

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

MICROFICHE

PB-251 726

EVALUATION OF COST-EFFECTIVENESS OF SERVICES
PROVIDED TO ABUSED AND NEGLECTED CHILDREN
AND THEIR FAMILIES UNDER TITLES IV-A AND
IV-B, VOLUME I

BURT ASSOCIATES, INCORPORATED
BETHESDA, MARYLAND

SEPTEMBER 1975

NCJRS

JUL 5 1977

ACQUISITIONS

8
H
E
C
H

KEEP UP TO DATE

Between the time you ordered this report—which is only one of the hundreds of thousands in the NTIS information collection available to you—and the time you are reading this message, several *new* reports relevant to your interests probably have entered the collection.

Subscribe to the **Weekly Government Abstracts** series that will bring you summaries of new reports *as soon as they are received by NTIS* from the originators of the research. The WGA's are an NTIS weekly newsletter service covering the most recent research findings in 25 areas of industrial, technological, and sociological interest—invaluable information for executives and professionals who must keep up to date.

The executive and professional information service provided by NTIS in the **Weekly Government Abstracts** newsletters will give you thorough and comprehensive coverage of government-conducted or sponsored re-

search activities. And you'll get this important information within two weeks of the time it's released by originating agencies.

WGA newsletters are computer produced and electronically photocomposed to slash the time gap between the release of a report and its availability. You can learn about technical innovations immediately—and use them in the most meaningful and productive ways possible for your organization. Please request NTIS-PR-205/PCW for more information.

The weekly newsletter series will keep you current. But *learn what you have missed in the past* by ordering a computer **NTISearch** of all the research reports in your area of interest, dating as far back as 1964, if you wish. Please request NTIS-PR-186/PCN for more information.

WRITE: Managing Editor
5285 Port Royal Road
Springfield, VA 22161

Keep Up To Date With SRIM

SRIM (Selected Research in Microfiche) provides you with regular, automatic distribution of the complete texts of NTIS research reports *only* in the subject areas you select. SRIM covers almost all Government research reports by subject area and/or the originating Federal or local government agency. You may subscribe by any category or subcategory of our WGA (**Weekly Government Abstracts**) or **Government Reports Announcements and Index** categories, or to the reports issued by a particular agency such as the Department of Defense, Federal Energy Administration, or Environmental Protection Agency. Other options that will give you greater selectivity are available on request.

The cost of SRIM service is only 45¢ domestic (60¢ foreign) for each complete

microfiche report. Your SRIM service begins as soon as your order is received and processed and you will receive biweekly shipments thereafter. If you wish, your service will be backdated to furnish you microfiche of reports issued earlier.

Because of contractual arrangements with several Special Technology Groups, not all NTIS reports are distributed in the SRIM program. You will receive a notice in your microfiche shipments identifying the exceptionally priced reports not available through SRIM.

A deposit account with NTIS is required before this service can be initiated. If you have specific questions concerning this service, please call (703) 451-1558, or write NTIS, attention SRIM Product Manager.

This information product distributed by

NTIS

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161

BIBLIOGRAPHIC DATA SHEET		1. Report No. SRS 74-1	2.	PR 251726
4. Title and Subtitle EVALUATION OF COST-EFFECTIVENESS OF SERVICES PROVIDED TO ABUSED AND NEGLECTED CHILDREN AND THEIR FAMILIES UNDER TITLES IV-A AND IV-B			5. Report Date 9/75	6.
7. Author(s)			8. Performing Organization Rept. No.	
9. Performing Organization Name and Address Burt Associates, Inc. CA 5110- 7315 Wisconsin Avenue Bethesda, Maryland 20014			10. Project/Task/Work Unit No.	
			11. Contract/Grant No. SRS 74-31	
12. Sponsoring Organization Name and Address Dept. of Health, Education, and Welfare Social and Rehabilitation Service (SRS) Washington, D. C.			13. Type of Report & Period Covered Final Report	
			14.	

15. Supplementary Notes

16. Abstracts

The purpose of this study is to stimulate State and local jurisdictions to measure the costs and results of their child abuse and neglect services in definitive, quantifiable ways (recidivism, severity) in order that they and the Federal Government can make program and resource allocation choices. In general, the purpose of this evaluation effort is to help SRS develop an initial evaluation system for measuring cost-effectiveness of protective services.

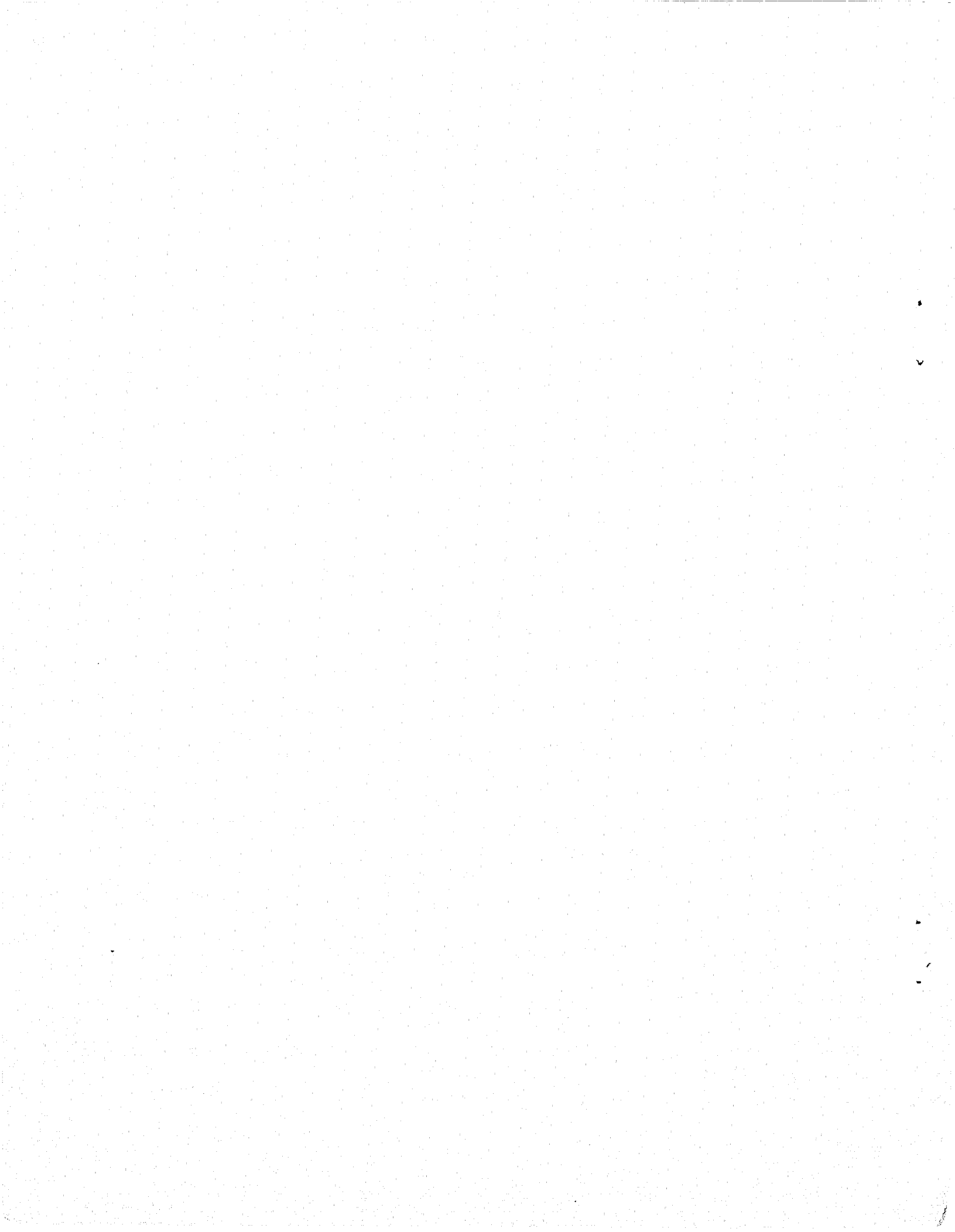
17. Key Words and Document Analysis. 17a. Descriptors

17b. Identifiers/Open-Ended Terms

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

SA
0901

17c. COSATI Field Group		PRICES SUBJECT TO CHANGE	
18. Availability Statement Release Unlimited		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages
		20. Security Class (This Page) UNCLASSIFIED	



EVALUATION OF COST-EFFECTIVENESS OF SERVICES PROVIDED TO
ABUSED AND NEGLECTED CHILDREN AND THEIR FAMILIES UNDER
TITLES IV-A AND IV-B

Volume I

By
Kenneth W. Webb
Marvin R. Burt
Sharon Pines
Barbara A. Kraft

Submitted to
Social and Rehabilitation Service
Department of Health, Education, and Welfare

Under Contract Number
SRS 74-31

By
Burt Associates, Incorporated
7315 Wisconsin Avenue
Bethesda, Maryland 20014
(301) 654-4436

September 1975

TABLE OF CONTENTS

Volume I

FOREWORD AND ACKNOWLEDGMENTS i

EXECUTIVE SUMMARY ii

Chapter

1. INTRODUCTION 1

2. REVIEW OF EXISTING SYSTEMS 8

3. SYSTEM FOR MEASURING EFFECTIVENESS---
THE TRACKING SYSTEM 16

4. SYSTEM FOR MEASURING COSTS 34

5. MANAGEMENT REPORTS 50

6. SUMMARIES OF DATA COLLECTED 90

7. PROPOSED AGENCY DATA COLLECTION METHODS 119

8. SOCIAL COSTS OF ABUSE AND NEGLECT 137

9. THE UTILITY OF THIS COST-EFFECTIVENESS EVALUATION
SYSTEM AS A POLICY ANALYSIS TOOL 141

10. CONCLUSIONS 154

Volume II

Appendix

A. SERVICES PROVIDED BY COUNTY A AND B 3

B. COST FORMS--COUNTY B 6

C. PUBLICLY AND PRIVATELY FUNDED AGENCIES AND GROUPS
PROVIDING SERVICES TO NEGLECTED AND ABUSED
CHILDREN IN COUNTIES A AND B 12

D. COMPLETE PRESENTATION OF EFFECTIVENESS DATA
COLLECTED FROM COUNTIES A AND B 18

LIST OF FORMS, TABLES, FIGURES, AND REPORTS

<u>FORM</u>	<u>Page</u>
4-1 DIRECT LABOR COSTS	44
4-2 TOTAL COST	45
4-3 PROTECTIVE SERVICES DATA COLLECTION FORM	47
7-1 PROTECTIVE SERVICES DATA COLLECTION FORM	122
 <u>TABLE</u>	
3-1 PROTECTIVE SERVICES DATA COLLECTION FORM	23
5-1 PREDICTED MONTH IN WHICH RECIDIVISM OCCURS (Average Percent of Logged Cases)	68
5-2 RECIDIVISM BY MONTH	72
6-1 EFFECTIVENESS DATA FOR PROTECTIVE SERVICES COMBINED TOTAL FOR NEGLECT AND ABUSE (County A) (100% Sampling)	91
6-2 EFFECTIVENESS DATA FOR PROTECTIVE SERVICES TOTAL FOR ABUSE--COUNTY A	92
6-3 EFFECTIVENESS DATA FOR PROTECTIVE SERVICES TOTAL FOR NEGLECT--COUNTY A	93
6-4 EFFECTIVENESS DATA FOR PROTECTIVE SERVICES COMBINED TOTAL FOR NEGLECT AND ABUSE (County B) (25% Sampling)	94
6-5 EFFECTIVENESS DATA FOR PROTECTIVE SERVICES TOTAL FOR ABUSE--COUNTY B	95
6-6 EFFECTIVENESS DATA FOR PROTECTIVE SERVICES TOTAL FOR NEGLECT--COUNTY B	96
6-7 CASE LOCATION--RURAL/URBAN (County A) (100% Sampling)	100
6-8 CASE LOCATION--RURAL/URBAN (County B) (25% Sampling)	101
6-9 RECIDIVISTIC DATA FOR COUNTY A COMBINED TOTAL FOR NEGLECT AND ABUSE	102

LIST OF FORMS, TABLES, FIGURES, AND REPORTS
(CONTINUED)

<u>TABLE</u>	<u>Page</u>
6-10 RECIDIVISTIC DATA FOR COUNTY A TOTAL FOR ABUSE	103
6-11 RECIDIVISTIC DATA FOR COUNTY A TOTAL FOR NEGLECT	104
6-12 RECIDIVISTIC DATA FOR COUNTY B COMBINED TOTAL FOR NEGLECT AND ABUSE	105
6-13 RECIDIVISTIC DATA FOR COUNTY B TOTAL FOR ABUSE	106
6-14 RECIDIVISTIC DATA FOR COUNTY B TOTAL FOR NEGLECT	107
6-15 PERCENT OF CASES WITH A PREVIOUS HISTORY	109
6-16 PERCENT OF VALIDATED CASES WITH A RECIDIVISTIC CASE	109
6-17 PERCENT OF CASES WITH CHANGE IN SEVERITY	110
6-18 PERCENT OF RECIDIVISTIC CASES THAT HAD A PREVIOUS HISTORY OF NEGLECT OR ABUSE	111
9-1 ILLUSTRATION OF AGENCY RANKINGS IN TERMS OF COST-EFFECTIVENESS	146
9-2 ILLUSTRATION OF COST-EFFECTIVENESS RELATED TO PURCHASED SERVICES	148

FIGURE

5-1 PREDICTED MONTH IN WHICH RECIDIVISM OCCURS (Monthly Distribution)	70
5-2 PREDICTED MONTH IN WHICH RECIDIVISM OCCURS (Culmulative Distribution)	71
9-1 ILLUSTRATION OF TREND ANALYSIS	147
9-2 ILLUSTRATION OF COST-EFFECTIVENESS OF PURCHASED SERVICES	150

LIST OF FORMS, TABLES, FIGURES, AND REPORTS
(CONTINUED)

<u>FIGURE</u>		<u>Page</u>
9-3	ILLUSTRATION OF COST-EFFECTIVENESS OF URBAN/RURAL MIX	151
9-4	EVALUATION AND PLANNING MODELS	153
 <u>REPORT</u>		
1	WORKLOAD AND EFFICIENCY (County B)	xvi
2	EFFECTIVENESS (County B)	xvii
3	COST-EFFECTIVENESS (County B)	xviii
4	COST-EFFECTIVENESS OF COUNTIES A AND B COMPARED	xix
5-1	WORKLOAD AND EFFICIENCY (County A)	52
5-2	EFFECTIVENESS (County A)	53
5-3	COST-EFFECTIVENESS (County A)	54
5-4	WORKLOAD AND EFFICIENCY (County B)	55
5-5	EFFECTIVENESS (County B)	56
5-6	COST-EFFECTIVENESS (County B)	57
5-7	EFFICIENCY COMPARISON--COUNTIES A AND B (1974)	59
5-8	EFFECTIVENESS COMPARISONS--COUNTIES A AND B	60
5-9	COST-EFFECTIVENESS OF COUNTIES A AND B COMPARED (1974)	61
5-10	EFFECTIVENESS ANALYSIS OF CHILD REMAINING WITH FAMILY (OBJECTIVE 1) (County A)	63
5-11	EFFECTIVENESS ANALYSIS OF CHILD REMAINING WITH FAMILY (OBJECTIVE 1) (County B)	64
5-12	EFFECTIVENESS ANALYSIS OF RECIDIVISM (OBJECTIVE 2) (County A)	66
5-13	EFFECTIVENESS ANALYSIS OF RECIDIVISM (OBJECTIVE 2) (County B)	67

LIST OF FORMS, TABLES, FIGURES, AND REPORTS
(CONTINUED)

<u>REPORT</u>	<u>Page</u>
5-14 EFFECTIVENESS ANALYSIS OF RECIDIVISM (OBJECTIVE 3) (County A)	75
5-15 EFFECTIVENESS ANALYSIS OF RECIDIVISM (OBJECTIVE 3) (County B)	76
5-16 EFFECTIVENESS ANALYSIS OF TIME TO COURT DECISION (OBJECTIVE 4) (County A)	78
5-17 EFFECTIVENESS ANALYSIS OF TIME TO COURT DECISION (OBJECTIVE 5) (County B)	79
5-18 EFFECTIVENESS ANALYSIS OF TIME TO COMPLETION OF INVESTIGATION AND VALIDATION (OBJECTIVE 5) (County A)	81
5-19 EFFECTIVENESS ANALYSIS OF TIME TO COMPLETION OF INVESTIGATION AND VALIDATION (OBJECTIVE 6) (County B)	82
5-20 MONTHLY COST ANALYSIS, COUNTY A	84
5-21 MONTHLY COST ANALYSIS, COUNTY B	86
5-22 COST-EFFECTIVENESS ANALYSIS--RETURN TO FAMILY (County B)	87
5-23 COST-EFFECTIVENESS ANALYSIS--RECIDIVISM (County B)	88
5-24 COST-EFFECTIVENESS ANALYSIS--SEVERITY (County B)	89

FOREWORD AND ACKNOWLEDGEMENTS

This study was made possible by the cooperation of many people. Our special thanks go to the SRS Project Officer, Mr. Kyn Kendall, and the Community Services Administration consultant, Dr. David Eppley, who were responsible for monitoring the project.

We also wish to thank the Regional Office personnel who were of considerable assistance in helping to select the two sites where the new system was tested. Many persons helped considerably in conducting the field test including State Office personnel and local agency protective services staff.

Throughout the project, these persons were extremely cooperative and helpful to us in collecting necessary data. A list of all the individual persons who helped in this project would be extremely long and would disclose the identity of the two counties, which we wish to keep confidential.

Burt Associates, Incorporated, is pleased to have been selected to conduct this study which has been an important part of its research program in child abuse and neglect and in developing evaluation systems.

EXECUTIVE SUMMARY

Introduction

The Social and Rehabilitation Service (SRS), under Titles IV-A and IV-B of the Social Security Act, provides funds to states for the provision of protective services to abused and neglected children and their families. The Secretary of the Department of Health, Education, and Welfare has given a high priority to services to abused and neglected children. Various agencies of HEW are cooperating in an interagency objective in this area. The evaluation of local protective services, the subject of this report, is part of the SRS/CSA efforts specified by the Intradepartmental Committee on Child Abuse and Neglect.

Objectives of the Research

A number of systems are under development or conceptualized for the evaluation of social services, with some relating directly to the evaluation of protective services. However, there are no generally accepted systems for determining costs and evaluating impacts of protective services in state and local public welfare agencies. The purpose of the effort described in this report, as stated by SRS, "is to stimulate State and local jurisdictions to measure the costs and results of their child abuse and neglect services in definitive, quantifiable ways (recidivism, severity) in

order that they and the Federal Government can make program¹ and resource allocation choices."

SRS wants service-specific effectiveness estimates of the results of protective services work in child abuse and neglect. Reduction of recidivism of abuse and neglect, for instance, is an important measure of the effectiveness of caretaker treatment. Further, the reduction of severity in cases where recidivism does occur, is another measure of the effectiveness of the services. The contract specified that cost estimation methods and effectiveness-measure estimates be performed as simply and with as little cost as possible in order to encourage the use of the methods by local agencies.

In general, the purpose of the evaluation effort in this contract is to help SRS develop an initial evaluation system for measuring cost-effectiveness of protective services. Specifically, the evaluation method will permit answers to the following types of questions:

- a. Which service agencies, individually or as aggregated by states or regions, are most effective in reducing recidivism and severity for the dollars spent? What is the order of cost-effectiveness from least to highest, by service agency, state, or region? This will permit agencies to improve their efficiency by identifying and correcting problems of poor performance and encouraging more successful approaches.

¹ U. S. Government, Social and Rehabilitation Service, RFP-SRS-74-23.

- b. What trends are discernable from year to year in cost-effectiveness of service agencies, states, regions, and the nation?
- c. Do agencies serve some groups (i.e., neglected children, abused children, urban children, rural children) more cost-effectively than others?
- d. How much does it cost to provide services to clients who achieve protective services objectives (i.e., child is not abused or neglected again) as compared with clients not achieving these objectives?

Approach

The technical approach consisted of these main steps:

- . Review of existing evaluation systems
- . Design of a protective services evaluation system
- . Demonstration at two test sites

Review of Existing Evaluation Systems

SRS had conducted studies to identify and analyze systems for evaluation of social services that are in various stages of development throughout the country. Many of the systems studied by SRS are generic and assess in global terms whether and to what extent the service goals have been achieved. Another approach is to classify cases according to degree of improvement. Generic systems were considered by SRS to be too subjective for use in cost-effectiveness evaluation. Thus, the objective of the research

in this report is the development of a method specific to protective services.

Burt Associates, Incorporated, as a first step, collected information on systems being designed throughout the country including those previously studied by SRS. The results of the analysis of existing systems along with descriptions of the systems (both generic and service-specific) are reported in Chapter 2.

Cost Methods

The methods of cost estimation found in the various system descriptions suffered from a variety of deficiencies. In general, the cost estimation techniques were far too detailed for use in the current project. Usually they were estimated by the case, either on a frequency analysis or a unit basis. The cost methodology derived by BAI and shown in Chapter 4 is based on specifications set forth in the RFP work statement and background knowledge of the BAI staff.

Data Gathering Techniques

The methods for data collection found in the system reviews are all on a case analysis basis with significant variation among systems on the data collected.

Few of the reports surveyed by BAI went into detail on the data collection methods used or to be used. In only one case was mention made of the use of sampling in lieu of total case analysis. No details were provided as to how well this worked.

Design of a Protective Services Evaluation System

Based on the findings of the review of current systems, detailed discussions with SRS personnel, and discussions with protective service supervisors, BAI designed a cost-effectiveness evaluation system. The design is composed of two major subsystems.

- . An effectiveness measurement subsystem that provides a minimal set of effectiveness measures but is sensitive enough to assess performance. This subsystem consists of two key parts:
 - . A method of data collection and client tracking that is not an excessive burden on the agency staff
 - . Analysis and reporting procedures that are easily understood by agency supervisors and management. This system is easily aggregated to the state, regional, and national levels.
- . A cost estimating subsystem that is easy to implement and does not place an excessive burden on the finance officer

These subsystems are described in Chapters 3 and 4 respectively.

Site Selection

The contract called for the testing of the methodology at two test sites for the purpose of demonstrating that the cost-effectiveness design would work. The criteria developed for the selection of the test sites were agreed to be the following:

- . The site should have a good data collection system
- . The number of cases of abuse and neglect of children per year should be at least 400
- . Socioeconomic and rural/urban citizen composition at the site should cover a wide range of conditions
- . The site personnel should be willing and able to participate

- . Sites should have a full range of services and well developed linkages with related agencies such as schools, courts, police and hospitals

The HEW Regional Commissioners and the Associate Regional Commissioners were contacted by the Community Service Administration (CSA), to inform them of the project and solicit their cooperation. BAI wrote a letter to each asking for nominations of local agencies within their regions that best met the criteria.

The Commissioners nominated 19 agencies from which two were selected by BAI, termed in this report "County A" and "County B." Visits to the two sites were made to ensure feasibility of the test with the following findings:

- . County A has an annual rate of about 900 cases a year and has an adequate manual data system composed of a log, family file, and case records. The clients represent a combination of urban/rural and different racial and other socioeconomic traits. The agency was interested in participating. The test made use of 100 percent sampling of cases for the test.
- . County B has an annual rate of 5,400 cases. At first, it was thought that the _____ automated data system would be usable and provide a contrast with the manual system of County A. However, _____ is encountering difficulties and BAI relied on the manual system of County B. The county and state personnel were interested in participating. BAI sampled at a rate of every fourth case. Sampling was preferred because of the heavy case load of County B.

Feasibility Test

Data was collected for evaluation of the system at the two sites from December 1974 to April 1975. Chapter 5 presents display and discussion of reports generated by the system at the two sites and Chapter 6 contains summaries of data collected.

Recommended System

Chapter 7 presents BAI's recommended data collection method; Chapter 9 draws conclusions about the utility of the recommended cost-effectiveness evaluation system based on its test in County A and County B.

Effectiveness Measures

A protective service operation generally attempts to retain the child in the family after abuse or neglect has been reported, contingent on investigation, family treatment, and other actions to alleviate the problem. The option is to remove the child from the family and place him with relatives, friends, or some type of foster care. This removal option is generally thought by advanced agencies to be an extreme action to be used where the case is hopeless. However, some agencies use the removal option much more frequently than others.¹

The emphasis upon keeping the children with their own families whenever possible is strongly supported by judicial doctrine, Federal legislation, HEW policy pronouncements, and child welfare professional standards.

When another instance of abuse or neglect occurs with the same or other children in the family, it is termed "recidivism." Recidivism indicates lack of success in working with the family. If a subsequent case occurs in the family, a further criterion is that the severity of the second case should be less than the first if the case work has been helpful.

¹One purpose of the present study is to provide a method of measuring the costs and effectiveness of these options.

Rapid decision making and placement of children is a generally accepted aim for an agency, because the children who are placed quickly are less likely to suffer severe emotional trauma. Thus, the time between intake and the completion of the caseworker's investigation or the time between intake and court decision are believed to be significant indicators of effectiveness of service.

The above discussion leads to the structuring of several management objectives:

1. An increase in the number and rate of validated cases where the child is returned or remains with the family¹ with better or equal cost, recidivism, and severity rates
2. A decrease in the number and rate of cases where a validated incident of child abuse and neglect occurs after a previous validated incident of child abuse or neglect
3. A reduction in severity in those cases where one or more validated incidents of child abuse and neglect occur
4. A reduction in time interval between intake and court decision for those validated cases where court action is required
5. For all validated cases, minimization of the time interval between intake and the completion of the investigation and validation.

