.

CONTINUED

1 OF 2

We were interested in examining the effect that the attitudes and demeanors of FCSU staff members, nature of the officers previous contacts with the State's Attorney's Office, and the officers' vested interest in the case might have on the stated outcomes.

Through a mutual decision of the SAO and the CJEU research staff, the target population consisted of one hundred Prince George's County Police officers, randomly selected from the Circuit Court docket (Upper Marlboro, Maryland), who had official contact with the FCSU over a four-month period of time (October 1975 to February 1976).

Upon rigorous review of the selected sample by the CJEU, it was determined that ninety-two (92) County police officers would be included in the final sample. Of those remaining officers not selected for interview some had mistakenly appeared in the sample more than once, others were either on vacation, retired or otherwise unavailable at the time the evaluation was conducted.

Some of the 92 police officers could not be reached in order to receive their input regarding the telephone interview portion of the evaluation. Other officers failed to return the questionnaires that had been disseminated to them via interdepartmental mail. This means that of the possible 92 County police officers, 72 responded to both the telephone interview and the questionnaire. Characteristics of these officers which were of interest are as follows:

- * Officer rank
- * Previous contact with SAO
- * Level of education
- * Years as police officer
- * Years assigned to present duty
- * Unit assigned when officer arrested subject for case study
- * Previous cases similar to one of case study

- * Number of previous similar cases
- * Previous similar cases, percent of convictions
- * Whether waiting for case review was typical experience
- * Whether satisfaction with FCSU was typical with past experience
- * Personal time spent involving case review
- * Whether contacts with FCSU were typical with past experience

It was found that a great majority (80%) of the officers had at least 2 years of college education. Over half (61%) of the officers were either privates or privates first class, and the remainder were of a higher rank, (27%), or were detectives (10%), or other (20%). Over half of the officers (58%) had five or more years of experience as a police officer. The Unit assignment was equally distributed among the officers, with approximately 1/3 of the officers assigned to either Bureau of Criminal Investigations, Patrol or Investigative Sections. Approximately half of the cases reviewed were property type crime while 30% was of a personal nature, and 12% involved narcotics. Finally, well over half of the officers (79%) had a favorable previous contact with the SAO and nearly half (41%) stated that their present contact with FCSU understudy was very typical with past contact.

C. DATA GENERATION STRATEGY: PHASE III

The third phase of the evaluation strategy deals with generating data which answers the policy relevant questions of interest. Since the evaluation of the FCSU occurred after the unit had been in operation less than one year, a one-shot, post-hoc research design was deemed most appropriate. This design, which only involves those police officers of the County police department who have had at least one felony case reviewed by the FCSU (no control group), allows one to evaluate the dynamics of the FCSU's case review process with minimal disturbance to day-to-day operations. Information included in the telephone interviews and questionnaires pertained to the stated outcomes, internal operation of the Felony Complaint Screening Unit, and characteristics of the police officers. Step-by-step procedures used to generate data for the FCSU evaluation are listed below:

Activities	Description
Identify source of data.....	Police Officers
Develop measures of program processes and outcome.....	Specific questions which police answered
Select data collection procedures.....	Questionnaire and telephone interview
Pretest research instruments.....	Four county police officers
Collect data	
Construct Codebook	
Establish coder reliability	
Stage I.....	Questionnaires randomly checked for mistakes in coding
Keypunch data.....	Machine punching utilized
Establish coder reliability	
Stage II.....	Data processed through lister to identify more mistakes
Stage III.....	Preliminary computer run to generate distribution for final error check

The major concern in this phase was to generate data for computer analysis which represented reliable and valid indicators of reality. Since the interview instruments were pretested with the participation of four county police officers, it provided a means to establish reliability and to train the four interviewers in administering the instruments. Consistent coding of the respondents across the four interviewers was also checked after all interview and questionnaire data were collected. Less than one percent error was found. Machine punching the data was also a factor in reducing the number of errors. A final check in establishing reliability in this data generation phase was through the first preliminary computer run, which was intended to locate coded responses that were outside of the ranges of possible responses.

D. ANALYSIS STRATEGY: PHASE IV

1. Development of Reliable Outcome Measures: A Description

In the analysis phase, CJEU staff and student researchers, using a factor

analysis procedure, built reliable and valid indices for the two outcomes which were identified as important policy concerns. Factor analysis helped uncover specific interview questions which seemed to measure the same outcome. Nine questions clustered together to measure the police officers' perception of the FCSU case review proficiency, and four questions were identified as measuring the police officers' perception of the need for the FCSU. Responses to each of these sets of questions were summed up to form a single index for each of the outcomes of interest.

It is important to recognize that these outcome measures are only yardsticks by which to evaluate the affects of program processes which are introduced in subsequent analyses. In lieu of this purpose, we want to develop indices with scores that are normally distributed over the entire range of possible values for a particular measure.

The distribution of the case review proficiency outcome is skewed toward the low proficiency end, with more officers reporting positive evaluations than negative ratings. The need for the FCSU tends to be only slightly skewed toward the low need end, with more officers reporting a high need for such a unit than the number of officers who reported a low need.

The policy relevance of these two outcomes are highlighted by examining their relationship with one positive behavioral change of officers which stemmed from their experience with the FCSU, improvements in report preparation. It was found that officers who gave the FCSU a high case review proficiency rating also had made some improvement in report preparation, provided more details, had produced less wordy reports and prepared more grammatically correct reports. Conversely, those officers who gave low proficiency ratings were less likely to make improvements. Similarly with the need for the FCSU outcome, high need for such a unit was found to be associated with improvements in reports.

Implications of these relationships are that if subsequent analyses can uncover particular FCSU activities which are associated with case review proficiency or need for the FCSU, then future emphasis placed on these activities may improve case review effectiveness. Hence to consider ways to improve police officers' perception of case review proficiency and increase perceived need for the FCSU is assumed to be policy relevant.

2. Description of FCSU Activities

In addition to describing officers' perception of the FCSU case review proficiency and need for the FCSU, questions were asked about how members of the FCSU handled their case. A description of the activities which were found to be important in subsequent analysis are as follows.

