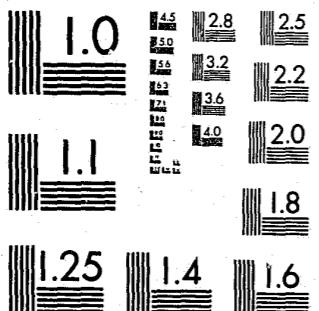


National Criminal Justice Reference Service

**ncjrs**

This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504.

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U. S. Department of Justice.

National Institute of Justice  
United States Department of Justice  
Washington, D.C. 20531

11/13/85

Q55H

95574

U.S. Department of Justice  
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this ~~copyrighted~~ material has been granted by

Public Domain/NIJ

U.S. Dept. of Justice

To the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the ~~copyright~~ owner.

# ARTHUR YOUNG

ARTHUR YOUNG & COMPANY  
CENTRAL TRUST CENTER, SUITE 2200  
CINCINNATI, OHIO 45202

November 9, 1983

Mr. Richard Hartigan  
Assistant Court Administrator  
Hamilton County Court House  
1000 Main Street  
Cincinnati, Ohio 45202

Dear Mr. Hartigan:

We have completed our engagement to serve as "Data Analysis Organization" in a project funded by a grant from the National Institute of Justice of the U.S. Department of Justice. The purpose of the grant was to investigate the costs and revenues to Hamilton County Municipal Court associated with the administration of a misdemeanor probationer program.

Accompanying this letter is our final report for the project "Cost Effectiveness of Misdemeanant Probation." With completion of this report we have fulfilled our obligations to your organization concerning this project. We would be pleased to meet with you to discuss our findings.

We have enjoyed working with you on this exciting project.

Very truly yours,

*Arthur Young & Company*

## Contents

- I. Abstract
  - II. Introduction
  - III. Executive Summary
  - IV. Background
  - V. Scope
  - VI. Methodology
  - VII. Research Results
  - VIII. Conclusions
    - A. Relationships Between Monetary and Non-monetary Attributes
    - B. Effects on the DSCP of Non-monetary Attributes
    - C. Effects on the Failure Rate of Risk, Supervision, and Experience
  - IX. Recommendations
    - A. Recommended Changes to the Data Collection Procedures
    - B. Recommended Changes to the MIS
    - C. Recommendations for Future Research
- Appendix:
- A. MIS Reports
  - B. Data Analysis Program Listings
  - C. Graphs
  - D. Probation Department Exhibits
  - E. Acronyms

### I. Abstract

Data was collected on approximately 3000 probation experiences of misdemeanants, measuring probationer background, degree of supervision, probationer behavior while on probation, probation officer's recommendation whether to terminate probation, costs of providing supervision, and amounts collected from probationers for court costs, fines, and restitution. After an assessment of risk using a standard scale, probations were assigned to a supervision category randomly, according to the roll of die. In order to quantify these relationships, a formal measure of probationer conduct, the Degree of Successful Completion of Probation (DSCP) was developed and used. The data were examined for trends and interrelationships. The following hypotheses, which may be tested in future studies, were developed from the data:

- Increases in DSCP, failure rate, costs incurred, and the excess of costs over receipts, and a decrease in total receipts, generally appear to coincide with increases in risk, increases in supervision, and multiple probation experiences; however, among subsequent probation experiences, when considering changes in DSCP, failure rate, and total receipts corresponding to changes in risk, the opposite relationship holds.
- DSCP, a measure of probationer misbehavior, appears highly correlated with the issuance of probation violation warrants by probation officers. The implication of this result is that probation management may with some confidence use the DSCP as an indicator of whether and when a probation officer should take action to modify the relationship between the officer and the probationer. Possible actions include changing the supervision level, issuing a probation violation warrant, recommending early termination, or imposing additional requirements on the probationer.

It was the consensus of the project team that the data analysis indicated that supervision of misdemeanor probationers, as supervision was administered during the study period, is not a cost-effective technique for increasing the level of successful completion of probation, as measured by either the DSCP or the

failure rate, subject to limitations and qualifications described further in section VIII. D, "Discussion of the conclusions."

## II. Introduction

This report presents the final conclusions of a study of probationer behavior and probation officer supervision sponsored by the National Institute of Justice and conducted by the Municipal Court of Hamilton County, Ohio. A major purpose of the study was to examine relationships among costs, revenues, type of supervision, risk assessment, and probationer conduct for the population of probationers. For this purpose, a formal measure of probationer conduct, the Degree of Successful Completion of Probation (DSCP), was used.

The investigation was performed in two major efforts:

- A computerized Management Information System (MIS) was developed to maintain data on probationers and to prepare summary reports on the operations of the Probation Department;
- Data maintained and summarized by the MIS were analyzed and examined for relationships among costs, revenues, risk, supervision, and conduct.

To assist in these two efforts, HCMC secured the assistance of two independent organizations. Educational Computer Systems functioned as a Computer System Service Organization (CSSO) and was responsible for design and implementation of the MIS. Arthur Young & Company functioned as the Data Analysis Organization (DAO), and provided assistance in the analysis and examination of data.

### III. Executive Summary

The following data were collected on 7,072 misdemeanor probation experiences:

- Risk assessment at intake
- Supervision level assigned
- Number of times the probationer was assigned to probation
- Start date
- Planned termination date
- Date of last status change
- Status at termination
- Degree of successful completion of probation (DSCP) achieved
- Costs incurred in administering probation
- Amounts collected from each probationer for
  - Court costs
  - Restitution
  - Fines

Probation experiences were classified as failures if during the probation experience a probation violation warrant was issued or if at the initially scheduled termination date, costs, fines, and restitution had not been completely paid.

For reasons described in this report, 4,316 experiences were excluded from the study. Such reasons include:

- Not falling within the study period of January 1, 1981 to December 31, 1982
- Failure of the probationer to report for screening
- Prior inclusion in the study of another experience of the same probationer
- Non-random assignment of supervision

For the remaining 2,756 probationers, the following averages were observed:

Data item	Observed average
DSCP	127
Failure rate	45%
Costs collected	\$7
Fines collected	\$32
Restitution received	\$10
Total receipts	\$49
Costs incurred	\$88
Excess of costs incurred over receipts	\$39

In general, the following trends were noted:

- An increase in DSCP appears to coincide with an increase in risk level among first probation experiences terminating either in success or failure;
- A decrease in DSCP appears to coincide with an increase in risk level among subsequent probation experiences terminating in success; an increase in DSCP appears to coincide with an increase in risk level among subsequent probation experiences terminating in failure;
- An increase in failure rate appears to coincide with an increase in risk level among first probation experiences;
- A decrease in failure rate appears to coincide with an increase in risk level among subsequent probation experiences;
- A decrease in gross receipts appears to coincide with an increase in risk level among first probation experiences;
- An increase in gross receipts appears to coincide with an increase in risk level among subsequent probation experiences;
- An increase in costs incurred appears to coincide with an increase in risk level among first probation experiences;

- An increase in costs incurred appears to coincide with an increase in risk level among subsequent probation experiences;
- An increase in the excess of costs over receipts appears to coincide with an increase in risk level among first probation experiences;
- An increase in the excess of costs over receipts appears to coincide with an increase in risk level among subsequent probation experiences;
- An increase in DSCP appears to coincide with an increase in supervision among first probation experiences; the trend is more pronounced among experiences terminating in success than among those terminating in failure;
- An increase in DSCP appears to coincide with an increase in supervision among subsequent probation experiences terminating either in success or failure;
- An increase in failure rate appears to coincide with an increase in supervision among first probation experiences;
- An increase in failure rate appears to coincide with an increase in supervision among subsequent probation experiences;
- A decrease in gross receipts appears to coincide with an increase in supervision among first probation experiences;
- A decrease in gross receipts appears to coincide with an increase in supervision among subsequent probation experiences;
- An increase in costs incurred appears to coincide with an increase in supervision among first probation experiences;
- An increase in costs incurred appears to coincide with an increase in supervision among subsequent probation experiences;
- An increase in the excess of costs over receipts appears to coincide with an increase in supervision level among first probation experiences;
- An increase in the excess of costs over receipts appears to coincide with an increase in supervision among subsequent probation experiences;

- Average DSCP appears higher among subsequent probation experiences than among first probation experiences terminating in failure; average DSCP appears lower among subsequent probation experiences than among first probation experiences terminating in success;
- The failure rate appears higher among subsequent probation experiences than among first probation experiences;
- Average gross receipts appear lower among subsequent probation experiences than among first probation experiences;
- Average costs incurred appear higher among subsequent probation experiences than among first probation experiences;
- Average excess of costs over receipts appears higher among subsequent probation experiences than among first probation experiences;
- DSCP appeared to be a very good measure of probationer success or failure, in the sense that average DSCP among successful probation experiences (16) differed greatly from average DSCP among probation experiences classified as failures (263).

Presentation of these trends corresponds to the planned analyses described in the Data Analysis Plan for the project dated February 11, 1983. Possible interpretations of these trends are presented in Section VIII, "Conclusions."

It was the consensus of the project team that the data analysis indicated that supervision of misdemeanant probationers, as supervision was administered during the study period, is not a cost-effective technique for increasing the level of successful completion of probation, as measured by either the DSCP or the failure rate, subject to limitations and qualifications described further in section VIII. D, "Discussion of the conclusions."

#### IV. Background

Data for the study was collected as a part of standard probation department procedures. The description of the procedures currently in use applicable to probation experiences included in the study, and the effect of these procedures on the study, is presented in the following paragraphs.

##### A. Intake

Convicted misdemeanants may be assigned to probation at the discretion of the sentencing judge. Prior to making such a decision, a judge may request a Pre-Sentence Investigation (PSI).

If a PSI is requested, the misdemeanant must report to the Probation Department with a green PSI request form (Exhibit P-1). The individual will be assigned to a Probation Officer (PO) who will conduct the PSI and return the completed PSI form to the judge for use in determining a sentence.

When the individual is sentenced, the judge may assign the person to probation. The basic tenet of probation is that upon completing the probation assignment, the individual may be relieved of any obligation to serve his initial sentence.

Individuals assigned to probation must report to the Probation Department for screening and supervision. Screening involves collection of basic background information on an individual, his conviction, and his sentence. The individual's background is used to determine a numerical Risk Level Indicator (RLI). Questionnaires used in the screening process are presented as Exhibits P-2, P-3, and P-4. Exhibit P-5 indicates the procedure used to calculate the RLI, based on data included in the questionnaires. The RLI may take a value from 2 to 34. Risks are classified as

high, moderate, or low, corresponding to RLI values of 18 or more, 12 to 16, and 2 to 10, respectively.

Most individuals are assigned to supervision levels based on a combination of their risk category and a random variable. Low risk individuals are assigned to an unsupervised category. Moderate risk individuals are randomly assigned to one of three groups with equal likelihood, based on the roll of a die. These three groups correspond to no supervision, minimum supervision, and maximum supervision. High risk individuals are randomly assigned to one of two groups with equal likelihood, again based on the roll of a die. These two groups correspond to minimum supervision and maximum supervision. In certain cases, the sentencing judge may prescribe a certain level of supervision, overriding any other classification procedures. Following determination of a supervision level, individuals are assigned to Probation Officers in a manner which tends to evenly distribute the case load among officers, except that low risk unsupervised probationers are generally all assigned to the same PO. Exhibit P-6 describes the proportionate supervision assignments contemplated at the beginning of the study.

The final step in the intake procedure is to present the conditions of probation to the probationer, including any special conditions prescribed by the sentencing judge. The conditions of probation are presented in Exhibits P-7 and P-8.

Exhibit P-9 depicts major events in the intake process. Exhibit P-10 summarizes data collection procedures pertinent to the intake process. Exhibit P-11 outlines a revision to the intake procedure implemented to improve the quality of the data gathered in the intake process.

## B. Supervision

During the intake process, a date will be established for an initial contact between the probationer and his PO. This may coincide with the screening or intake dates. Thereafter, during each contact between the probationer and his PO, arrangements will be made for the following contact, until the probationer terminates probation.

The PO records summary data on each contact with each probationer on a Daily Probationer Supervision Log (DPSL), (Exhibit P-12). Each sheet in the log contains the PO's name, the date, and information on each contact in columns from left to right as follows:

- Probationer Name -

Last name, first name, and middle initial.

- File Number -

A unique code of five digits that identifies the probationer, assigned when the probationer first enters the probation system, followed by a number indicating how many times the individual has entered the probation system. The two identifiers are separated by a dash. Prior to planning for the present study, only the first code was assigned as the file number.