1

This can also be treated as a policy question to be answered by the evaluation. If the policy is inappropriate, it can result in increases in recidivism and increased severity of these second cases.

Objective (1): Measures of Effectiveness

- . Total validated cases where the child is returned to or remains with the family
- .
$$\frac{\text{Total validated cases where the child is returned or remains with his family}}{\text{Total validated cases}}$$

Objective (2): Measures of Effectiveness

- . The number of families where a validated incident of child abuse or neglect occurs within a year after a previous validated incident of child abuse or neglect
- .
$$\frac{\text{The number of families where a validated incident of child abuse and neglect occurs within a year after a previous validated incident of child abuse or neglect}}{\text{Total validated cases}}$$

Objective (3): Measures of Effectiveness

- . For all recidivism cases of measure of effectiveness (2), the number of cases where the severity decreases in the second incident
- .
$$\frac{\text{For all recidivism cases of measure of effectiveness (2), the number of cases where the severity decreased in the second incident}}{\text{Total recidivism cases}}$$

Objective (4): Measure of Effectiveness¹

- . The average time between intake of a reported case and court decision, for those cases where court decision is taken.

Objective (5): Measure of Effectiveness¹

- . The average time between intake of a reported case and the completion of investigation and validation.

The definitions and severity rankings of different forms of abuse and neglect are a critical problem for this system because it is necessary to determine changes in severity from the first to the second incident. The two demonstration counties

¹A future evaluation task should be to correlate speed and recidivism. The present study did not collect sufficient data for that analysis.

have different lists of types of abuse and neglect to use for intake classification and treatment classification. In order to standardize the classifications for purposes of this evaluation, BAI reviewed the literature and arrived at a classification which is general for all agencies. The classifications used by the two demonstration counties are readily included in the BAI classification.

BAI decided to use the following list of types of neglect and abuse as a severity ranking classification (from most severe to least severe).¹

- . Death
- . Brain damage, dismemberment
- . Poisoning
- . Internal injuries
- . Skull fractures; sexual abuse
- . Bone fractures; burns, scalding; exposure--freezing
- . Sprains, dislocations; abrasions, lacerations; wounds, cuts, punctures; subdural hemorages or hematomas
- . Malnutrition, emotional neglect; medical neglect; abandonment
- . Bruises, welts
- . Educational neglect; moral neglect
- . Shelter neglect; lack of supervision
- . Clothing neglect

The rankings were arrived at by a Delphi technique using BAI staff personnel who work on protective services problems. If this type of ranking were to be used for more general

¹ Alternative lists would be feasible using the same basic data.

implementation, a Delphi technique used with outstanding people in the field would be more appropriate.

About 35 percent of the cases in Counties A and B contained multiple conditions of neglect and abuse. Thus, in making judgments about change in severity between two incidents, a standard method was required. It was decided that the most severe condition in each incident would be compared to determine changes in severity.

Tracking System

Data Collection on Effectiveness

Data collection procedures and forms were developed to assure standardized data collection for the two sites. These are fully described in Chapter 3. The data were collected by tracking cases on a monthly basis for a 12 month period from December 1973 through November 1974.

System for Measuring Costs

The contract specified the following requirements for the cost analysis subsystem:

- . Costs are not to be estimated on an individual case basis
- . Costs must include direct, indirect and purchased services
- . Costs from all sources, Federal, state and local as incurred by the public welfare agency under Title IV-A, and IV-B, are to be included
- . The method must be objective, comprehensible to management, timely, and least expensive with relation to validity and reliability

In addition, it was requested that BAI include marginal cost analysis if possible.

Most protective services fall into one of the two organizational types represented by County A and County B in the study. In County A, the smaller county, protective services cases are usually handled by the protective service unit; other social service personnel, however, also handle neglect and abuse cases when these events occur in the course of some other type of case such as AFDC. Therefore, in estimating costs, a fractional part of the time spent by other social service staff must be allocated to the costs of the protective service system.

In County B, only protective services personnel handle protective services cases. Therefore, only the time spent by the protective services staff need be considered in estimating costs.

The method developed for estimating the cost elements of protective services is applicable to either the type of service where both protective services staff and other staff work on protective services cases as in County A or where only protective services personnel handle them as in County B.

The cost methodology is shown in Chapter 4.

A series of equations offers an objective method of cost estimation in that all the variables are formulated from actual agency cost figures or from valid statistical methods of comparison or estimation. The estimation techniques are comprehensible to management because they are composed of totals or averages with no complex or subjective methods of

estimation. In an operational evaluation system the statistics for the last quarter should be available within two weeks in either a manual or computerized system.

The cost to the agency in providing this costing system is minimal because the system does not depend on a case analysis or a frequency analysis of major factors.

The aggregation of the agency estimates by state, by region, or nationally can be done by adding numerators and denominators from the cost equations for all agencies in the geographic area and dividing. This can be done on a 100 percent sample basis or by random sampling. For instance, the 3,000 or so counties in the nation could be randomly selected for evaluation in terms of stratification by state and/or regions and perhaps other categories such as population, or AFDC caseload.

Trend analysis can be accomplished by posting monthly estimates for successive time periods. These monthly estimates may be sensitive to seasonal variation, so trends should be studied over at least a two-year period. During this time, many of the basic input factors, such as agency budget and number of caseworkers will change. Exogenous factors such as the number of abused children may also change.

Data Collection Forms

Forms were designed to collect the data necessary for each of the cost equations as shown in Chapter 4. When the cost-estimation system was tried experimentally in County A

and County B, the financial officer of the agency filled out the forms.

In County A, in addition to the protective service unit personnel, most staff personnel working on AFDC and other types of cases also engaged in protective services. Therefore, a time/cost allocation procedure was necessary. The county had in operation a time-allocation recording system which recorded minutes devoted to each function for each staff person. This facilitated allocating costs to protective services as a function of staff time. However, the system proved able to provide staff time allocation for only three months during 1974, despite assurances that separate sets of data were available for each of the months; however, data covering the entire year were available. Had this been recognized, a random work sampling procedure could have been used, but since it was not, the monthly cost distributions used in this report were randomly generated and therefore should be viewed as merely illustrative. However, annual costs as stated in Chapter 6 are accurate and have been validated by comparing the annual costs derived by the state's cost/time allocation system with those derived by BAI's costing system described. The two figures differ by only two percent.

County B had only protective services staff engaged in protective services. No special cost-allocation techniques were required as all protective service staff were assigned only to that function. Therefore, County B costs were not

statistically derived, but represented actual accounting data and no validation was necessary.

Displays and Discussions of Reports

Three types of management reports were generated from the data collected:

- . Aggregate analysis of Counties A and B
- . Comparative analysis of Counties A and B
- . Detailed management reports on Counties A and B

A complete presentation of 27 reports generated is contained in Chapter 5. Four selected reports follow. The first¹ three illustrate aggregate analysis, the fourth illustrates comparative analysis.

Report 1 presents workload and efficiency measures indicating the demands placed upon the agency and how efficiently it operated.

Report 2 presents an analysis of effectiveness using the evaluation criteria defined.

Report 3 presents cost-effectiveness for County B; Report 4 compares cost-effectiveness of County A and County B.

Conclusions

The Utility of the Cost-Effectiveness Evaluation System

The system designed by BAI is feasible for implementation in a number of agencies offering protective services, either as a separate unit or as a part of other social service units.

¹ Data for "previous year" and "objective" are hypothetical while data for "this year" are actual.

REPORT 1

WORKLOAD AND EFFICIENCY

(County B)

Number of Cases	Previous Year 1973 (H)	This Year--1974 (A)					Objective This Year 1974 (H)
		1Q	2Q	3Q	4Q	Total	
Reported	2,500	1,132	1,136	1,216	1,116	4,600	3,000
Assigned	2,000	680	852	788	632	2,952	3,000
Validated	760	268	196	180	156	800	1,140

Efficiency (\$)	Previous Year (H)	This Year (A)	Objective (H)
Total Cost per Case Reported	\$250	\$585	\$250
Total Cost per Case Assigned	200	911	200
Total Cost per Case Validated	500	3,362	500

(H)--indicates hypothetical data

(A)--indicates actual data

Interpretation

Only 2,952 of 4,600 cases (64 percent) were assigned during 1974 compared to 80 percent in 1973. Ideally, all cases should be assigned for investigation. This was due to the substantially increased workload, phasing-in of substantial numbers of untrained staff, and the confusion caused by decentralizing operations to newly established satellite offices.

As the workload overwhelmed the staff, efficiency declined markedly during 1974 compared to the previous year. This intolerable situation must be improved substantially during 1975. However, these data show little cause for optimism. Indeed, the number of cases validated declined steadily from 268 during the first quarter to 156 during the fourth quarter.

REPORT 2
EFFECTIVENESS
(County B)

Effectiveness Measure	Previous Year (H)	This Year--1974 (A)					Objective (H)
		1Q	2Q	3Q	4Q	Total	
Percent of Validated Cases Where Child Remains with or Is Returned to Family (%)	70	76	84	89	79	82	70
Eventual Rate of Recidivism (Rate)	.15	.30	.29	.33	.49	.34	.15
Percent of Recidivistic Cases Where Severity Decreased (%)*	30	25	21	53	43	34	30
Average Time Between Intake and Decision for Court Case (days)	30	38.3	-	30.5	-	36.8	30
Average Time Between Intake and Completion of Investigation and Validation (days)	14	16.8	21.4	15.6	5.7	15.5	14

(H)--indicates hypothetical data
(A)--indicates actual data

Interpretation

It is generally believed to be desirable for a child to remain with his family whenever possible. However, this should not be done where he would be endangered. The above table shows that a substantially higher percentage of children remained with or were returned to their families--82 percent in 1974 compared to 70 percent in 1973--and the objective was exceeded. However, this was due to the sharp increase in workload which overwhelmed staff and available foster homes. In many questionable cases no other option was available but to leave children in their homes; no foster homes were available and the large case load frequently made adequate protective services supervision impossible. In view of these circumstances, it is not surprising, however undesirable, that an extremely high recidivism rate was experienced throughout the year which was highest during the third and fourth quarters. The rate for 1974 was more than double the 1973 experience and objective for 1974.

The number of days elapsed between intake and court decision and between intake and validation seem higher than desirable. It took longer than desired, on the average, to process the cases.

*The percentage of cases where severity either remained the same or increased is 100 minus the number indicated in the table. The percentage of cases where severity increased could be determined from the raw data in Appendix D.

REPORT 3
 COST-EFFECTIVENESS
 (County B)

Cost-Effectiveness Ratio	Previous Year 1973 (H)	This Year 1974 (A)	Objective 1974 (H)
$\frac{\text{Total Cost}}{\text{Eventual Number of Validated Cases not Recidivistic}}$	\$425	\$5,095	\$425
$\frac{\text{Total Cost}}{\text{Number of Children Returned to Families}}$	410	4,126	410

(H)--indicates hypothetical data
 (A)--indicates actual data

Interpretation

Cost-effectiveness in 1974 was dramatically less than in 1973 and less than the objective set for 1974. This extremely poor situation was attributable to the factors previously discussed.

REPORT 4

COST-EFFECTIVENESS OF COUNTIES A AND B COMPARED

(1974)

Cost-Effectiveness Ratio	County	
	A	B
$\frac{\text{Total Cost}}{\text{Eventual Number of Validated Cases not Recidivistic}}$	\$1,201	\$5,095
$\frac{\text{Total Cost}}{\text{Number of Children Returned to Families}}$	1,386	4,126

Interpretation

This report shows cost-effectiveness in terms of two measures--recidivism and children returned to their families. County A is more cost-effective by considerable margins in terms of cost per case that does not recidivate and cost per child remaining with or returned to his family (\$1,201 and \$1,386 respectively for County A compared to \$5,095 and \$4,126 for County B).

The data-gathering methods are designed to be simple and easily understood by social-work and administrative personnel. The system has not yet been tested on local personnel working independently of BAI staff assistance. There are, however, some conceptual difficulties with the cost-measurement methodology specified in the Scope of Work. It requires further development and should be used carefully and sparingly.

If numerous agencies used this cost-effectiveness system, it should be easy for the Federal Government to aggregate data over states, regions, and the nation. These aggregations could be accomplished on a sampling basis using stratified sampling procedures. Such a procedure would be most useful and acceptable to the agencies if feedback were provided to show how well they were doing in comparison to other agencies.

The validity of the agency reports and the aggregated versions is not an analytic problem because all the measures are objective. There are not subjective judgments or artificial scales leading to questions such as: "Are we measuring the phenomena that we want to measure?" This quality of the cost-effectiveness evaluation should have appeal to management personnel in the agency and at the state and regional levels. The reliability and accuracy of the measurements is not a problem for agencies because the measures are not difficult to estimate.

It is also feasible to conduct analyses of certain specified major categories:

- . Rural and urban
- . Neglect and abuse

Such analyses can be facilitated by simple computer processing procedures in the larger agencies. However, the analyses in this report were conducted entirely by hand and used little staff time.

Based on the feasibility test in the two counties, BAI estimates that agency personnel can be trained to use this system within a few hours. The methods of cost-effectiveness evaluation detailed in this report are simple to estimate in an on-going system. In an on-going system a management report should be available two weeks after the end of a month, with minimal workload. The following is an estimate of the staff time per month that would be required to operate the recommended system in the two counties:

<u>Staff</u>	<u>County A</u> 392 cases/year (33 cases sampled/month)	<u>County B</u> 4,600 cases/year (96 cases sampled/month)
Clerk	16 hours	48 hours
Caseworker	2 hours	4 hours
Financial Officer	<u>1 hour</u>	<u>1 hour</u>
<u>Total</u>	19 hours	53 hours

This cost-effectiveness evaluation system can provide data to test significant hypotheses concerning alternative protective services policies. Significant policy questions can be addressed and planning models developed that would be of substantial assistance to states in implementing Title XX as illustrated in Chapter 9.

CHAPTER 1

INTRODUCTION

The Social and Rehabilitation Service (SRS), under Titles IV-A and IV-B of the Social Security Act, provides funds to states for the provision of protective services to abused and neglected children and their families. The Secretary of the Department of Health, Education, and Welfare has given services to abused and neglected children a high priority. Various agencies of HEW are cooperating in an interagency objective in this area. The evaluation of local protective services, the subject of this report, is part of the SRS/CSA efforts specified by the Intradepartmental Committee on Child Abuse and Neglect.

OBJECTIVES OF THE RESEARCH

There are a number of systems under development or conceptualized for the evaluation of social services, with some relating directly to the evaluation of protective services. However, there are no generally accepted systems for determining costs and evaluating impacts of protective services in state and local public welfare agencies. The purpose of the effort described in this report, as stated by SRS, "is to stimulate State and local jurisdictions to measure the costs and results of their child abuse and neglect services in definitive, quantifiable ways (recidivism, severity) in

order that they and the Federal Government can make program and resource allocation choices."¹ However, no attempt was made to measure the specific effects of protective services on the children.

SRS wants service-specific effectiveness estimates of the results protective services work has on child abuse and neglect. Reduction of recidivism of abuse and neglect, for instance, is an important measure of the effectiveness of caretaker treatment. Further, the reduction of severity in cases where recidivism does occur, is another measure of the effectiveness of the services. The contract specified that cost estimation methods and effectiveness measure estimates be performed as simply and with as little cost as possible in order to encourage the use of the methods by local agencies.

In general, the purpose of the evaluation effort in this contract is to help SRS develop an initial evaluation system for measuring cost-effectiveness of protective services. Specifically, the evaluation method will permit answers to the following types of questions:

- a. Which service agencies, individually or as aggregated by states or regions, are most effective for the dollars spent? What is the order of cost-effectiveness from least to highest, by service agency, state, or region? This will permit agencies to improve their efficiency by identifying and correcting problems of poor performance and encouraging more successful approaches.

- b. What trends are discernable from year to year in cost-effectiveness of service agencies, states, regions and the nation?
- c. Do agencies serve some groups (i.e., neglected children, abused children, urban children, rural children) more cost-effectively than others?
- d. How much does it cost to provide services to clients who achieve protective services objectives (e.g., child remains with the family) as compared with clients not achieving these objectives?

APPROACH

The technical approach consisted of these main steps:

- . Review of existing evaluation systems
- . Design of a protective services evaluation system
- . Demonstration at two test sites

Review of Existing Evaluation Systems

SRS had conducted studies to identify and analyze systems for evaluation of social services that are in various stages of development throughout the country. Many of the systems studied by SRS are generic in that they assess in global terms whether and to what extent the service goals have been achieved. Another generic approach is to classify cases according to degree of improvement. Generic systems were considered by SRS to be too subjective for use in cost-effectiveness evaluation. Thus, the objective of the research

in this report is the development of a method specific to protective services.

Burt Associates, Incorporated, as a first step, collected information on systems being designed throughout the country including those previously studied by SRS. The results of the analysis of existing systems along with descriptions of the systems (both generic and service-specific) are reported in Chapter 2.

Cost Methods

The methods of cost estimation found in the various system descriptions suffered from a variety of deficiencies. In general, the cost estimation techniques were far too detailed for use in the current project. Usually they were estimated by the case, either on a frequency analysis or a unit basis. The cost methodology derived by BAI and shown in Chapter 4 is based on specifications set forth in the RFP work statement and background knowledge of the BAI staff.

Data Gathering Techniques

The methods for data collection found in the system reviews are all on a case analysis basis with significant variation among systems on the data collected.

Few of the reports surveyed by BAI went into detail on the data collection methods used or to be used. In only one case was mention made of the use of sampling in lieu of total case analysis. No details were provided as to how well this worked.

Design of a Protective Services Evaluation System

Based on the findings of the review of current systems, detailed discussions with SRS personnel, and discussions with protective service supervisors, BAI designed a cost-effectiveness evaluation system. The design is composed of two major subsystems.

- . An effectiveness measurement subsystem that provides a minimal set of effectiveness measures but is sensitive enough to assess performance. This subsystem consists of two key parts:
 - . A method of data collection and client tracking that is not an excessive burden on the agency staff
 - . Analysis and reporting procedures that are easily understood by agency supervisors and management. This system is easily aggregated to the state, regional, and national levels.
- . A cost estimating subsystem that is easy to implement and does not place an excessive burden on the finance officer

These subsystems are described in Chapters 3 and 4 respectively.

Site Selection

The contract called for the testing of the methodology at two test sites for the purpose of demonstrating that the cost-effectiveness scheme would work. The criteria developed for the selection of the test sites were agreed to be the following:

- . The site should have a good data collection system
- . The number of cases of abuse and neglect of children per year should be at least 400
- . Socioeconomic and rural/urban citizen composition at the site should cover a wide range of conditions
- . The site personnel should be willing and able to participate

- . Sites should have a full range of services and well developed linkages with related agencies such as schools, courts, police and hospitals

The HEW Regional Commissioners and the Associate Regional Commissioners were contacted by the Community Service Administration (CSA), to inform them of the project and solicit their cooperation. BAI wrote a letter to each asking for nominations of local agencies within their regions that best met the criteria.

The Commissioners nominated 19 agencies from which two were selected by BAI, termed in this report "County A" and "County B." Visits to the two sites were made to ensure feasibility of the test with the following findings:

- . County A has an annual rate of about 900 cases and has an adequate manual data system composed of a log, family file, and case records. The clients represent a combination of urban/rural and different racial and other socioeconomic traits. The agency was very interested in participating. The test made use of 100 percent sampling of cases for the test.
- . County B has an annual rate of 5,400 cases. At first, it was thought that the CANRIS automated data system would be usable and provide a contrast with the manual system of County A. However, CANRIS is encountering difficulties and BAI relied on the manual system of County B. The county and state personnel were very interested in participating. BAI sampled at a rate of every fourth case. Sampling was preferred because of the heavy case load of County B.

Feasibility Test

The evaluation system was tested at the two sites during December 1974 to April 1975. Chapter 5 presents display and discussion of reports generated by the system at the two sites and Chapter 6 contains summaries of data collected.

Recommended System

Chapter 7 presents BAI's recommended data collection method; Chapters 9 and 10 draw conclusions about the utility of the recommended cost-effectiveness evaluation system based on its test in County A and County B.

CHAPTER 2

REVIEW OF EXISTING SYSTEMS

SRS has conducted studies to identify and analyze the systems for evaluation of social services that are in various stages of development throughout the country. SRS has determined that the generic type systems under development are not appropriate for cost-effectiveness evaluation because they rely too heavily on subjective judgments and lack rigor. SRS favors service-specific type of effectiveness measurement. For example, reduction of recidivism of child abuse and neglect and reduction of severity of abuse and neglect are two criteria of effectiveness which are of primary importance. The recidivism and severity measures must include a means for identifying and assessing differential effectiveness by type of care, such as family care.

BAI has reviewed 14 evaluative studies or tracking systems for social programs to insure that all program effectiveness measures, and data collection systems appropriate for SRS purposes have been explored.¹ The 14 studies reviewed are listed below:

¹ Complete summaries of this review are contained in: Burt Associates, Incorporated, "Evaluation of Cost-Effectiveness of Services Provided to Abused and Neglected Children and Their Families Under Titles IV-A and IV-B: Phase I Report" (Bethesda, Maryland: Burt Associates, Incorporated, 1974).

1. Arthur Belton Associates, COST BENEFIT METHODOLOGIES RELATED TO SERVICE PROVIDED UNDER TITLES, I, IV, X, XIV, AND XVI OF THE SOCIAL SECURITY ACT ENABLING RECIPIENTS TO ACHIEVE GOAL OF INSTITUTIONAL OR COMMUNITY-BASED CARE. November 1973.
2. Booz, Allen. Public Administration Services, CHILD ABUSE AND NEGLECT REGISTRATION AND INQUIRY SYSTEM, CANRIS, TEXAS DEPARTMENT OF PUBLIC WELFARE, Austin Texas. August 6, 1973.
3. FLORIDA CHILD ABUSE REPORTING SYSTEM, Jacksonville, Florida. No printed report.
4. Government Accounting Office. SOCIAL SERVICES: THEIR IMPACT ON HELPING WELFARE RECIPIENTS ACHIEVE SELF SUPPORT OR REDUCE DEPENDENCY. April 27, 1973.
5. Iowa Department of Social Services. PROGRAM AND FINANCIAL PLAN. Vol. I, 1975; Vol. II, 1976.
6. Juvenile Protective Association. REPORT ON THE BOWEN CENTER PROJECT, Chicago, Illinois.
7. National Clearinghouse on Child Neglect and Abuse.
8. Peat, Marwick, Mitchell & Co., THE EFFECTIVENESS MEASURES PROJECT, Milwaukee County Department of Public Welfare. August 1973.
9. Peat, Marwick, Mitchell & Co., EVALUATING SOCIAL SERVICES. State Department of Public Welfare, Austin, Texas. No date.
10. Sam Harris Associates, Ltd., STUDY FOR THE DEVELOPMENT OF A COST-BENEFIT METHODOLOGY FOR SELF SUPPORT SOCIAL SERVICES, Vol. I. June 30, 1975.
11. Touche Ross & Co., COST ANALYSIS OF SOCIAL SERVICES, Contract No. SRS 71-36. June 1972.
12. UNCO, Inc. PHASE III UNCO DEMONSTRATION PROJECT, Minnesota, Washington, and District of Columbia. September 1, 1971.
13. UNCO, Inc. SOCIAL SERVICES EVALUATION DEMONSTRATION PROJECT (SSEDP), Washington State Department of Health and Social Services. August 31, 1973.
14. Urban Institute, NASHVILLE-DAVIDSON COUNTY TRACKING SYSTEM. 1971.

Each of the above evaluative studies was reviewed for the following characteristics of criteria and objectives:

- . Consistency with protective services objectives
- . Measurable criteria and objectives
- . One or more criteria per objective
- . Consistent criteria
- . Criteria useful to management
- . Not a burden to estimate
- . Reasonable cost
- . Incentive for good management

Only a few of the studies listed criteria or methodologies useful to this SRS study.

A. Measures of Effectiveness and Objectives

The BAI reviews of evaluation methods under various stages of development yielded several criteria in addition to the reduction in amount and severity of recidivism specified by SRS.

1. The ratio of children separated, requiring medical care related to emotional or physical damage, or dying, to total children who received protective services for the past 90 days.² This is a severity criterion that could be used as a simple approach compared to the BAI severity ranking classification described in Chapter 3.
2. The ratio of children separated, requiring medical care related to emotional or physical damage, or dying, to the total number of children in families

who have received social services during the past 12 months.² Another severity criterion which has a higher risk base.

3. The ratio of the number of families requiring protective services on a recurring basis to total number of families who have received protective services where the new service is directed to other children who have not received protective services.¹ A recidivism measure which isolates within family increase.
4. The ratio of the number of families requiring protective services on a recurring basis to the total number of families who have received protective services for at least one but not all of their children.¹ A recidivism measure which measures families where not all the children have been abused.
5. The ratio of the number of children reunited with their families after separation to the total number of children receiving protective services and separated from their families by action of the agency.² This is a family reuniting measure.
6. The ratio of the number of children reunited with their families after separation to the total number of children receiving protective services and separated from their families for reasons other than agency action.³ This is a family reuniting measure.