- * A majority of the officers reported that the FCSU/were self-confident and displayed the feeling that staff's time was not being wasted. However, only a small percent of the officers reported that the FCSU offered assistance or praised them for their efforts.
- * Twenty-five percent of the officers stated that the merits of their case had been questioned by the FCSU and only 17 percent indicated that delays were not justified.
- * Thirty-one percent of the officers who participated in case reviews had the charge either modified or reduced. Two-thirds of these officers were consulted first and the charge explained to them. Approximately 60 percent of these officers indicated that the change was justified.
- * In regards to officers' last case, telephone calls and visits required, ranged from zero to seven calls and zero to four visits. Typically two to three calls and one visit to the States Attorney's Office were necessary to complete the case review process.

3. Discovery of Unit Activities which are Related to Outcomes

Important findings which emerged from our attempts to uncover certain statistically significant relationships between unit activities and the policy relevant outcomes comprised the final stage of our analysis strategy. An analysis of variance procedure was used to uncover differences in average outcome index scores across subgroups of officers who had different experiences with FCSU's handling of their case. To increase our confidence that other variables such as characteristics of officers were not affecting these relationships, we identified spuriousness through examining correlations of these variables with both officers' reports of their experiences with the FCSU and the outcome measures. We also reviewed results from an analysis of variance using individual characteristics. Based on the analysis, we controlled for the affect of three individual characteristics to be policy relevant in our final analysis--type of crime, officer assignment and prior past experience with the States Attorney's Office. Listed below are the results of these analysis.¹

Two unit activities were found to be important processes when concerned about officers' perception of the FCSU case review proficiency and perceived need of such a unit. Case review proficiency and need for the FCSU were significantly higher:

- * When the FCSU offered officers assistance to aid in further development of their case.
- * When no more than two telephone contacts were required in screening their case. Among officers with favorable past experiences with the SAO, the number of calls required to complete the case review did not make any difference in perceived case review proficiency.

¹The final analysis consisted of a procedure called crossbreak, a sub-program of SPSS computer statistical package.

Additional unit activities which were uncovered as being associated only with officers' perception of the Unit's case review proficiency are:

- * When the screening attorney displayed self-confidence, officers' perception of case review proficiency was higher than when the attorney generated a lack of confidence in his ability to screen the case.
- * When the FCSU staff explained changes made in the case, officers perceived case review proficiency was higher than when the staff failed to offer an explanation. If officers believed changes to be justified, then case review proficiency was also viewed as higher than situations where the change was not seen as justifiable.
- * When the FCSU staff made officers feel as if they were wasting the Unit's time, officers tended to indicate a lower case review proficiency rating than when members of the Unit displayed a feeling of concern for their case. These case review proficiency differences were most pronounced among officers with crime against persons cases or where unfavorable past experiences with the States Attorney's Office were reported.
- * When the FCSU questioned the merit of an officers' case, the case review proficiency was found to be lower than when the merits of the case were not questioned. BCI officers and officers with unfavorable past experiences with the SAO seem to be most affected by the merits of their case being questioned.
- * High case review proficiency was found to be associated with officers feeling that delays were justified, whereas low proficiency was indicated among those officers who had experienced delays which they felt to be unjustified. Differences in case review proficiency across these two types of experiences was most pronounced among officers assigned to district stations.
- * FCSU staff praising seemed to make the most difference in perceived case review proficiency among officers with crime against person type cases and detectives assigned to BCI. It is also interesting to note that whether or not members of FCSU offered praise made no difference in c.r.p. among those officers with an unfavorable past experience with the SAO.

In addition to the preceeding results which stem directly from our quantitative analysis, several observations are worth noting:

- * Current practices in maintaining accurate and policy relevant information on certain measures of effectiveness and Unit activities needs considerably more attention by the States Attorney's Office. Currently there is insufficient personnel to devote adequate time to completing these tasks.
- * It is to be assumed that the working relationship between the Prince George's County Police Department and the States Attorney's Office is crucial to effective law enforcement. Members of both agencies must maintain a sound professional rapport conducive to cooperative behavior toward achieving their mutual goals. In support of our quantitative data, it was observed that these two agencies need to jointly undertake appropriate measures to improve their working relationship, to reduce frictions that exist among various County police officers who present felony cases to the FCSU.
- * In addition, it is evident that many of the felony cases that police officers bring to the States Attorney's Office are routine and could be adequately screened by the FCSU by some other means that do not necessitate the presence of the arresting officer at Upper Marlboro. A re-assessment of the States Attorney's Office position regarding this requirement may provide a solution to this situation that may be mutually satisfactory to both agencies.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V

Potential use of findings from process evaluation is the most important phase of our evaluation strategy. The findings uncovered by the process evaluation could either support the present direction, suggest program modification or development, or state a need for future research.

Examples of potential uses of such findings regarding the States Attorney's Felony Complaint Screening Unit are as follows: Each suggestion is based on specific results of the process evaluation.

- * If improved quality of police reports received by the FCSU is important then the FCSU should renew and revitalize any attempts to impart to the police the expectations and needs of the FCSU in receiving better reports (e.g., as a component of police in-service training).

-Those officers who made changes to improve their reports showed a higher perception of case review proficiency and need for the FCSU than those who made no changes. To the extent that better reports may improve the response of the FCSU to the officer and his case, better reports may indirectly improve the officers' perceptions of the Unit itself.

* Our analysis indicates that more than two telephone calls required to complete a case review is associated with low perceived case review proficiency and the need for the FCSU, especially when officers reported unfavorable past experience with the States Attorney's Office. An effort to minimize repeated requests for additional information could possibly be reduced by more extensive in-service police training on preparing cases for the FCSU.

* Results should help in the selection of attorneys who at some point may assume the responsibilities of the FCSU.

-Screening attorneys demeanor was found to be instrumental in establishing an effective and cooperative rapport with the police officer.

* It was found that the explanation of any changes in the criminal charge is an important consideration; consequently, it is suggested that policy guidelines be reformulated to ensure that police officers receive, in addition to a notification of the change in charge(s), an explanation as to why the change was made.