- Judge -

The judge sentencing the individual and assigning him to probation.

- Risk -

The risk level for the probationer determined by computing the RLI and assigning a level as follows:

<u>Risk Level</u>	<u>RLI Values</u>
Low	Up to 10
Moderate	12 to 16
High	18 and above

Because the RLI takes only even values, the indicated categorization is comprehensive.

- Contact Notation -

A check is made in the appropriate column to indicate the type of contact:

I - Initial (intake) contact

T - Telephone call

O - Office visit

H - Home visit

A - Agency contact with PO

U - Unscheduled (contacts not elsewhere classified)

L - Letter written or received

C - Court was contacted

Refer to Exhibit P-11 for additional information on intake coding.

- Time In -

The time that contact with the probationer began.

- Time Out -

The time that contact with the probationer ended.

- Mileage -

Mileage driven by the PO in making the contact is recorded in this column.

- Probation Condition (PC) -

This data is recorded in accordance with the directions given in Exhibit P-13.

- PC Value -

This field refers to the point value associated with violation of the indicated condition of probation, as indicated by Exhibit P-13.

- Revenues Owed or Paid -

The C, F, and R columns refer respectively to court costs, fines, and restitution. The first line of each set refers to the amount owed by the probationer. The second line refers to amounts paid by the probationer in each category. In addition to inclusion in the Daily Probationer Supervision Log, amounts owed and paid by the probationer are recorded on receipts in duplicate by the cashier. These receipts are posted daily by the cashier to the Collections Sheet, Exhibit P-14.

- Next Contact -

At completion of the contact, the probationer and PO will arrange a follow-up contact. The type of contact and its scheduled date and time are recorded in the last columns on the log. If the PO fails to record a next contact date, a next contact will be scheduled automatically by the Data Coordinator as follows:

<u>Supervision Level</u>	<u>Time Until Scheduled Contact</u>
Unsupervised	N/A
Minimum	28 days
Maximum	14 days

#### C. Data Collection

The Daily Probationer Supervision Logs are sent to the Data Coordinator (DC) by each PO. The DC reviews each log for completeness and reasonableness. If the DC believes that the log is incomplete or inaccurate, he will mark on the log to indicate the reasons for rejection, and return the log to the responsible PO. The PO will then complete or correct the form and resubmit it to the DC. The DC maintains a list of rejected logs from which each is eliminated when finally submitted correctly, allowing the DC to follow up on seriously delinquent logs.

The DC also prepares the Consolidated Data Sheets (CDS), Exhibit P-15. The columns on the CDS correspond one-for-one with those on the logs, with the following exceptions:

- "Time In" and "Time Out" have been replaced with one column, "Time (Minutes)," calculated by subtracting "Time In" from "Time Out".
- A "Cost" column has been added, the contents of which may be calculated as follows:  

$$\text{Cost} = \text{Mileage} \times 0.185 \\ + \text{Time (Minutes)} \times 0.317$$

If the contact is of type Intake, the fixed cost of \$62.05 is added.

- A "PO" column has been added, where the identification number of the appropriate PO is entered.

Data on intakes only is copied by the DC from the DPSL to the CDS, and additional data is provided on the CDS as necessary.

The following four items constitute the major inputs to the MIS, and are recorded in the MIS data base:

- Data on intakes, from the CDS's;
- Data on collections, from duplicate copies of the receipts;
- Data on contacts and misbehavior, from the DPSL's;
- Data on terminations and status changes, from probationer status cards maintained by the Probation Department.

These items are input by the computer operator.

#### D. Probation Termination

The termination date of a specific probation experience is the earlier of the following two dates:

- The date on which the probation experience was initially scheduled to end when the probationer was assigned to probation;

- The date on which the probationer's PO recommended that probation be revoked, by recording a PC code of "PV" on the DPSL.

Because the date on which a "PV" was recorded was not consistently available from the MIS, the termination date used in the data analysis was estimated by using the earlier of the planned termination date and the status date. Collections, costs, and points accumulated thereafter were not reflected on the MIS reports used in the study and included here in the appendices, although the data is included on reports to judges and POs prepared by the MIS.

Exhibit 1 summarizes the status data and associated fields that may be recorded in the MIS. An interface program developed by the CSSO summarizes data on probation experiences according to the table and prepares an intermediate computer file for use by the DAO in preparing the MIS reports included in the appendices. Data contained in the file includes the following:

- PC Points -

All points accumulated by the probationer on or after his start date and on or before his termination date are accumulated, including each one hundred points assessed automatically if a contact is not recorded with a probationer on or before a scheduled contact date.

- Costs -

All costs of supervision of the probationer incurred at or following intake and on or before the end date are computed as follows:

$$\text{Costs} = \$62.05 + \$0.317 \times \text{minutes supervised} \\ + \$0.185 \times \text{miles driven}$$

- Court costs, fines and restitution -

All court costs, fines and restitution actually paid by the probationer toward the court costs, fines and restitution applicable to the probation experience

### EXHIBIT 1

#### SUMMARY OF PROBATIONER STATUS CODES

<u>Status Code</u>	<u>Status Meaning</u>	<u>End Date</u>	<u>Status Date</u>	<u>Implied Result</u>	<u>Point,Cost and Revenue Data</u>
AC	Active	Initially scheduled termination date	Initially scheduled termination date	Pending	Accumulated through reporting date
SC	Successful	Initially scheduled termination date	Initially scheduled termination date	Success	Accumulated through End Date
TE	Terminated Early	Early termination date	Early termination date	Success	Accumulated through End Date
CO	Continued	Date PV was issued	Date continuation was granted	Failure	Accumulated through Status Date
PV	Probation violation warrant issued	Date PV was issued	Date PV was issued	Failure	Accumulated through End Date
RE	Revoked	Date PV was issued	Date probation was revoked	Failure	Accumulated through Status Date
TU	Terminated unsuccessfully	Date PV was issued (if issued) or initially scheduled termination date (if failure due to delinquent payments)	Date probation was terminated	Failure	Accumulated through Status Date

under study are accumulated. The MIS automatically applies payments to the earliest probation experience, and applies payments to court costs until court costs are fully paid, then to fines until fines are fully paid, then to restitution. The computer operator may at data entry time override the default application method by specifying which probation experience is to be credited, and for what type of payment.

- **Result -**

All experiences for which a PV was recorded (i.e., for which the PO recommended revocation), are classified as failures. All experiences for which court costs, fines and restitution were not fully paid as of the initially scheduled termination date are also classified as failures. All other experiences are classified as successes.

Probationers for whom revocation is recommended must appear before a judge who may either terminate the probation experience, continue it, or extend it beyond its originally scheduled end date.

#### E. Effects of Probation Department Procedures on the Study

Certain aspects of Probation Department procedures may affect variables under study. The following should be considered in interpreting the results of the study:

- Point accumulation results. One goal of the study is to evaluate the differences between point scores accumulated by persons who complete probation successfully, and point scores accumulated by persons whose probation results in failure. Because PO's consider the number of points accumulated by a probationer in deciding whether to recommend revocation, the accumulation of points and the result of a probation experience are interrelated. Therefore, the relationship between point score accumulation and probation result may appear more pronounced than if the recommendation of revocation and the accumulation of points were independent.
- Probation Officer attitudes. While certain aspects of the data collected are objectively verifiable, other data may depend upon the attitudes of the

reporting PO, and still additional data may require estimation not subject to verification. Such data include the following:

- Whether a probation violation has in fact occurred;
- What constitutes a contact;
- What the duration of a contact was;
- Whether a contact is reported.
- Probation Department valuations. The costs of probation supervision have been estimated by the Probation Department administration as a fixed rate per minute of contact and as a fixed rate per mile traveled. Such estimation affects the comparison of costs with revenues and probation results, both of which may be objectively verified.
- Assignments for low risk probationers. Approximately 75% of low risk unsupervised probationers are assigned to the same PO. Because the probationers will contact only this individual whenever a contact is initiated, the results for this group may be biased.
- Assignments for low risk probationers with alcohol, drug, or mental health problems. Because alcohol and drug problems are used in calculating the RLI, moderate and high risk groups included in the study will exhibit relatively higher RLI's than if the RLI calculation excluded alcohol and drug problems, while persons with serious alcohol and drug problems will be excluded from the low risk study group due to the non-random manner in which the related supervision level is determined.
- Cash collections. Not all amounts assessed against probationers are collected in the probation department. Some amounts may be collected by the court when the probationer is initially assigned to probation, but before he reports to the probation department. The amounts collected from each probationer do not include amounts previously collected in court, and therefore total revenues may be understated.

## V. Scope

The grant from NIJ identified several objectives for the investigation. These include the following:

1. Determine costs incurred in the administration of misdemeanor probationer assignments among first time probationers according to risk assessment, type of supervision, and probationer conduct.
2. Determine costs incurred in the administration of misdemeanor probationer assignments among repeating probationers according to risk assessment, type of supervision, and probationer conduct.
3. Determine a relationship between revenues received and costs incurred in the administration of misdemeanor probationer assignments, according to risk assessment, type of supervision, probationer conduct, and whether the individual is a first-time or repeat probationer.
4. Design, develop, and test a management information system (MIS) to provide timely, regular information to judges, Probation Officers, and court administrators about the results of their decisions concerning probation.

This report is intended to address the first three objectives identified above, using the data collected with the MIS and presented in the MIS reports included in the appendices.

## VI. Methodology

As previously indicated, the project involved two separate tasks:

- Development of an MIS to provide information for HCMC and Probation Department administration.
- Study of probationers to identify various relationships among variables such as the following:
  - Cost of supervision
  - Revenues collected from probationers
  - Probationer behavior, as measured by the DSCP

Neither task encompassed the entire population of probationers supervised by the HCMC Probation Department. By design, the second task, study of probationers, related to a subset of the group of probationers involved in the first task, development of an MIS.

Probation experiences, with an identifiable start, duration and termination were the material for the project. Because there is a one-for-one relationship between probationers and probation experiences in the study, the terms "probationer" and "probation experience" may be used interchangeably in defining the populations.

### A. Reporting Population

The MIS reports on a subset (the Reporting Population) of all probationers supervised by HCMC Probation Department. These probationers are characterized as follows:

- Misdemeanants. Persons on probation for felonies were excluded from the Reporting Population.
- Eligible for supervision. Persons formally assigned to probation only for the purpose of completing or participating in a special alcoholism, community

service or collection program, or assigned to non-reporting probation by the judge, were excluded from the Reporting Population.

- Assigned to probation on or after October 1, 1980. Persons assigned to probation on or before September 30, 1980 were excluded from the Reporting Population.

#### B. Study Population

The study population included HCMC probationers characterized in the following ways:

- Members of the Reporting Population. Persons excluded from the Reporting Population were also excluded from the Study Population.
- Assigned to probation, and able to complete probation during the twenty-four month study period from January 1, 1981 to December 31, 1982. Persons whose initial assignment to probation extended beyond the study period were excluded from the Study Population. The collection of data on a person terminated when the person completed probation or when as a result of a review hearing, the person's assignment to probation was extended beyond the initially assigned termination date.
- Persons whose supervision level was not changed during the probation experience. Supervision level may be increased at the recommendation of the PO, resulting in exclusion.
- Not previously studied. Persons with a prior probation experience included in the Study Population were excluded from future admission to the population. For instance, an individual studied from January 1, 1981 to March 31, 1981, who was reassigned to six months of probation on October 1, 1981, was not studied twice.
- Persons who were randomly assigned a supervision level. Those in the low risk category with drug, alcohol, or mental health problems were excluded.
- Persons assigned to a specific supervision level by a judge were also excluded. A judge may at his own discretion require maximum or minimum supervision for a particular person, or may assign a person to non-reporting probation.

#### C. Effects of the Population Definitions on the Study

Certain aspects of the population definitions may have affected the results of the study of information gathered during the project. These aspects include the following:

- Short probation assignments. The definition of the Study Population precluded the inclusion of data concerning probationers whose initial assignment exceeded two years. Furthermore, as the study progressed, the average length of each probationer's initial probation assignment declined. For example, no probationer entered the study after July 1, 1982 unless his initial probation assignment duration was less than six months.
- Early probation experiences. Because persons are not readmitted to the Study Population, the experiences are weighted toward earlier probation experiences. For instance, a person assigned to multiple probation terms between January 1, 1981 and December 31, 1982, was only studied for his first experience during that period.