7. The number of days of separation per child.⁴ This measure of the length of time of separation is associated with the objective of reducing the time away from families.
8. The last six months incidence for which no final report has been recorded.⁵ This measure is to detect the time scales of final disposition of cases.
9. Frequency distribution of types of abuse.⁶ The frequency distributions of categories of abuse indicate changes of the severity problems. The categories were helpful in selecting the set of severity measures recommended in this report.
10. Ratio¹ of families whose children are removed from the home to all families referred to child protection services where child abuse, neglect or exploitation has been validated.⁷ This measures child separation.
11. The ratio of families in which child abuse, neglect or exploitation occurs within one year after their on-going service case is closed to all families whose on-going child protection services cases have been closed for one year or less.⁸ This is a recidivism measure.
12. Number of neglect and dependency (N&D) petitions filed and number of families that contain one or

more children named on N&D petitions.⁹ These criteria are associated with the objective of reducing the number of N&D petitions.

13. The number of children who are declared N&D more than once.¹⁰ This is a recidivism measure.

These findings on criteria have been selected on the basis of possible usefulness in the evaluation project. Many more criteria were examined but were not included because they were obviously not appropriate. The above criteria were useful in formulating the recommended measures in Chapter 3.

B. Cost Methods

The methods of cost estimation found in the various system descriptions suffered from a variety of deficiencies. In general, the cost estimation techniques were far too detailed for use in the current project. Usually they were estimates by the case, either on a frequency analysis or a unit basis. The cost methodology derived by BAI and shown in Chapter 4 is based on specifications set forth in the RFP work statement and background knowledge of the BAI staff.

C. Data Gathering Techniques

The methods for data collection found in the system reviews are all on a case analysis basis with significant variation among systems on the data collected. For instance, the Florida system and the CANRIS system collected

data on severity classifications whereas the other systems did not. However, the list of severity measures used by Florida was different from the CANRIS list.

Few of the reports surveyed by BAI went into detail on the data collection methods used or to be used. In only one case was mention made of the use of sampling in lieu of total cases analysis. No details were provided as to how well this worked. The UNCO systems made use of monte-carlo simulation for estimation of probabilities (error analysis) in comparing cost and effectiveness ratios of counties. This was the only sophisticated approach noted in all the reviews. This particular application suffered from various technical deficiencies for our purposes. Unfortunately, this type analysis would not be understood by management personnel concerned with the protective services evaluation project.

FOOTNOTES

1. Complete summaries of this review are contained in "Evaluation of Cost-Effectiveness of Services Provided to Abused and Neglected Children and Their Families Under Titles IV-A and IV-B," (Bethesda, MD: Burt Associates, Incorporated) September 30, 1974.
2. Peat, Marwick, Mitchell & Co., Evaluating Social Services, (Austin, Texas: State Department of Public Welfare).
3. Ibid.
4. Ibid.
5. Booz, Allen Public Administration Services, Child Abuse and Neglect Registration and Inquiry System (CANRIS), (Austin, Texas: State Department of Public Welfare, 1973).
6. Booz, Allen.
7. Peat, Marwick, Mitchell & Co., The Effectiveness Measures Project, Status Report, (Milwaukee: County Department of Public Welfare, 1973).
8. Ibid.
9. Marvin R. Burt and Louis Blair, Options for Improving the Care of Neglected and Dependent Children, Nashville-Davidson County Tracking System, (Washington, D.C.: Urban Institute, 1971).
10. Ibid.

CHAPTER 3

SYSTEM FOR MEASURING EFFECTIVENESS--THE TRACKING SYSTEM

SRS intends to provide a tracking system to allow measurement of recurring abuse and neglect in cases when a child is not removed from his home. The tracking system used to gather the data by which to measure of the effectiveness criteria in this project is a first step in that direction.

EFFECTIVENESS MEASURES

Keeping Child with Family

A protective service operation generally attempts to retain the child in the family after abuse or neglect has been reported, contingent on investigation, family treatment, and other actions to alleviate the problem. Protective services' other option is to remove the child from the family and place him with relatives, friends, or in foster care. (Foster care in this report refers to foster family care, group care, and institutional care.) Some agencies remove children from their homes more frequently than others. However, keeping children with their own families wherever possible is strongly supported by judicial doctrine,¹ Federal legislation,^{2,3,4} HEW policy pronouncements,^{5,6,7,8} and child welfare professional standards.⁹

When another instance of abuse or neglect occurs with the same or other children in a family, it is termed

"recidivism." Recidivism is believed to indicate lack of success by agencies dealing with the case. If a subsequent case or cases occur in the family, a further criterion is that the severity of the second case should be less than the first if the case work has been helpful.

Time Between Intake and Placement Decision

Rapid decision making and placement of children is a generally accepted aim for an agency, because the children who are placed quickly are less likely to suffer severe emotional trauma. Thus, the time between intake and the completion of the case worker's investigation or the time between intake and court decision are believed to be significant indicators of effectiveness of service.

Management Objectives

The above discussion leads to the structuring of several management objectives.

1. An increase in the number and rate of validated cases where the child is returned or remains with the family*
2. A decrease in the number and rate of cases where a validated incident of child abuse and neglect occurs within a year after a previous validated incident of child abuse or neglect
3. A reduction in severity in those cases where one or more validated incidents of child abuse and neglect occur within one year from a previous incident

*In the evaluation system this can also be regarded as a hypothesis to be tested by seeing the effects of the policy in terms of increased recidivism and severity of the recidivistic cases.

4. A reduction in time interval between intake and court decision for those validated cases where court action is required
5. For all validated cases, minimization of the time interval between intake and the completion of the investigation and validation.

Measures of Effectiveness

These management objectives require measures of effectiveness to determine progress towards the objectives. These are measured for each month of the reporting period.

Objective (1): Measures of Effectiveness

- . Total validated cases where the child is returned or remains with the family
- .
$$\frac{\text{Total validated cases where the child is returned or remains with his family}}{\text{Total validated cases}}$$

Objective (2): Measures of Effectiveness

- . The number of families where a validated incident of child abuse or neglect occurs within a year after a previous validated incident of child abuse or neglect
- .
$$\frac{\text{The number of families where a validated incident of child abuse and neglect occurs within a year after a previous validated incident of child abuse or neglect}}{\text{Total validated cases}}$$

Objective (3): Measures of Effectiveness

- . For all recidivism cases of measure of effectiveness (2), the number of cases where the severity decreases in the second incident
- .
$$\frac{\text{For all recidivism cases of measure of effectiveness (2), the number of cases where the severity decreased in the second incident}}{\text{Total recidivism cases}}$$

Objective (4): Measure of Effectiveness

- . The average time between intake of a reported case and court decision, for those cases where court decision is taken.

Objective (5): Measure of Effectiveness

- . The average time between intake of a reported case and the completion of investigation and validation.

Severity Rankings

The definitions and severity rankings of different forms of abuse and neglect are a critical problem for this system because it is necessary to determine changes in severity from the first to the second incident. The two demonstration counties had different lists of types of abuse and neglect that were used for intake classification and treatment classification. In order to standardize the classifications for purposes of this evaluation, BAI reviewed the literature and arrived at a classification which is general for all agencies. The classifications used by the two demonstration counties are readily included in the BAI classification.

One severity ranking method is found in the National Clearinghouse on Child Neglect and Abuse data collection form. It has 13 categories of severity which are comprehensive and independent of the type of abuse or neglect.

The 13 categories are:

- . No medical treatment required/child seen by a physician
- . Appeared not to require medical treatment/child not seen by a physician
- . Appeared to require medical treatment/treatment not sought

- . Received outpatient medical treatment
- . Received hospitalization for medical treatment
- . No psychiatric treatment/required child seen by physician
- . Appeared not to require psychiatric treatment/child not seen by physician
- . Appeared to require psychiatric treatment/treatment not sought
- . Received outpatient psychiatric treatment
- . Hospitalized for psychiatric treatment
- . Dead on arrival
- . Death, not immediate
- . Unknown

The data on severity could have been collected using these categories, and measurement of severity change could be tested with both the complete list and a simplified version of the Clearinghouse list such as:

- . No treatment or only outpatient psychiatric or medical treatment required
- . Psychiatric or medical hospitalization required
- . Death or dead on arrival

This approach would be subject to considerable error because each state and locality will be found to have different policies. Some have no psychiatric facilities, others admit all abuse cases to the hospital regardless of condition, others use hospitals only when there is a severe case. Thus, with the many policies and procedures at different sites, the results would not be meaningful. BAI decided not to use the above approach for this reason.

BAI instead chose to use the following list of types of neglect and abuse as a severity ranking classification (from most severe to least severe):^{*}

- . Death
- . Brain damage, dismemberment
- . Poisoning
- . Internal injuries
- . Skull fractures; sexual abuse
- . Bone fractures; burns, scalding; exposure--freezing
- . Sprains, dislocations; abrasions, lacerations; wounds, cuts, punctures; subdural hemorages or hematomas
- . Malnutrition, emotional neglect; medical neglect; abandonment
- . Bruises, welts
- . Educational neglect; moral neglect
- . Shelter neglect; lack of supervision
- . Clothing neglect

The rankings were arrived at by a Delphi technique using BAI staff personnel who work on protective services problems. If this type of ranking were to be used for more general implementation, a Delphi technique used with outstanding people in the field would be more appropriate.

^{*} Initially, we developed independent scales for abuse and neglect on the assumption that abuse is always more severe than neglect. However, a detailed investigation showed that this is not necessarily true. Some types of neglect, particularly when quite severe (e.g., medical, emotional neglect), can have a more severe impact on a child than relatively minor forms of abuse (e.g., bruises). The above results of the Dephi Technique tend to confirm this decision to consider the two in a common severity ranking classification.

About 35 percent of the cases in Counties A and B contained multiple conditions of neglect and abuse. Thus, in making judgments about change in severity between two incidents, a standard method was required. It was decided that the most severe condition in each incident would be compared to determine changes in severity.

Tracking System

Data Collection on Effectiveness

Data collection procedures and forms were developed to assure standardized data collection for the two sites. The data were collected by tracking cases on a monthly basis for a 12 month period from 1973 through November 1974.

Table 3-1 is an illustration of the data collection forms used at both sites. The steps taken in gathering data were the following:

1. The log book was consulted for each month to be analyzed--December 1973 to November 1974. In County B, 25 percent of the cases for each month were sampled (every fourth entry). However, some of the entries in the log included reports that were not considered neglect or abuse, such as: Information, advice and referral; court-ordered evaluation; voluntary placement of "unadoptable" newborns; and were, therefore, excluded in the sampling. The County B log provided the following codes indicating reasons for referral which allowed BAI to exclude those entries that were inappropriate (An asterisk (*) appears beside those referrals considered appropriate for sampling.)

I - information, advice and referral
 *A - abuse
 *N - neglect, inadequate care or supervision
 *M - medical neglect
 *D - desertion/abandonment
 *S - sexual molestation
 *X - exploitation
 *T - truancy
 *F or R - runaway and other parent-child relationship problems

TABLE 1

January 1974 (County B)
Page 1

PROTECTIVE SERVICES DATA COLLECTION FORM

1	2	3	4	5	6	7	8	9	10	11	12	13	14
REPORTED CASE FILE NO.	TYPE OF CASE	ABUSE/DUI	STATUS	SETTING	NO. OF REPORTED CASES IN THIS AND ALL OTHER STUDIES	NO. OF RELATED INCIDENTS OF NEGLECT OR ABUSE FOLLOWING THIS REPORTED CASE UNDER STUDY	SEVERITY OF THE REPORTED CASE UNDER STUDY	SEVERITY OF SECOND INCIDENT AFTER THE REPORTED CASE UNDER STUDY	NO. OF DAYS BETWEEN INSTANCES	LOCATION OF CHILD REMAINED RETURNED REMOVED	IF COURT ACTION REQUIRED NO. OF DAYS BETWEEN INTAKE AND COURT DECISION	NO. OF DAYS BETWEEN INTAKE & COLLECTION OF INVESTIGATION & VALIDATION	OTHER
A-03	Abuse	Yes	Inv. In.	Urban									
N-11	Neglect	Yes	Valid	Urban	N=2	N=3/A=1	LS/EdN	IS/Br	49	Remained		11	
F-15	Neglect	No		Unk									
N-19	Neglect	Yes	Invalid	Urban									
F-23	Neglect	No		Unk									
T-08	Neglect	No		Unk									
M-12	Neglect	Yes	Inv. In.	Rural									
C-16	Neglect	Yes		Urban									
F-04	Neglect	No		Unk									
S-01	Abuse	Yes	Valid	Urban	N=0/A=0	N=0/A=0	Br/SA		0	Remained		1	
A-12	Abuse	Yes	Valid	Urban	N=0	N=0/A=0	Br			Remained		14	
N-10	Neglect	Yes	Valid	Urban	N=2		EdN			Remained		140	

*L - lost child or child under 10 arrested
*J - jailed parent(s)
*H - hospitalized parent(s)
*C - no legal custodian
E - court-ordered evaluation
V - voluntary placement of "unadoptable" newborns

In County A, 100 percent of the cases for each month were sampled (all entries). County A's log contained only cases that were neglect and/or abuse.

2. For all cases assigned, the case file was a central file room. For those cases that were active, however, it was necessary to determine from the log which caseworker was assigned to them. The appropriate caseworker was then located, and the case file obtained. In County B, it was necessary to make several visits to satellite offices to obtain the sampled cases listed as active. In County A, only a small percentage of the cases were found to be still active in the satellite office.

The following is the step-by-step procedure used in tracking the cases to complete the data collection forms illustrated in Table 3-1.

In column 1, the identification number for each case was recorded. In order to maintain strict confidentiality, no names were recorded on any data collection forms; only the case number was used. In County B, the case numbers consisted of a letter indicating the type of case followed by a two-digit number. In County A, the identification number consisted of four or five digits. The identification number was obtained from the intake log book at both test sites.

In column 2, the nature of each case was recorded, i.e., whether it was a case of neglect or abuse. In cases where a combination of both neglect and abuse existed, all types were recorded.

In column 3, indicates whether or not the case had been assigned. Not all cases were assigned to caseworkers in County

B because of the heavy caseload. However, all cases were assigned to caseworkers in County A. The log books in both counties designated whether the incoming report or complaint was assigned. Only assigned cases were used for further data collection.

In column 4, indicates whether or not the case was validated. Some of the cases were not completely investigated and could not be classified as valid or invalid. This condition was indicated in this column as investigation incomplete. In County B, it was necessary to examine the case file to determine the status of the case. In County A, the status of the case was found in the log book.

In column 5 of the data collection form, the residence of the family--urban or rural--was indicated. The log books at both sites designated the area the family resided in. The agency staff indicated which areas were considered urban and which were considered rural.

In column 6, the number of previously reported, valid cases of neglect or abuse occurring before the reported case sampled was recorded. In order to determine the number, it was necessary at both sites to review the case file. This information was gathered from case notes and previous intake forms that indicated a valid case of neglect or abuse. Where these records were not up to date, the caseworker supplied the information. For most of the data BAI collected, only the frequency of abuse or neglect was obtained since this was the only information that was required initially. However, at a meeting with the SRS

monitors after the data collection phase had begun, it was decided that the dates and severity levels of the previous cases would also be collected. Therefore, only on some of the cases does this additional information exist.

Column 7 indicates the number of valid reported incidents of abuse and neglect which occurred after the reported incident that was sampled. This information was also gathered from the case record by reviewing the case notes and intake forms that had a valid case of neglect or abuse.

In column 8, the severity of the reported case under study was recorded. In order to determine of this, the case files were reviewed. A description of the nature of the neglect or abuse was found in the case notes.

In column 9, the severity and the date of the incident following the reported incident under study (if any) was recorded. This severity was also determined by reviewing the description of the neglect or abuse in the case notes in file.

The number of days between the instances recorded in columns 8 and 9 was recorded in column 10. This information was determined by counting the days between the dates of the two incidents. This was found in the intake form or case notes in the file.

Column 11 indicates the location of the child following the incident under study as of December 1974. From the case notes in the file, it was determined and indicated on the data forms whether the:

- . Child was never removed and was still with his family
- . Child had been removed but was then returned to his family
- . Child had been removed from his family and was then with relatives
- . Child had been removed and was then in foster care
- . Child had been removed and was then either in foster care awaiting adoption or had already been adopted

In column 12, indicates whether or not court action occurred, and if so, how many days elapsed between intake and the court decision. If a court action was taken, it could be ascertained from the case notes or court petitions found in the case file. If a court action was required, the number of days were determined by comparing the date of intake and the date of the court decision.

The number of days between intake and the completion of the protective services investigation and validation was recorded in column 13. This was determined by counting the days between the date of intake and the date the caseworker's indicated validation of the report, both of which were found in the case file.

Column 14, titled "Other," indicated the dates and severity of any other valid cases of neglect and abuse that followed the second incident recorded in column 9. This information was retrieved by reviewing the case notes valid intake reports found in the case file.

Problems and Resolutions

The actual amount of time necessary to complete the data tracking procedure for each case varied greatly. The time spent on each case depended basically on the following four factors:

- . Organization, accuracy, and completeness of the log books
- . Organization and efficiency of the filing system
- . Availability of the caseworkers
- . Organization, accuracy, and completeness of the case files

Organization, Accuracy, and Completeness of the Log Books

The log book was initially consulted for each month. Besides providing part of the data that was necessary in completing the data collection forms as indicated in Table 2-1, it also provided the location of the case file and therefore was also used in retrieving the case files of those cases assigned and found to be valid cases of neglect or abuse. Therefore, it was most helpful if the log books were well organized, accurate, and complete.

In County A, the log books were well organized, accurate, and complete. Because the log book was typewritten, it was easy to read and to collect the necessary information. It also saved a great deal of time by its inclusion of the status of the case (valid or invalid) in the log since determining this status can take a great deal of time to retrieve from the case file and since many of the cases are invalid. The log books

were also found to be accurate in indicating which caseworker was assigned to each case.

In County B, the log books were also well organized and complete. It was relatively easy to collect the necessary data. However, because they were handwritten, more time was required. The log books would have been even more helpful if they had contained the status of the case (valid or invalid) since it required taking time to retrieve and review the case files even for the invalid sampled cases. Also, because County B's protective services staff was being doubled, the log books were not always accurate in indicating the location of case files. Often, the log books did not show recent transferences or case closures. As a result, about 15 percent (152 out of 1,150) of the case files were never found.

Organization and Efficiency of the Filing System

The filing systems at both sites were utilized only for the retrieval of closed case files.

In County A, the filing system was not too massive and was well organized. As a result, closed case files were retrieved with relative ease.

Because of the massive influx of cases in County B and the way the filing system was organized, retrieval of closed case files was often difficult. A closed case file could be found in any one of three places in the filing room. In two of these areas, each case file had its own folder and was easy to retrieve. However, the case files in the third area were

not in individual folders and were only grouped alphabetically with other case files. This meant flipping through a number of case files and scanning the names for the correct file. The organization of the filing system made retrieval of case files an extremely time-consuming and tedious task for BAI staff. In resolution of this problem, BAI hired temporary help in addition to the county staff that were retrieving the closed case files.

Availability of Caseworkers

To obtain the active case files, it was necessary to locate the caseworkers assigned to them.

Due to the smaller size of County A's operation, the caseworkers were easy to locate and were available. This, however, was not the case in County B.

The size of County B's protective services operation required several satellite offices. Visits to these offices were necessary to obtain sampled cases. In some instances, the caseworkers were not available and the case file could not be reviewed. These visits were time consuming, particularly, if several trips were necessary to obtain the case file from the appropriate caseworker.

Because of County B's large expansion of its protective services staff and decentralization, the location of the caseworkers changed as new offices were added, and transference of cases sometimes resulted from relocation. The appropriate caseworker, along with the sampled case file, was in some instances difficult to locate.

In order to resolve these difficulties, some of the case files from satellite offices were brought to the main office by a mail carrier. A great deal of time and effort was saved in this manner. In an ongoing evaluation system, agency staff would collect data at each of the satellite offices.

Organization, Accuracy, and Completeness of the Case Files

The case files reviewed in County B were found to be accurate and, in most instances, complete. Some case files contain extensive information resulting from several years of services to a particular family. In these instances, much time was spent in reviewing case notes and intake reports, in order to determine the exact information necessary for the data collection forms. In some instances, the caseworker's notes on a certain case were still in handwritten-note form, difficult to decipher at times and time consuming to read. These minor difficulties were overcome by conferring with the caseworker about a particular case in order to decrease the time spent to obtain valid information.

The case files sampled in County A were also accurate and complete. The files were generally well organized and up to date. In many cases, AFDC records were also included in the file, increasing the amount of time spent by BAI staff in gathering information on protective service involvement with the family. As in County B, the extensive amount of information contained in some case files required much time to review accurately. In these instances, caseworkers or supervisors were consulted for information not found in case files.

Problems in Tracking

The system used to collect the data proved to be workable. Essentially no problems were encountered in County A. Problems encountered in County B were attributable to their recent large increase in workload and the actions being taken to meet it: a doubling of the staff and decentralization of operations to satellite offices. The data were successfully collected, however, despite these problems. From experience in County A and with other protective services agencies (on other projects), it appears unlikely that these problems would be nearly as severe in other agencies.

Limitations

The tracking system does not collect data directly from other agencies (e.g., police, voluntary agencies, juvenile court, etc.). Thus, in counties where all known neglect and abuse cases are not referred to the protective services agency, all cases would not be recorded.

This system should be tied-in to a statewide tracking system in order to record cases that cross county lines. It would be preferable to operate this system throughout a state, thus, helping to ensure compatibility of information and uniform reporting.

FOOTNOTES

1. Sanford Katz, When Parents Fail (Boston: Beacon Press, 1971), p. 4.
2. Social Security Act (as amended).
3. Federal Register, Service Programs for Families and Children, vol. 34, no. 18, January 28, 1969.
4. Federal Register, Social Service Program, Individual and Family Services (proposed rules), vol. 40, no. 72, April 14, 1975.
5. Social Rehabilitation Service, DHEW, Statement of Objectives for Improved Delivery and Management of Services to Abused and Neglected Children.
6. James S. Dwight, Jr., letter to the Honorable Walter F. Mondale, June 12, 1973.
7. Stanley B. Thomas, Jr., Assistant Secretary for Human Development, Statement before the Select Subcommittee on Education, Committee on Education and Labor, U.S. House of Representatives, October 5, 1973.
8. Stephen Kurzman, Assistant Secretary for Legislation, Statement before the Subcommittee on Children and Youth, Committee on Labor and Public Welfare, U.S. Senate, March 27, 1973.
9. Child Welfare League of America, Standards for Child Protective Service, Revised edition, (New York: the League, 1973).

CHAPTER 4

SYSTEM FOR MEASURING COSTS

The contract specifies the following requirements for the cost analysis subsystem:

- . Costs are not to be estimated on an individual care basis
- . Costs must include direct, indirect and purchased services
- . Costs from all sources (Federal, state and local) as incurred by the public welfare agency under Title IV-A and IV-B are to be included
- . The method used must be objective, comprehensible to management, timely and least expensive with relation to validity and reliability

In addition, it was requested that BAI include marginal cost analysis, if possible.

Organizational Configurations

Most protective services fall into one of the two organizational types represented by County A and County B in the study. In County A, the smaller county, protective services cases are usually handled by the protective service unit; other social service personnel, however, also handle neglect and abuse cases when these events occur in the course of some other type of case, such as AFDC. Therefore, in estimating costs, a fractional part of the time spent by other social service staff must be allocated to the costs of the protective service system.

In County B, only protective services personnel handle protective services cases. Therefore, only the time spent by the protective services staff need be considered in estimating costs.

The method developed for estimating the cost elements of protective services is applicable to either the type of service where both protective services staff and other staff work on protective services cases, as in County A, or where only protective services personnel handle them, as in County B.

The cost methodology is worked out through a series of equations which follows. The number and dollar amounts are hypothetical and are given to allow a clearer illustration of how the equations will work in an actual situation. The cost estimates are for a one-month period.