* Suggestions as to how to combat problems which were observed during the evaluation are as follows:

-First, more accurate and policy relevant information should be generated on LEAA funded projects such as the FCSU if part-time research roles would be built into the initial grants. Such a person would be responsible for developing a detailed monitoring system with technical assistance from the CJEU staff, Region IV and the Maryland Governor's Commission. In addition, this person could coordinate collection of data and analysis of these data for quarterly reports.

-A second suggestion stems from the need to improve the working relationship among various County police officers who present cases to the Unit and the FCSU. The PGC training division with the cooperation of the State's Attorney's office may work to reduce underlying friction between the County police officers and the FCSU by developing a series of training sessions. Such sessions could be built into inservice police training, and designed to convey to the police the needs and expectations of the FCSU.

-Our final observation indicated that certain felony cases may be adequately screened by means that do not require the presence of the arresting officer at Upper Marlboro. One solution would link the States Attorney's Office with

the County police department in a joint effort to devise a plan that would permit officers in certain situations not to appear in person for case review. Details of such a plan could be developed by the State Attorney's Office and appropriate Police personnel.

VI. AN EVALUATION OF THE OASIS YOUTH SERVICE BUREAU

A. INTRODUCTION: UNIVERSITY INVOLVEMENT IN EVALUATING THE OASIS YOUTH SERVICE BUREAU

In the Fall of 1975, the Prince George's County Criminal Justice Evaluation Unit (CJEU) staff, which is comprised of County, University of Maryland personnel and students began an evaluation of the OASIS activities. The CJEU was established to provide county government officials with additional information about third-year federally funded criminal justice programs whose continuation is contingent upon total or partial funding by the Prince George's County Government. The Laurel-Beltsville OASIS Youth Service Bureau is such a program.

Following this evaluation the director agreed that a more in-depth process evaluation utilizing primary data would be desirable. Thus, in January, 1976, one student research intern who was participating in a one-year evaluative research training program was assigned to work with CJEU in conducting a process evaluation of OASIS. He was assisted by a student taking an independent research course.

B. DEVELOPMENT OF THE EVALUATION FRAMEWORK: PHASE II

The target population consisted of all clients who have terminated from the program, a total of 163 youths. Of these 163, 46 could not be contacted due to a change of address or telephone number. This left a total population of 117, of which 49 were interviewed while the other 68 could not be contacted. The age of the client interviewed ranged from 9

to 18 years of age with the majority ages 14 to 16. Over half (57%) had no delinquency complaint lodged against them. Approximately 53% were either below their proper grade level in school or not in school. A large majority of the clients were white males. The overwhelming number of whites is consistent with the area served by OASIS. Over 80% of the clients are from the Laurel-Beltsville area which has a very small minority population.

A comparison based on OASIS record data, of those clients interviewed with those youths not interviewed across 30 client characteristics showed a significant difference only in the categories concerning the clients' race, length of stay at OASIS, problem type, and evaluation as determined by periodic checks with clients made by the counselors concerning client status since leaving OASIS. As was previously mentioned only a few blacks have utilized OASIS. Our sample included a large majority of the blacks who have terminated from the program. Our sample also included a significantly large percentage of those who had remained in the program for greater than eight months while the mode for the rest of the population was a stay of from two to four months at OASIS. More of those in our sample had drug and alcohol problems while the percentage of those involved in activities against persons or property was higher in the rest of the population. A large majority of the former clients interviewed were also evaluated by the counselors as having remained stable or improved over their status at termination. This compares with less than half of those not interviewed who were evaluated as stable or improved by the counselors. These four significant differences may be attributed to former client's availability. As was previously indicated in this section, a large number of former clients could not be contacted. Those who are more adjusted are

usually the relatively easier groups to contact. Nevertheless, it must be remembered that there were no significant differences across the other 26 characteristics, indicating that our sample is representative of the total population of clients who have used services provided by OASIS.

Several meetings with the director of OASIS identified implicit and explicit objectives of the program from which six measurable outcomes were uncovered in the analysis stage. They were:

- * Client adjustment in the family
- * Client adjustment in dealing with the legal system,
- * Client adjustment in dealing with personal problems in school
- * Client adjustment in dealing with structure in school
- * Client concern with personal problems
- * Client concern with drug problems

In meetings with the director, six dimensions of the program were identified as important policy concerns. Internal aspects of the program included:

- * Programatic Policies
 - type of counseling
 - termination status
 - length of stay
- * Counselor-Client Relationship
- * Employment Assistance

In addition, three sets of policy relevant factors external to OASIS are:

- * Involvement in Community Activities
- * Police Contact
- * Parental and Peer Pressure exerted while attending OASIS

C. DATA GENERATION STRATEGY: PHASE III

The third phase of the evaluation strategy deals with generating data which answers the policy relevant questions of interest. Since the evaluation of OASIS occurred after the program had been in operation for two and one-half years, a one-shot, post-hoc research design was deemed most appropriate. This design, which only involves terminated OASIS clients (no control group),

allows one to evaluate the dynamics of the program with minimal disturbance to day-to-day operations. Following is a step-by-step description of the data generation strategy used in this evaluation.

Activities	Description
Identify source of data.....	Records and terminated clients
Develop measures of program processes and outcomes.....	Specific questions, most of which were close ended, which terminated clients answered
Select data collection procedures	Telephone interview
Pretest research instruments....	Questions asked of five OASIS clients who had not terminated
Collect data	
Construct codebook	
Establish coder reliability	
Stage I	50% of questionnaires randomly checked for mistakes in coding
Keypunch data	Machine punching utilized
Establish coder reliability	
Stage II	Data processed through lister to identify more mistakes
Stage III.....	Preliminary computer run to generate distribution for final error check

First, two sources of data were identified to answer the policy relevant questions of interest. The OASIS records were utilized to secure most of the informations about the participant characteristics and the outcomes and processes were measured by a questionnaire administered by the student research intern and an undergraduate assistant. The questions were developed by this research intern and his assistant along with the assistance of the Prince George's Criminal Justice Evaluation Unit staff.