#### D. Data Attributes

An objective of the project was to examine relationships among certain attributes of the probation experiences under study. These attributes include the following, with further definitions as noted:

- Experience - This attribute refers to whether or not the probation experience under study is a person's first assignment to probation. Possible values are "First" and "Subsequent".
- Result - This attribute refers to the circumstances surrounding the termination of a person's probation experience. As described in Section IV-D, probation experiences may be classified as successes or failures.
- Degree of Successful Completion of Probation (DSCP) - The DSCP takes the value of the point score accumulated during the probation experience as a result of substandard probationer conduct in relation to the conditions of probation, according to the schedule of values indicated in Exhibit P-13. This is also referred to as PC score or as point value.

- Risk Level - The risk level takes on values determined by the Risk Level Indicator (RLI) according to the following table:

<u>RLI</u>	<u>Risk Level</u>
up to 10	Low
12 to 16	Moderate
18 or greater	High

The RLI is computed for each individual at intake and is based on personal data concerning the probationer.

- Supervision Level - Supervision Level corresponds to the amount of supervision anticipated for the individual. Possible levels are the following:

- Unsupervised - No contact with the probationer is regularly scheduled.
- Minimum - The PO and the probationer are to communicate at the discretion of the PO, at least once every twenty-eight days.
- Maximum - The PO and the probationer are to communicate extensively on a regular, formal basis, at least once every fourteen days.

Unless instructed otherwise, the Data Coordinator automatically scheduled contacts every two weeks for maximum supervision and every four weeks for minimum supervision probationers.

While the Supervision Level may be mandated by the court, it was always determined for probation experiences in the Study Population according to the Risk Level and the random roll of a die as follows:

<u>Risk Level</u>	<u>Spots on Die</u>	<u>Supervision Level</u>
High	1, 2, or 3	Maximum
High	4, 5, or 6	Minimum
Moderate	1 or 2	Maximum
Moderate	3 or 4	Minimum
Moderate	5 or 6	Unsupervised
Low	Any value	Unsupervised

- Costs Incurred - This attribute was assigned a value according to the following formula:

$$\text{Costs Incurred} = \text{Total Contact} \times \$0.317 + \\ \text{Total Mileage} \times \$0.185 + \\ \$62.05 \text{ (if intake occurs)}$$

In the formula, Total Contact refers to the total minutes of contact of any type except intake processing recorded by the MIS for the particular probation experience, and Total Mileage refers to the total miles driven by the PO in supervising the probationer, as recorded by the MIS.

- Restitution Received - This attribute refers to the total amount of money received from the probationer during the probation experience as restitution for damages caused.
- Fines Collected - This attribute refers to the total amount of money received from the probationer during the probation experience as a penalty for the acts committed.
- Court Costs Collected - This attribute refers to the total amount of money received from the probationer during the probation experience as reimbursement to HCMC for the costs of hearings.
- Gross Receipts - This attribute is the sum of Restitution Received, Fines Collected, and Court Costs Collected.
- Excess of Receipts Over Costs - The value of this attribute is determined by subtracting Costs Incurred from Gross Receipts; the value may be positive, negative, or zero.

#### E. Reporting

The DAO prepared computer reports using the information presented on the monthly reports for judges and probation officers prepared by the MIS. These reports summarized relationships among the eleven attributes defined in Section VI-D using data accumulated through the end of the study. These attributes are the following:

- Experience
- Result
- DSCP
- Risk Level

- Supervision Level
- Costs Incurred
- Restitution Received
- Fines Collected
- Court Costs Collected
- Gross Receipts
- Excess of Receipts Over Costs

#### 1. Reports Presenting Monetary Attributes

The six monetary attributes presented in these reports are as follows:

- Costs Incurred
- Restitution Received
- Fines Collected
- Court Costs Collected
- Gross Receipts
- Excess of Receipts Over Costs

The data was grouped into reporting cells based on the following attributes:

- Experience
- Risk Level
- Supervision Level
- DSCP

Reports were prepared showing the number of probation experiences classified in each cell. On separate reports, average values for each of the six monetary attributes listed above, averaged among probation experiences classified in the reporting cell, are presented. In addition to the average value of the attribute, its standard deviation is presented, calculated as described in Section VI-E-3.

#### 2. Reports Presenting Degree of Successful Completion of Probation

The primary attribute presented in these reports is the Degree of Successful Completion of Probation (DSCP). The probation experiences in the Study Population were grouped into reporting cells based on possible values of the following attributes:

- Risk Level
- Supervision Level
- Experience
- Result

The average DSCP for each cell so defined, together with its standard deviation calculated as described in Section VI-E-3, is presented. The standard deviation is a measure of the variability of results and may be used to evaluate whether the results are significant. The reports include subtotals for all Success and for all Failure experiences, as well as subtotals for all First experiences and for all Subsequent experiences. Calculation of the average DSCP for each of the cells disclosed trends and relationships that affect the DSCP.

#### 3. Calculation of the Standard Deviation

The standard deviation for each cell presented on the MIS reports was computed according to the following formula:

$$\text{Standard deviation} = \sqrt{\frac{\text{SUM}}{N-1}}$$

where:

SUM = the sum of the square of the differences between each attribute value represented in the cell and the average attribute value in the cell;

N = the number of experiences included in SUM and in the cell.

The standard deviation is a measure of the variability of data, and is used to evaluate the strength of test results. A high standard deviation may indicate that test results occurred primarily due to chance. A low standard deviation may indicate that test results are representative of a true characteristic of a population.

## VII. Research Results

The study focused on misdemeanor probation experiences completed between January 1, 1981 and December 31, 1982. An experience was defined as all data associated with an individual probationer from the initial assignment to probation by a judge to the final termination of the probation period by expiration, by revocation, by continuance, or by suspension. No probationer was allowed to be included in the study more than once.

Data on 7,072 probation experiences, each commencing on or after October 1, 1980, were recorded in the MIS. Of the 7,072 experiences, the following were excluded for the reasons indicated.

<u>Number Excluded</u>	<u>Reason for Exclusion</u>
253	Probationer was never screened
814	Probationer had another experience that was included in the study
3083	Experience was not completed by December 31, 1982
2	Experience began prior to January 1, 1981
164	Supervision level was not randomly assigned
4316	

The remaining 2,756 experiences were analyzed and classified according to experience, result, supervision, risk assessment at intake, and DSCP achieved. The following overall observations apply:

<u>Classification of experiences</u>	<u>Number</u>	<u>Percent</u>
<u>Risk assessment at intake</u>		
Low risk experiences	888	32.2
Moderate risk experience	965	35.0
High risk experiences	903	32.8
Total experiences	<u>2756</u>	<u>100.0</u>
<u>Supervision levels assigned</u>		
Unsupervised experiences	1169	42.4
Minimum supervision experiences	884	32.1
Maximum supervision experiences	703	25.5
Total experiences	<u>2756</u>	<u>100.0</u>
<u>Times on probation</u>		
First experiences	1963	71.2
Subsequent experiences	793	28.8
Total experiences	<u>2756</u>	<u>100.0</u>
<u>DSCP compared to result</u>		
Average DSCP among experiences described as successes	16	
Average DSCP among experiences classified as failures	263	
Average DSCP among all experiences	127	

<u>Average DSCP, costs incurred, amounts collected, and failure rate</u>	<u>Population subset</u>	<u>DSCP</u>	<u>Fines collected</u>	<u>Costs collected</u>	<u>Restitution collected</u>	<u>Total receipts</u>	<u>Costs incurred</u>	<u>Costs less receipts</u>	<u>Failure rate (%)</u>
First experiences	First experiences	110	\$34	\$ 7	\$11	\$52	\$85	\$34	41
Subsequent experiences	Subsequent experiences	169	27	5	9	41	95	54	54
Unsupervised experiences	Unsupervised experiences	78	40	8	10	58	74	17	34
Minimum supervision experiences	Minimum supervision experiences	154	24	6	11	41	97	56	53
Maximum supervision experiences	Maximum supervision experiences	174	28	6	10	43	100	56	53
Low risk experiences	Low risk experiences	67	41	8	10	59	70	11	31
Moderate risk experiences	Moderate risk experiences	134	32	7	11	49	94	45	49
High risk experiences	High risk experiences	180	23	6	10	38	99	62	55
All experiences	All experiences	127	32	7	10	49	88	39	45

In general, the following trends were noted:

- Increases in DSCP, failure rate, costs incurred, and the excess of costs over receipts, and a decrease in total receipts, appeared to coincide with increases in risk, increases in supervision, and multiple probation experiences. These observations are generally independent. For example, an increase in DSCP appears to coincide with an increase in risk, regardless of supervision level or the number of probation experiences. However, among subsequent probation experiences, an increase in total receipts and decreases in DSCP and failure rate appeared to coincide with increases in risk at intake.
- DSCP appeared to be a very good measure of probationer success or failure, in the sense that average DSCP among successful probation experiences (16) differed

greatly from average DSCP among probation experiences classified as failures (263).

## VIII. Conclusions.

The conclusions of the study are divided into three categories:

- Relationships between monetary and non-monetary attributes - Monetary attributes include costs, fines, and restitution actually collected, as well as costs of supervision for probationers. Non-monetary attributes include risk assessment, supervision level, result, experience, and DSCP;
- Effects on the DSCP of non-monetary attributes - DSCP achieved, also referred to as PC score, was measured according to risk assessment, supervision level, experience and result.
- Effects on the failure rate of risk, supervision and experience - The failure rate is a measure of a probation officer's evaluation of a probation experience, as opposed to the DSCP, a measure of probationer misbehavior.

### A. Relationships between monetary and non-monetary attributes

1. Relationship - High probation costs appear to correspond to high PC scores among both first and subsequent experiences, as may be seen from Table 1 and from Graph 1 in Appendix C.

Implication - Costs of supervision increase partially as a result of misbehavior among probationers, or more supervision results in a higher PC score.

2. Relationship - Low gross receipts appear to correspond to high PC scores, among both first and subsequent experiences, as may be seen from Table 2 and from Graph 2.

Implication - Decreased collections may result partially from probationer misbehavior.

3. Relationship - Large excesses of costs of probation over gross receipts appear to correspond to high PC scores, among both first and subsequent experiences, as may be seen from Table 3 and from Graph 3 (excess of receipts over costs is the negative of this quantity).

Implication - See implications A-1 and A-2.

4. Relationship - Average probation costs appear slightly higher among subsequent experiences than among first experiences. Graph 1 and Table 1 demonstrate this apparent tendency according to PC score, while Table 4 and Table 5 demonstrate the same conclusion using data classified according to risk and supervision, respectively.

Implication - The cost of administering a probation experience is higher among persons who have previously been on probation.

5. Relationship - Amounts collected from probationers appear higher among first experiences than among subsequent experiences when data are classified according to PC score. Graph 2 and Table 2 demonstrate this apparent tendency. This relationship does not appear to hold true for data classified according to either risk or supervision.

Implication - Either probationers are more likely to pay assessments when on probation for the first time, or assessments are higher, on the average, among first experiences than subsequent experiences, or both.

6. Relationship - Costs of probation appear to exceed gross receipts by a greater amount among subsequent experiences than among first experiences. This relationship may be inferred from relationships A-4 and A-5.

Implication - See implications A-4 and A-5.

7. Relationship - Costs of administering probation for higher risk groups appears to exceed those for lower risk groups. Graph 4 and Table 6 present nine comparisons of pairs of probation costs. Within each pair, supervision and experience are constant, and risk varies, either between low and moderate, or between moderate and high. (Some bars are absent from the charts, corresponding to non-valid combinations of risk and supervision.) The center bars (those centered on the tick marks on the horizontal axis) correspond to moderate risk experiences. The labels on Graph 4 correspond to the following categories:

<u>Label</u>	<u>Category</u>
FUN	First experience, unsupervised
FMN	First experience, minimum supervision
FMX	First experience, maximum supervision
SUN	Subsequent experience, unsupervised

<u>Label</u>	<u>Category</u>
SMN	Subsequent experience, minimum supervision
SMX	Subsequent experience, maximum supervision
AUN	All experiences, unsupervised
AMN	All experiences, minimum supervision
AMX	All experiences, maximum supervision

Implication - The cost of administering a probation experience is higher among persons classified as high risk individuals.

8. Relationship - Amounts collected from probationers are higher among low risk probationers than among high risk probationers, except among subsequent probation experiences. Graph 5 and Table 7 present nine comparisons of pairs of amounts collected, similar to those described above in relationship A-7.