Computing Direct Labor Costs

Direct labor costs are the total salaries and fringe benefits of those working in protective services. Put in equation form, the monthly labor cost is computed by

$$D_i = B_i + C_i \quad \text{Equation 1}$$

i = the type of direct labor personnel

1 = Paraprofessional

2 = Caseworkers, BA

3 = Caseworkers, MA

B_i = Average monthly salary per category i per person taken from financial records

$$B_1 = 530$$

$$B_2 = 670$$

$$B_3 = 820$$

C_i = Average monthly per person cost of fringe benefits for category i

$$C_1 = 70$$

$$C_2 = 90$$

$$C_3 = 110$$

$D_i = B_i + C_i$ (Equation 1) Average monthly cost of category i per person

$$D_1 = 600$$

$$D_2 = 760$$

$$D_3 = 930$$

Next, to compute the total cost of direct labor for protective services,

$$Y = \sum X_i D_i P_i$$

Equation 2

X_i = The number of personnel of type i

$$X_1 = 6$$

$$X_2 = 80$$

$$X_3 = 7$$

$X_i D_i$ = The total cost of personnel type i per month

$$X_1 D_1 = 3600$$

$$X_2 D_2 = 60800$$

$$X_3 D_3 = 6510$$

P_i = The average proportion of time spent on protective services by personnel of type i . P_i comprises:

N_i = The number of people in the protective services unit

$$N_1 = 3$$

$$N_2 = 8$$

$$N_3 = 3$$

$$\bar{N}_i = X_i - N_i$$

$$\bar{N}_1 = 3$$

$$\bar{N}_2 = 72$$

$$\bar{N}_3 = 4$$

M_i = Average fraction of time that \bar{N}_i spent on protective services

$$M_1 = .05$$

$$M_2 = .01$$

$$M_3 = .06$$

Thus,

$$P_i = \frac{N_i + (M_i)(\bar{N}_i)}{X_i}$$

$$P_1 = .53$$

$$P_2 = .19$$

$$P_3 = .46$$

$Y = \sum_i X_i D_i P_i$ = Total cost of direct labor for protective services for all categories of personnel for the month

$$Y = 3600(.53) + 60800(.19) + 6510(.46) = \$16454$$

Adding in Purchase Costs

The following factors are developed from agency records for one month

A.	Total salary and fringe benefit costs of all personnel (direct, supervisory and management)	\$124,115.28
B.	Total agency travel costs	4,831.64
C.	Total education costs for the agency	3,168.39
D.	Purchased (paid by the agency) private services for protective services cases (such as hospitalization)	245.00
E.	Foster care costs for the month of those children that went to foster care via protective services. This can be estimated by multiplying total foster care cost for the month by the ratio of protective services children in foster care to all children under foster care	79,568.50
F.	Costs of (not part of welfare services, but paid for by the agency) services supplied by other public agencies during the month at the request of protective services. This would include services such as clinics and diagnostic centers. This can be estimated by multiplying the total cost of the service by the percent of children who arrive via protective services.	0
G.	Cost of homemaker, day care and other welfare services supplied to protective services cases during the month. This can be estimated by a percentage of total cases in those services that are protective services times total costs	95.00
H.	Facilities and materials costs paid for by the social service agency	31,118.87
I.	Other agency operating costs not including payments to clients that partially or entirely relate to protective services	0

In summary,

Y = Total direct labor cost of protective services = 16,454

K = Cost of purchased services =
D + E + F + G = 79,908

L = Indirect cost for protective services = 13,848

Where $L = (A - \sum_i X_i D_i + B + C + H + I) \bar{P}$ where \bar{P} is a weighted average over types of personnel of P. In the case of the example of Form 4-1, $\bar{P} = [6(3/6) + 80(8/80) + 7(3/7)]/93 = .15$. The total cost of protective services for one month is $Y + K + L = \$110,206$.

Computing Client Costs

Client costs are computed on the basis of average case cost for all cases. Since the costing method does not account for individual case costs, it is not a sensitive cost comparison.

Equations 3 and 4 will compute the cost of clients who meet the objectives identified in Chapter 3 and the cost of clients who did not meet the objectives. First a few new variables must be defined.

N_o = The number of cases that meet the objective in the month (e.g., child returned to family). This will be obtained by a review of cases handled in the month as described in Chapter 3.

$$N_o = 268$$

N_o^- = The number of cases that did not meet objectives in the month. This would include incomplete cases and those that are complete but did not have the desired outcomes.

$$N_o^- = 12$$

The total cost of clients who meet the objectives is

$$(Y + L + K) \frac{N_o}{N_o + N_o^-} \quad \text{Equation 3}$$

$$\text{Substituting, } 110,206 \left(\frac{268}{280} \right) = \$106,798$$

The total cost for clients who do not meet the objectives is

$$(Y + L + K) \left(1 - \frac{N_o}{N_o + N_o^-} \right) \quad \text{Equation 4}$$

$$\text{Substituting, } 110,206 \left(1 - \frac{268}{280} \right) = \$3,508.$$

Thus, the total costs for protective services for one month in this hypothetical example is \$110,206. Of this, \$106,798 went towards clients who met the specified objectives; \$3,508 went for clients who did not meet the objectives, assuming case costs are the same.

Case Analysis for Computing Client Costs

An analysis of all cases handled in each month is also needed for costing purposes. Each case can be tallied into frequency distributions on the following attributes:

N_o = The number of assigned cases that have met the objectives

N_o^- = The number of assigned cases that have not met the objectives

Similar tallies can be made for other subgroups such as neglected/abused, urban/rural, etc. The cost breakdown for subgroups will be computed the same as for N_o and N_o^- as posted above.

There must be no relationship between case cost and the subgroup if the estimates in equations 3 and 4 for each subgroup is to be accurate and valid. For instance, neglect cases cost less than abuse cases; therefore, the averaging method of equations 3 and 4 will not be valid.

If it is found that the averaging estimates of subgroups are not valid using statistical tests of differences of means of costs, a more detailed approach for subgroups will be necessary for operating systems. This may involve case-by-case aggregation of costs by keeping records on all time spent on each case. A more detailed approach would require the equations 1 through 4 to be estimated by subgroups. This costing method will be more laborious. However, it may be possible to estimate subgroups weights statistically on a sampling basis. The value of the subgroup information should be weighted against the difficulty of obtaining the data. Since Title IV-A and Title IV-B funds are merged for protective services at the state level, only the averaging method will work for that particular cost analysis.

Aggregation of Estimates

The aggregation of the agency estimates by state, by region and nationally can be done by adding numerators and denominators for all agencies in the geographic area and dividing. This can be done on a 100 percent sample basis or by random sampling. For instance, the 3,000 or so counties in the nation could be randomly selected for evaluation in terms of stratification by state and regions and perhaps other categories such as population, AFDC caseload, etc.

Trend analysis can be accomplished with all of the estimates shown by the sets of equations. The equations as posted are intended for monthly estimates. Trends can be studied by posting these estimates for successive time periods. Monthly estimates may be sensitive to seasonal variation, so trends should be studied over at least a two-year period. During such a period of time, many of the basic input factors, such as agency budget and number of counselors will change. Exogenous factors such as the number of abused children will also change.

Advantages of Method

The series of equations represents an objective method of cost estimation in that all the variables are formulated from actual agency cost figures or from valid statistical methods of comparison or estimation. The estimation techniques are comprehensible to management because they are composed of totals or averages with no complex or subjective methods of estimation. In an operational evaluation system, the statistics for the last month should be available within two weeks in either a manual or computerized system.

The cost to the agency in providing this costing system is minimal because the system does not depend on a case analysis or a frequency analysis for the major factors. The P_i factor in Equation 2 should be stable because it is an average. The degree of accuracy can be controlled by the size of the sample. The reliability of the subgroup analysis will require testing at sites to discover any

problems with validity. In general, the validity and reliability of the estimates can be determined by using either a method of statistical variance analysis or an "engineering" approach to error analysis. For instance, when cost A is related to factors L, Y, K, \bar{P} , the possible error or the variance of each factor can be estimated either statistically or by rough calculations. These errors can then be aggregated for A by using the Gauss or Beta distributions and an error distribution for A can be estimated. The overall error to A will be related to both sampling error and estimation error.

It should be noted that the described method is not total systems cost. The total system includes activity by police, other welfare agency services, hospitals, schools, courts, private agencies and others. In addition to costs incurred by the other activities, there are social costs to consider, including cost to society for long-term outcomes to the children and the social and economic effects on family structure. It is not within the scope of this effort to estimate costs other than those directly involved in the welfare agency for protective services.

Data Collection Forms on Cost

Forms have been designed to collect the data necessary for each of the cost equations. Form 4-1 is designed to collect direct labor costs for Equations 1 and 2. Form 4-2 collects the total costs from agency records. Form 4-3 collects the data necessary for equations 3 and 4 where it is necessary to know whether clients have met the specified objectives.

Form 4-3 is discussed more fully in Chapter 3.

Date _____

Agency _____

FORM 4-1
DIRECT LABOR COSTS

Reporting Month _____

(1)	(2)	(3)	(4)	(5)	(6)
Direct Labor, Types of Personnel	Average Per Person Monthly Salary (dollars)	Fringe Benefits Cost/Person/ Month (dollars)	Number of Personnel in Agency	Number Full- Time on Protective Services	Average % of the Time that the (4)-(5) People Spend On Protective Services Duties
Hypothetical Example					
Volunteer	0	70	10	2	0
Paraprofessional	300	70	5	1	.2
Caseworker/ Counselor BA	700	130	3	1	.1
Caseworker/ Counselor MA	730	140	6	0	0
Social Worker	720	120	1	0	0
Psychologist	800	130	4	0	0

Date _____

Reporting Month _____

FORM 4-2
TOTAL COST

Agency _____

Total Agency Cost for the Reporting Month _____

The total cost figure should be the summation of the following eight cost elements. These cost elements are parts of the cost reporting that each agency makes to the state social services department.

1) Total labor and fringe benefits of all personnel (direct, supervisory, and management).

2) Total travel costs of the agency for the month _____

3) Total education costs for the agency for the month _____

4) Purchased (paid by the agency) private services for protective services cases (such as hospitalization)

(identify all services and costs)

6) Foster care costs for the month of those children that went to foster care via protective services. This can be estimated by multiplying total foster care cost for the month by the ratio of protective services children to all children under foster care (specify method used).

7) Costs of (not part of welfare services) services supplied by other public agencies during the month at the request of protective services. This would include services such as clinics and diagnostic centers. This can be estimated by multiplying the total cost of the service by the percent of children who arrive via protective services. (specify method of estimation)

- 8) Cost of homemaker, day care and other welfare services supplied to protective services cases during the month. This can be estimated by a percentage of total cases in those services that are protective services times total costs. (specify method of estimation)
-

Form 4-1, the direct labor cost, is used to estimate the cost of direct labor for protective services, as estimated in Equations 1 and 2. Column 1 lists the types of personnel (subscript i). Column 2 lists the average per person monthly salary (B_i). Column 3 lists the average per person per month fringe benefit cost (C_i). Columns 4, 5, and 6 are used to compute P_i , the average proportion of time spent on protective services by each type of personnel. The method of attaining the weighted average of P is shown at the end of the "Adding in Purchase Costs" section.

When the cost-estimation system was tried experimentally in County A and County B, the financial officer of the agency filled out forms 1 and 2. In County A some staff personnel working on AFDC and other types of cases also engaged in protective services. Therefore, a time/cost allocation procedure was necessary. The county had in operation a time-allocation recording system which recorded minutes devoted to each function for each staff person. This facilitated allocating costs to protective services as a function of staff time. However, the system proved able to provide staff time allocation for only three months during 1974, despite assurances that separate sets of data were available for each of the months; however, data covering the entire year were available. Had this been recognized, a random work sampling procedure could have been used, but since it was not, the monthly cost distributions used in this report were randomly

generated and, therefore, should be viewed as merely illustrative. However, annual costs as stated in Chapter 6 are accurate and have been validated by comparing the annual costs derived by the state's cost/time allocation system with BAI's costing system described. The two figures differ by only 2 percent.

County B had only protective services staff engaged in protective services. No special cost allocation techniques were required as all protective service staff were assigned only to that function. Therefore, county B costs were not statistically derived, but represented actual accounting data and no validation was necessary. Such validation is accomplished annually by audit.

50

CHAPTER 5

MANAGEMENT REPORTS

This chapter presents management reports generated from the data collected in County A and County B. The reports utilize the evaluation criteria discussed in Chapter 3. The following major types of reports are presented:

- . Aggregate analysis of Counties A and B
- . Comparative analysis of Counties A and B
- . Detailed management reports on Counties A and B

These management reports are intended to provide the manager with periodic information as to how efficiently the resources are being used, changes in the demand for resources, and how effectively and cost-effectively the programs are operating.

Aggregate Analysis of County A and B

The aggregate analysis is intended to provide management with brief highlights of how well protective services programs are doing in terms of workload, efficiency, effectiveness, and cost-effectiveness. It should show trends and how the program compares to at least one previous year and (if these have been quantified) to its objectives. In these illustrations for County A and B, data for "previous year" and "objective" are hypothetical, while data for "this year" are actual for the period December 1973 through November 1974. We assume that "previous year 1973" is a

fiscal year beginning in December 1, 1972, and ending November 30, 1973; this year 1974 is a fiscal year beginning on December 1, 1973, and ending on November 30, 1974.

Reports 5-1 through 5-3 are for County A, and 5-4 through 5-6 are for County B.

REPORT 5-2
 WORKLOAD AND EFFICIENCY
 (County A)

Number of Cases	Previous Year (H)	This Year--1974 (A)					Objective This Year (H)
		1Q	2Q	3Q	4Q	Total	
Reported	300	99	110	104	79	392	350
Assigned	300	99	110	104	79	392	350
Validated	114	34	43	44	26	147	133

Efficiency (\$)	a/	Previous Year (H)	This Year (A)	Objective (H)
Total Cost per Case Reported		400	392	400
Total Cost per Case Assigned		400	392	400
Total Cost per Case Validated		1,100	1,046	1,100

(H)--indicates hypothetical data

(A)--indicates actual data

a/--all costs are total including direct, indirect, and purchased services

Interpretation

The number of cases reported was substantially higher this year than last year and exceeded the objective by 42. All reported cases were actually assigned to a caseworker for investigation this year. This was also accomplished during the previous year. About 38 percent of the reported cases were validated this year which is about the same as last year.

Efficiency has increased this year and exceeded the objectives set despite heavy inflation and an 8 percent increase in staff salaries.

REPORT 5-2
EFFECTIVENESS
(County A)

Effectiveness Measure	Previous Year (H)	This Year--1974 (A)				Total	Objective (H)
		1Q	2Q	3Q	4Q		
Percent of Validated Cases Where Child Remains with or Is Returned to Family	65	68	70	77	81	76	70
Eventual Rate of Recidivism	.15	.30	.05	.09	.12	.13	.09
Percent of Recidivistic Cases Where Severity Decreased	15	10	0	50	0	17	30
Average Time Between Intake and Decision for Court Case (days)	12	14	11.4	6.7	21.9	12	12
Average Time Between Intake and Completion of Investigation and Validation (days)	2.1	2.2	2.2	2.0	2.1	2.1	2.1

(H)--indicates hypothetical data

(A)--indicates actual data

Interpretation

The percent of validated cases where the child remains with or is returned to his family increased steadily during this year. During the fourth quarter, it was 81 percent and was 76 percent for the entire year. This substantially exceeded the previous year (65 percent) and the objective for this year (70 percent). Increasing this percentage increases the risk of recidivism. However, protective services has been successful in reducing the eventual rate of recidivism from .15 the previous year to .13 during this year.

Only 17 percent of the recidivistic cases showed a reduction in severity from the initial incident. This was improved slightly from the previous year, but is far short of the objective. More intensive work is required for the "high risk" cases.

The data on the average number of days elapsed between intake and decision and between intake and validation indicate continued rapid motion. The objectives of 12 and 2.1 days were met.

REPORT 5-3
 COST-EFFECTIVENESS
 (County A)

Cost-Effectiveness Ratio <u>a/</u>	Previous Year 1973 (H)	This Year 1974 (A)	Objective 1974 (H)
<u>Total Cost</u> Eventual Number of Validated Cases not Recidivistic	1,300	1,201	1,300
<u>Total Cost</u> Number of Children Returned to Families	1,500	1,386	1,500

(H) --indicates hypothetical data

(A) --indicates actual data

a/ --total costs includes direct and indirect costs and purchased services.

Interpretation

Cost-effectiveness has improved this year compared to the previous year despite the impact of inflation on costs. Cost-effectiveness exceeded the objectives set.

REPORT 5-4

WORKLOAD AND EFFICIENCY

(County B)

Number of Cases	Previous Year 1973 (H)	This Year--1974 (A)					Objective This Year 1974 (H)
		1Q	2Q	3Q	4Q	Total	
Reported	2,500	1,132	1,136	1,216	1,116	4,600	3,000
Assigned	2,000	680	852	788	632	2,952	3,000
Validated	760	268	196	180	156	800	1,140

Efficiency (\$)	Previous Year (H)	This Year (A)	Objective (H)
Total Cost per Case Reported	250	585	250
Total Cost per Case Assigned	200	911	200
Total Cost per Case Validated	500	3,362	500

(H)--indicates hypothetical data
(A)--indicates actual data

Interpretation

Only 2,952 of 4,600 cases (64 percent) were assigned during 1974 compared to 80 percent in 1973. Ideally, all cases should be assigned for investigation. This was due to the substantially increased workload, phasing-in of substantial numbers of untrained staff, and the confusion caused by decentralizing operations to newly established satellite offices.

As the workload overwhelmed the staff, efficiency declined markedly during 1974 compared to the previous year. This intolerable situation must be improved substantially during 1975. However, these data show little cause for optimism. Indeed, the number of cases validated declined steadily from 268 during the first quarter to 156 during the fourth quarter.

REPORT 5-5
EFFECTIVENESS
(County B)

Effectiveness Measure	Previous Year (H)	This Year--1974 (A)					Objective (H)
		1Q	2Q	3Q	4Q	Total	
Percent of Validated Cases Where Child Remains with or Is Returned to Family	70	76	84	89	79	82	70
Eventual Rate of Recidivism	.15	.30	.29	.33	.49	.34	.15
Percent of Recidivistic Cases Where Severity Decreased	30	25	21	53	43	34	30
Average Time Between Intake and Decision for Court Case (days)	30	38.3	-	30.5	-	36.8	30
Average Time Between Intake and Completion of Investigation and Validation (days)	14	16.8	21.4	15.6	5.7	15.5	14

(H)--indicates hypothetical data
(A)--indicates actual data

Interpretation

It is generally believed to be desirable for a child to remain with his family whenever possible. However, this should not be done where he would be endangered. The above table shows that a substantially higher percentage of children remained with or were returned to their families--82 percent in 1974 compared to 70 percent in 1973--and the objective was exceeded. However, this was due to the sharp increase in workload which overwhelmed staff and available foster homes. In many questionable cases no other option was available but to leave children in their homes; no foster homes were available and the large case load frequently made adequate protective services supervision impossible. In view of these circumstances, it is not surprising, however undesirable, that an extremely high recidivism rate was experienced throughout the year which was highest during the third and fourth quarters. The rate for 1974 was more than double the 1973 experience and objective for 1974.

The number of days elapsed between intake and court decision and between intake and validation seem higher than desirable. It took longer than desired, on the average, to process the cases.

REPORT 5-6
 COST-EFFECTIVENESS
 (County B)

Cost-Effectiveness Ratio	Previous Year 1973 (H)	This Year 1974 (A)	Objective 1974 (H)
<u>Total Cost</u> Eventual Number of Validated Cases not Recidivistic	425	5,095	425
<u>Total Cost</u> Number of Children Returned to Families	410	4,126	410

(H)--indicates hypothetical data
 (A)--indicates actual data

Interpretation

Cost-effectiveness in 1974 was dramatically less than in 1973 and less than the objective set for 1974. This extremely poor situation was attributable to the factors previously discussed.

Comparative Analysis of Counties A and B

The comparative analysis is conducted on a highly aggregated basis. In these illustrative reports (5-7, 5-8, and 5-9) actual data are used as contained in the aggregate analysis previously presented for each county. Trends are not shown in these examples, but could be included.

In order to avoid repetition, detailed explanations for County B's difficulties, which were discussed previously, will not be repeated.

These comparisons highlight the dramatic differences among the two counties identified by this evaluation system. The data confirm the observation made by BAI staff during the field test and demonstrate the sensitivity of the measures used.

REPORT 5-7

EFFICIENCY COMPARISON--COUNTIES A AND B

(1974)

Efficiency Measure	County	
	A	B
Total Cost per Case Reported	\$92	\$85
Total Cost per Case Assigned	392	911
Total Cost per Case Validated	1,046	3,362

Interpretation

County A is substantially more efficient than County B in all three efficiency measures. For the reasons described previously, County B was unable to perform adequately during 1974.

REPORT 5-8

EFFECTIVENESS COMPARISONS--COUNTIES A AND B
(1974)

Effectiveness Measure	County	
	A	B
Percent of Validated Cases Where Child Remains With or Is Returned to Family	76	82
Eventual Rate of Recidivism	.13	.34
Percent of Recidivistic Cases Where Severity Decreased	15	34

Interpretation

County A experienced a slightly lower percentage of children remaining with or returned to their families than County B, but also a substantially lower recidivism rate. These data suggest that County B is offering inadequate protective services supervision in the home and possibly not making sufficient use of foster care. County B did, however, experience a substantially higher percent of recidivistic cases where severity decreased.*

* The percentage of cases where severity either remained the same or increased is 100 minus the number indicated in the table (i.e., 85 and 66 percent for Counties A and B respectively). The percentage of cases where severity increased could be determined from the raw data in Appendix D.

REPORT 5-9

COST-EFFECTIVENESS OF COUNTIES A AND B COMPARED

(1974)

Cost-Effectiveness Ratio	County	
	A	B
$\frac{\text{Total Cost}}{\text{Eventual Number of Validated Cases not Recidivistic}}$	1,201	5,095
$\frac{\text{Total Cost}}{\text{Number of Children Returned to Families}}$	1,386	4,126

Interpretation

This report shows cost-effectiveness in terms of two measures--recidivism and children returned to their families. County A is more cost-effective by considerable margins in terms of cost per case that does not recidivate and cost per child remaining with or returned to his family (\$1,201 and \$1,386 respectively for County A compared to \$5,095 and \$4,126 for County B).

Detailed Management Reports

This section presents detailed management reports generated from the data collected in County A and County B. Reports are presented for each of the evaluation criteria of each of the five objectives that were discussed in Chapter 3.

Effectiveness Analysis of Child Remaining with Family (Objective 1)

Reports 5-10 and 5-11 depict the applications of objective 1 for the two counties. No monthly trends are apparent during this period. These ratios should be compared with prior years to determine changes. Comparison with desired levels (i.e., performance standards) would also be useful.

REPORT 5-10

EFFECTIVENESS ANALYSIS OF CHILD REMAINING WITH FAMILY (OBJECTIVE 1)
(County A)Service Objectives

Maximize the number of cases where child remains with or returns to family.

Effectiveness Measure

The ratio of:
$$\frac{\text{Total validated cases of child returned to or remains in family}}{\text{Total validated cases}}$$

Reporting Period

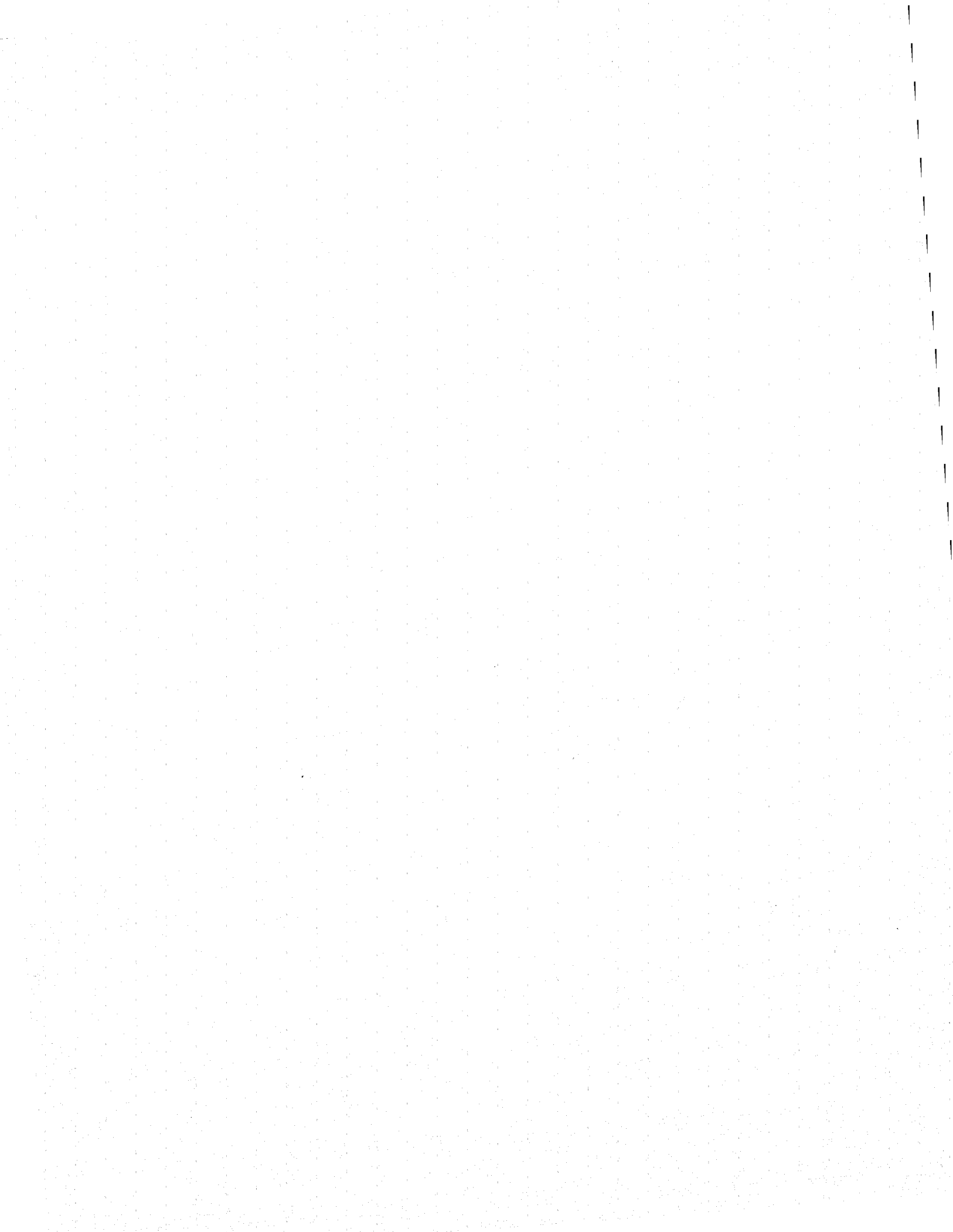
December 1974

	1973	1974											TOTAL
	D	J	F	M	A	M	J	J	A	S	O	N	
Total Validated No. of Cases	12	13	9	18	11	14	12	18	14	9	7	10	147
Validated Cases Where Child Is Returned or Remains With Family	7	9	7	14	7	12*	11	16	7	5	7	9	111
Ratio	.58	.69	.78	.78	.64	.86	.92	.89	.50	.56	1.00	.90	.76

*One child dead.