Data collection was accomplished primarily by a telephone interview procedure when it was discovered that we could not get many of the terminated clients to come to OASIS to fill out the questionnaire. The data gathered from the ten former clients who did come to OASIS to answer the questionnaire were included since the research intern or his assistant were always at OASIS to administer the questionnaire and to answer any questions which the respondents had. There were a few variables which were significantly different when response frequencies were compared between these two procedures, most of which were not included in this study. Clients confidentiality in the telephone interviews was kept by having counselors first get former clients on the phone and then the interviewer would conduct the interview.

The major concern in this phase is to generate data for computer analysis which represents reliable and valid indicators of reality. A pretest identified some minor problems with the wording of the questions. It also gave the interviewers some training in this data collection process. Consistent coding of the respondents across the two interviewers was also checked after all interview and record data were collected. Less than one percent error was found. Data were then processed through a card lister as a further check for mistakes. A final reliability check in the data generation phase was to locate coded responses outside of the range of possible answers by means of a preliminary computer run which generated a frequency distribution of responses.

D. ANALYSIS OF DATA: PHASE IV

This validation study utilized a two-stage analysis process. First, composite outcome measures were constructed using a factor analysis procedure. In the second stage statistically significant relationships between

and outcome and process measures were identified while also controlling for other data elements such as the individual characteristics of clients.

1. Development of Reliable Outcome Measures

Factor analysis was used in the first stage to build reliable and valid indices for the six outcomes which were identified as important policy concerns. Factor analysis helps uncover specific interview questions which seem to measure the same outcome. Four questions dealing with Client-Parent relationships clustered together to measure the clients family adjustment and five questions comprised clients adjustment in dealing with the legal system. The outcome dealing with clients' adjustment in dealing with personal problems in school was measured by three questions while nine questions clustered as a measure of the adjustment problems clients were having in school due to hassles with the system itself. Five questions were identified as measures of clients concern of problem with self while three questions were seen as measures of clients adjustment in dealing with problems concerning drugs. Responses to each set of questions were summed up to form a single index for each outcome of interest.

It is important to recognize that these outcome indices are only yardsticks by which to evaluate the dynamics of OASIS. In lieu of this purpose, we want to develop indices with scores that are normally distributed over the entire range of possible values for each particular outcome.

An examination of distributions for each of the six outcome indices revealed that three outcomes - adjustment in the family, adjustment in dealing with school structure and client concern with problems of self - were generally normally distributed over nearly the entire range of possible scores. The remaining three outcomes were skewed, however scores were dispersed enough to be acceptable for subsequent analysis.

Worth noting is that youth in school (36 of the 49 study clients) seem to have more problems with structural dimensions of school in classrooms and school rules than personal problems, e.g. being prepared for school. Further, a majority of the former clients felt that they have no drug hassles with which to contend. Finally, a large majority of the former clients indicated some negative contact with the police, however, few of their actions were serious enough to be evoked into the juvenile justice process.

It should also be noted that most former clients left OASIS with a positive perception of this youth service bureau. Approximately eighty-five percent stated that they would recommend or bring a friend to OASIS and thirty-eight percent reported that they had brought a friend to OASIS. A factor analysis revealed that these questions did not group together to measure any particular outcome criteria being considered. Thus the decision was made to exclude the single questions as outcome measures for subsequent analyses because of the lack of confidence in the reliability and validity of outcomes consisting of only one self-report piece of information.

2. Description of Experiences of Former OASIS Clients

One set of program processes which were considered important was programmatic policy-type of counseling, length of stay and termination status. In addition, questions were asked in the interview which dealt with client-counselor relationship, client perception of the program and employment assistance rendered by OASIS. Questions were also asked about environmental factors over which OASIS has no direct control, yet which may have an affect on the clients' adjustment. A description of those processes which were uncovered in subsequent analyses as being policy relevant are listed below.

* Programmatic Policy

Individual counseling was found to be most frequently prescribed for clients (47%), a second most frequent counseling prescription was a combination of family and either individual or group (43%).

The average length of stay was about four months. Twenty percent, however, remained in OASIS Program for over eight months.

A majority of the former clients who participated in the interview had successfully completed the program prescribed for them or completed part of the program (31% and 33% respectively). Others either dropped out by choice or was referred to another agency, etc.

* Client - OASIS Relationship

Seventy-four percent perceived their counselors as friends. An extremely large percentage (91%) trusted their counselors with personal information, as well as trusting their counselors not to tell their parents about anything they did not want them to know. While 65% saw OASIS as a place to spend free time, a very high percentage felt that OASIS was there to help as well as being a place where they could talk about their problems (91% and 98% respectively).

Although 78% stated that friends knew that they went to OASIS only 28% reported at least a little encouragement from them about attending OASIS.

* Employment Assistance

Approximately two-thirds stated that they had discussed employment possibilities with their counselor and were interested in finding a job while 55% of the total sample (or 82% of those interested in finding employment) stated that they would like to have OASIS help them find a job.

* Involvement in Community Activities

Twenty-nine percent are members, or at least involved in other community groups like the scouts, sports teams, etc.

* Police Contact

Less than one-third of the former clients had experience with the police helping them, a friendly talk with the Police, or had a friend who had been helped by the Police. Forty-seven percent had however heard a police officer talk at school. Conversely, three-quarters had watched police work at an accident scene or give a ticket to someone. Fifty-four percent reported observing an officer make an arrest.

3. Discovery of OASIS Activities Which Are Associated With Program Outcomes

The final stage of our analysis strategy is comprised of uncovering statistically significant relationships between former clients' experience at OASIS and two program outcomes adjustment in the family and adjustment in dealing with the justice system. The decision to only use these two outcomes as criteria for evaluating the dynamics of OASIS was due to the following reasons. First, the two outcomes concerning the school were not used because these indices included only those 36 former clients who were in school, a sample size which is questionable for subsequent analysis procedures being used. The two indices that purport to measure outcomes concern former clients' problems of self

and drugs are difficult to translate into objectives of OASIS. That is under certain conditions low concern may be a desirable outcome and in other situations high concern may be desirable.