Implication - Either low risk probationers tend to pay a greater portion of amounts assessed, in general, or else generally assessments are higher among low risk probationers. This latter interpretation could arise if judges felt, for instance, that increasing assessments of hard-core offenders would not result in benefits, or else because low risk probationers may, for reasons positively correlated with a low risk assessment, appear better able to pay assessments. The fact that the data run contrary to the general pattern among subsequent probation experiences may indicate that collection activity from individuals repeating probation is more closely watched. Alternatively, it may indicate that ability to pay an assessment, discussed above, is not considered as important among subsequent probation experiences as among first experiences.

9. Relationship - Costs of probation appear to exceed gross receipts by a greater amount among higher risk probation experiences than among lower risk probation experiences. Graph 6 and Table 8 present nine comparisons of pairs of costs in excess of gross receipts, similar to those described above in relationship A-7. This relationship follows immediately from relationships A-7 and A-8.

Implication - See implications A-7 and A-8.

10. Relationship - Costs of administering probation increase with increasing levels of supervision. Graph 7 and Table 9 present three pairs and three triplets of data on probation costs. Within each

pair or triplet, experience and risk are constant, and level of supervision varies, either among unsupervised, minimum, and maximum (for moderate risk experiences), or between minimum and maximum (for high risk experiences). On Graph 7, three bars are absent, corresponding to the fact that no high risk probation experiences were unsupervised in the study. The labels for the groups of bars on Graph 7 correspond to the following experience and risk categories:

<u>Label</u>	<u>Category</u>
FMO	First experiences, moderate risk
FHI	First experiences, high risk
SMO	Subsequent experiences, moderate risk
SHI	Subsequent experiences, high risk
AMO	All experiences, moderate risk
AHI	All experiences, high risk

The center bars correspond to minimum supervision experiences, and appear directly over the tick marks on the horizontal axis.

Implication - Costs increase with higher supervision levels.

#### B. Effects on the DSCP of non-monetary attributes

1. Relationship - DSCP achieved is higher among experiences with higher risk than among those with lower risk. Graph 8 and Table 10 present nine comparisons of pairs of probation costs, similar to those described above in relationship A-7. Bars on the left of each pair correspond to a lower degree of risk than do bars on the right of each pair. All data support this conclusion except those for unsupervised and minimum supervision subsequent experiences.

Implication - Increased risk corresponds to increased misbehavior.

2. Relationship - Increased supervision appears to correspond to a higher DSCP. Graph 9 and Table 12 present three pairs and three triplets of data on DSCP. Within each pair or triplet, experience and risk are constant, and level of supervision varies, either among unsupervised, minimum, and maximum (for moderate risk experiences) or between minimum and maximum (for high risk experiences). On Graph 9, three bars are absent, corresponding to the fact that no high risk probation experiences were unsupervised in the study. The labels for the groups of bars on Graph 9

were summarized above in the discussion of relationship A-10. The center bars correspond to minimum supervision experiences, and appear directly over the tick marks on the horizontal axis. All possible comparisons among the data support the conclusion, except for comparisons of minimum and maximum supervision moderate risk experiences.

Implication - Increased supervision causes increased awareness among probation officers of misbehavior among probationers.

3. Relationship - DSCP achieved in subsequent experiences appears higher than that achieved in first experiences. Graph 10 and Table 12 present six comparisons of DSCP achieved between first and subsequent experiences, with risk and supervision held constant for each comparison. The labels on Graph 10 correspond to the following risk and supervision categories:

<u>Label</u>	<u>Category</u>
LUN	Low risk, unsupervised
MUN	Moderate risk, unsupervised
MMN	Moderate risk, minimum supervision
MMX	Moderate risk, maximum supervision
HMN	High risk, minimum supervision
HMX	High risk, maximum supervision

Implication - Persons previously on probation are more likely to disregard terms of probation than persons on probation for the first time.

4. Relationship - DSCP achieved in experiences terminating in failure appears significantly higher than DSCP achieved in successful experiences. Graph 11 and Table 13 present six comparisons of DSCP achieved between successful and unsuccessful experiences, with risk and supervision held constant for each comparison. The labels for Graph 11 are the same as those described in the discussion of relationship B-3.

Implication - DSCP is a measure that correlates well with probation officers' assessments of probation experiences.

#### C. Effects on the failure rate of risk, supervision, and experience

1. Relationship - High risk appears to be associated with a high failure rate. Of the nine comparisons of failure rates presented in Graph 12 and Table 14,

six support this interpretation and three contradict it. Data counter to the general trend appears concentrated in subsequent experiences. (The labels on Graph 12 are identical to those on Graphs 4, 5, 6 and 8.)

Implication - Risk assessment appears to be an indicator of a probationer's likelihood of success. The contrary data pertaining to subsequent experiences may indicate that among chronic misdemeanants the risk assessment is a less reliable indicator, or is negatively correlated with the failure rate.

2. Relationship - High supervision appears to be associated with a high failure rate. Graph 13 and Table 15 provide data for twelve comparisons of failure rates varying only supervision, seven of which support the conclusion, four of which contradict the conclusion, and one of which indicates no difference. (The labels on Graph 13 are identical to those on Graphs 7 and 9.) However, comparing only minimum supervision experiences with maximum supervision experiences, the data support the conclusion that maximum supervision does not appear to be associated with a lower or higher failure rate than does minimum supervision.

Implication - Increased supervision does not appear to be a cost effective technique for reducing failure among probationers. It may be that increased supervision reduces failure from certain causes but not from others.

3. Relationship - Failure rates among subsequent probationers appear higher than those among first experiences, as can be seen from Graph 14 and Table 16.

Implication - A person is more likely to fail probation the more times he has been assigned to probation.

#### D. Discussion of the conclusions

1. Relationship between DSCP and probation costs - The observation that costs appear to increase as DSCP increases seems to coincide with expectations, that is, that misbehavior, as measured by the DSCP, will require increased supervision efforts among probation officers, as measured by the cost of providing supervision.
2. Relationship between DSCP and amounts collected - The observation that gross receipts appears to decrease as DSCP increases does not seem to have an

easy explanation. Judges may assess lower amounts from probationers likely to achieve a high DSCP, or else misbehavior corresponds to a decreased likelihood that a probationer will pay a specific assessment.

3. Relationship between probation costs and experience - Again, probationers assigned to probation several times may require increased supervision, and hence increased costs.
4. Relationship between experience and amounts collected - The observations that gross receipts appear to decrease among subsequent experiences when compared to first experiences does not seem to have an easy explanation. Judges may assess lower amounts from probationers who have been on probation more than once, perhaps due to an evaluation of ability to pay, or else persons on probation more than once are less likely to pay a specified assessment.
5. Relationship between risk assessment and probation costs - The observations that probation costs appear higher among high risk groups than among low risk groups seems to coincide with expectations, that is, that a tendency toward misbehavior or a background of problems will increase the amount of supervision required.
6. Relationship between risk assessment and amounts collected - The observation that gross receipts appear lower among high risk probationers than among low risk probationers does not seem to have an easy explanation. Judges may assess lower amounts from high risk probationers, perhaps because of apparent inability to pay, or else high risk probationers are less likely to pay a specified assessment. The exception among subsequent probation experiences does not have an apparent explanation.
7. Relationship between probation costs and supervision - The observation that probation costs are higher among increased supervision experiences is as expected, since probation costs may be a measure of supervision. Remarkable is the fact that the difference in costs between minimum and maximum supervision is relatively small, indicating that either probation officers are spending almost as much time on minimum supervision experiences as on maximum supervision experiences, or else that the quality of cost data recorded is not reasonably representative of supervision patterns.

8. Relationship between risk assessment and DSCP achieved - The observation that a higher DSCP is achieved among higher risk experiences than among lower risk experiences is as expected. The differences appear significant. This indicates that risk assessment is a good predictor of probationer behavior as measured by the DSCP.
9. Relationship between supervision level and DSCP achieved - The observation that a higher DSCP appears to correspond to increased supervision may be attributed to the possibility that increased supervision leads to increased detection of misbehavior, or perhaps a greater likelihood to record misbehavior.
10. Relationship between experience and DSCP - The observation that DSCP achieved appears higher among subsequent experiences than among first experiences seems logical if misbehavior is more likely among chronic misdemeanants assigned to probation.
11. Relationship between failure and DSCP - The observation that DSCP appears higher among experiences terminating in failure than among experiences terminating in success was expected. This may indicate that DSCP achieved is a good yardstick to measure probation officer evaluations of probationer behavior.
12. Relationship between risk assessment and failure rate - The apparent tendency for high risk experiences to achieve a high failure rate was expected. Because the tendency is weak, a stronger measure of the tendency to fail than the risk assessment may be available.
13. Relationship between supervision and failure rate - A weak and unanticipated tendency for increasing supervision from minimum to maximum to correspond to a high failure rate can be detected in the data. One undesirable inference is that high supervision leads to a high failure rate; an alternative inference is that increased supervision allows probation officers more frequent opportunities and more data on which to base a request for a revocation.
14. Relationship between experience and failure rate - The tendency for subsequent experiences to terminate in failure more frequently than first experiences was expected.
15. Overall level of probation costs - The average level of probation costs among all experiences was approximately \$88.13. Excluding intake costs of \$62.05, and dividing by \$0.317 per contact minute yields an average contact time of approximately 82 minutes per probation experience, in the absence of significant mileage costs.
16. Overall level of amounts collected - The average level of amounts collected from probationers among all experiences was approximately \$48.68.
17. Overall level of DSCP achieved - The average DSCP achieved among all experiences was approximately 127. Among failures the average was 263, significantly greater. Neither figure approaches the tentative level of 600 points previously discussed among probation department and court personnel as a level for mandatory recommendation of revocation.
18. Overall failure rate - The average failure rate observed among all experiences was 45%.
19. Cost effectiveness of supervision - It was the consensus of the project team that the data analysis indicated that supervision of misdemeanor probationers, as supervision was administered during the study period, and is currently administered, is not a cost-effective technique for increasing the level of successful completion of probation, as measured by either the DSCP or the failure rate, subject to the following limitations and qualifications:
- Costs refer to the costs of supervision only. No consideration was given to possible costs of incarceration, if probation were not granted, nor to future costs of crime prevention, crime detection, criminal prosecution, incarceration, or related social costs;
  - Effectiveness refers either to the measured failure rate or the measured DSCP, but not to broader measures of effectiveness such as reduced recidivism or greater rehabilitation;
  - Measures of effectiveness used may have been significantly skewed due to the fact that increased supervision affords greater opportunity to gather evidence in support of a higher DSCP measurement and greater opportunity to issue a probation violation warrant, which could thereby significantly increase the failure rate and DSCP among highly supervised probationers.