Interpretation

No monthly trends are apparent. The larger ratio of children remaining with the family indicates that this policy is being implemented strongly. Reference should be made to the rate of recidivism and severity of recidivistic cases as an evaluation of his policy.



CONTINUED

1 OF 2

REPORT 5-11

EFFECTIVENESS ANALYSIS OF CHILD REMAINING WITH FAMILY (OBJECTIVE 1)

(County B)

Service Objectives

Maximize the number of cases where child remains with or returns to family.

Effectiveness Measure

The ratio of:
$$\frac{\text{Total validated cases of child returned to or remains in family}}{\text{Total validated cases}}$$

Reporting Period

December 1974

	1973				1974								TOTAL
	D	J	F	M	A	M	J	J	A	S	O	N	
Total Validated No. of Cases	96	108	64	28	84	84	64	80	36	72	40	44	800
Validated Cases Where Child Is Returned or Remains With Family	72	88	44	28	68	68	56	80	24	64	28	32	652
Ratio	.75	.81	.69	1.00	.81	.81	.88	1.00	.67	.89	.70	.73	.82

Interpretation

No monthly trends are apparent. The large proportion that remain with the family indicates that this policy is being implemented strongly. Reference should be made to the rate of recidivism and severity of recidivistic cases as an evaluation of this policy.

Effectiveness Analysis of Recidivism (Objective 2)

Tables in reports 5-12 and 5-13 trace the recidivism one year previous to the time when data is collected and reported to management. For instance, the data on County A are assumed to be collected in December 1974 and are tracked backwards to December 1973.

The reason for backward tracking is that rates of recidivism must be calculated on the month that the case is logged at intake.

The rows are calculated as follows:

- . Total Number of Validated Cases--This is the total of the cases logged in each month that, upon investigation, were found to be valid in that they warranted action.
- . Actual Number of Recidivistic Cases Up to This Point--This row shows the number of validated cases for each month of intake that have a second case in that month or later. For example, in County A, two out of twelve cases entered in December 1973 had recidivism as of December 1974. Five of the 13 cases that were reported in January 1974 had recidivism by December 1974. It is to be noted that the frequency decreases because each succeeding month has less time for the second case to occur. Thus, this row is not sufficiently accurate for management analysis.
- . Eventual Estimated Cases of Recidivism--This row is an estimate of recidivism frequency that will occur for cases logged in each month. Assuming that a year has gone by, we will use County A data to show this technique.

REPORT 5-12

EFFECTIVENESS ANALYSIS OF RECIDIVISM (OBJECTIVE 2)
(County A)Service Objectives

Minimize the number of cases of family recidivism.

Effectiveness Measures

1. The number of families with validated cases of abuse or neglect reported in the month, where it is estimated that they will have a subsequent validated case in the same family within a year after the case.
2. The ratio of:
$$\frac{\text{Number of families as stated in (1)}}{\text{Total validated cases}}$$

Recidivism - County A

		D	J	F	M	A	M	J	J	A	S	O	N	Total
		73	74											
Total No. of Validated Cases	Abuse	3	3	5	4	3	9	2	7	7	4	1	3	51
	Neglect	9	10	4	14	8	5	10	11	7	5	6	7	96
Actual No. of Recidivistic Cases So Far	Abuse	0	0	1	0	0	0	1	0	1	0	0	0	3
	Neglect	2	5	2	0	1	1	0	1	1	1	1	0	15
Eventual Estimated Cases of Recidivism		2	5	3	0	1	1	1	1	2	1	2	0	19
Eventual Rate of Recidivism		.17	.38	.33	0	.09	.07	.08	.06	.14	.11	.29	0	.13

REPORT 5-13

EFFECTIVENESS ANALYSIS OF RECIDIVISM (OBJECTIVE 2)
(County B)Service Objectives

Minimize the number of cases of family recidivism.

Effectiveness Measures

1. The number of families with validated cases of abuse or neglect reported in the month, where it is estimated that they will have a subsequent validated case in the same family within a year after the case.
2. The ratio of:
$$\frac{\text{Number of families as stated in (1)}}{\text{Total validated cases}}$$

Recidivism - County B

		D	J	F	M	A	M	J	J	A	S	O	N	Total
Total No. of Validated Cases	Abuse	16	20	24	12	24	28	20	20	8	24	12	20	228
	Neglect	80	88	40	16	60	56	44	60	28	48	28	24	572
Actual No. of Recidivistic Cases So Far	Abuse	4	4	8	0	8	12	8	4	0	12	0	4	64
	Neglect	24	28	12	0	16	20	20	20	8	4	8	0	164
Eventual Estimated Cases of Recidivism		28	32	20	0	24	32	28	24	8	20	16	40	272
Eventual Rate of Recidivism		.29	.30	.31	0	.29	.38	.44	.30	.22	.28	.40	.91	.34

By checking each case of recidivism, Table 5-1 was computed. This table was calculated by making a tally of the actual data on recidivistic cases (neglect and abuse combined). Thus, a tally was made of the number of cases that had a recurrence in the same month that it was reported.* A second tally was made for cases that had a second occurrence in the month after initial reporting and so on. The tallies were then converted to percentages of the recidivistic cases.

TABLE 5-1

Predicted Month in Which Recidivism Occurs
(Average Percent of Logged Cases)

Month	Percent	
	During Month	Cumulative
Original Intake	10	10
Second	47	57
Third	17	74
Fourth	6	80
Fifth	13	93
Sixth	7	100
TOTAL	100	-

* The number of reoccurrences during the first calendar month represents an under count. For example, if the initial complaint is filed on the 15th, a second complaint would have to be filed within 15 days to be counted during that month. If the tracking system recorded complaints by exact date, 30-day intervals could be used in lieu of calendar months, thus, eliminating this distortion.

Thus, on the average over all the data collected, 10 percent of the second cases occur in the same month that they are originally logged for the first case. Forty-seven percent occur in the month after the first case is logged. Thus, the validated cases logged in any month will have all the recidivism occur in six months (an approximation). The distribution of percents of recidivistic cases that occur in each month (Figure 5-1) was used to develop the curve in Figure 5-2. This curve is most easily explained with a few illustrations.

The third row of the table in Report 5-12 indicates zero cases of recidivism in November out of ten validated cases. Table 5-2 shows that on the average, this represents about 10 percent of the eventual cases over the next six months. Thus, $\frac{0}{.10} = 0$ is the estimate for November.

In October, one case of recidivism occurred out of seven validated cases during the months of October and November. According to Table 5-2, this represents about 57 percent of the eventual recidivism. Thus, $\frac{1}{.57} \approx 2$ is the estimate for October.

This method was used for each of the months to estimate the expected amount of recidivism that will finally occur.

FIGURE 5-1

PREDICTED MONTH IN WHICH RECIDIVISM OCCURS
(Monthly Distribution)

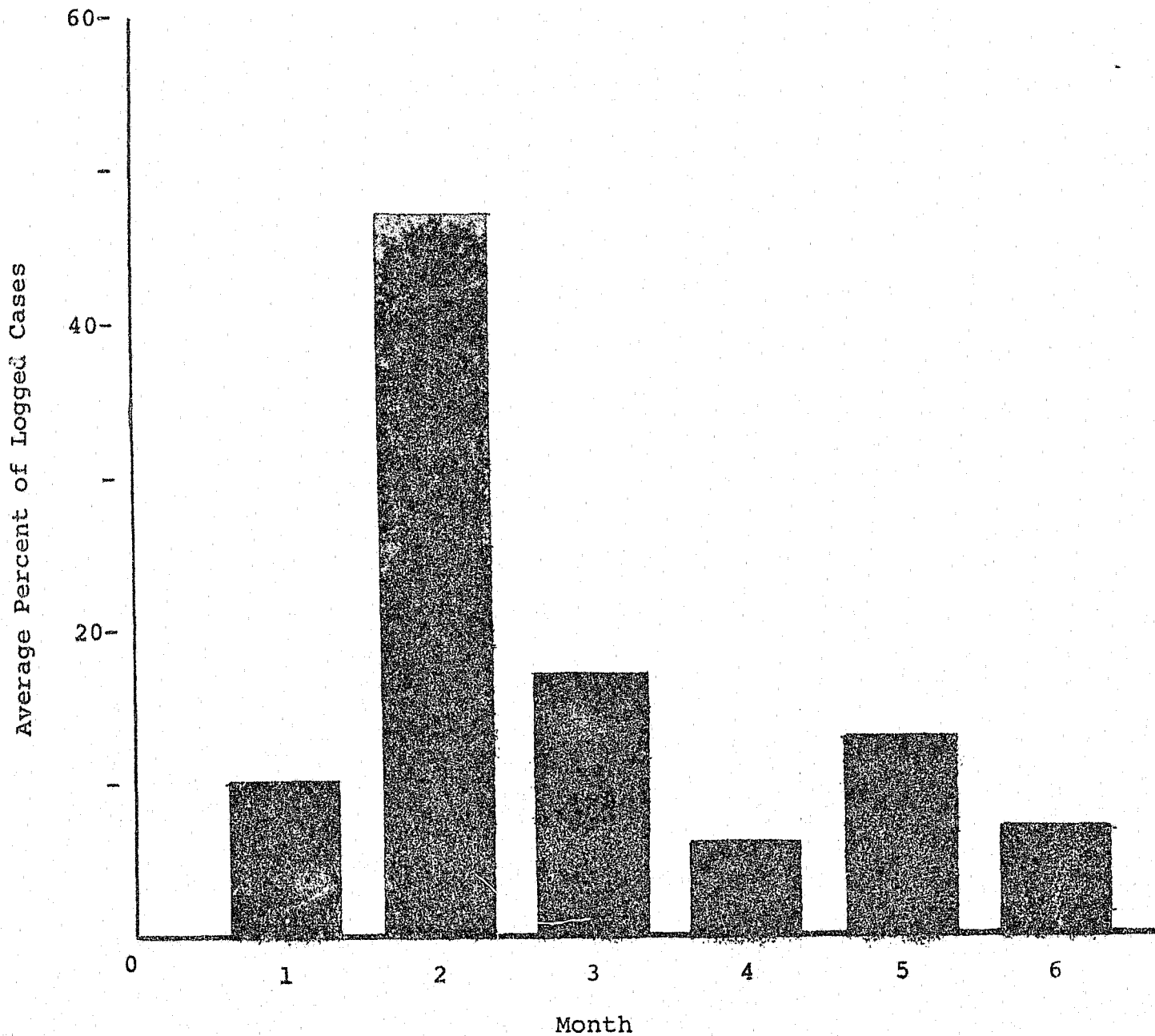


FIGURE 5-2

PREDICTED MONTH IN WHICH RECIDIVISM OCCURS
(Culmulative Distribution)

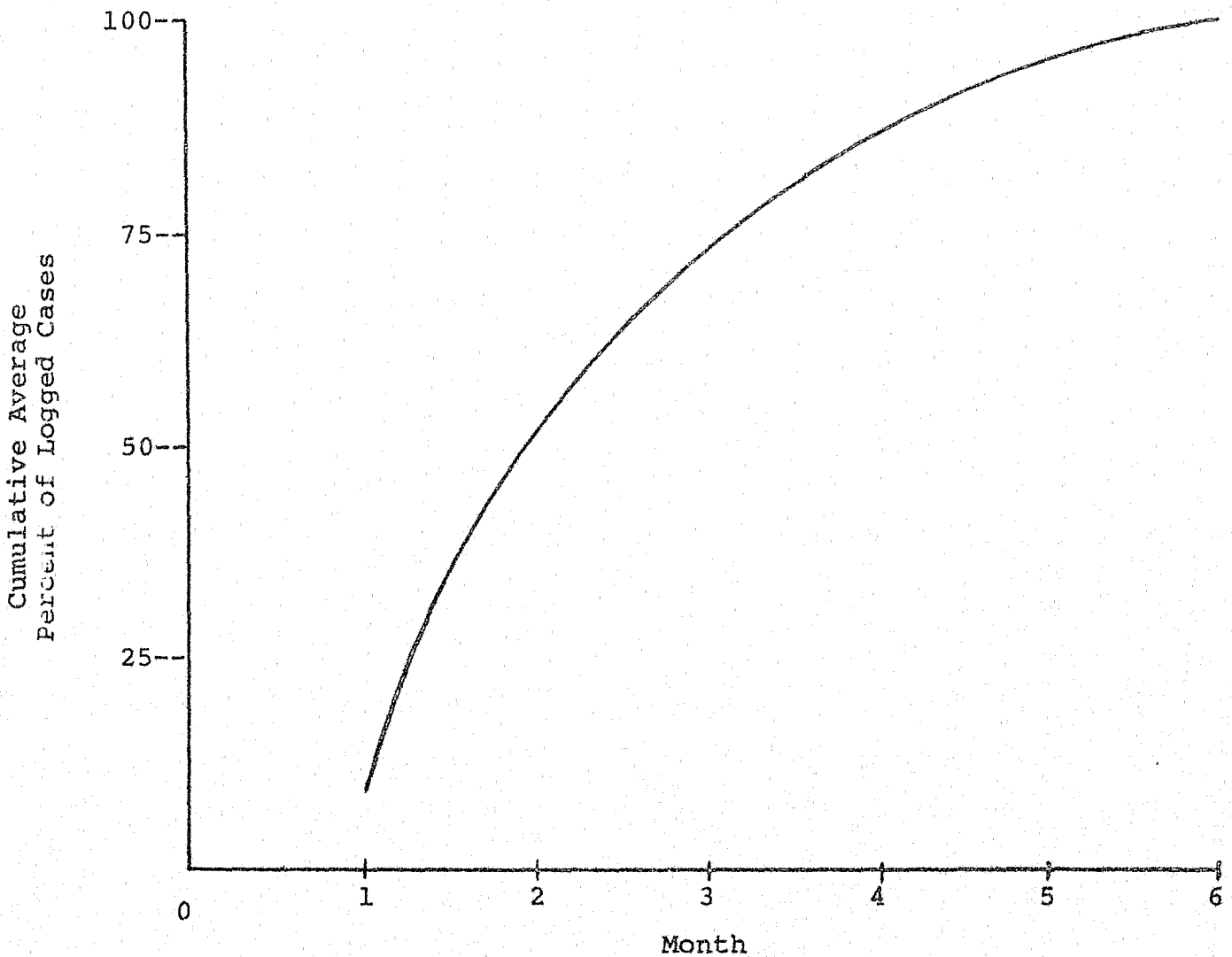


TABLE 5-2
 RECIDIVISM BY MONTH

Reporting Month	Percent Recidivism Completed
December 1973	100
January 1974	100
February 1974	100
March 1974	100
April 1974	100
May 1974	100
June 1974	100
July 1974	93
August 1974	80
September 1974	74
October 1974	57
November 1974	10

Thus, in November 1974 the reported figure represents only 10 percent of the eventual figure. The reported figure for October is only 47 + 10 percent complete. Thus, these percentages can be used to adjust the reported figures to an estimate of what they will be eventually. The last row is the rate of recidivism based on the adjusted frequency of recidivism.

These calculations of estimated cases of recidivism and eventual rate of recidivism were made for neglect and abuse

combined based on actual occurrences. If more cases were available, computations could be made for neglect and abuse separately.

Effectiveness Analysis of Severity (Objective 3)

If protective services are effective, the second incident should be less severe than the first. Reports 5-14 and 5-15 depict the effectiveness analysis of severity (Objective 3) for the two counties. No clear trends are shown, although some improvement occurred in County B during the second half of the year. The small number of recidivistic cases can result in misleading impressions on a month-to-month basis.*

* However, statistical techniques can be used to analyze trends in small numbers of cases over a more extended time period.

REPORT 5-14

EFFECTIVENESS ANALYSIS OF SEVERITY (OBJECTIVE 3)

(County A)

Service Objectives

In those cases where recidivism occurs, to decrease the severity of the second incident to reflect effective services.

Effectiveness Measure

The ratio of:
$$\frac{\text{For all cases of recidivism, the number of cases where the severity decreased in the second incident}}{\text{The number of cases of recidivism}}$$

Reporting Period

December 1974

	1973		1974										TOTAL
	D	J	F	M	A	M	J	J	A	S	O	N	
Total Validated No. of Recidivistic Cases	2	5	3	0	1	1	1	1	2	1	1	0	18
Validated Cases Where Severity Decreased	0	0	1	0	0	0	1	0	1	0	0	0	3
Ratio	0	0	.33	0	0	0	1.00	0	.50	0	0	0	.17

Interpretation

Only 17 percent of the recidivistic cases had a decrease in severity. This indicates a treatment problem requiring attention in that in 83 percent of the recidivistic cases, the second incident was at least as severe as the first.

REPORT 5-15

EFFECTIVENESS ANALYSIS OF SEVERITY (OBJECTIVE 3)
(County B)Service Objectives

In those cases where recidivism occurs, to decrease the severity of the second incident to reflect effective services.

Effectiveness Measure

The ratio of:
$$\frac{\text{For all cases of recidivism, the number of cases where the severity decreased in the second incident}}{\text{The number of cases of recidivism}}$$

Reporting Period

December 1974

Trend	1973	1974											TOTAL
	D	J	F	M	A	M	J	J	A	S	O	N	
Total No. of Cases of Recidivism	28	32	20	0	20	32	28	24	8	16	8	4	224
Cases Where Severity Decreased	8	8	8	0	8	8	16	8	8	8	4	0	76
Ratio	.29	.25	.20	0	.17	.25	.57	.33	1.00	.50	.50	.50	.34

Interpretation

Some improvement occurred during the second half of the year. The 34 percent total cases of recidivism where the severity decreased indicates a problem requiring attention in that it indicates that in 66 percent of the recidivistic cases the severity in the second case was greater or equal to the first case. This indicates that the treatment is inadequate for the large numbers returned to the family.

Effectiveness Analysis of Time to Court Decision (Objective 4)

The time elapsed between intake and a court's placement decision is an indication of the length of time that a child must endure uncertainty. This measure was interpreted to apply only to cases in which children are permanently removed as the result of a court decision. Therefore, Reports 5-16 and 5-17 show that only a small number of such cases occurred. It would be better to include all cases on which court petitions are filed because the child undergoes considerable uncertainty in all such cases. This would considerably increase the number of cases measured under this objective and generate more meaningful statistics.

These data should be compared with prior years, with other communities, and possibly with performance standards.

REPORT 5-16

EFFECTIVENESS ANALYSIS OF TIME TO COURT DECISION (OBJECTIVE 4)
(County A)Service Objective

Minimize the time for validated cases between intake and court decision.

Effectiveness Measure

The average time between intake and decision for those cases where court action is taken.

Reporting Period

December 1974

Trend	1973	1974											Total
	D	J	F	M	A	M	J	J	A	S	O	N	
Days	3.5	11.4	30.8	1.2	1.8	91.0	11.5	7	5.3	31.5	7	17.5	12
No. of Cases	2	5	2	4	4	1	2	1	7	2	1	1	33

Interpretation

No trends are apparent.

REPORT 5-17

EFFECTIVENESS ANALYSIS OF TIME TO COURT DECISION (OBJECTIVE 5)
(County B)Service Objective

Minimize the time for validated cases between intake and court decision.

Effectiveness Measure

The average time between intake and decision for those cases where court action is taken.

Reporting Period

December 1974

Trend	1973			1974									Total
	D	J	F	M	A	M	J	J	A	S	O	N	
Days	80	32.6	16.3				30.5						36.8
No. of Cases	8	12	12	0	0	0	8	0	0	0	0	0	40

Interpretation

No trends are apparent. The large number of days required for court decision indicates system defects.

Effectiveness Analysis of Time to Completion of Investigation
and Validation (Objective 5)

This is an indicator of the time required to make a determination as to whether neglect or abuse are present. This time should be minimized. Reports 5-18 and 5-19 show a slight decline (i.e., improvement) in elapsed time during the last two months for County A. County B achieved considerable improvement during the last three months of the period (Report 5-19). In comparison to County B, County A is considerably more effective throughout the year in terms of this criterion. This suggests the value in using the data comparatively.

REPORT 5-18

EFFECTIVENESS ANALYSIS OF TIME TO COMPLETION OF
 INVESTIGATION AND VALIDATION (OBJECTIVE 5)
 (County A)

Service Objective

Minimize the time between intake and completion of the investigation and validation.

Effectiveness Measure

The average time between intake and completion of the investigation and validation of cases.

Reporting Period

December 1974

Trend	1973	1974											Total
	D	J	F	M	A	M	J	J	A	S	O	N	
Days	1.8	2.1	3.0	1.9	3.4	1.5	2.2	1.9	1.8	3.1	1.3	1.8	2.1

Interpretation

A slight decline (i.e., improvement) in elapsed time occurred during the last two months of the period.

REPORT 5-19

EFFECTIVENESS ANALYSIS OF TIME TO COMPLETION OF
INVESTIGATION AND VALIDATION (OBJECTIVE 6)
(County B)Service Objective

Minimize the time between intake and completion of the investigation and validation.

Effectiveness Measure

The average time between intake and completion of the investigation and validation of cases.

Reporting Period

December 1974

Trend	1973		1974										Total
	D	J	F	M	A	M	J	J	A	S	O	N	
Days	17	23	6	39	23	14	15	15	18	6	5	6	16

Interpretation

Considerable improvement occurred during the last three months of the period.

Monthly Cost Analysis--County A

Report 5-20 presents illustrative costs for County A. The total costs for the reporting period are accurate. The monthly costs are randomly generated for reasons explained in Chapter 4 in the section on data collection. Therefore, monthly cost data should be considered only as illustrative.

No cost-effectiveness trend analysis is presented because actual monthly cost data are not available.

REPORT 5-20

MONTHLY COST ANALYSIS, COUNTY A

Reporting Period December 1974

	Dec 73	Jan 74	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	TOTAL
Total Direct Labor Cost	6472	6293	6173	6233	5873	5813	6113	5793	5693	5514	5933	6053	71,956
Total Indirect Labor Costs	1506	1464	1436	1450	1366	1352	1422	1338	1324	1282	1380	1408	16,728
Total Purchased Services Costs	5860	5697	5589	5642	5317	5263	5535	5209	5155	4992	5372	5480	65,111
Total Protective Services	13886	13454	13198	13325	12556	12428	13070	12340	12172	11788	12685	12941	153,795
Per Worker Cost of Protective Services Excluding Purchased Services	997	974	951	960	905	896	942	891	877	849	914	932	924
Average Cost of Purchased Services	254	124	186	176	156	120	146	148	166	161	199	260	162

84

Interpretation

These data are for illustrative purposes only.

Monthly Cost Analysis--County B

Table 5-21 presents costs for County B.

Cost-Effective Analysis--County B

Reports 5-22, 5-23, and 5-24 depict cost-effectiveness in terms of whether a child is returned to his family, whether there is recidivism, and whether or not the recidivism is less severe. Cost-effectiveness analysis would be more useful in making year-to-year comparisons within an agency and in comparing multiple agencies as illustrated previously in this chapter. Analytical techniques such as regression analysis could be used if more data becomes available.

REPORT 5-21
MONTHLY COST ANALYSIS, COUNTY B

Reporting Period December 1974

	Dec 73	Jan 74	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	TOTAL
Total Direct Labor Cost	49,860	55,190	61,280	66,940	68,970	70,740	69,980	69,980	70,910	70,910	78,025	76,155	806,940
Total Indirect Costs	93,244	63,696	58,706	41,717	83,588	77,647	95,336	85,478	83,307	92,322	73,090	106,673	954,864
Total Purchased Services Costs	74,757	62,357	73,394	76,993	71,748	80,481	78,184	81,292	83,470	75,908	80,468	75,110	928,162
Total Protective Services	217,861	181,243	193,380	185,650	222,308	228,868	243,500	236,750	247,747	243,140	231,583	257,938	2,689,966
Average Case Cost of Purchased Services	389	240	322	321	233	265	301	286	383	286	437	447	262
Per Worker Cost of Protective Services Excluding Purchased Services	2,168	1,629	1,481	1,235	1,711	1,595	1,797	1,690	1,659	1,755	1,558	1,693	1,656

Interpretation

The total protective services costs is generally increasing, while direct, indirect and purchased services fluctuate monthly. The per worker cost fluctuates considerably from month-to-month, but there is no general trend.

REPORT 5-22

COST-EFFECTIVENESS ANALYSIS--
RETURN TO FAMILY

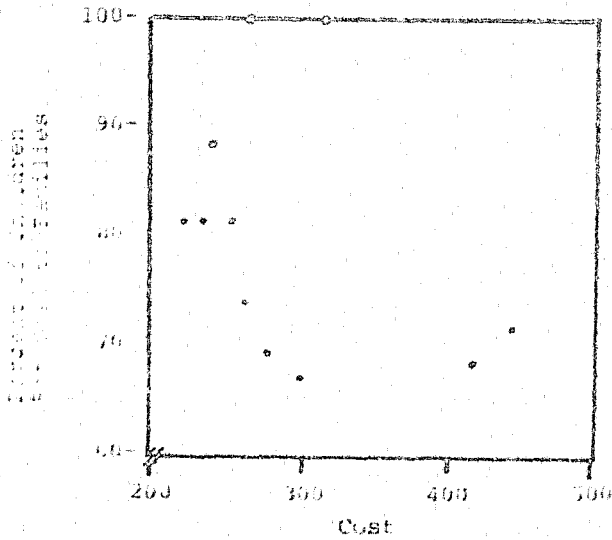
County B

Reporting Period December 1974

Measures

Average case cost of direct labor vs Objective 1. Percent of validated cases in which child remains or is returned to family.