An analysis of variance procedure was used to uncover differences in average outcome scale scores across subgroups of clients who had different experiences in the OASIS program. To increase our confidence that findings were not being affected by other variables, we controlled for school grade completed, justice system status, authority figures in the house, and whether the client had a job, four variables which were found to be correlated with several of our outcomes and process variables. Listed below are those important relationships that emerged from our analyses.

* Programatic Policy

- It was found that former clients who had participated in family and individual counseling reported more family adjustment as measured by amount of conflict with parents than those who were involved only in group or individual counseling indicated a more problematic home environment. No significant differences in adjustment in dealing with the justice system were uncovered across various types of counseling.
- A significant relationship also existed between former clients adjustment in dealing with the legal system and their termination status from OASIS. Those having negative contacts with the police and/or courts most often were the former clients referred out of the program for various reasons including need of services not offered by OASIS, referral to the juvenile justice system, or because the client was determined not to be susceptible to existing Youth Service Bureau treatment services.
- Within specific sub-groups, those who had completed between the seventh and ninth grades in school or those currently involved in the juvenile justice system show the lowest adjustment in dealing with the legal system. Those terminated because of partial success in completing treatment showed the best overall adjustment in dealing with the legal system, especially those in the subgroups who are involved in the juvenile justice system. (No Table Display)

-It was uncovered that clients who only partially completed their program had similar family adjustment to those who completed the entire program.

-In regards to length of stay in the program, an important finding is that those former clients who participated from 1 to 4 months indicated higher family adjustment than those individuals who stayed less than one month or more than 4 months. There was no association between length of stay and adjustment in dealing with the justice system.

* Client- OASIS relationship

-It was found that average family adjustment was lower for former clients who simply agreed that they could stop by OASIS at anytime than for those clients who strongly agreed to this question. This finding suggest that clients who left OASIS feeling that the staff really wanted them to return at anytime are those who are having less conflict with their parents.

-Former clients who saw counselors as a big brother or big sister reported less conflict with parents than those individuals who perceived counselors as friends or as a teacher.

-Because of so few former clients who indicated undesirable relationships with OASIS and its staff, other characteristics of the client-OASIS relationship could not be evaluated. However, a trend which seemed to emerge consistantly in the analysis should be noted. The more positive the relationship between clients and OASIS, the higher the adjustment. Characteristics which were examined were counselor wanting to help, interest of counselor in the client and counselor could be trusted with confidential information.

* Employment Assistance

-It was found that former clients who had discussed jobs with counselors or would like OASIS to neip find them a job was associated with lower adjustment in dealing with the justice system.

-It was also found that former clients who would like OASIS to help find them a job was associated with lower adjustment in the family within the following subgroups.

* Those former clients who have had previous involvement with the justice system.

* Those who have both parents in the home.

* Those who presently do not have a job.

-Conversely, it was found that specific subgroups of clients who had received some employment assistance by the counselor discussing job possibilities but yet had lower family adjustment than those who did not have such discussions with their counselor. These groups are as follows:

- * Former clients who had no justice system status.
- * Those who are currently involved with the justice system.
- * Those who have only one parent in the home.
- * Former clients who currently have a job.

These findings offers guidance as to type of clients who currently would like OASIS to provide assistance in getting a job. In addition, the results describe the specific groups of former clients who receive some assistance. Further, the fact that assistance was provided to clients with lower adjustment within specific subgroups suggest that other types of employment should be considered.

* Involvement in Community Activities

-Those former clients who were a member of some community group have on the average less conflict with parent. There were no difference in average legal system adjustment score between former clients who were involved in community activities and those who were not.

* Police- Client Contact

-It was found that those former clients who had friendly talks with the police and who had watch police make arrests reported having more conflict with their parents (less family adjustment) than those who reported no such police contact. Examining these differences within specific subgroups, we found that former clients who reported watching police make arrests and indicated more conflict with their parents were youth with less than a sixth grade education, or clients without a job or who has only one parent in the home.

-It was further uncovered that those former clients who had watched police make arrests also reported more problems in dealing with the justice system.

- * In addition to the quantitative data presented above it was pointed out in discussion with the Youth Service Bureau Staff that more youth should be made aware of the service being offered.

E. UTILIZATION OF PROCESS EVALUATION FINDINGS: PHASE V

Potential use of findings from process evaluation constitutes the most important phase of the evaluation strategy. The findings uncovered by the process evaluation could either support the present direction, suggest program modification or development, or state a need for future research.

Potential use of such findings regarding the Laurel-Beltsville OASIS Youth Service Bureau operations are as follows:

- * Results should help justify continued financial support.
 - A large majority felt that OASIS was a place where they could find help in dealing with their problems.
 - A large majority felt that their counselors were very interested in them, wanted to help, and could be trusted with personal information.
 - It was found that specific program attributes were associated with adjustment in the family and in dealing with the legal system.
- * Creation of a volunteer position to seek meaningful jobs for both present and former clients interested in finding employment.
 - A large majority were interested in finding jobs.
 - Of the 32 former clients who do not now have a job, 82% indicated that they would like to have OASIS help them to find employment.
 - Former clients who wanted OASIS to help them find a job reported more conflict with parents than those who did not want help.
 - Results show that clients with more conflict with parents have received job assistance from OASIS. This finding could mean that discussing job possibilities is not enough or simply getting a job for clients is not the answer. Rather it may be important to find clients a job that they like.
- * In addition to referrals for professional help, counselors should become more familiar with the social programs available in the community which might be suggested to the youths as an alternative to hanging out on the streets.

-Youths involved in other socially-oriented community groups showed better adjustment in the family.

- * Inclusion of police who are known to have some rapport with youths in the OASIS prevention efforts. This additional role model may be especially beneficial to youth with problematic behavior.

-Many former clients, especially those involved in the juvenile justice system, who are having positive contacts with the police on the streets are those who are having more conflict with parents.

- * Further research endeavors:

-Replication using a larger sample who have terminated.

-Identification of the types of social groups or activities which would interest these youths.

-Further research to more thoroughly identify adjustment in dealing with problems in school.

-Further research to determine the impact of different types of treatment.