TABLE 1

## COSTS INCURRED

DSCP:	0	100	200	300	400	500	600	700	800	900	1,000	1,100+
Experience:												
First	80	85	93	103	99	119	109	116	103	151	140	122
Subsequent	90	91	96	92	97	131	107	117	124	75	232	139
All experiences combined	82	88	94	101	98	123	108	117	113	140	157	130

TABLE 2

## GROSS RECEIPTS

DSCP:	0	100	200	300	400	500	600	700	800	900	1,000	1,100+
Experience:												
First	48	30	78	72	63	73	43	53	42	23	34	31
Subsequent	41	15	66	34	49	17	28	0	54	0	215	14
All experiences combined	47	24	75	65	56	53	37	21	48	20	67	23

TABLE 3

## EXCESS OF COSTS OVER RECEIPTS

DSCP:	0	100	200	300	400	500	600	700	800	900	1,000	1,100+
Experience:												
First	31	55	14	31	37	46	66	63	61	128	107	91
Subsequent	49	77	29	58	48	114	79	117	70	75	17	125
All experiences combined	36	64	19	36	42	70	71	96	65	121	90	106

TABLE 4  
PROBATION COSTS

	Low	Moderate	High
Risk:			
Experience:			
First	69	93	99
Subsequent	76	96	100
All experiences combined	70	94	99

TABLE 5  
PROBATION COSTS

	Unsupervised	Minimum	Maximum
Supervision:			
Experience:			
First	73	97	98
Subsequent	82	97	102
All experiences combined	74	97	100

TABLE 6  
COSTS INCURRED

Experience	Supervision	Risk		
		Low	Moderate	High
First	Unsupervised	69	89	-
First	Minimum	-	95	99
First	Maximum	-	97	99
Subsequent	Unsupervised	76	90	-
Subsequent	Minimum	-	95	99
Subsequent	Maximum	-	104	101
Combined	Unsupervised	70	89	-
Combined	Minimum	-	95	99
Combined	Maximum	-	99	100

TABLE 7  
GROSS RECEIPTS

Experience	Supervision	Risk		
		Low	Moderate	High
First	Unsupervised	61	53	-
First	Minimum	-	52	35
First	Maximum	-	62	32
Subsequent	Unsupervised	42	54	-
Subsequent	Minimum	-	36	39
Subsequent	Maximum	-	26	50
Combined	Unsupervised	59	53	-
Combined	Minimum	-	47	37
Combined	Maximum	-	50	39

TABLE 8

EXCESS OF COSTS OVER RECEIPTS

Experience	Supervision	Risk		
		Low	Moderate	High
First	Unsupervised	8	35	-
First	Minimum	-	42	64
First	Maximum	-	35	67
Subsequent	Unsupervised	33	36	-
Subsequent	Minimum	-	60	60
Subsequent	Maximum	-	77	51
Combined	Unsupervised	11	35	-
Combined	Minimum	-	48	63
Combined	Maximum	-	49	60

TABLE 9

## COSTS INCURRED

<u>Experience</u>	<u>Risk</u>	Level of Supervision			
		<u>Unsupervised</u>	<u>Minimum</u>	<u>Maximum</u>	<u>All</u>
First	Moderate	89	95	97	93
First	High	-	99	99	99
Subsequent	Moderate	90	95	104	96
Subsequent	High	-	99	101	100
Combined	Moderate	89	95	99	94
Combined	High	-	99	100	99
All experiences	Except low risk	89	97	100	97

TABLE 10

## DSCP ACHIEVED

<u>Experience</u>	<u>Supervision</u>	Risk			
		<u>Low</u>	<u>Moderate</u>	<u>High</u>	<u>All</u>
First	Unsupervised	56	117	-	68
First	Minimum	-	122	155	138
First	Maximum	-	128	1996	169
Subsequent	Unsupervised	147	114	-	132
Subsequent	Minimum	-	184	176	179
Subsequent	Maximum	-	153	197	183
Combined	Unsupervised	67	116	-	78
Combined	Minimum	-	144	163	154
Combined	Maximum	-	136	196	174
All experiences		67	134	180	127

TABLE 11

## DSCP ACHIEVED

<u>Experience</u>	<u>Risk</u>	Level of Supervision			
		<u>Unsupervised</u>	<u>Minimum</u>	<u>Maximum</u>	<u>All</u>
First	Moderate	117	122	128	122
First	High	-	155	196	175
Subsequent	Moderate	114	184	153	157
Subsequent	High	-	176	197	186
Combined	Moderate	116	144	136	134
Combined	High	-	163	196	180
All experiences	Except low risk	116	154	174	144

TABLE 12

## DSCP ACHIEVED

<u>Risk</u>	<u>Supervision</u>	Experience		
		<u>First</u>	<u>Subsequent</u>	<u>All</u>
Low	Unsupervised	56	147	67
Moderate	Unsupervised	117	114	116
Moderate	Minimum	122	184	144
Moderate	Maximum	128	153	136
High	Minimum	155	176	163
High	Maximum	196	197	196
All experiences		110	169	127

TABLE 13

## DSCP ACHIEVED

<u>Risk</u>	<u>Supervision</u>	<u>Success</u>	<u>Failure</u>	<u>All</u>
Low	Unsupervised	1	215	67
Moderate	Unsupervised	27	225	116
Moderate	Minimum	27	253	144
Moderate	Maximum	25	256	136
High	Minimum	26	277	163
High	Maximum	26	331	196
<b>All experiences</b>		<b>16</b>	<b>263</b>	<b>127</b>

-45-

TABLE 14

## FAILURE RATE (%)

<u>Experience</u>	<u>Supervision</u>	<u>Low</u>	<u>Moderate</u>	<u>High</u>	<u>All</u>
First	Unsupervised	29	44	-	32
First	Minimum	-	48	55	51
First	Maximum	-	43	56	51
Subsequent	Unsupervised	47	46	-	46
Subsequent	Minimum	-	59	55	56
Subsequent	Maximum	-	58	55	56
Combined	Unsupervised	31	45	-	34
Combined	Minimum	-	52	55	53
Combined	Maximum	-	48	56	53
<b>All experiences</b>		<b>31</b>	<b>49</b>	<b>55</b>	<b>45</b>

TABLE 15

FAILURE RATE (%)

<u>Experience</u>	<u>Risk</u>	<u>Level of Supervision</u>			
		<u>Unsupervised</u>	<u>Minimum</u>	<u>Maximum</u>	<u>All</u>
First	Moderate	44	48	43	46
First	High	-	55	56	55
Subsequent	Moderate	46	59	58	55
Subsequent	High	-	55	55	55
Combined	Moderate	45	52	48	49
Combined	High	-	55	56	55
All experiences	Except low risk	45	53	53	52

TABLE 16

FAILURE RATE (%)

<u>Risk</u>	<u>Supervision</u>	<u>Experience</u>		
		<u>First</u>	<u>Subsequent</u>	<u>All</u>
Low	Unsupervised	29	47	31
Moderate	Unsupervised	44	46	45
Moderate	Minimum	48	59	52
Moderate	Maximum	43	58	48
High	Minimum	55	55	55
High	Maximum	56	55	56
All experiences		41	54	45

## IX. Recommendations

Recommendations are presented concerning changes to the data collection procedures, changes to the MIS, and directions for future research.

### A. Recommended Changes to the Data Collection Procedures

1. Increase coordination of cash collection record keeping with the court. A court official collecting costs, fines, or restitution from a probationer should report such collection activity to the Probation Department, and the Data Coordinator should record the amounts assessed and paid in the MIS.
2. Implement additional controls over data collection to ensure that recorded data is accurate and that all pertinent data is recorded. Such controls may include the following:
  - Increased reconciliation among the MIS data, probationer file cards, court activity, and cashier transactions.
  - Continued audit by Probation Department management of randomly selected DPSL's, to assure the accuracy and reasonableness of contacts and point assessments recorded there.

### B. Recommended Changes to the MIS

1. Record the status date and the termination date separately, and accumulate point, cost and revenue data through the termination date. Doing so will permit distinction in the data analysis between point, cost, and revenue data accumulated before the termination date and data accumulated after the termination date.
2. Implement additional validation logic for data entry to assure that the dates of all recorded activity fall on or after the start date of the probation experience, and on or before the termination date, if the probation experience has terminated.

### C. Recommendations for Future Research

1. Conduct the study again under different conditions. The different conditions should include:
  - Implementation of the recommended changes to the data collection procedures.
  - Implementation of the recommended changes to the MIS.
  - Performance of the study after probation officers and Probation Department management have become accustomed to, and knowledgeable in, the data collection procedures. A significant portion of the present study period was spent in working out problems with the data collection procedures and in getting initial start-up data entered into the computer.

Performance of the study a second time may be less expensive than the initial study because the required procedures and computer programs have been developed, and Probation Department personnel have been trained.

2. Conduct a similar study again, but with additional input data available for analysis. The additional data would include:
  - Demographic data, in place of the risk level assessment, such as the following:
    - Age
    - Sex
    - Marital status
    - Economic profile
    - Family background
    - Criminal record
    - History of drug and alcohol abuse
  - Prior probation history, including
    - Number of probation experiences
    - DSCP, if available, for each experience
    - Length of each experience
    - Result of each experience
    - Supervision assigned for each experience.

The revised study could also allow multiple concurrent probation experiences to be analyzed for probationers.

3. Conduct a follow-on study of recidivism. Recidivism could be correlated with DSCP, result, costs incurred, receipts, risk, and supervision. The results of the study could be supplemented with measures of costs of various types of future behavior, such as costs of incarceration, probation, prosecution, and crime prevention, to determine an estimate of the long term costs and likely results of probation-related decisions.
4. Conduct a study with greater differences between minimum and maximum supervision. In the present study, average time spent per probationer for supervision following intake among maximum supervision probationers exceeded average time spent per probationer for supervision among minimum supervision probationers by less than 10%.
5. Investigate the causes for subsequent probation experiences to differ from first probation experiences when changes in DSCP, failure rate, and gross receipts are correlated with changes in risk level at intake.

Appendix A  
MIS Reports

APPLE SSC:6B  
AATDTDTT8877113366611

NO CARRIER

APPLE SSC:E D

APPLE SSC:BB  
ATDT8711436

NO CARRIER

APPLE SSC:R  
ATDT8713661

CONNECT

:HELLO, MGR. PRO  
ENTER ACCOUNT PASSWORD:

ENTER USER PASSWORD:

HP3000 / MPE IV C.B1.00. TUE, JUL 26, 1983, 8:11 PM

\*\*\*\*\*  
\* THE COMPUTER WILL BE SHUT DOWN FROM 10:30 P.M. TO \*  
\* 8:00 P.M. TONIGHT, TUESDAY, JULY 26 1983. PLEASE \*  
\* BE OFF THE SYSTEM BY 5:30 P.M. THAN YOU, \*  
\* S.B.D.P. \*

\*\*\*\*\*  
:LISTF

FILENAME

ALIST	AYBATCH	BATCH01	BATCH2	BATCH03	BATCH04
BATCIHN	BATCIN	BATDUP	BLIST	DEFHCC	DISCFILE
DOLL1	DOLLIA	DOLLIEV	DOLL2	DOLL2A	DOLL2V
DSCP	DSCPA	DSCPSV	HCCFILE	HCCFORM3	HCCFORM4
HCCFORM5	HCCFORM6	HCCFORM7	HCCPRC	HCCTEMP	ODSCP
ODSCPA	PARTA	PARTB	PARTC	PARTD	PAYCHECK
PAYFILE	PAYFILE1	PAYFILE2	POFIL	POFILE1	QSBP10
QSBP20	QSEX	QSIN	QSLIS	REPORT	TESTAY
TESTAYSV	TESTDATA				

:HCCDATA

INPUT DATABASE PASSWORD ==> READ

ENTER START DATE (MMDDYY)

010181

ENTER END DATE (MMDDYY)

123182

TOTAL UNSCREENED RECORDS: 253

END OF PROGRAM

0J5

FROM/J5 MGR.PRO/FILE 'HCCFILE' IS READY

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 81231  
RECORDS READ 006819  
VALID DATE RANGES 002920  
DISTINCT FILE NUMBERS 006005  
INCLUDED RECORDS 002756  
EXCLUDED RECORDS 000164  
MULTIPLE EXPERIENCES 000814  
TOO LATE END DATE 009083  
TOO EARLY START DATE 000002  
INVALID RISK & SUPER 000000  
INVALID STATUS 000000  
INVALID COST 000000  
INVALID TIMES ON PROB 000000

PAGE 3

END OF PROGRAM

:APPLE SSC:6B

M

APPLE SSC:8B

UNKNOWN COMMAND NAME. (CIERR 975)

:BYE

CPU=725, CONNECT=96, TUE, JUL 26, 1983, 147 PM  
NO CARRIER

AT

OK  
ATDT871

OK

APPLE SSC:6B

AT

OK  
ATDT8713661

CONNECT

:HELLO,MCR,PRO  
ENTER ACCOUNT PASSWORD:  
ENTER USER PASSWORD:  
HP3000 / MPE IV C.B1.00, TUE, JUL 26, 1983, 9:48 PM  
:FILE PRINTER=STDLIST  
:FILE HCCLIST=HCCFILE  
:RUN DSCPBV

ENTER STUDY START DATE YYMMDD:  
810101

ENTER END OF REPORT PERIOD YYMMDD:  
821231

SHALL I PRINT STATUS/END ERRORS (Y/N)?:  
Y

810101 THROUGH 821231 OKAY?

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
NUMBERS OF EXPERIENCES

PAGE 1

RISK: SUPERVISION:	LOW	MODERATE	MODERATE	MODERATE	HIGH	HIGH	MODERATE	HIGH	ANY	ANY	ANY	ANY
RESULT EXPER.	UNSUPER.	UNSUPER.	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	ANY	ANY	UNSUPER.	MINIMUM	MAXIMUM	ANY
FIRST SUCCESS	562	109	146	96	124	113	351	237	671	270	209	1150
FIRST FAILURE	225	87	134	79	149	145	294	294	312	283	218	813
FIRST ANY	787	196	280	169	273	258	645	591	989	553	427	1963
LATER SUCCESS	54	46	61	37	83	84	144	167	100	144	121	365
LATER FAILURE	47	39	86	51	101	104	176	205	86	187	155	428
LATER ANY	101	85	147	88	184	188	320	372	186	331	276	793
ANY SUCCESS	616	155	207	133	207	197	495	404	771	414	330	1515
ANY FAILURE	272	126	220	124	250	249	470	499	398	470	373	1241
ANY ANY	888	281	427	257	457	446	965	903	1169	684	703	2756