Case Cost	1973	1974										
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Cost	260	212	269	279	218	233	246	247	291	253	424	453
% Children Returned to Family	75	81	69	100	81	81	88	100	67	89	70	73



Interpretation

The points on the cost-effectiveness graph indicate no clear relationship between monthly case cost and percent of children returned to their families.

REPORT 5-23

COST-EFFECTIVENESS ANALYSIS--
RECIDIVISM

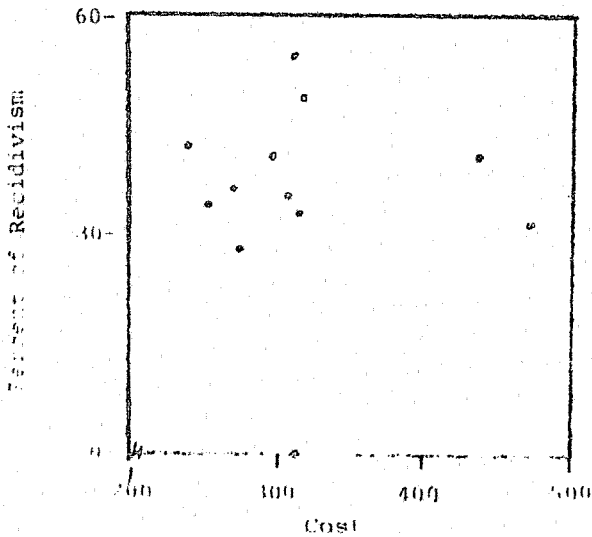
County B

Reporting Period December 1974

Measures

Average case cost of direct labor vs Objective 2. Percent of cases that are estimated to be eventually recidivistic.

Case Cost	1973	1974										
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Cost	260	212	269	279	218	233	246	247	291	253	424	453
Percent of Recidivism	29	44	56	0	33	42	56	35	33	38	40	27

Interpretation

The points on the cost-effectiveness graph indicate no clear relationship between costs and eventual recidivism.

COST-EFFECTIVENESS ANALYSIS--
SEVERITY

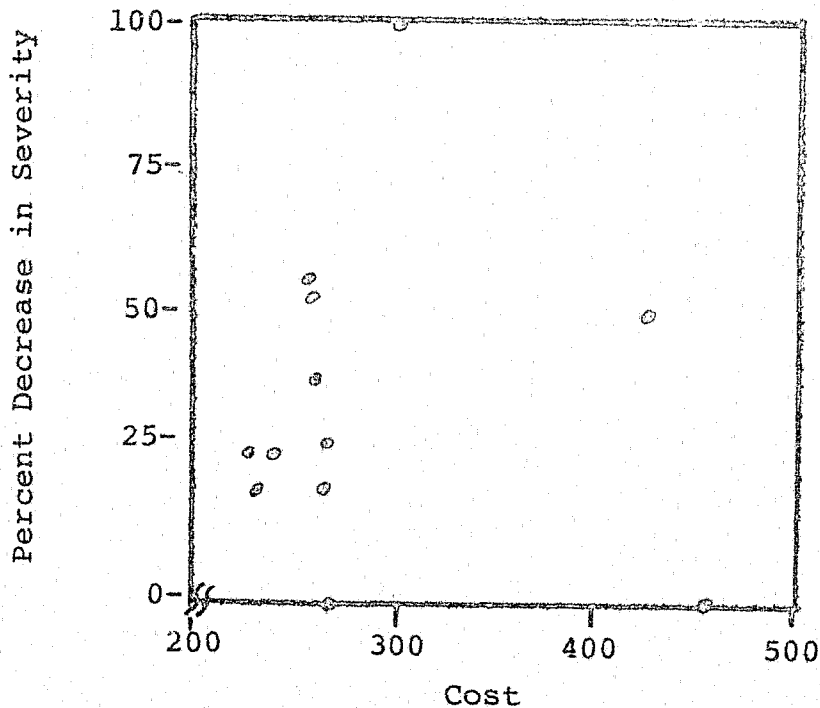
County B

Reporting Period December 1974

Measures

Average case cost of direct labor vs Objective 3. Percent of cases where severity decreased in the second incident.

Case Cost	1973	1974										
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Cost	260	212	269	279	218	233	246	247	291	253	424	453
% Decrease in Severity	29	25	20	0	17	25	57	33	100	50	50	0



Interpretation

The points on the cost-effectiveness graph indicate that as the cost increases, there is a slight tendency for the severity to decrease.

CHAPTER 6

SUMMARIES OF DATA COLLECTED

This chapter summarizes and analyzes in detail the data collected to conduct the effectiveness analyses presented in Chapter 5. Cost data are presented in Appendix B.

Compilation of the Data

The information provided in this section is shown in three tables for each county. The first table represents the data for all the cases of neglect and abuse; the second table provides the data for only the abuse cases reported; and the third table provides the data for only the neglect cases. Using the 25 percent sample in County B, we have projected figures for the total number of cases; thus, the following tables representing County B are based on these projections.

Tables (6-1 through 6-6) provide the following information for each month reported:*

Number of Reported Cases--The number of cases that were reported each month for study.

Number of Assigned Cases--The number of cases assigned to caseworkers for study and validation.

Number of Cases Pending Assignment--The number of cases that were assigned but were awaiting assignment and would be assigned as soon as a caseworker was available.

* One hundred percent of the reported cases in County A were sampled. Twenty-five percent of the reported cases in County B were sampled. The number of cases sampled in County B were multiplied by four to derive the numbers in the tables.

TABLE 6-1
EFFECTIVENESS DATA FOR PROTECTIVE SERVICES
COMBINED TOTAL FOR NEGLECT AND ABUSE
COUNTY A (100% SAMPLING)

COMBINED TOTAL FOR NEGLECT AND ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
NUMBER OF REPORTED CASES	23	46	30	32	34	44	38	35	31	31	27	21	392
NUMBER OF ASSIGNED CASES	23	46	30	32	34	44	38	35	31	31	27	21	392
NUMBER OF CASES PENDING ASSIGNMENT (UNASSIGNED)	0	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF UNASSIGNED CASES THAT WERE CLOSED	0	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF VALIDATED CASES	12	13	9	18	11	14	12	18	14	9	7	10	147

TABLE 6-2
EFFECTIVENESS DATA FOR PROTECTIVE SERVICES
TOTAL FOR ABUSE--COUNTY A

TOTAL FOR ABUSE	1974												TOTAL	
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV		
TOTAL NUMBER OF REPORTED ABUSE CASES	5*	9*	9*	7*	8*	15*	6*	12*	12*	9*	5	4*	101*	* 30 reported cases of combined neglect and abuse
TOTAL NUMBER OF ASSIGNED ABUSE CASES	5	9	9	7	8	15	6	12	12	9	5	4	101	* 3 reported cases of combined neglect and abuse
TOTAL NUMBER OF ABUSE CASES PENDING ASSIGNMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	* 3 reported cases of combined neglect and abuse
TOTAL NUMBER OF UNASSIGNED ABUSE CASES THAT WERE CLOSED	0	0	0	0	0	0	0	0	0	0	0	0	0	* 1 reported case of combined neglect and abuse
TOTAL NUMBER OF VALID ABUSE CASES	3	3	5	4	3	9	2	7	7	4	1	3	51*	* 2 reported cases of combined neglect and abuse * 3 reported cases of combined neglect and abuse * 3 reported cases of combined neglect and abuse * 1 reported case of combined neglect and abuse

TABLE 6-3
EFFECTIVENESS DATA FOR PROTECTIVE SERVICES
TOTAL FOR NEGLECT--COUNTY A

TOTAL FOR NEGLECT	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF REPORTED NEGLECT CASES	19*	42*	26*	25*	29*	32*	36*	23*	20*	25*	22	20*	319*
TOTAL NUMBER OF ASSIGNED NEGLECT CASES	19	42	26	25	29	32	36	23	20	25	22	20	319
TOTAL NUMBER OF NEGLECT CASES PENDING ASSIGNMENT	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL NUMBER OF UNASSIGNED NEGLECT CASES THAT WERE CLOSED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL NUMBER OF VALID NEGLECT CASES	9	12	6	14	8	6	10	13	7	6	6	10	108

* 30 reported cases of combined neglect and abuse

* 3 reported cases of combined neglect and abuse

* 3 reported cases of combined neglect and abuse

* 1 reported case of combined neglect and abuse

* 3 reported cases of combined neglect and abuse

* 3 reported cases of combined neglect and abuse

* 2 reported cases of combined neglect and abuse

* 3 reported cases of combined neglect and abuse

* 3 reported cases of combined neglect and abuse

* 1 reported case of combined neglect and abuse

* 5 reported cases of combined neglect and abuse

* 5 reported cases of combined neglect and abuse

* 1 reported case of combined neglect and abuse

TABLE 6-4
EFFECTIVENESS DATA FOR PROTECTIVE SERVICES
COMBINED TOTAL FOR NEGLECT AND ABUSE
COUNTY B (25% SAMPLING)

COMBINED TOTAL FOR NEGLECT AND ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
NUMBER OF REPORTED CASES	320	464	348	352	404	380	396	416	404	396	336	384	4600
NUMBER OF ASSIGNED CASES	192	260	228	240	308	304	260	284	294	280	184	168	2952
NUMBER OF CASES PENDING ASSIGNMENT (UNASSIGNED)	0	24		12	24	12	32	48	68	72	76	132	500
NUMBER OF UNASSIGNED CASES THAT WERE CLOSED	128	180	120	100	72	64	104	84	92	44	76	84	1198
NUMBER OF VALIDATED CASES	96	108	64	28	84	84	64	80	36	72	40	44	800

TABLE 6-5
EFFECTIVENESS DATA FOR PROTECTIVE SERVICES
TOTAL FOR ABUSE--COUNTY B

TOTAL FOR ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
NUMBER OF REPORTED CASES	56	108	96	84	100	92	92	104	72	84	60	100	1048
NUMBER OF ASSIGNED CASES	44	80	68	76	88	88	76	84	48	80	48	68	848
NUMBER OF CASES PENDING ASSIGNMENT (UNASSIGNED)	0	4	0	0	0	0	8	4	8	4	8	20	56
NUMBER OF UNASSIGNED CASES THAT WERE CLOSED	12	24	28	8	12	4	8	16	16	0	4	12	144
NUMBER OF VALIDATED CASES	16	20	24	12	24	28	20	20	8	24	12	20	228

TABLE 6-6
EFFECTIVENESS DATA FOR PROTECTIVE SERVICES
TOTAL FOR NEGLECT--COUNTY B

TOTAL FOR NEGLECT	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
NUMBER OF REPORTED CASES	264	356	252	268	304	288	304	312	332	312	276	284	3552
NUMBER OF ASSIGNED CASES	148	180	160	164	220	216	184	200	196	200	136	100	2104
NUMBER OF CASES PENDING ASSIGNMENT (UNASSIGNED)	0	20	0	12	24	12	24	44	60	68	68	112	444
NUMBER OF UNASSIGNED CASES THAT WERE CLOSED	116	156	92	92	60	60	96	68	76	44	72	72	1004
NUMBER OF VALIDATED CASES	80	88	40	16	60	56	44	60	28	48	28	24	572

Number of Unassigned Cases that were Closed--The number of cases that were unassigned and closed at intake. These cases were closed at intake by an intake caseworker usually because of one of the following reasons: it was considered invalid or inappropriate to the agency's activities; the problem was taken care of at intake; etc. The percentage in parenthesis represents the percent of reported cases that were unassigned but closed.

Number of Validated Cases--The number of cases that were investigated and found to be valid cases of neglect and abuse. Other cases were put into one of two other categories: (1) the investigation of the report was completed and no neglect or abuse was found, (2) the investigation was incomplete because the investigation had just been initiated, the situation was difficult to assess, the family was difficult to contact, or the family had moved. These cases were, therefore, not categorized as valid or invalid.

Due to the small number of cases, every reported case was included in the County A sample--an average of 27 per month. In County B, which had a considerably larger number of cases, every fourth case was recorded--an average of 96 per month.

Discussion of Tables for Counties A and B

In reviewing the 12 months reported in the two counties, there do not appear to be any trends or significant seasonal effects; however, in County A there is a slight tendency for a higher rate of reported cases in the summer months.

In County A, all the cases are assigned at intake. This is not the method in County B where 11 percent of the cases reported for the 12-month period were still pending assignment as of December 1974 and 25 percent of the cases were closed at intake without being assigned to a caseworker (Table 6-4). Most of those cases in County B that were still pending assignment, however, were neglect cases (Table 6-6) and were reported in the later months. Realizing that these data represent the status of the cases at the time of December 1974, it would be expected that the months closer to December 1974 would have larger percentages of cases pending assignment.

Thirty-eight percent of those cases reported in County A during the 12-month period were found to be valid (Table 6-1). The other 62 percent consisted mainly of those cases that were investigated and no neglect or abuse found. A few of the cases in the 62 percent had not been categorized as valid or invalid because the investigation was incomplete. In County B, 17 percent of the cases sampled during the 12-month period were found to be valid (Table 6-4). The other 83 percent consisted of the following: cases that were investigated and found to be invalid; cases that were not completely investigated and could, therefore, not be categorized as valid or invalid yet; cases that were unassigned; and cases that could not be located.

Rural vs Urban: Neglect and Abuse

Tables 6-7 and 6-8 provide frequencies of the valid cases by location--rural and urban. More specifically, the following information is provided for each county: total valid rural cases; total valid urban cases; total valid rural neglect cases; total valid rural abuse cases; total valid urban neglect cases; total valid urban abuse cases. Table 6-8 reflects projected figures for the total number of cases, based on our 25 percent sample.

Most of the valid reported cases in both County A and County B are of families residing in urban areas. Only about 8 percent of the valid cases in each county were located in rural areas.

Of the total valid rural cases in County A, 69 percent were classified as neglect and 31 percent were classified as abuse (Table 6-7). In County B, 60 percent of the valid rural cases were classified as neglect and 40 percent as abuse (Table 6-8).

Of the total valid urban cases in County A, 68 percent were classified as neglect and 32 percent were classified as abuse (Table 6-7). Seventy-two percent of the valid urban cases in County B were classified as neglect and 28 percent as abuse (Table 6-8).

Recidivism

The data provided in this section (Tables 6-9 to 6-14) are broken down into three tables for each county. The first table presents the data for both neglect and abuse cases.

TABLE 6-7
CASE LOCATION--RURAL/URBAN
COUNTY A (100% SAMPLING)

RURAL vs. URBAN NEGLECT AND ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL VALID RURAL CASES	0	0	1	1	1	1	1	5	2	1*	0	0	12
TOTAL VALID URBAN CASES	12	13*	8*	17	10	13*	1	15*	12	8	7	10*	121
TOTAL VALID RURAL NEGLECT CASES	0	0	1	1	1	0	1	4	0	1	0	0	9
TOTAL VALID RURAL ABUSE CASES	0	0	0	0	0	1	0	1	2	0	0	0	4
TOTAL VALID URBAN NEGLECT CASES	9	12	5	13	7	6	9	9	7	5	6	10	98
TOTAL VALID URBAN ABUSE CASES	3	3	5	4	3	8	2	6	5	4	1	3	47

* 2 valid cases of combined neglect and abuse

* 2 valid cases of combined neglect and abuse

* 1 valid case of combined neglect and abuse

* 2 valid cases of combined neglect and abuse

* 1 valid case of combined neglect and abuse

* 3 valid cases of combined neglect and abuse

TABLE 6-8
CASE LOCATION--RURAL/URBAN
COUNTY B (25% SAMPLING)

RURAL vs. URBAN NEGLECT AND ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL VALID RURAL CASES	8	0	0	8	8	12	4	8	0	8	4	0	60
TOTAL VALID URBAN CASES	88	103	64	20	76	72	60	72	36	64	36	44	740
TOTAL VALID RURAL NEGLECT CASES	4	0	0	8	4	12	0	4	0	0	4	0	36
TOTAL VALID RURAL ABUSE CASES	4	0	0	0	4	0	4	4	0	8	0	0	24
TOTAL VALID URBAN NEGLECT CASES	76	88	40	8	56	44	40	56	28	48	24	24	532
TOTAL VALID URBAN ABUSE CASES	12	20	24	12	20	28	20	16	8	16	12	20	208

TABLE 6-9
 RECIDIVISTIC DATA FOR COUNTY A
 COMBINED TOTAL FOR NEGLECT AND ABUSE

COMBINED TOTAL FOR NEGLECT AND ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF VALIDATED CASES	12	13*	9*	18	11	14*	12	18*	14	9*	7	10*	147*
TOTAL NUMBER OF VALIDATED CASES WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	3	6	3	5	2	2	4	3	5	3	3	7	46
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR	2	5	3	0	1	1	1	1	2	1	1	0	18
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	1	4	2	0	0	0	0	0	0	1	0	0	8
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM INCREASED	1	0	1	0	0	0	0	0	1	0	0	0	3
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM STAYED THE SAME	1	5	1	0	1	1	0	1	0	1	1	0	12
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM DECREASED	0	0	1	0	0	0	1	0	1	0	0	0	3

* 2 valid cases of
combined N & A

* 2 valid cases of
combined N & A

* 1 valid case of
combined N & A

* 2 valid cases of
combined N & A

* 1 valid case of
combined N & A

* 3 valid cases of
combined N & A

* 10 valid cases of
combined N & A

TABLE 6-10
 RECIDIVISTIC DATA FOR COUNTY A
 TOTAL FOR ABUSE

ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF VALIDATED CASES OF ABUSE	3	3*	5*	4	3	9*	2	7*	7	4*	1	3*	51*
TOTAL NUMBER OF VALIDATED CASES WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	0	0	1	0	0	0	0	1	3	1	0	0	6
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR	0	0	1	0	0	0	1	0	1	0	0	0	3
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	0	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM INCREASED	0	0	0	0	0	0	0	0	1	0	0	0	1
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM STAYED THE SAME	0	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM DECREASED	0	0	1	0	0	0	1	0	0	0	0	0	2

* 2 valid cases of combined N & A

* 2 valid cases of combined N & A

* 2 valid cases of combined N & A

* 1 valid case of combined N & A

* 1 valid case of combined N & A

* 2 valid cases of combined N & A

* 2 valid cases of combined N & A

* 1 valid case of combined N & A

* 1 valid case of combined N & A

* 3 valid cases of combined N & A

* 10 valid cases of combined N & A

TABLE 6-11
 RECIDIVISTIC DATA FOR COUNTY A
 TOTAL FOR NEGLECT

NEGLECT	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF VALIDATED CASES OF NEGLECT	9	12*	6*	14	8	6*	10	13*	7	6*	6	10*	107*
TOTAL NUMBER OF VALIDATED CASES WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	3	6	2	5	2	2	4	2	2	2	3	7	40
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR	2	5	2	0	1	1	0	1	1	1	1	0	15
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	1	4	2	0	0	0	0	0	0	1	0	0	8
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM INCREASED	1	0	1	0	0	0	0	0	0	0	0	0	2
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM STAYED THE SAME	1	5	1	0	1	1	0	1	0	1	1	0	12
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM DECREASED	0	0	0	0	0	0	0	0	1	0	0	0	1

* 2 valid cases of combined N & A

* 2 valid cases of combined N & A

* 1 valid case of combined N & A

* 2 valid cases of combined N & A

* 1 valid case of combined N & A

* 3 valid cases of combined N & A

* 10 valid cases of combined N & A

TABLE 6-12
 RECIDIVISTIC DATA FOR COUNTY B
 COMBINED TOTAL FOR NEGLECT AND ABUSE

COMBINED TOTAL FOR NEGLECT AND ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF VALIDATED CASES	96	108	64	28	84	84	64	80	36	72	40	44	800
TOTAL NUMBER OF VALIDATED CASES WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	40	32	16	8	52	36	24	40	20	24	12	16	320
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR	28	32	20	0	24	32	28	24	8	16	8	4	224
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	20	16	8	0	24	20	20	16	8	0	4	0	136
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM INCREASED	4	16	8	0	8	20	8	4	0	0	0	0	68
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM STAYED THE SAME	16	8	8	0	12	4	4	12	0	8	4	4	80
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM DECREASED	8	8	4	0	4	8	16	8	8	8	4	0	76

TABLE 6-13
 RECIDIVISTIC DATA FOR COUNTY B
 TOTAL FOR ABUSE

TOTAL FOR ABUSE	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF VALIDATED CASES	16	20	24	12	24	28	20	20	8	24	12	20	228
TOTAL NUMBER OF VALIDATED CASES WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	8	4	0	0	0	16	8	8	4	0	0	4	52
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR	4	4	8	0	8	12	8	4	0	12	0	4	64
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	4	4	0	0	0	8	4	4	0	0	0	0	24
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM INCREASED	0	0	0	0	0	8	4	0	0	0	0	0	12
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM STAYED THE SAME	4	4	4	0	4	0	4	0	0	4	0	4	28
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM DECREASED	0	0	4	0	4	4	0	4	0	8	0	0	24

TABLE 6-14
 RECIDIVISTIC DATA FOR COUNTY B
 TOTAL FOR NEGLECT

TOTAL FOR NEGLECT	1973	1974											TOTAL
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	
TOTAL NUMBER OF VALIDATED CASES	80	88	40	16	60	56	44	60	20	48	28	24	572
TOTAL NUMBER OF VALIDATED CASES WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	32	28	16	8	52	20	16	32	16	24	12	12	268
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR	24	28	12	0	16	20	20	20	8	4	8	0	160
ACTUAL NUMBER OF RECIDIVISTIC CASES SO FAR WITH A PREVIOUS HISTORY OF ABUSE OR NEGLECT	16	12	8	0	16	12	16	12	8	0	4	0	104
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM INCREASED	4	16	8	0	8	12	4	4	0	0	0	0	56
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM STAYED THE SAME	12	4	4	0	8	4	0	12	0	4	4	0	52
NUMBER OF CASES WHERE SEVERITY OF RECIDIVISM DECREASED	8	8	0	0	0	4	16	4	8	0	4	0	52

The second table consists of data for abuse cases only and the third table consists of data for just the neglect cases. Using the 25 percent sample in County B, we have projected figures for the total number of cases, thus, the following tables representing County B are based on these projections. The tables present the following information for each month reported:

Total Validated Number of Cases--The number of cases that were investigated and categorized as valid cases of neglect or abuse

Validated Cases with a Previous History of Neglect or Abuse--The number of valid cases that had previous valid reports of neglect and abuse

Actual Number of Recidivistic Cases so Far--The number of valid cases that had at least one valid repeated incident of neglect or abuse by December 1974

Actual Number of Recidivistic Cases so Far that Have a Previous History of Neglect or Abuse--The number of valid cases that had at least one valid repeated incident of neglect or abuse by December 1974 and at least one previously valid incident of neglect and abuse

Number of Cases where Severity of Recidivism Increased--The number of valid cases that had a valid repeated incident which was more severe than the incident sampled and under study

Number of Cases where Severity of Recidivism Stayed the Same--The number of valid cases that had a valid reported

incident which had a severity rating equal to the incident sampled and under study

Number of Cases where Severity of Recidivism Decreased--

The number of valid cases that had a valid repeated incident which was less severe than the incident sampled and under study

Table 6-15 presents a breakdown of the validated cases with a previous history of neglect or abuse.

Table 6-15

Percent of Cases with a Previous History

<u>County</u>	<u>Neglect and Abuse</u>	<u>Neglect</u>	<u>Abuse</u>
A	31	37	12
B	40	46	23

Thus, three times the proportion of neglect cases as abuse cases in County A showed a previous history of neglect or abuse and twice the proportion of neglect cases as compared to the abuse cases in County B had a previous history of neglect or abuse.

Table 6-16 presents a breakdown of the number of recidivistic cases so far for each county.

Table 6-16

Percent of Validated Cases with a Recidivistic Case

<u>County</u>	<u>Neglect and Abuse</u>	<u>Neglect</u>	<u>Abuse</u>
A	12	14	6
B	28	28	28

All but one of the recidivistic cases in County A were categorized as neglect. The one sampled validated case that had a recidivistic case of abuse was also categorized as abuse.

In County B, most of the sampled neglect cases that recidivated were categorized as neglect the second time. Of the sampled abuse cases that recidivated, the recidivistic incidents were composed of an equal number of neglect and abuse cases.

Of those cases which have recidivated, the Table 6-17 presents the severity changes between the sampled incidents and the recidivistic incident.

Table 6-17

Percent of Cases with Change in Severity

	<u>Neglect and Abuse</u>	<u>Neglect</u>	<u>Abuse</u>
County A			
Severity increased	17	13	34
Severity stayed same	66	80	66
Severity decreased	17	7	0
County B			
Severity increased	30	34	19
Severity stayed same	36	33	44
Severity decreased	34	33	37

Table 6-18 presents a breakdown of the number of recidivistic cases so far that had a history of neglect or abuse.

Table 6-18

Percent of Recidivistic Cases that had a Previous
History of Neglect or Abuse

<u>County</u>	<u>Neglect or Abuse</u>	<u>Neglect</u>	<u>Abuse</u>
A	5	7	0
B	16	18	11

In County A, all the recidivistic neglect cases that had a previous history were categorized as neglect in both the previous history and in the incidents occurring after the sampled incidents.

Of the recidivistic cases of abuse in County B, abuse was found in both the previous history and in the incidents occurring after the incident that was sampled in more than

half of the cases. Of the recidivistic neglect cases that had a previous history, most were categorized as neglect in both the previous history and in the incidents occurring after the incident that was sampled.