VII. PRINCE GEORGE'S COUNTY HALFWAY HOUSE EVALUATION

A. INTRODUCTION: UNIVERSITY INVOLVEMENT IN EVALUATING PRINCE GEORGE'S COUNTY HALFWAY HOUSE

Beginning in 1973, a Halfway House was established under the supervision of Probation and Parole in Riverdale, Maryland. Financial support was obtained through LEAA's block grant monies which were awarded by the Maryland Governor's Commission on Law Enforcement and the Administration of Justice. The Halfway House is composed of 1 director, 1 assistant director, 2 caseworkers and 6 full/part-time counselors.

In the fall of 1975, the CJEU staff which is comprised of county and University of Maryland personnel and students began an evaluation of the Halfway House. The initial phase of the Halfway House evaluation strategy entailed establishing the student research intern role. A collaborative relationship was easily established between the research intern and staff since she had worked as a part-time counselor during the previous summer. Beginning in September, 1975, the evaluation of the Half-way House began. The student served as an extension of the CJEU staff in an internship status. The responsibility of the student was to manage evaluation activities for the CJEU staff and to become familiar with the dynamics of the Halfway House for the purpose of tasks to be performed in Phases II and III of the evaluation.

B. ELEMENTS OF THE FRAMEWORK FOR PROCESS EVALUATION: PHASE II

During the Phase II of the evaluation, outcomes were developed from the explicit and implicit objectives of the Halfway House program, a strategy which was based on program objectives cited in the grant, and verbalized objectives of the Halfway House staff. Although 8 outcomes were initially derived from policy relevant objectives only 3 outcomes were found to be reliable measures in an analysis stage to be discussed later.

They were:

- * Job adjustment
- * Involvement with police
- * Director's evaluation of ex-residents' adjustment

Internal and external processes were identified next, with emphasis on the processes which could be directly effected by the Halfway House. We were interested in examining the association between stated outcomes and four aspect of the program-staff-resident relations, rules of the house, participation in outside programs and pressure to remain in the program.

The target population was initially those ex-residents who had left the program within the past 6 months. When it became obvious that there would not be enough in the sample, this period was extended back to the winter of 1973. Some people were not available when an interviewer called and several ex-residents refused the interview. Of the total population identified (163), 51 were interviewed. In comparing those ex-residents interviewed with those not interviewed, we can say that the sample obtained tends to be representative of the population according to age, education, entry status (volunteer or under special conditions), prior arrest convictions, commitment and length of stay. As was expected, the sample interviewed included more graduates and less residents who left the program under undesirable conditions than those individuals not interviewed.

C. DATA GENERATION STRATEGY: PHASE III

The third phase of the evaluation strategy deals with generating data which answers the policy relevant questions of interest. Since the evaluation of the Halfway House occurred after the House had been in operation for over 2 years, a one-shot, post hoc research design was deemed most appropriate. This design, which only involves ex-residents of the Halfway House (no control group), allows one to evaluate the dynamics of the Halfway House with minimal disturbances to day-to-day operations. Information included in a telephone interview pertained to the stated

program outcomes, and the internal processes of the Halfway House as well as relevant environmental factors. Characteristics of the ex-residents were obtained from the Halfway House files. Step-by-step procedures used to generate data for the Halfway House evaluation are listed below:

Activities	Description
Identify source of data	Halfway House Records and ex-residents
Develop measures of program processes and outcomes.....	Specific questions answered by ex-residents
Select data collection procedures.....	Telephone interview
Pretest research instruments.....	Telephone interview of present residents
Collect data.....	Two interviewers
Establish coder reliability	
Stage I.....	Questionnaires randomly checked for mistake in coding
Key punch data.....	Machine punching utilized
Establish coder reliability	
Stage II.....	Data processed through lister to identify other mistakes
Stage III.....	Preliminary computer run to generate distribution for a final error check

The major concern in this phase was to generate data for computer analysis which represented reliable and valid indicators of reality. In addition to establishing face validity and identifying ambiguous questions, the pretest was used to train 2 interviewers. Consistent coding of the respondents across the 2 interviewers was also checked before the data was analyzed with less than 1 percent error being tolerated. Machine punching the data was also a factor in reducing the number of processing errors.

D. ANALYSIS STRATEGY: PHASE IV

1. Development of Reliable Outcome Measures: A Description

In the analysis stage, the student researcher and the CJEU staff built, using factor analysis procedures, reliable and valid scales for the 3 outcomes

which were identified as important policy concerns. Factor analysis helps to uncover specific interview questions which seem to measure the same outcome. Three questions were used to measure ex-residents job adjustment and two questions were identified as measuring ex-residents involvement with police. In addition, two highly correlated rating scales, which were used by the director, were summed together to determine adjustment after leaving the program. Responses to each of the other sets of questions were also summed to form single indices for each of the outcomes of interest.

It is important to recognize that these outcome measures are only yardsticks by which to evaluate the affects of program processes which are introduced in subsequent analyses. In lieu of this purpose, we want to develop indices with scores that are normally distributed over the entire range of possible values for a particular measure.

- * Distribution of the job adjustment outcome index is slightly skewed toward the low adjustment end of the index, indicating that a majority of the ex-residents were fairly adjusted. Seventeen percent, however, indicated having problems in the work environment. An examination of frequencies for each job adjustment indicator revealed that 86 percent of the ex-residents were currently working and 47 percent were making more money now. In regard to tardiness, 33 percent stated never, 49 percent reported sometimes and 16 percent indicated that they were often late for work.
- * A second less policy relevant outcome was ex-resident amount and nature of police contact. The assumption is that ex-residents inability to handle police encounters rationally increases the probability of being evoked back into the system for minor offenses. In general, a majority of the ex-residents had no run in with the police or, when police encounters occurred, was able to act cool or the contact did not bother them. Thirty-six percent, however, reported that in encounters with the police they became annoyed or got mad.
- * The third outcome measure was combined rating scales conducted by the director at termination and follow-up several months later. It was found that a majority of the ex-residents' attitudes and behavior in the community was indicative of becoming reintegrated back into the community, 20 percent, however, received poor ratings. The validity of these evaluations is supported by a large percentage of the ex-residents working and not being evoked back into the criminal justice system, recidivism was found to be less than 10 percent on follow-up after several months in the community.