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
AVERAGE PC SCORES

RISK: SUPERVISION:	LOW	MODERATE	MODERATE	MODERATE	HIGH	HIGH	MEDIUM	HIGH	HIGH	ANY	ANY	ANY	ANY
RESULT EXPER.	UNSUPER.	UNSUPER.	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	ANY	ANY	UNSUPER.	MINIMUM	MAXIMUM	ANY	ANY
FIRST SUCCESS	1	33	15	22	37	33	23	35	6	25	28	15	77
+/-	27	105	69	96	130	111	89	121	50	102	104	304	245
FIRST FAILURE	194	221	240	267	253	323	241	288	201	247	202	214	210
+/-	200	222	216	183	188	226	210	210	206	202	198	169	110
FIRST ANY	56	117	122	128	155	196	122	175	68	138	169	218	186
+/-	139	191	193	185	196	234	190	216	153	195	218	21	20
LATER SUCCESS		13	57	32	10	16	36	19	6	30	115	99	94
+/-		49	165	135	46	78	131	64	34	294	309	296	
LATER FAILURE	317	239	274	241	311	343	255	327	279	168	199	226	203
+/-	96	220	198	253	199	204	220	197	137	186	132	179	169
LATER ANY	147	114	184	153	176	197	157	220	179	212	231	213	
+/-	171	188	213	235	212	228	215	26	6	27	26	16	
ANY SUCCESS	1	27	27	25	26	26	27	102	48	107	102	82	
+/-	25	93	108	108	105	99	103	304	218	266	306	263	
ANY FAILURE	215	225	253	256	277	331	246	207	201	202	218	209	
+/-	192	221	209	214	194	217	214	180	78	154	174	127	
ANY ANY	67	116	144	136	163	196	134	199	218	159	203	223	196
+/-	146	190	202	203	203	291							

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM B10101 TO B21231

RECORDS READ 005819  
VALID DATE RANGES 002920  
DISTINCT FILE NUMBERS 006005  
INCLUDED RECORDS 002756  
EXCLUDED RECORDS 000164  
MULTIPLE EXPERIENCES 000814  
TOO LATE END DATE 003083  
TOO EARLY START DATE 000002  
INVALID RISK & SUPER 000000  
INVALID STATUS 000000  
INVALID COST 000000  
INVALID TIMES ON PROB 000000

END OF PROGRAM  
1BYE

CPU=101. CONNECT=8. TUE, JUL 26, 1983, 9:55 PM

5  
NO CARRIER

APPLE SSC:0535  
ATDTB713661

CONNECT

:HELLO,MGR,PRO  
ENTER ACCOUNT PASSWORD:  
ENTER USER PASSWORD:  
HP3000 / MPE IV C.B1.00. TUE, JUL 26, 1983, 9:57 PM  
:RUN DOLL1SV

HCCLIST

\*\*\* ERROR 542 OPEN SERVICE NOT GRANTED

+F-I-L-E---I-N-F-O-R-M-A-T-I-O-N---D-I-S-P-L-A-Y+  
| ERROR NUMBER: 52 RESIDUE: 0 |  
| BLOCK NUMBER: 0 NUMREC: 0 |  
+-----+

ABORT :DOLL1SV,PUB,PRO,X0,X47  
PROGRAM ERROR #18 :PROCESS QUIT .PARAM = 42

PROGRAM TERMINATED IN AN ERROR STATE. (CIERR 976)  
:FILE PRINTER=\$STDLIST  
:FILE HCCLIST=HCCFILE  
:RUN DOLL1SV

ENTER STUDY START DATE YYMMDD:  
810101

ENTER END OF REPORT PERIOD YYMMDD:  
821231

SHALL I PRINT STATUS/END ERRORS (Y/N)?:  
Y

810101 THROUGH 821231 OKAY?

TYPE Y TO CONFIRM:  
Y

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 NUMBERS OF EXPERIENCES

PAGE 1

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	671.00	137.00	200.00	116.00	168.00	148.00	453.00	316.00	808.00	368.00	264.00	1440.00
100	9.00	5.00	7.00	2.00	9.00	12.00	14.00	21.00	14.00	16.00	14.00	44.00
200	61.00	26.00	34.00	31.00	48.00	35.00	91.00	83.00	87.00	82.00	66.00	235.00
300	5.00	5.00	6.00	3.00	8.00	7.00	14.00	15.00	10.00	14.00	10.00	34.00
400	6.00	5.00	4.00	0.00	4.00	7.00	9.00	11.00	11.00	8.00	7.00	26.00
500	1.00	1.00	3.00	1.00	1.00	4.00	5.00	5.00	2.00	4.00	5.00	11.00
600	22.00	9.00	14.00	10.00	24.00	24.00	33.00	48.00	31.00	38.00	34.00	103.00
700	0.00	0.00	1.00	0.00	1.00	2.00	1.00	3.00	0.00	2.00	2.00	4.00
800	2.00	3.00	1.00	1.00	3.00	7.00	5.00	10.00	5.00	4.00	8.00	17.00
900	0.00	1.00	2.00	0.00	0.00	3.00	3.00	3.00	1.00	2.00	3.00	6.00
1000	2.00	1.00	0.00	1.00	3.00	2.00	2.00	5.00	3.00	3.00	3.00	9.00
1000+	8.00	3.00	8.00	4.00	4.00	7.00	15.00	11.00	11.00	12.00	11.00	34.00
OK	787.00	196.00	280.00	169.00	273.00	256.00	645.00	531.00	983.00	553.00	427.00	1963.00

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 EXCESS OF RECEIPTS OVER COSTS

PAGE 2

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	HIGH ANY	MEDIUM ANY	HIGH ANY	MEDIUM ANY	HIGH ANY
0	-8.43	-33.86	-39.56	-43.81	-68.52	-66.92	-38.92	-67.77	-12.74	-52.78	-56.76	-31.05	
+/-	113.77	116.15	104.82	91.30	72.19	80.77	105.03	76.20	114.50	92.40	86.16	106.38	
100	-52.11	8.32	-88.80	-76.39	-32.43	-77.87	-52.34	-58.40	-30.53	-57.09	-77.66	-55.18	
+/-	62.19	188.93	46.75	78.37	123.73	15.49	121.18	82.38	119.44	99.36	26.00	91.24	
200	16.17	-21.91	-1.11	-15.52	-43.60	-33.46	-11.96	-39.33	4.79	-25.98	-25.04	-14.32	
+/-	140.87	106.44	188.85	196.33	79.12	84.96	170.73	81.28	132.09	136.40	147.13	138.14	
300	99.47	-28.17	-81.28	104.97	-81.68	-85.14	-22.40	-89.30	35.65	-81.51	-28.11	-31.34	
+/-	289.88	138.09	80.42	190.55	84.33	16.67	138.92	60.65	224.39	79.47	129.18	152.32	
400	24.49	-88.12	-47.10	0.00	-33.85	-48.42	-69.89	-43.12	-26.69	-40.47	-48.42	-36.78	
+/-	118.09	83.29	60.91	0.00	101.16	113.37	72.99	104.09	114.92	77.63	113.37	100.70	
500	-100.10	-82.34	-73.11	-13.44	221.33	-77.75	-69.02	-17.94	-91.22	0.50	-64.89	-45.90	
+/-	0.00	0.00	82.21	0.00	0.00	171.22	64.52	199.69	12.53	161.80	151.05	135.82	
600	-40.39	-90.32	-101.31	-9.22	-74.56	-75.68	-70.40	-75.12	-54.88	-84.42	-56.13	-66.19	
+/-	92.50	61.70	61.89	129.33	92.16	90.34	94.40	90.28	86.81	82.44	105.80	92.20	
700	0.00	0.00	42.51	0.00	-62.08	-116.74	42.51	-98.52	0.00	-9.78	-116.74	-63.26	
+/-	0.00	0.00	0.00	0.00	0.00	45.97	0.00	45.30	0.00	73.95	45.97	79.62	
800	-78.78	3.22	-133.39	-103.27	-84.03	-56.86	-45.40	-65.01	-29.58	-96.37	-62.66	-60.86	
+/-	16.37	156.94	0.00	0.00	13.42	55.34	129.85	47.48	120.00	27.00	53.80	75.00	
900	0.00	-12.72	-88.36	0.00	0.00	-193.01	-63.15	-193.01	-12.72	-88.36	-193.01	-128.08	
+/-	0.00	0.00	23.30	0.00	0.00	95.41	46.68	95.41	0.00	23.30	95.41	97.84	
1000	-106.66	-68.81	0.00	49.94	-130.85	-167.19	-9.43	-145.39	-94.04	-130.85	-94.81	-106.57	
+/-	72.79	0.00	0.00	0.00	29.83	100.72	89.96	58.11	55.91	29.83	144.18	80.83	
1000+	-67.47	-55.75	-92.54	-83.92	-147.24	-104.56	-82.88	-120.08	-64.27	-110.77	-97.06	-91.29	
+/-	65.28	128.90	103.97	81.95	58.50	29.15	97.10	44.72	79.61	92.40	51.31	77.18	
0k	-8.13	-35.12	-42.47	-34.88	-64.28	-67.24	-38.25	-65.72	-13.51	-53.24	-54.49	-33.60	
+/-	116.79	114.20	115.69	121.40	79.98	82.43	116.64	81.12	116.72	100.18	100.81	110.70	

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 AVERAGE GROSS RECEIPTS

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	HIGH ANY	ANY ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY	
0	58.51	50.01	50.49	47.36	25.92	25.25	49.54	25.60	57.07	39.27	34.96	48.47
+/-	113.82	112.36	103.25	92.48	66.13	74.60	103.29	70.11	113.55	88.99	83.49	103.06
100	19.62	82.41	18.18	69.69	52.82	0.00	48.48	22.64	42.04	37.66	9.95	30.24
+/-	58.86	184.29	48.09	98.55	120.17	0.00	115.20	80.59	116.43	94.56	37.24	88.53
200	91.43	61.76	96.56	97.01	54.04	67.07	86.77	59.53	82.56	71.67	81.19	78.36
+/-	141.71	120.07	191.90	40.58	70.78	86.95	135.91	77.77	135.60	135.48	70.29	120.45
300	167.86	96.15	29.12	214.79	38.98	0.00	92.84	20.79	132.00	34.75	64.43	72.08
+/-	287.37	149.78	64.20	214.62	79.78	0.00	144.52	59.89	219.32	70.98	144.92	150.09
400	102.29	26.05	42.61	0.00	63.78	65.21	33.41	64.69	67.64	53.19	65.21	62.54
+/-	123.41	43.76	56.89	0.00	102.65	86.35	47.40	87.38	99.82	77.65	86.35	86.64
500	0.00	0.00	69.69	67.00	309.06	35.00	55.21	103.81	0.00	129.53	57.40	73.19
+/-	0.00	0.00	61.11	0.00	0.00	97.12	53.11	141.36	0.00	129.67	84.28	101.74
600	45.34	10.86	16.81	88.42	49.88	42.17	36.89	46.02	35.33	37.69	55.77	42.95
+/-	94.86	25.94	43.29	121.35	84.89	78.29	79.17	80.88	82.05	73.48	93.52	82.77
700	0.00	0.00	135.00	0.00	75.75	0.00	135.00	25.25	0.00	105.37	0.00	52.68
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.73	0.00	41.89	0.00	65.47
800	15.00	126.04	0.00	0.00	0.00	44.45	75.62	31.11	81.62	0.00	38.89	42.31
+/-	21.21	112.22	0.00	0.00	0.00	84.84	105.18	72.53	100.54	0.00	80.11	79.19
900	0.01	139.38	0.00	0.00	0.00	0.00	0.00	46.46	0.00	139.38	0.00	23.23
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.47	0.00	0.00	0.00	56.89
1000	15.00	145.44	0.00	126.25	0.00	0.00	0.00	135.84	0.00	58.48	0.00	42.08
+/-	21.21	0.00	0.00	0.00	0.00	0.00	0.00	13.53	0.00	76.79	0.00	39.52
1000+	54.42	73.79	25.14	30.04	3.75	6.49	36.17	5.49	59.58	18.01	42.08	59.03
+/-	70.14	127.70	71.13	60.09	7.48	17.18	77.56	19.96	82.38	57.84	37.43	63.37
OK	60.94	53.38	52.26	62.02	35.12	31.51	55.16	93.36	59.43	43.80	43.59	51.58
+/-	116.70	112.00	113.05	92.27	73.12	74.55	107.58	73.77	115.76	95.75	89.27	104.19