The cases presented in this section are characterized by a continuing condition of neglect or abuse. The chronic neglect or abuse that exist in some of these cases may be due to conditions that are untreatable by the services of protective agencies, such as severe pathology of the caretakers or poverty. Many of these cases with a continuing condition of neglect or abuse, however, may be indicative

of a failure on the part of the protective service agency to provide adequate treatment.

In examining Tables 6-15 to 6-18, it is apparent that there is a much higher proportion of neglect cases than abuse cases that have a previous history of neglect or abuse, a repeated incident of neglect or abuse or both (except for an equal percent of recidivistic neglect and abuse cases in County B as seen in Table B). In deliberating possible explanations for why a higher proportion of the neglect cases were characterized by a continuous condition as compared to the abuse cases, it was helpful to first determine if there were any differences between the composition of previous and recidivistic incidents of neglect cases and the composition of previous and recidivistic incidents of the abuse cases. Most of the previous and recidivistic incidents of neglect cases were categorized as neglect (County A's previous incidents were 95 percent; and repeated incidents, 100 percent; County B's previous incidents were 88 percent; repeated incidents, 95 percent). The previous and repeated incidents of abuse cases were basically composed of an equal number of neglect and abuse cases in both counties.

The composition of the previous and repeated incidents of the neglect and abuse cases sampled were, as mentioned above, basically made up of neglect cases. Some possible explanations for the resulting composition can be found by looking at the distinctions between child abuse and neglect

and the characteristics that must be present for a case to be designated as abuse or neglect.

Definitions of Abuse and Neglect

Although neglect and abuse are closely linked, even by experts, several investigators have shown that the two are often distinct phenomena that are probably related, but by no means identical.

David Gil, in his Violence Against Children, defines physical abuse of children as:

The intentional nonaccidental use of physical force, or intentional nonaccidental acts of omission on the part of the parent or other caretaker interacting with the child and its care, aimed at hurting, injuring, or destroying that child. ¹

Polansky et al ² proposes the following working definition of neglect:

Child neglect may be defined as a condition in which a caretaker responsible for the child either deliberately or by extraordinary inattentiveness permits the child to experience avoidable present suffering and/or fails to provide one or more of the ingredients generally deemed essential for developing a person's physical, intellectual and emotional capacities.

Research by various experts (notably Young ³ and Giovannoni ⁴) completely differentiates neglect and abuse. The latter associated abuse with acts of commission; neglect with omission. Thus, neglect represented failure to perform parental duties including provision, nurturance, and protection, while abuse was associated with specific acts.

In the above discussion on the distinctions made between neglect and abuse and the characteristics which must be present for a case to be designated as abuse or neglect, a

number of important points are made that may help explain our results.

In accordance with Gil's definition of abuse, a case can only be designated as abuse if the act consists of "intentional nonaccidental use of physical force, or intentional acts of omission . . . aimed at hurting, injuring or destroying that child." The presence of these required characteristics is frequently difficult to measure and therefore difficult to prove. Even if the child is examined by a physician and some damage or injury is detected, it is frequently difficult to prove that it was unintentional and nonaccidental. Also, for some of the less severe cases of abuse, if the child is not examined very soon after the abusive act occurred, evidence of the abuse will disappear. As a result, many cases of abuse are never validated and therefore, may be a contributing factor to why there were not more abuse cases found in the previous and repeated incidents and also why there were not more abuse cases with a continuing condition.

The characteristics which must be present in designating a case of neglect are much easier to measure and therefore easier to prove. As discussed above, one of the reasons that abuse is so difficult to prove is that intent must be measured. In neglect cases, intent of the caretaker is irrelevant. All that must be proven in designating a case as neglect is the caretaker's failure to perform certain parental duties. This is not that difficult to prove

since neglect encompasses a wide spectrum of acts and/or conditions, most of which are easy to measure. Therefore, cases of neglect are more easily detected and easier to validate, which may help account for why a higher percentage of the previous and repeated incidents were composed of neglect and also why there was a much higher percentage of neglect cases than abuse cases with a continuing condition.

Cases that are designated as neglect are sometimes isolated acts. Most often, they are characterized by a continuing condition. When a neglect case is found to be a continuing condition, it is frequently a product of such factors as poverty and ignorance. Because of the nature of these factors that predispose a family to neglect their child, protective services are often ineffectual in treating them and in preventing the continuation of the condition. Cases that are designated as abuse are more often isolated acts that occur in many families only once. As a consequence, there is a greater chance of success in the prevention of a second case of abuse within the same family than in the prevention of a second case of neglect within the same family. Thus, this may be another reason that a much higher percentage of neglect cases were categorized by a continuous condition than abuse cases.

Another factor that may be involved in having greater success in the prevention of a second case of abuse within the same family than in the prevention of a second case of neglect within the same family is the quicker response rate

of the protective service agency to cases of abuse than to cases of neglect. A prompt response to many cases of both neglect or abuse can make a critical difference in the provision of effective services to a family and may be an important factor in precluding recidivism. Also, in many abuse cases, the child is removed immediately following the incident which would preclude a second incident of abuse or neglect. In both County A and County B, cases of abuse were almost always given priority over those cases of neglect. The response rate to all cases, however, was much faster in County A than in County B. In County A, all cases were assigned at intake which was not true for County B. Also, County A investigation and validation of the cases sampled took an average of two days, whereas the cases sampled in County B took an average of 16 days to investigate and validate. This slower response rate in County B may explain why it had a significantly higher rate of recidivism than County A.

Although all of the cases in this section showed, by definition, a continuing condition of neglect or abuse and, therefore, possibly a need for further services, some improvement was evident in those cases where the severity decreased (Table 6-17). Thus, some improvement did occur in 34 percent of the recidivistic cases in County B and in 17 percent of the recidivistic cases in County A. In comparing the percent of improved recidivistic cases in the two counties,

it appears that County B was much more successful in improving
recidivistic cases than County A. However, the percentage
of recidivistic cases in County B is twice the percentage
of recidivistic cases in County A.

FOOTNOTES

1. David Gil, Violence Against Children, (Cambridge: Harvard University Press, 1970).
2. Norman A. Polansky, Carolyn Hally, and Nancy F. Polansky, Child Neglect: State of Knowledge, SRS Project Grant No. 09-P-56-15/5 (July 1974).
3. Leontine Young, Wednesday's Children: A Study of Child Neglect and Abuse, (New York: McGraw-Hill, 1964).
4. J.M. Giovannoni and A. Billingsley, "Child Neglect Among the Poor: A Study of Parental Adequacy in Three Ethnic Groups," Child Welfare 49 (1970): 196-204.

CHAPTER 7

PROPOSED AGENCY DATA COLLECTION METHODS

General Procedures

Any proposed system run by the agency for collecting and analyzing data within the agency should require a minimal amount of time on the part of the caseworker. The actual data collection process should not require the effort of more than one clerical staff person. Analysis and compilation of the data should be a relatively simple procedure requiring a minimal amount of training for the staff person involved.

The system designed by BAI involves collection of data on a monthly basis. The staff person responsible for data collection and analysis need not be a caseworker, but someone who is familiar with the intake log and filing systems.

At the end of each month, this person will gather the necessary information on forms similar to those used by BAI in the field study tests. The log book record of intakes for the month will be consulted for family name of the cases, the caseworker assigned to the case, the type of case (neglect or abuse), the date of intake, and rural or urban location. This information is recorded on the data forms. If the case load for the agency is particularly large, a representative sample may be drawn from the log book rather than studying all cases. Once the data from the log book have been

recorded, any information on the previous history of a case may be obtained from the case file. The caseworkers assigned to the specific cases under study are then contacted. The staff person involved in the data collection procedure visits each caseworker and obtains the remaining information, including the status of the case (valid, invalid, incomplete), the severity of the case, the location of the child (remained, returned, removed), court action required, and the date of validation of the case. If certain information is not available at that time, the caseworker may be contacted at a later date or at the end of the next month during the regular data collection period.

After completing the collection of the data, the designated staff person then compiles and analyzes the information. The analysis of agency data will be similar to that described in Chapter 3 of this report. The analysis will focus mainly on recidivism and severity of reported cases, and statistics may be compared on a monthly, quarterly and/or yearly basis. All data will be kept in the central file room and will be accessible to all staff members.

A minimal amount of training will be necessary for the staff person collecting and analyzing data. Chapter 3 of this report can be easily adapted to describe and explain the procedure necessary for analysis. Analysis of the data will require only straightforward computations and interpretation. If analysis is done on a monthly basis, the time involved will be minimal.

The advantages to this system are many. The staff person collecting and analyzing data will be familiar with the agency staff and files. This will prevent any wasted time and effort in locating caseworkers and files. The caseworkers will not be responsible for completing additional forms which may interfere with time needed to investigate cases. Also, information gathered in this manner will be precise, accurate, and easily accessible. The system allows for sampling of intake reports while assuring accuracy of results. Finally, the results of analysis can be compared in a manner most suited to the agency.

Description of the Effectiveness Data Collection Procedures

This system design is predicated on using a modified version of the data collection form used by BAI in the field study tests. Thus, the following step by step procedure is based on the assumption that the designated staff person will use this data form (Form 7-1) to collect the appropriate information for each month.

To complete all the information required by the data collection form, the staff person will first consult the log book record of intakes for the appropriate month and then the case files for all the reported cases that were validated.

The log book record of intakes should provide the following information that is required on the data collection forms:

1. The family name of the reported case - Column 1.
2. The nature of the reported case, i.e., how it was categorized at intake = neglect, abuse, or a combination of neglect and abuse - Column 2.
3. Whether or not the case has been assigned to a caseworker - Column 3.
4. The status of the assigned cases - was the reported incident classified as valid or invalid or not classified as either because the investigation has not been completed - Column 4. It is extremely important that this information be provided in the log book since no further information will be required on those cases that are invalid or not classified as valid or invalid. Otherwise, the staff person would have to take the time to examine the case files of all the assigned cases just to determine the status of the case. This would consume much time and lack efficiency.
5. Location of the family - rural or urban - Column 5. If the log book does not provide the families location in terms of urban/rural, but instead provides just the specific address, it would be important to provide the staff person with a listing of which addresses are considered urban and which are considered rural for easy reference.
6. Location of the validated case files - whether the case closed and filed in the filing system or it still active and if so, the name of caseworker assigned to it - Column 14.

The case files for all validated cases should provide the following information that is required for the data collection forms:

1. The number of previously reported cases of neglect or abuse that occurred prior to the case under study - Column 6.
2. The number of repeated incidents of neglect or abuse following the reported case under study - Column 7.
3. The severity of the reported case under study - Column 8.
4. The severity of the second incident after the reported case under study - Column 9.

5. The number of days between the reported case under study and the following validated incident of neglect or abuse that may have occurred - Column 10.
6. The location of child following the reported incident of neglect or abuse under study - was the child never removed from the family; was the child removed from the family but returned to the family; was the child removed from the family and placed with friends, with relatives, or in foster care, or placed in foster care awaiting adoption, or already adopted - Column 11.
7. If court action occurred, the number of days between intake and the court decision - Column 12.
8. The number of days between intake and the completion of investigation and validation.

The following is a step by step procedure that should be used in collecting this data and in recording the information on the data collection forms for each intake designated as neglect or abuse. The source to be consulted for each piece of information will appear at the beginning of each step.

Step 1

Consult the log book record of intakes. Record in Column 1 of the data collection form the name of the family for each reported case.

Step 2

Consult the log book record of intakes. In Column 2 indicate the nature of the case by recording one of the following:

- . Neglect
- . Abuse
- . Combination of neglect and abuse

Step 3

Consult the log book record of intakes. In Column 3 indicate whether or not the case has been assigned to a caseworker by recording "Yes" if the case was assigned or "No" if the case has not been assigned. For cases that are unassigned, no further information will be collected.

Step 4

Consult the log book record of intakes. For cases that have been assigned, indicate in Column 4 the status of the case by recording one of the following:

- . Valid - this will indicate that the case has been investigated and found to be valid.
- . Invalid - this will indicate that the case has been investigated and found to be invalid.
- . Investigation Incomplete - this will indicate that the case has not been classified as valid or invalid because the investigation is not completed.

Further data will only be collected for those cases that were classified as valid.

Step 5

Consult the log book record of intakes. For those cases that are valid, indicate in Column 5 the location of the family by recording "urban" or "rural."

Step 6

Consult of the log book record of intakes. In Column 14 indicate the location of the validated case files by recording "closed" if the case file has been closed and filed in the filing system or if the case file is still active, record the name of the caseworker to whom the case file is assigned.

Step 7

Consult the case file. In Column 6, indicate the number of previously reported valid cases of neglect or abuse that occurred prior to the case or incident under study. To indicate the number of previously reported cases of neglect, record the letter N followed by the number of reported neglect cases. To indicate the number of previously reported cases of abuse, record the letter A followed by the number of reported abuse cases. To indicate that there is no previous history of neglect or abuse, record a zero in Column 6.

Examples:

- Case A has 4 previously reported neglect cases and one previously reported abuse cases. In Column 6, record, N=4/A=1
- Case B has one previously reported neglect case and no previously reported abuse case. In Column 6, record, N=1

The number of previously reported valid cases of neglect or abuse should include the number of validated reports of neglect or abuse received at intake and the number of times the caseworker found a condition of neglect or abuse while investigating the case. The number of validated reports of neglect or abuse received at intake can be determined by counting the number of validated intake forms that are dated before the intake of the case or incident under study. The number of times the caseworker found a condition of neglect or abuse while investigating the case can be determined by examining the caseworker's dictation or by questioning the caseworker.

Step 8

Consult the case file. In Column 7 indicate the number of valid repeated incidents of neglect or abuse that occurred after the intake of the reported case under study. As in Column 6, to indicate the number of valid repeated incidents of neglect, record the letter N followed by the number of reported neglect cases. To indicate the number of valid repeated incidents of abuse, record the letter A followed by the number of reported abuse cases. To indicate that there were not valid repeated cases of neglect or abuse, record a zero in Column 7.

The number of valid repeated incidents of neglect or abuse should include the number of validated reports of neglect or abuse received at intake and the number of times the caseworker found a recurring condition of neglect or abuse while investigating the case. The number of validated reports of neglect or abuse received at intake can be determined by counting the number of validated intake forms that are dated after the intake of the case or incident under study. The number of times the caseworker found a recurring condition of neglect or abuse while investigating the case can be determined by examining the caseworker's dictation or by questioning the caseworker.

Step 9

Consult the case file. In Column 8, record the severity of the reported incident under study. This can be determined by examining the caseworker's dictation or by asking the

caseworker for a description of the validated incident of neglect or abuse. The description will then be classified into a type of severity by using a standardized categorization of severity types.

Step 10

Consult the case file. If there is a valid repeated incident of neglect or abuse, record in Column 9 the severity of the second incident that occurred after the reported incident under study. This can be determined by examining the caseworker's dictation or by asking the caseworker for a description of the second validated incident of neglect or abuse. The description will then be classified into a type severity by using a standardized categorization of severity types.

Step 11

Consult the case file. If there is a valid incident of neglect or abuse that occurred after the intake of the reported case under study, record in Column 10, the number of days between the two instances. This can be determined by comparing the date of intake of the reported incident under study to the date of the first repeated incident. Column 10 would then show the number of days between the severity of neglect or abuse in Column 8 and Column 9. Thus, if a severity type appears in Column 9, Column 10 would require data, if a severity type does not appear in Column 9, Column 10 would remain blank.

Step 12

Consult the case file. In Column 11, indicate the location of the child following the reported incident of neglect or abuse under study by recording one of the following:

- Remained - if the child has not been removed from the family
- Returned - if the child was removed from the family but has been returned to the family
- Removed - if the child was removed from the family. This may include one of the following:
 - Removal of the child from the family by a formal court order. It may include placing the child with friends or relatives of the family; placing the child in foster care; placing the child in foster care awaiting adoption; placing the child in an adopted home; or placing the child in some institution. It would be considered a formal placement because of the court order. However, it may be a temporary placement with eventual return to the family or somewhere else.
 - Removal of the child from the family without a formal court order. This type of removal results from the family agreeing voluntarily to give up the child for temporary placement which may become permanent placement. Placement of the child may be with friends or relatives of the family, in foster care, or in an institution.

The location of the child can be determined by examining the caseworker's dictation or by questioning the caseworker.

The following are some examples that may help categorization of the location of the child:

Example 1

The child was abandoned by the mother at a babysitter's. An aunt and uncle picked up the child and brought it to their house. A few days later the mother returned and picked up the child.

This case would be categorized as Returned.

Example 2

A child was picked up and taken to the grandparents by a caseworker because the parents were jailed. The child is still with the grandparents.

This case would be categorized as Removed.

Example 3

After an incident of neglect or abuse, a child living with the mother was picked up by a caseworker with a formal court order and placed with the father who is separated from the mother. The child is still with the father.

This case would be categorized as Removed.

Example 4

A child was found alone in the family's house. A caseworker picked the child up and brought him to the child welfare agency. When the mother was contacted, she picked up the child from the welfare agency and brought him home.

This case would be categorized as Returned.

Step 13

Consult the case file. If a court action was required in removing a child from the home record in Column 12 the number of days between the date of intake of the reported incident under study and the date of the court action. This can be determined by comparing the date on the appropriate intake form and the date which appears on the formal court action form.

Step 14

Consult the case file. In Column 13 record the number of days between intake of the reported incident under study and completion of investigation and validation of the case. This can be determined by counting the number of days between the date which appears on the intake form of the report under study and the date that the caseworker was able to validate that neglect or abuse did occur in family. The date that the caseworker validated the report of neglect or abuse can be found by examining the caseworker's dictation or by questioning the caseworker.

102

CHAPTER 8

SOCIAL COSTS OF ABUSE AND NEGLECT

The costs presented in Chapter 5 reflect the resources used by the public protective services agencies in carrying out their functions (including services purchased from other agencies). Excluded are some costs incurred by voluntary agencies in helping neglected and abused children and their families and costs borne by certain other agencies that become involved, notably the police and courts. Of particular concern is the longer-term impact on the society of abuse and neglect. This impact may be viewed as the cost to society or social costs, which frequently cannot be expressed in monetary terms. The social costs of child abuse and neglect were not measured in this study; they are beyond the scope of this cost-effectiveness evaluation system.

The costs of child abuse and neglect to society extend far beyond the obvious financial expenditures of protective services for the care and treatment of abused and neglected children and their families to the often obscure, but significant, social costs resulting from the long-term effects of abuse and neglect.

Some abused and neglected children develop into relatively well-adjusted and healthy adults; however, many are left with severe emotional scars which preclude or retard their development into normal and productive adulthood. The social costs of child abuse and neglect can be identified by

examining the long-term physical and psychological effects which tend to obviate and thwart growth and development in many children who are victims of child abuse and neglect.

The long-term physical and psychological effects of abuse and neglect on children may be grouped into the following broad categories:

- . Manifestation of enduring emotional, intellectual, and physical problems
- . Transmission of abusive tendencies from the parent to the child
- . Development of aggressive and violent tendencies resulting in criminal and delinquent behavior

Manifestation of Enduring Emotional, Intellectual and Physical Problems

As victims of abuse and neglect, many children manifest symptoms indicative of emotional, intellectual, and physical malfunctioning. A recent study by Kempe concluded that 50 percent of these abused children will have permanent physical injury and almost all will have mental and psychological problems.¹

Based on a series of nationwide epidemiological studies, public opinion, and press surveys on child abuse, David Gil found that "about 29 percent of the children revealed deviations in social interaction and general functioning during the year preceding the abusive incident, nearly 14 percent suffered from deviations in physical functioning during the same time span and nearly 8 percent revealed deviations in intellectual functioning. Among

the school-aged children, over 13 percent attended special classes for retarded children or were in grades below their age level."²

Markin, et al., followed up 58 children after they were identified as abused to determine the effects of child abuse and abusive environments on children. They found five years later that:

. . . some of them did have brain damage, 53 percent of them had some neurological findings and 31 percent of them had serious neurological findings, about a third of them had undernutrition at the time they were abused, and of those, 18 of the 21 still had poor growth 5 years later when we saw them.

The groups as a whole were not significantly retarded, their mean IQ was within the normal range but when you looked at the group more closely you found two to three times more children than you would expect who had IQ's below 85 so they were handicapped in terms of their mental development.

Most impressive was our finding that 66 percent of these children really weren't able to enjoy themselves. They were a very inhibited type of children. Fifty-two percent had very poor self-esteem, felt very poorly of themselves, which wasn't surprising since they had been getting the message for years that they were not very worthy children. Sixty-two percent had behavioral problems. A quarter of the children at school age had learning problems which wasn't accounted for by neurologic deficit.³

Esther Muller, Ph.D. found that abused babies tend to be delayed in their overall development, even though physical and neurological examination do not necessarily reveal evidence of mental retardation.⁴

Miriam Muravchik notes that man⁶ children who are victims of neglect and abuse "have problems of identity

and difficulty in forming relationships that are more than superficial. Some suffer from reoccurring depression later in life."⁵

Thus, the manifestation of enduring emotional, intellectual and physical problems exist among many children victimized by neglectful and abusive parents. As a result, many are never able to adjust and as David Gil appropriately states, "there can be little doubt that all these phenomena tend to block opportunities for growth and development of many millions of children, and that they tend to prevent the realization of their innate human potentialities."⁶

Transmission of Abusive Tendencies from the Parent to the Child

"Child abuse has been referred to as an inherited disease, because we know many parents who abuse their children were themselves abused, isolated, or emotionally abused as they grew up."⁷ The transmission of these aggressive and abusive tendencies appears to be transmitted from generation to generation. Carl Pollack, M.D. and Brandt Steele, M.D., touched upon this issue in summarizing the psychodynamics of child abuse:

Both this pattern of demanding, aggressive behavior toward the child, and the crisis of emotional deprivation which trigger the pattern of abuse, stem directly from the parents' own childhood experience and learning. Abusive parents were raised in a similar system, i.e., were expected to perform well, to gratify parental needs early in life, and then were criticized, punished and often abused for failure to do so. They

felt their own needs were neither met nor adequately considered; rather, they had to orient toward parental expectation and develop an almost intuitive understanding of what would satisfy the parents and prevent severe punishment.⁸

Thus, many parents suffer from the residual effects of their traumatic experience of being neglected and abused and deprived of nurturant care.

Dr. Brandt Steele found, in his experience of working with parents who have abused their children, that the parents were brought up very much in the same way. "They are repeating with their own children the child-rearing practices of their own parents."⁹

In addition to using similar child rearing practices to the ones their parents used, Steele points out that many parents even use the same type of punishment that was inflicted on them by their parents. "Another man, who had seriously burned the palms of the hands of his two little boys as a lesson--teaching punishment for playing with matches--said to us, 'That's the right and best way to deal with things. My mother burned my hands when I played with matches'."¹⁰

The developmental pattern of the abusing parent's own life is so often characterized by a constant bombardment of emotional and physical abuse which leaves him with feelings of isolation, low self-esteem, and lack of self-confidence. When the rest of his world has failed him, the abusing parent will look to his child in a

final, desperate attempt to capture the comfort and care he yearns for so intensively. But the child, with his own needs for comfort and care and his helplessness, often fails to provide what these parents need. The child then becomes the target of the pent up frustrations and hostilities of the parent and, thus, the cycle of abuse is perpetuated.

Thus, many abused and neglected children do inherit the abusive tendencies of their parents and "unless the cycle is broken, there is a reoccurring and continuing family heritage of abuse."¹¹

Development of Aggression and Violent Tendencies
Resulting in Criminal and Delinquent Behavior

Brandt Steele points out that the young child who sees serious expressions of violence in his own family, and is often the target of these expressions, will grow up to follow parental example and believe in violence as a way of life and as a useful tool to solve problems. "He will also, in an effort to gain some measure of self-protection and mastery, identify very strongly with the aggressor and develop a very deep-set pattern in himself of discharging aggression against the outside world in order to manage his own insecurities."¹²

Dr. Esther Mullen has observed aggressive and violent patterns in many of the young children brought into the hospital where she works.

Brandt Steele states that, "There is an increasing body of evidence that from the great pool of neglected and battered children come significant numbers of juvenile delinquents, murderers, and assassins."¹³ Thus, many abused children become threats to society.

A number of studies which have been done on juvenile and adult offenders indicate that a large proportion of these offenders were abused or neglected during their childhood. Dr. James Weston interviewed, in depth, 100 consecutive juvenile offenders and found that 80 percent had a history of being neglected or abused as young children and 40 percent could recall being knocked unconscious by one of the parents.¹⁴ Mrs. Jean Hopkins interviewed 200 randomly selected juveniles who were brought into a detention center for their first offense. Of 100 whose parents were not seen, 72 percent gave a history of abuse in their homes. Of 100 whose parents were also interviewed in depth, there were 84 percent who had a significant physical attack by their parents, ranging from bruises and lacerations to fractures.¹⁵ Brandt Steele, in his article, "Violence in Our Society," cited some additional studies:

Some years ago, Duncan et al., in Minnesota studied a series of six convicted first-degree murderers whose parents were also available for the study. In working with this group, they found that three of these six murderers had been seriously abused and beaten by their parents in very early infancy and childhood. Further, Drs. Salten and Rosen, at the Menninger Clinic in

Topeka, reported investigations of four men who had murdered without an apparent motive. All four of these men had experienced extreme parental violence during their childhoods.¹⁶

From these studies, it may be concluded that a significant relationship does exist between abusive and neglectful experiences during childhood and aggressive tendencies in later life. Thus, the experience of being subjected to violence during early childhood may provide the impetus for violent and aggressive behavior during adolescence and adulthood.