2. Description of House Activities (Program Processes)

In addition to describing ex-resident's job adjustment, involvement with the police and Director's evaluation of ex-resident's adjustment, we asked respondents questions about their experience in the program. This analysis revealed that:

- * A large majority of the ex-residents reported that the staff had been somewhat or very helpful in finding jobs. Conversely, 65 percent stated the staff had been of little or no use in finding them a place to live which is a function of not needing assistance.
- * Most ex-residents stated that it had been somewhat to very helpful to talk with staff members and that the staff seemed interested in helping them after release. Seventy percent of the ex-residents also stated that it was very important for the staff to determine when a resident was ready to leave. Sixty-one percent of the ex-residents stated that they sometime or frequently shared their problems with staff members; however, 37 percent reported they were reluctant to do so. In addition, 59 percent said that the staff offered little or no compliments (positive feedback) to them.
- * Ex-resident's thought that rules were important and, to a lesser degree, that the point system was helpful. Face validity of house rules were reflected by 57 percent of the individuals reporting that few rules were meaningless and 29 percent stating that all of the rules had meaning. Never the less, ex-residents said that some of the rules were not followed, 29 percent reported not adhering to curfew, 29 percent violating drinking/drug rules, 12 percent the sign-in rule and 8 percent reported not following rules regarding guests.
- * In regard to participation in outside programs, 37 percent did not participate, 12 percent were enrolled in vocational rehab., 18 percent in drug counselling and 31 percent in A.A. Of those individuals participating, most felt that the programs were somewhat or very helpful.

3. Discovery of Program Activities Which Are Related To Outcome Measures

Important findings which emerged from our attempts to uncover certain statistical significant relationships between unit activities and outcome measures comprised the final stage of our analysis strategy. An

analysis of variance procedure was used to uncover differences in average outcome scale scores across subgroups of ex-residents who differed in their experiences and attitudes (process variables). To increase our confidence that any significant findings were not being affected by other variables, we controlled for age, length of stay and termination status, 3 variables which were found to be correlated with several of our outcomes measures and program process variables. Listed below are results of these analyses:

- * Residents who participated in Vocational Rehabilitation programs experienced more job adjustment than those in other or no programs
- * Those residents who felt the outside programs were very helpful were more adjusted in their jobs and also experienced less involvement or more positive involvement with police
- * Those residents who continued in programs after release were less involved and/or more positively involved with the police
- * Those residents who felt it was very important knowing when the staff considered them ready to leave received the highest post-adjustment evaluations
- * Those residents who didn't participate in outside programs and those who participated in Vocational Rehabilitation received the highest post-adjustment evaluations
- * Although adherence to rules and discipline is seen as important, this set of program activities was found to have no association with job adjustment and contact with the police
- * Individuals who reported that the staff was useful or very useful in finding jobs had higher job adjustment than those who received little but some assistance. This difference was most pronounced among 17 - 20 year old ex-residents
- * Among 17 - 25 year old ex-residents: it was also found that the more individuals shared their problems with staff the higher their job adjustment

- * Among ex-residents who had stayed at the Halfway House for less than one month, the more they shared their problems with staff, the more negative contact they have had with police after leaving the house. Further it was found that among those ex-residents who had left the house for undesirable reasons, those who had shared their problems with staff reported having less negative contact with the police.

In addition to the preceeding results which stem directly from our quantitative analysis, several observations are worth noting:

- * It is evident that Vocational Rehabilitation is a worthwhile program and should be pursued, as well as other job training programs such as the WIN and UPWARD BOUND programs. Possibly closer coordination with these agencies would insure more referrals being accepted from the Halfway House.
- * Keeping follow-up data is almost an impossibility because many residents are transient and there is inadequate personnel to complete this task.

E. Utilization of Process Evaluation Findings: Phase V

Potential use of findings from process evaluation is the most important phase of the evaluation strategy. The findings uncovered by the process evaluation could either support the present direction, suggest program modification or development or state a need for future research.

Potential use of such findings regarding the Halfway House are as follows:

- * Results which could support continued funding of the Halfway House
 - It was found that ex-residents reported low negative contact with police, the gatekeepers to the criminal justice system.
 - Some program activities are related to both job adjustment and contact with the police.
- * Results which suggest program modification or expansion
 - It was found that those ex-residents who had participated in a vocational rehabilitation program reported higher adjustment on the job. More emphasis on involvement in such programs may optimize goal attainment.
 - The results suggest that helping younger residents to find a job may lead to higher job adjustment. Further the data shows that attention should be placed on getting younger residents to share their problems with the staff in order to optimize job adjustment.

-Results show that some program component should be built in to get ex-residents to continue participation in outside programs after release. It was found that those ex-residents who had continued in a program after release were less involved or had less negative contact with the police.

-The finding what pertained to rules and discipline suggest that the function of this set of program activities is not associated with behavior after release. As explained by the Director, rules and discipline are not intended to have long effects, but rather for the purpose of maintaining order while in the Halfway House.

* Suggestion as how to combat problems which were observed by the student research intern and the CJEU staff are as follows:

-First, more accurate and policy relevant information could be generated on LEAA funded projects such as the Halfway House if part-time research roles could be built into the initial grants. Such a person could be responsible for developing a detailed monitoring system with technical assistance from the CJEU staff, Region IV and the Maryland Governor's Commission. In addition, this person could coordinate collection of data and analysis of these data for quarterly reports.

-In order to keep complete follow-up data on ex-residents, it would also be helpful to set up some procedure where the program staff could track people for at least 12 months. Further, this follow-up data should be collected at specified times after leaving the program, e.g. 3 months, 6 months, and 12 months. Attempts should also be made to cross validate self-reported follow-up data.

-In regards to closer coordination between the Halfway House and other agencies, a series of meetings could be held to formulate which agencies can be utilized more fully for referrals.