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 AVERAGE FINES COLLECTED

PAGE 4

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	39.63	34.00	30.30	32.09	15.02	19.02	31.87	16.89	38.68	23.32	24.76	32.20
+/-	84.88	74.81	65.45	74.67	45.55	62.69	70.65	54.20	83.25	57.66	68.39	75.12
100	16.81	70.70	14.42	50.50	49.23	0.00	39.67	21.10	36.05	34.00	7.21	26.13
+/-	50.44	158.09	38.17	71.41	114.80	0.00	97.40	76.77	99.86	89.04	26.98	78.57
200	64.68	47.00	40.39	43.51	41.95	41.74	43.34	41.51	59.40	40.95	42.57	48.23
+/-	122.05	110.37	61.22	58.87	60.10	58.40	76.94	59.03	118.32	60.19	58.17	86.10
300	121.20	80.80	20.20	134.65	12.61	0.00	66.37	6.72	101.00	15.86	40.40	48.12
+/-	271.01	131.69	49.48	116.52	29.35	0.00	102.52	17.75	202.00	35.36	85.17	122.09
400	41.88	20.20	25.25	0.00	5.20	50.50	22.44	34.02	32.02	15.22	50.50	31.83
+/-	66.91	45.17	50.50	0.00	10.39	65.19	44.53	55.72	56.42	35.41	65.19	53.20
500	0.00	0.00	58.91	0.00	292.30	0.00	35.35	46.46	0.00	102.26	0.00	97.18
+/-	0.00	0.00	52.55	0.00	0.00	0.00	49.21	103.88	0.00	96.73	0.00	73.95
600	37.63	6.59	5.05	73.15	38.44	25.43	26.11	31.93	28.62	26.14	39.45	31.28
+/-	79.42	19.47	18.89	117.94	72.45	61.29	71.72	66.72	68.71	60.46	83.06	70.58
700	0.00	0.00	90.56	0.00	50.50	0.00	90.56	16.83	0.00	70.53	0.00	35.26
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.15	0.00	28.32	0.00	43.87
800	5.40	0.00	0.00	0.00	0.00	7.21	0.00	5.05	2.16	0.00	6.31	3.60
+/-	7.62	0.00	0.00	0.00	0.00	19.08	0.00	15.97	4.80	0.00	17.83	12.33
900	0.00	101.00	0.00	0.00	0.00	0.00	33.66	0.00	101.00	0.00	0.00	16.83
+/-	0.00	0.00	0.00	0.00	0.00	0.00	58.31	0.00	0.00	0.00	0.00	41.23
1000	5.40	101.00	0.00	101.00	0.00	0.00	101.00	0.00	37.27	0.00	33.66	23.64
+/-	7.62	0.00	0.00	0.00	0.00	0.00	0.00	55.45	0.00	58.31	0.00	43.99
1000+	44.82	67.33	0.00	25.25	0.00	3.75	20.20	2.38	50.95	0.00	11.56	20.23
+/-	61.89	116.62	0.00	50.50	0.00	9.90	56.62	7.87	74.24	0.00	30.68	49.44
0k	41.62	36.74	28.91	38.52	23.00	20.60	93.80	21.83	40.63	25.99	27.69	39.70
+/-	89.50	82.24	61.21	75.73	55.48	37.41	72.01	56.38	88.09	58.47	65.78	76.38

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 SUBSEQUENT EXPERIENCES  
 NUMBERS OF EXPERIENCES

PAGE 5

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY ANY	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	70.00	60.00	85.00	58.00	115.00	115.00	204.00	230.00	130.00	201.00	173.00	504.00	
100	4.00	1.00	5.00	6.00	10.00	7.00	12.00	17.00	5.00	15.00	13.00	33.00	
200	13.00	15.00	24.00	6.00	22.00	22.00	45.00	44.00	28.00	46.00	28.00	102.00	
300	1.00	0.00	2.00	1.00	2.00	2.00	3.00	4.00	1.00	4.00	3.00	8.00	
400	1.00	1.00	8.00	9.00	2.00	7.00	12.00	9.00	2.00	10.00	10.00	22.00	
500	1.00	0.00	0.00	0.00	4.00	1.00	0.00	5.00	1.00	4.00	1.00	6.00	
600	4.00	5.00	19.00	8.00	17.00	19.00	26.00	36.00	9.00	30.00	27.00	66.00	
700	0.00	0.00	1.00	2.00	0.00	3.00	3.00	3.00	0.00	1.00	3.00	6.00	
800	2.00	1.00	3.00	2.00	4.00	4.00	6.00	8.00	3.00	7.00	6.00	16.00	
900	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	
1000	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	
1000+	4.00	2.00	4.00	2.00	7.00	8.00	8.00	15.00	6.00	11.00	10.00	27.00	
0k	101.00	85.00	147.00	88.00	184.00	188.00	320.00	372.00	186.00	331.00	276.00	793.00	

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 SUBSEQUENT EXPERIENCES  
 EXCESS OF RECEIPTS OVER COSTS

PAGE 6

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	Moderate ANY	HIGH ANY	ANY ANY	ANY ANY	ANY ANY	
0	-30.63	-41.89	-60.72	-78.58	-47.18	-40.93	-60.26	-43.75	-35.83	-52.97	-53.15	-48.61
+/-	76.53	82.24	64.24	60.21	84.30	109.02	70.06	97.29	79.11	76.49	96.99	84.88
100	26.02	-115.95	-95.95	-120.49	-80.15	-74.22	-109.89	-77.71	-2.37	-85.42	-95.57	-76.83
+/-	118.04	0.00	57.72	45.42	16.46	25.59	47.98	20.17	120.34	34.44	42.00	63.51
200	-31.56	36.07	-8.85	30.57	-84.95	-55.29	11.37	-70.12	4.67	-45.24	-36.89	-29.25
+/-	69.39	165.62	105.96	185.17	68.11	79.94	137.75	74.60	191.11	96.85	111.93	112.15
300	-66.80	0.00	-108.81	-147.66	-69.18	52.55	-121.76	-8.31	-66.80	-88.99	-14.18	-58.16
+/-	0.00	0.00	54.93	0.00	10.05	201.53	44.84	136.06	0.00	39.53	183.49	108.04
400	-197.13	-84.24	-31.41	-89.57	-111.99	-2.84	-50.35	-27.09	-140.68	-47.53	-28.86	-47.51
+/-	0.00	0.00	61.97	19.49	70.62	102.77	57.42	104.22	79.82	68.52	94.24	84.34
500	-103.27	0.00	0.00	0.00	-116.35	-113.42	0.00	-115.77	-103.27	-116.35	-113.42	-113.68
+/-	0.00	0.00	0.00	0.00	111.45	0.00	0.00	96.52	0.00	111.45	0.00	86.49
600	-59.29	-81.91	-105.09	-77.49	-82.14	-63.77	-92.14	-72.44	-71.86	-92.09	-67.83	-79.41
+/-	39.95	47.48	58.79	125.38	76.67	124.50	81.23	103.66	43.21	69.33	122.49	92.27
700	0.00	0.00	-87.10	-86.62	0.00	-148.21	-86.78	-148.21	0.00	-87.10	-123.57	-117.49
+/-	0.00	0.00	0.00	7.81	0.00	41.38	5.48	41.38	0.00	0.00	44.82	42.77
800	70.72	-333.17	-26.09	-94.07	-51.35	-112.70	-99.93	-82.02	-63.91	-40.52	-106.49	-69.64
+/-	225.88	0.00	251.34	27.35	76.49	49.48	198.95	58.06	282.64	155.45	41.35	147.76
900	0.00	0.00	-75.05	0.00	0.00	0.00	-75.05	0.00	0.00	-75.05	0.00	-75.05
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	-49.22	0.00	0.00	0.00	14.24	0.00	0.00	14.24	-49.22	14.24	0.00	-17.49
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.87
1000+	-101.87	-77.26	-200.62	-151.94	-85.95	-137.71	-157.61	-113.56	-93.67	-127.65	-140.56	-124.88
+/-	28.98	12.53	70.06	12.77	81.10	57.18	71.14	71.89	25.40	93.63	50.93	68.75
0k	-33.37	-36.11	-59.81	-77.25	-60.39	-51.12	-58.31	-55.71	-34.62	-60.14	-59.45	-53.91
+/-	80.21	108.19	83.80	82.95	80.21	105.29	91.67	93.72	93.78	81.69	99.32	91.52

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 SUBSEQUENT EXPERIENCES  
 AVERAGE CROSS RECEIPTS

PAGE 7

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	39.63	43.53	25.87	21.98	44.99	57.57	29.95	51.28	41.43	36.81	45.64	41.03
+/-	78.56	80.39	60.99	51.80	81.82	102.90	65.34	92.97	79.13	74.07	90.50	81.26
100	92.66	0.00	10.03	0.00	0.00	8.30	4.18	3.41	74.13	3.34	4.46	14.51
+/-	121.77	0.00	22.43	0.00	0.00	21.95	14.46	14.07	113.31	12.92	16.09	49.30
200	42.73	124.05	87.89	123.90	27.38	41.35	104.75	34.36	86.29	58.95	59.04	66.48
+/-	60.19	161.84	101.20	214.26	46.36	74.39	138.69	61.78	129.99	84.68	118.40	107.75
300	0.00	0.00	0.00	0.00	0.00	135.84	0.00	67.92	0.00	0.00	90.56	33.96
+/-	0.00	0.00	0.00	0.00	0.00	192.11	0.00	135.84	0.00	0.00	156.86	96.05
400	0.00	0.00	61.62	1.75	0.00	82.84	41.52	64.43	0.00	49.30	58.51	49.00
+/-	0.00	0.00	68.48	3.00	0.00	102.24	62.19	95.78	0.00	65.74	92.22	75.95
500	0.00	0.00	0.00	0.00	25.83	0.00	0.00	20.67	0.00	25.83	0.00	17.22
+/-	0.00	0.00	0.00	0.00	51.67	0.00	0.00	46.22	0.00	51.67	0.00	42.19
600	49.99	16.16	0.00	38.42	17.74	49.14	14.92	34.31	31.19	10.05	45.96	27.62
+/-	60.03	35.12	0.00	108.67	56.69	111.52	61.71	90.10	48.19	43.05	108.69	78.24
700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800	170.18	0.00	120.19	0.00	42.48	0.00	60.09	21.24	113.45	75.78	0.00	54.43
+/-	240.68	0.00	208.17	0.00	84.96	0.00	147.20	60.07	196.51	140.64	0.00	123.11
900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	16.00	0.00	0.00	0.00	414.00	0.00	0.00	414.00	16.00	414.00	0.00	215.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	281.43
1000+	6.31	0.00	0.00	0.00	50.20	1.25	0.00	24.09	4.20	31.94	1.00	14.32
+/-	12.61	0.00	0.00	0.00	89.99	3.46	0.00	60.56	10.30	69.81	3.16	46.07
0k	42.40	53.57	35.63	26.48	98.67	49.91	37.88	44.35	47.50	37.32	42.44	41.49
+/-	79.87	100.90	74.20	78.44	77.88	96.24	83.36	87.71	90.01	76.17	91.46	85.03