Thus, from the foregoing discussion, it is apparent that the social costs of child abuse and neglect are substantial in terms of both human costs and monetary costs to society. Therefore, in determining the costs of child abuse and neglect to society, it is necessary to consider the social costs as well as the more immediate and obvious monetary costs.

FOOTNOTES

1. U.S., Congress, Senate, Committee on Labor and Public Welfare, Hearings before the Subcommittee on Children and Youth on S. 1191, 93rd Cong., 1st sess., 1973, p. 11.
2. David G. Gil, "Violence Against Children," Journal of Marriage and Family (November 1971) : 640.
3. Hearings, p. 234.
4. Ibid., p. 356.
5. Ibid., p. 366.
6. Gil, "Violence Against Children," 637.
7. Hearings, p. 154.
8. Carl Pollack and Brandt Steele, "A Therapeutic Approach to the Parents," in Helping the Battered Child and His Family, ed. C. Henry Kempe and Ray E. Helfer (Philadelphia: J. B. Lippincott Company, 1972), p. 4.
9. Brandt Steele, "Violence of Our Society," The Phases of Alpha Omega Alpha 33 (April 1970) : 44.
10. Ibid., p. 44.
11. Hearings, p. 614.
12. Steele, "Violence of Our Society," 46.
13. Hearings, p. 230.
14. Ibid., p. 231.
15. Ibid.
16. Steele, "Violence of Our Society," 46.

CHAPTER 9

THE UTILITY OF THIS COST-EFFECTIVENESS EVALUATION SYSTEM AS A POLICY ANALYSIS TOOL

This system is potentially a very powerful policy analysis tool as well as an operational tool for internal agency or state management. The utility for operational management is discussed elsewhere in the report. In this chapter, we will focus on it as a policy analysis tool. Several hypotheses to be tested have been identified in the course of the study and several policy questions are raised in the contract. These will be addressed in this chapter.

Hypothesis Testing

The measures of effectiveness can be employed to determine differential effectiveness of alternative types of care for identifying and assessing various trade-offs associated with these alternatives. There are at least two interesting possibilities that we will use to illustrate the potential for conducting such analyses: (1) family care vs substitute care and (2) use of alternative mixes of services.

The belief strongly espoused by legislation, HEW policy, and child welfare professional standards, that it is generally preferable to permit a neglected or abused child to remain with his own family, is reflected in the evaluation system's first management objective: An increase in the number and rate of validated cases where the child is returned or remains

with the family and the corresponding evaluation criteria. Actually, of course, no one believes that this objective should be maximized (i.e., no child should be removed) as there are many cases in which a child is in sufficient danger that removal is necessary for his protection. There are no clear, unambiguous guidelines establishing when removal is necessary. Some research suggests that much more removal occurs than is warranted; but no one knows how to judge whether an agency removes too many children. In effect, in research terms, this objective constitutes a hypothesis to be tested.

This hypothesis may be tested by comparing the achievement of this objective with achievement of the others: recidivism, severity and process time. Thus, empirical relationships can be established between management policies stressing more removal compared to those stressing less removal. Cost-effectiveness comparisons can be made using the tracking and costing system described in this report. These comparisons can be made using trend analysis, where a policy change is introduced in a particular agency and the cost-effectiveness compared before and after its introduction. Comparative analyses can be used where agencies are compared which stress more or less removal.

A critical question is how to know what the optimal policy (or optimal range) is and how to trade off removal with recidivism and severity.

One would like to minimize recidivism and increases in severity; however, no one believes that all children should be removed, a policy that would virtually eliminate recidivism and severity by definition.

The policy choice has a substantial impact on costs. Removal requires some type of foster care (foster family, group, or institutional) which is substantially more costly than nearly all types of care in the home. There are substantial variations in home care in that protective services can be provided with or without various types of social services (e.g., homemakers, etc.). The policy adopted by a state or agency has a substantial impact on planning under Title XX. This is particularly true in light of the substantial increases in reported cases of child abuse and neglect throughout the country and the strong emphasis in Title XX on services for neglected and abused children.

Cost-effectiveness comparisons of alternative policies are of particular importance in determining the trade-offs among alternative policies. Some of the critical management policy questions are:

- . What is the cost-effectiveness of the agency's current policies?
- . What is the estimated cost-effectiveness of alternatives?
 - . Increasing emphasis on children remaining with or returning to their families?
 - . Increasing the use of homemakers?
 - . Employing a comprehensive emergency service system?

These are two principal ways to obtain answers to these types of policy questions.

- . Encourage states and agencies to install the cost-effectiveness evaluation system and test different policies over time using trend analysis

- . Install or help several states and agencies install the cost-effectiveness evaluation system and test alternative policies either through planned experiments (where preplanned variables are established and perhaps manipulated such as removal policies, etc.) or by natural experiments (carefully selecting states or counties already employing alternative policies)

Policy Questions

SRS has requested that BAI specifically discuss and illustrate how this evaluation system will answer specific types of questions posed in Attachment A of the contract. Here, we will pose each question, relate it to the evaluation system developed, and discuss how it can be answered.

- . Which service agencies, individually or aggregated by states or regions, are most effective for the dollars spent; and what is the order of cost-effectiveness from least to highest, by service agency, state, or region?

Because an acceptable cost-effectiveness evaluation system for protective services must employ multiple measures of effectiveness, we necessarily have a joint-product problem. Five measures of effectiveness are employed, reflecting the five management objectives of this type of program. Thus, a single cost-effectiveness ratio would have to collapse all five measures into one. This would be a subjective, judgmental exercise which we do not recommend. For example, how can we weigh the relative value of decreasing recidivism, decreasing severity, decreasing removal, and decreasing processing time? One could use a ratio of cost to one of the five measures, but this distorts the picture because of the interdependence among the measures (e.g., decreased recidivism can result from increased removal). We do not reject such approaches but are wary of presenting misleading data.

One approach is to array all or several of the effectiveness measures together with total costs. This has the virtue of constituting a more complete presentation but suffers from difficulties in clearly ranking all the agencies.

Table 9-1 illustrates how multiple cost-effectiveness ratios can be used to rank agencies; states or regions can be ranked by aggregating agency data.

Where more than one measure is used, decision rules should be developed for use in instances where rankings are ambiguous (e.g., an agency is more cost-effective in two, but not the third measure). The decision rules could be simple (e.g., each measure has equal value) or more complex (e.g., expert judgments are employed to determine values for each measure).

- . What trends are discernible from year to year in cost-effectiveness of service agencies, states, and regions?

Using the measures described under the preceding policy question, trend analysis can easily be accomplished. Figure 9-1 illustrates one type of presentation comparing states using one of the cost-effectiveness measures.

- . What are the cost-effectiveness differentials for services directly provided as opposed to those purchased?

This cost-effectiveness evaluation method does not identify specific services. However, costs of services purchased are identified separately from those provided directly. Thus, it would be possible to present (say) the proportion of services purchased. However, this would be in the form of additional information as it constitutes only a portion of the cost inputs. Table 9-2 illustrates such a presentation.

TABLE 9-1

ILLUSTRATION OF AGENCY RANKINGS IN
TERMS OF COST-EFFECTIVENESS

Agency Rankings	Cost-Effectiveness		
	<u>Costs</u> Children Remaining With Family	<u>Costs</u> Eventual Number of Valid Cases Not Recidivistic	<u>Costs</u> Eventual Number of Recidivistic Valid Cases Where Severity Decreases
1			
2			
.			
.			
n			

FIGURE 9-1

ILLUSTRATION OF TREND ANALYSIS

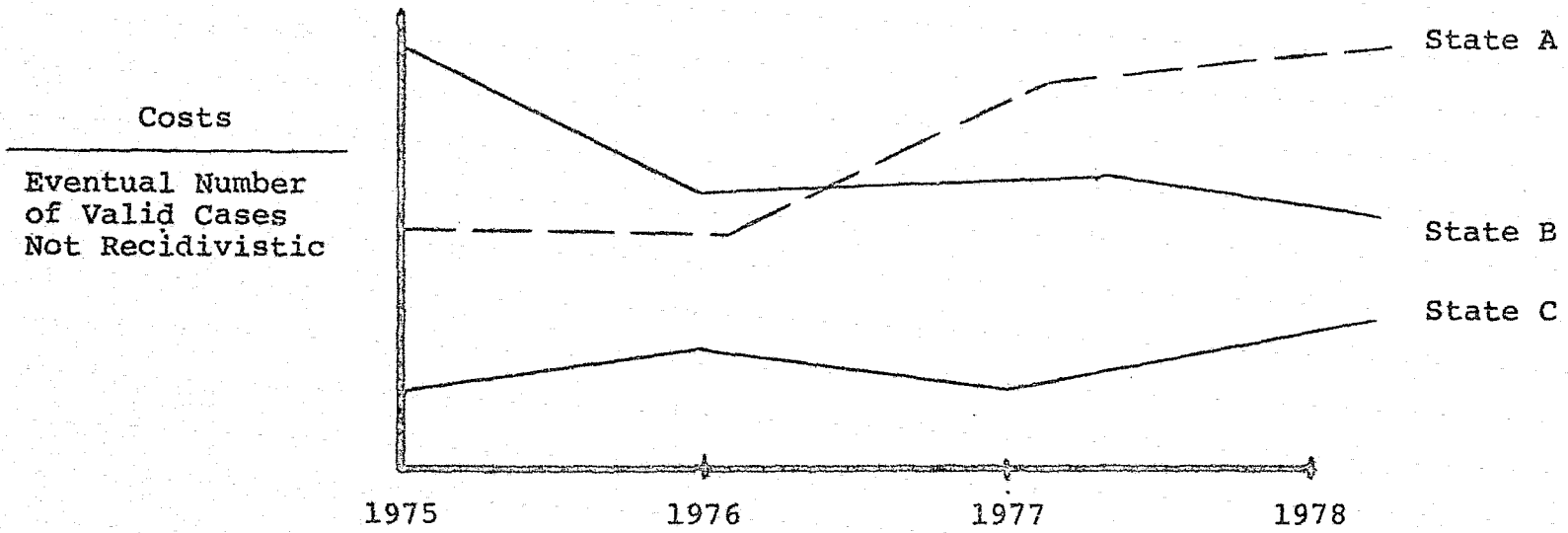


TABLE 9-2

ILLUSTRATION OF COST-EFFECTIVENESS
RELATED TO PURCHASED SERVICES

Agency	Cost-Effectiveness			Purchased Services as Percentage of Total Costs
	$\frac{\text{Total Costs}}{\text{Number of Children Remaining With Family}}$	$\frac{\text{Total Costs}}{\text{Eventual Number of Valid Cases Not Recidivistic}}$	$\frac{\text{Total Costs}}{\text{Eventual Number of Recidivistic Valid Cases Where Severity Decreases}}$	
1				
2				
.				
.				
n				

Relationships can be investigated by comparing one or more (in turn) of the cost-effectiveness measure(s) to the purchased services as a percentage of total costs as illustrated in Figure 9-2.

- . How much does it cost to provide services to clients who achieve protective services objectives as compared with clients not achieving those objectives?

The costing system is not case-specific, but it does provide average case cost for all cases. It cannot distinguish between costs of clients achieving objectives and clients not achieving them.

- . Do agencies serve some groups (i.e., neglected children, abused children, Title IV-A cases, Title IV-B cases, urban cases, rural cases) more cost-effectively than others?

This can readily be accomplished on an average cost-per-client basis. Effectiveness can be compared for urban/rural and Title IV-A and IV-B cases. The costing system is not case-specific. It would be possible to select agencies serving exclusively urban and exclusively rural clientele and compare their cost-effectiveness. One could also plot the cost-effectiveness of agencies in terms of (say) percentage of clientele who are urban, Title IV-A, etc. compared to cost-effectiveness as illustrated in Figure 9-3.

- . What is the cost-effectiveness of protective services on a national basis?

This policy question can be answered by aggregating cost and effectiveness data on all individual agencies or samples or agencies. Sampling agencies is probably most desirable. Stratification may be used to incorporate regions, types of agencies, etc.

FIGURE 9-2

ILLUSTRATION OF COST-EFFECTIVENESS OF PURCHASED SERVICES

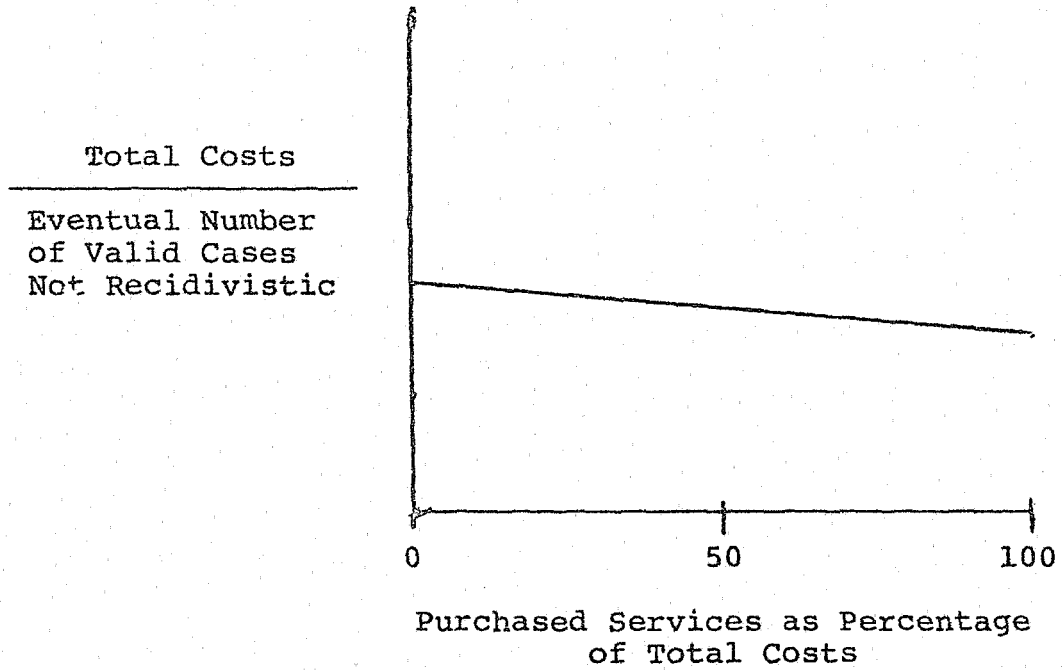
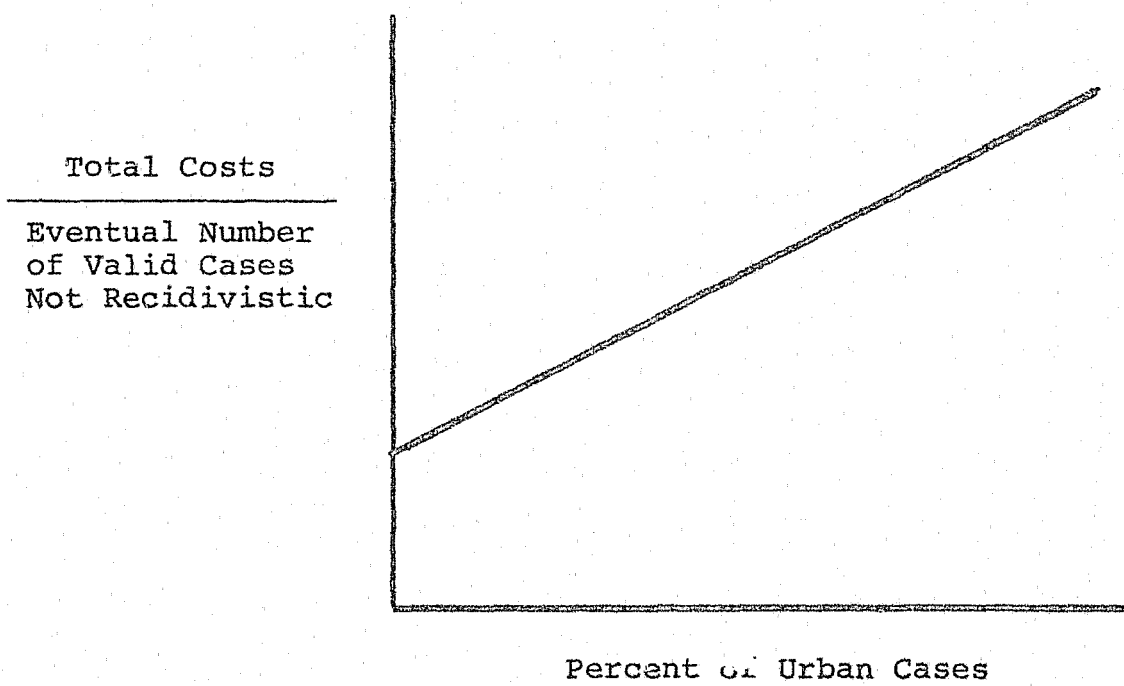


FIGURE 9-3

ILLUSTRATION OF COST-EFFECTIVENESS OF URBAN/RURAL MIX



Reporting by all agencies is probably not desirable for a number of reasons including difficulty in achieving compliance; the Federal-region-state-local relationships and roles; inaccurate reporting; and the relative efficiency, ease and accuracy of sampling.

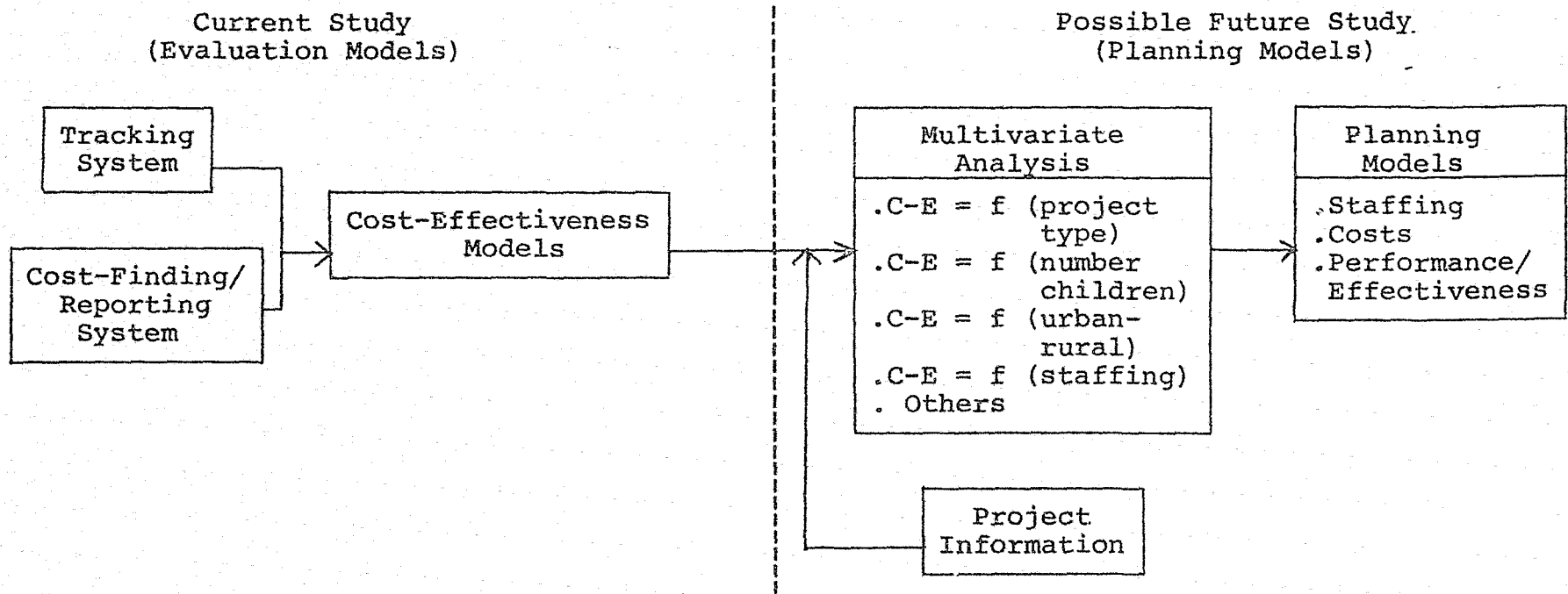
A further extension of these evaluation models should be considered. Government decisionmakers at all levels need guidelines and standards for planning protective services programs, revising existing programs and monitoring existing programs.

Once the evaluation models produce data for a sufficiently long period, planning models can be readily developed to estimate the cost-effectiveness of various types of protective services programs. Figure 9-4 shows how these evaluation models can lead to developing planning models. Independent variables may be defined such as type of protective service project (in terms of components), number of children neglected or abused, urban-rural, staffing pattern, etc. Regression analysis can be employed to determine what independent variable best explains cost-effectiveness; planning models are then developed using the resultant regression equation.

The output of this process is planning models depicting cost-effectiveness of each type of protective service program. Such models would be extremely useful to states in carrying out planning under Title XX.

FIGURE 9-4

EVALUATION AND PLANNING MODELS



CHAPTER 10

CONCLUSIONS

This cost-effectiveness evaluation system for child protective services possesses the following properties:

- . It is objective and not subjective
- . Management will understand the objectives and the related measures of effectiveness
- . It is timely
- . It is least expensive with relation to validity and reliability

For purposes of agency, state, regional and national evaluation, the measures are of a form that aggregates. The form permits trend analysis and analysis by selected subgroups.

Design of a Protective Services Evaluation System

BAI has designed a cost-effectiveness evaluation system which is based on the findings of the review of current systems, detailed discussions with SRS personnel, and discussions with protective service supervisors. The design is composed of two major subsystems.

1. An effectiveness measurement subsystem that provides a minimal set of effectiveness measures but is sensitive enough to assess performance. This subsystem consists of two key parts:
 - . A method of data collection and client tracking that is not an excessive burden on the agency staff
 - . Analysis and reporting procedures that can be easily understood by agency supervisors and management. This system is easily aggregated to the state, regional, and national levels.

2. A cost estimating subsystem that is easy to implement and does not place an excessive burden on the finance officer

These subsystems were described in Chapters 3 and 4 respectively.

The effectiveness measurement subsystem utilizes the following criteria to measure the attainment of five objectives identified in Chapter 3.

- . Number of cases where a child remains or is returned to his home and its ratio to the total number of validated cases
- . Number of recidivistic cases and its ratio to total validated cases
- . Percent of recidivistic cases where severity decreases
- . Average time between intake and court decision on placement of a child
- . Average time between intake and case validation

By means of the cost-effectiveness system described in this report, each of the above criteria can be estimated for a single agency or aggregated by full count or on a sampling basis by states, regions, or nationally.

Each of the criteria can also be related to the following major cost elements in the cost-estimating subsystem:

- . Total protective services
- . Direct labor
- . Purchased services
- . Indirect

It is also feasible to conduct analyses with respect to certain specified major categories:

- . Rural and urban
- . Neglect and abuse

Such analyses can be facilitated by simple computer processing procedures in the larger agencies. However, the analyses in this report were conducted entirely by hand at BAI and consumed little staff time.

The methods of cost-effectiveness evaluation detailed in this report are simple to estimate in an ongoing system. In an ongoing system, a management report should be available two weeks after the end of a month, with minimal workload.

Based on the feasibility test in the two counties, BAI estimates that agency personnel can be easily trained to use this system within a few hours.

The following is an estimate of the staff time per month that would be required to operate the recommended system in the two counties.

Staff	<u>County A</u> (900 Cases/Year)	<u>County B</u> (5,400 Cases/Year)
Clerk	16 hours	48 hours
Caseworker	2 hours	4 hours
Financial Officer	1 hour	1 hour
TOTAL	19 hours	53 hours

BAI successfully tested the evaluation system in County A and County B for the period, December 1973 to November 1974. The data were collected by BAI staff members from December 1974 to April 1975 with the help of the protective services staffs of the two counties. The effectiveness measures for each of the five objectives lent themselves to relatively simple procedures of data collection. Displays and reports on the extent to which each objective had been achieved and the cost-effectiveness of return to family, recidivism, and severity are shown in detail in Chapter 5.

Chapter 6 contains summaries of all the data collected in the two counties. The recommended data collection forms and procedures are described in Chapter 7 and were developed out of the experience of BAI staff.

The Utility of the Cost-Effectiveness Evaluation System

The system designed by BAI is feasible for implementation in a number of agencies offering protective services, either as a separate unit or as a part of other social service units. The data-gathering methods are designed to be simple and easily understood by social-work and administrative personnel. The system has not yet been tested on local personnel working independently of BAI staff assistance.

If numerous agencies used this cost-effectiveness system, it should be easy for the Federal Government to aggregate data over states, regions, and the nation. These aggregations could be accomplished on a sampling basis using stratified

sampling procedures. Such a procedure would be most useful and acceptable to the agencies if feedback were provided to the agencies to show how well they are doing in comparison to other agencies.

The validity of the agency reports and the aggregated versions is not an analytic problem because all the measures are objective. There are no subjective judgments or artificial scales leading to questions such as: "Are we measuring the phenomena that we want to measure?" This quality of the cost-effectiveness evaluation should appeal to management personnel in the agency and at the state and regional levels. The reliability and accuracy of the measurements are not a problem for agencies because the measures are not difficult to estimate.

This cost-effectiveness evaluation system can provide data to test significant hypotheses concerning alternative protective services policies. Significant policy questions can be addressed and planning models developed that would be of substantial assistance to states in implementing Title XX as illustrated in Chapter 9.

END