APPENDIX B

GLOSSARY OF TECHNICAL TERMS

ANALYSIS OF CO-VARIANCE: Data analysis technique which makes it possible to analyze the variation of program outcome scores across independent groups of subjects while controlling for the effects of one or more other variables.

ANALYSIS OF VARIANCE: Data analysis technique which makes it possible to analyze variation in program outcome scores across independent groups of subjects.

BIVARIATE CORRELATIONAL ANALYSIS: Provides a single summary statistic describing the magnitude of relationship between two variables.

CLOSE END MEASURE: One can determine its real limits and therefore compute its midpoint.

CODEBOOK: A reference of various designations used to distinguish data on computer cards.

CODER RELIABILITY: To the extent that the code (reduction of information) to a set of alphanumericies suitable for input into an analysis procedure) can produce similar findings if the collection of evidence were repeated.

COMPOSITE OUTCOME MEASURE: A summated score consisting of two or more variables which have been found to measure the same phenomenon.

CONTINUOUS DATA: When a variable is considered to have the possibility of occurring at all different values within a specified range of the variable.

CURVILINEARITY: An examination of a scatterplot suggests that the relationship between two variables departs from linearity in a systematic way and that the linear correlation coefficient may be underestiamting the true strength of the relationship.

F STATISTIC: Used to make inferences on whether the variability of one population is precisely equal to that of another population.

FACTOR ANALYSIS: Given an array of correlation coefficients for a set of variables, some underlying pattern of relationships exists such that the data may be rearranged or reduced to a small set of factors.

FACTOR LOADING: The correlation between a variable and a factor.

FREQUENCIES: The simple frequency distribution of the cases in a data file among the values of a discrete variable.

HOMOGENEITY OF VARIANCE: Indicates that the variation of individual scores around the mean of one group of subjects is equal to the variation of scores in one or more other groups of subjects. It is a requirement of Analysis of Variance.

INTERVAL LEVEL MEASURE: A level of measurement whose values are equally spaced on a continuum.

MULTIPLE REGRESSION: An extension of the bivariate correlation coefficients to multivariate analysis. Allows the researcher to study the linear relationships between a set of independent variables and dependent variables while taking into account the interrelationships among the dependent variables.

NON-PARAMETRIC: Distribution free statistics. Statistics which do not require the variables to have some special distribution.

OPEN END MEASURE: There is no way to determine its upper level real limit. and therefore, no computations involving the midpoints can be carried out.

ORDINAL LEVEL MEASURE: A level of measurement whose values denote an ordering rather than relative magnitude.

PARAMETRIC: Statistics which require the variables to have some special distribution (e.g., normality).

PARTIAL CORRELATION: Provides a single measure of association describing the linear relationship between two variables while adjusting or controlling for the effects of one or more additional variables.

RELIABILITY: To the extent that one can assert confidently that similar findings would be obtained if the collection of evidence were repeated.

SCATTERGRAM: Describes the capability of having a single summary statistic describing the relationship between two variables by producing a scatterplot diagram of the relationship between two variables.

SIGNIFICANCE LEVEL: Represents the probability of rejecting a finding which is in fact real.

SPURIOUSNESS: Where an observed relationship between two variables is a function of the influence of some third variable or combination of variables.

THREE-WAY CROSS CLASSIFICATION: Data analysis technique which makes it possible to analyze the variation of program outcome scores across independent groups of subjects within subclasses of a third variable.

TWO-WAY CROSS CLASSIFICATION: A sequence of two-way tables showing along the vertical dimension the values of one variable and along the horizontal dimension the values of a second variable.

VALIDITY: The extent to which differences in scores on it reflect true differences among individuals, groups, or situations in the characteristic is seeks to measure rather than constant or random errors.

VARIMAX ROTATION: Centers on simplifying the column of a factor matrix.

BIBLIOGRAPHY

- Adams, Stuart, Evaluative Research in Corrections: A Practical Guide, U.S. Department of Justice, Law Enforcement Assistance Administration, March, 1975.
- Argyris, Chris, "Creating Effective Research Relationships in Organizations", Readings in Evaluation Research; Russell Sage Foundation; New York, 1971.
- Cargo, Francis G. (ed), Readings in Evaluation Research, New York, Russell Sage Foundation, 1971.
- Eisenberg, Terry, Collaboration Between Law Enforcement Executives and Social Scientists, National Conference of Christians and Jews, Inc., Berkely, California, April, 1975.
- Havelock, Ronald G., Planning for Innovation, University of Michigan, Ann Arbor, Michigan, 1973.
- Horst, Pamela, Nay, Joe M. Scanton, John W., Wholey, Joseph S., "Program Management and the Federal Evaluator", Public Administration Review, July, August, 1974.
- Johnson, K. W., "New Direction in Criminal Justice Education: A Program Designed to Prepare College Students to Initiate Planned Change in Criminal Justice", New Directions and Initiatives in Criminal Justice Education, Temple University, Philadelphia, Pennsylvania, 1974.
- Schulberg, Herbert C. and Baker, Frank, "Program Evaluation Models and Implementation of Research Findings", Readings in Evaluation Research, Russell Sage Foundation, New York, 1971.
- Suchman, Edward, Evaluative Research, University of Pittsburgh, Russell Sage Foundation, New York, 1967.
- Twain, David, Harlow, Eleanor and Merwin, Donald, Research and Human Services: A Guide to Collaboration for Program Development, Research and Development Center, Jewish Board of Guardians, New York, New York, September, 1970.
- Waller, John D., MacNeil, Dona, Scanlon, John W., Tolson, Francine L. Wholey, Joseph S., Monitoring for Criminal Justice Planning Agencies, U.S. Department of Justice Law Enforcement Assistance Administration, August 1, 1974.

Weidman, Donald R., Waller, John D., MacNeil, Dona Tolson, Francine Wholey,
Joseph S., Intensive Evaluation for Criminal Justice Planning Agencies,
U.S. Department of Justice Law Enforcement Assistance Administration, July,
1975.

U.S. Department of Justice Law Enforcement Assistance Administration, LEAA
Guideline Manual, M4100.1CH61, November 1, 1974.

END