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 SUBSEQUENT EXPERIENCES  
 AVERAGE FINES COLLECTED

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MODERATE ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY
0	31.13	35.41	18.47	15.59	17.83	32.50	22.63	25.16	33.10	18.10	26.83	24.97
+/-	65.09	69.46	48.70	40.89	49.75	65.67	54.18	58.59	67.43	49.18	58.96	57.91
100	82.06	0.00	5.20	0.00	0.00	0.00	2.58	0.00	65.65	2.06	0.00	10.88
+/-	107.87	0.00	13.86	0.00	0.00	0.00	8.94	0.00	100.36	8.00	0.00	42.90
200	34.65	62.75	64.38	120.70	19.62	34.66	71.35	27.14	49.70	42.97	53.09	47.60
+/-	52.00	72.71	93.15	212.66	38.55	71.96	108.36	57.56	64.40	75.09	117.03	85.45
300	0.00	0.00	0.00	0.00	0.00	126.25	0.00	63.12	0.00	0.00	84.16	31.56
+/-	0.00	0.00	0.00	0.00	0.00	178.54	0.00	126.25	0.00	0.00	145.78	89.27
400	0.00	0.00	44.20	0.00	0.00	58.43	29.46	45.45	0.00	35.36	40.90	34.66
+/-	0.00	0.00	49.86	0.00	0.00	83.68	45.34	76.92	0.00	47.76	73.99	58.76
500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600	37.87	0.00	0.00	33.62	10.39	36.60	10.34	24.23	16.83	5.89	35.72	19.58
+/-	48.34	0.00	0.00	95.10	29.68	96.95	52.74	73.57	35.71	22.63	94.57	64.49
700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800	151.50	0.00	101.00	0.00	37.68	0.00	50.50	18.84	101.00	64.82	0.00	47.29
+/-	214.25	0.00	174.94	0.00	75.37	0.00	123.70	53.29	174.94	119.10	0.00	106.63
900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	0.00	1.43
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000+	6.31	0.00	0.00	0.00	40.51	0.00	0.00	18.90	4.20	23.77	0.00	11.43
+/-	12.61	0.00	0.00	0.00	77.43	0.00	0.00	54.89	10.30	63.36	0.00	41.39
0k	34.06	36.07	25.99	21.56	16.81	31.15	27.45	24.06	34.98	20.89	28.09	26.70
+/-	68.34	67.47	61.74	72.27	46.31	68.99	66.32	59.23	67.77	53.82	70.06	63.36

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 NUMBERS OF EXPERIENCES

PAGE 9

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	Moderate ANY	HIGH ANY	HIGH ANY	ANY ANY	ANY ANY	ANY ANY
0	741.00	197.00	286.00	174.00	283.00	263.00	657.00	546.00	938.00	569.00	437.00	1944.00
100	13.00	6.00	12.00	8.00	19.00	19.00	26.00	38.00	19.00	31.00	27.00	77.00
200	74.00	41.00	58.00	37.00	70.00	57.00	136.00	127.00	115.00	128.00	94.00	337.00
300	6.00	5.00	8.00	4.00	10.00	9.00	17.00	19.00	11.00	18.00	13.00	42.00
400	7.00	6.00	12.00	3.00	6.00	14.00	21.00	20.00	13.00	18.00	17.00	48.00
500	2.00	1.00	3.00	1.00	5.00	5.00	5.00	10.00	3.00	8.00	6.00	17.00
600	26.00	14.00	27.00	18.00	41.00	43.00	59.00	84.00	40.00	68.00	61.00	169.00
700	0.00	0.00	2.00	2.00	1.00	5.00	4.00	6.00	0.00	3.00	7.00	10.00
800	4.00	4.00	4.00	3.00	7.00	11.00	11.00	18.00	8.00	11.00	14.00	33.00
900	0.00	1.00	3.00	0.00	0.00	3.00	4.00	3.00	1.00	3.00	3.00	7.00
1000	3.00	1.00	0.00	1.00	4.00	2.00	2.00	6.00	4.00	4.00	3.00	11.00
1000+	12.00	5.00	12.00	6.00	11.00	15.00	23.00	26.00	17.00	23.00	21.00	61.00
OK	888.00	281.00	427.00	257.00	457.00	446.00	965.00	903.00	1169.00	884.00	703.00	2756.00

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 EXCESS OF RECEIPTS OVER COSTS

PAGE 10

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	HIGH UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	10.53	-36.31	-45.92	-55.40	-59.85	-55.29	-45.55	-57.65	-15.94	-52.85	-55.33	-35.60
+/-	110.94	106.82	94.85	83.70	77.90	94.90	96.01	86.45	110.53	87.04	90.51	101.51
100	-28.07	-12.39	-91.78	-109.46	-57.55	-76.52	-78.90	-67.03	-23.12	-70.80	-86.28	-64.46
+/-	86.43	176.43	49.17	52.61	86.83	19.18	97.49	62.76	116.98	75.48	35.14	80.78
200	7.79	-0.70	-4.31	-8.05	-56.60	-41.89	-4.24	-50.00	4.76	-32.91	-28.57	-18.84
+/-	131.55	192.22	158.72	192.82	77.78	82.81	160.49	80.09	131.27	123.60	137.11	130.83
300	71.76	-28.17	-88.16	41.81	-79.18	-54.54	-39.93	-67.51	26.39	-89.17	-24.89	-36.45
+/-	268.02	198.09	72.20	200.40	74.63	94.72	132.12	83.26	215.10	71.53	134.78	144.16
400	-7.16	-87.47	-36.64	-89.57	-59.90	-25.63	-58.72	-35.91	-44.23	-44.39	-36.91	-41.70
+/-	136.52	74.52	59.29	19.49	93.62	106.61	63.58	101.70	115.62	70.57	99.57	92.75
500	-101.68	-82.34	-73.11	-13.44	-48.82	-84.89	-63.02	-66.85	-95.23	-57.92	-72.98	-69.82
+/-	2.00	0.00	82.21	0.00	179.23	149.14	64.52	155.60	11.27	142.98	136.54	122.40
600	-43.30	-87.32	-103.13	-39.56	-77.70	-70.41	-79.98	-73.97	-58.70	-87.80	-61.31	-71.35
+/-	86.19	55.26	59.28	128.63	85.14	105.58	88.76	95.65	78.94	76.47	112.66	92.17
700	0.00	0.00	-22.29	-86.62	-62.08	-135.62	-54.45	-123.36	0.00	-35.55	-121.62	-95.80
+/-	0.00	0.00	91.65	7.81	0.00	41.00	64.80	47.99	0.00	68.75	41.27	62.56
800	-4.03	-80.87	-52.92	-97.14	-65.35	-77.16	-75.14	-72.57	-42.45	-60.83	-81.44	-63.12
+/-	156.67	211.45	212.11	20.03	57.37	58.02	165.37	56.36	177.11	124.54	52.18	114.31
900	0.00	-12.72	-63.92	0.00	0.00	-193.01	-66.12	-193.01	-12.72	-83.92	-193.01	-120.50
+/-	0.00	0.00	18.17	0.00	0.00	95.41	38.57	93.41	0.00	18.17	95.41	91.53
1000	-87.51	-68.81	0.00	49.94	-94.58	-167.19	-9.43	-118.78	-82.83	-94.58	-94.81	-90.37
+/-	61.22	0.00	0.00	0.00	76.53	100.72	89.96	89.36	50.85	76.53	144.18	82.01
1000+	-78.94	-64.35	-128.57	-106.39	-108.23	-122.24	-108.88	-116.32	-74.65	-118.84	-117.77	-106.16
0k	36.82	92.12	105.11	72.77	77.00	47.87	94.53	60.87	66.24	91.26	54.60	74.88
+/-	-11.00	-35.42	-48.44	-49.39	-62.72	-60.45	-44.90	-61.60	-16.87	-55.82	-56.40	-39.45
	113.47	112.22	106.02	111.43	80.01	92.99	109.36	86.62	119.61	93.70	100.18	105.92

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 AVERAGE GROSS RECEIPTS

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	56.73	48.04	43.08	38.90	33.67	39.38	43.46	36.42	54.90	38.40	39.19	46.54
+/-	111.07	103.50	93.17	81.93	73.38	89.38	93.57	81.45	109.53	83.97	86.39	97.91
100	42.09	68.68	14.78	17.42	25.02	3.05	28.03	14.04	50.49	21.06	7.31	23.50
+/-	85.14	168.23	98.24	49.27	84.57	13.30	36.60	60.75	113.38	69.66	28.65	74.29
200	82.87	84.55	92.98	101.37	45.66	57.14	92.72	50.81	83.47	67.10	74.55	74.77
+/-	132.09	138.20	159.60	88.59	64.98	82.68	136.19	73.37	133.70	119.52	87.33	116.72
300	139.88	96.15	21.84	161.09	31.18	30.18	76.46	30.71	120.00	27.09	70.46	64.82
+/-	266.01	149.78	55.90	205.53	72.25	90.56	135.28	79.09	211.84	63.82	141.36	141.20
400	87.68	21.71	55.28	1.75	42.52	74.03	38.04	64.57	57.23	51.03	61.27	56.34
+/-	119.10	40.56	62.88	3.00	86.06	91.38	55.16	88.77	94.60	69.10	87.13	81.34
500	0.00	0.00	69.69	67.00	82.48	44.00	55.21	63.24	0.00	77.68	47.83	53.44
+/-	0.00	0.00	61.11	0.00	134.33	87.64	53.11	108.83	0.00	106.87	78.94	88.24
600	46.06	12.75	8.71	66.20	36.55	45.25	27.21	41.00	34.40	25.50	51.43	36.97
+/-	89.41	28.67	31.78	115.38	75.41	99.27	72.25	84.63	75.22	63.05	99.77	81.14
700	0.00	0.00	67.50	0.00	75.75	0.00	33.75	12.62	0.00	70.25	0.00	21.07
+/-	0.00	0.00	95.46	0.00	0.00	0.00	67.50	30.92	0.00	67.66	0.00	46.57
800	92.59	94.53	90.14	0.00	24.27	28.29	67.15	26.72	93.36	48.22	22.22	48.18
+/-	165.79	111.21	180.28	0.00	64.23	69.44	123.79	65.54	130.69	115.46	62.08	101.38
900	0.00	139.38	0.00	0.00	0.00	0.00	34.84	0.00	139.38	0.00	0.00	19.91
+/-	0.00	0.00	0.00	0.00	0.00	0.00	69.69	0.00	0.00	0.00	0.00	52.68
1000	15.33	145.44	0.00	126.25	103.50	0.00	135.84	69.00	47.86	103.50	42.08	66.51
+/-	15.00	0.00	0.00	0.00	207.00	0.00	13.33	169.01	65.20	207.00	72.88	126.87
1000+	38.38	44.23	16.76	20.03	33.31	3.69	29.59	16.22	40.10	24.67	8.36	23.36
+/-	61.11	98.91	58.08	49.06	69.27	11.83	64.33	47.12	70.86	62.76	27.51	56.52
0k	58.83	53.44	46.54	49.85	36.55	39.27	49.43	37.89	57.53	41.37	43.14	48.68
+/-	113.24	108.58	101.59	89.24	75.01	84.76	100.54	79.94	112.11	88.94	86.52	99.15

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 AVERAGE FINES COLLECTED

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE UNSUPER.	MODERATE UNSUPER.	HIGH MINIMUM	HIGH MAXIMUM	HIGH ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	38.83	34.43	26.74	26.59	16.16	24.91	29.01	20.38	37.90	21.48	25.58	30.33
+/-	83.29	73.05	61.06	65.71	47.23	64.29	66.08	56.19	81.23	54.83	64.75	71.11
100	36.89	58.91	11.00	12.62	23.32	0.00	22.55	11.66	43.84	18.55	3.74	19.60
+/-	74.75	144.32	29.70	35.71	80.59	0.00	72.96	57.44	98.09	65.25	19.42	65.76
200	39.40	52.76	50.31	56.03	34.52	39.01	52.61	36.53	57.04	41.68	45.71	48.04
+/-	113.23	97.59	76.24	100.00	54.92	63.44	89.15	58.69	107.52	65.65	79.78	85.78
300	101.00	80.80	15.15	101.00	10.09	28.05	54.65	18.60	91.81	12.33	50.50	44.96
+/-	247.40	131.69	42.85	116.62	21.26	84.17	96.02	58.81	194.04	31.65	96.70	115.76
400	35.90	16.83	37.88	0.00	3.46	54.46	26.45	39.16	27.10	26.41	44.85	33.13
+/-	63.10	41.23	48.63	0.00	8.49	72.19	44.00	64.49	52.89	42.78	68.50	55.23
500	0.00	0.00	58.91	0.00	46.46	0.00	35.35	23.23	0.00	51.13	0.00	24.06
+/-	0.00	0.00	52.55	0.00	103.88	0.00	49.21	73.45	0.00	83.65	0.00	61.26
600	37.67	4.24	2.61	55.58	26.81	30.37	19.16	28.63	25.97	17.20	37.81	26.71
+/-	74.69	15.62	13.60	107.22	59.72	78.21	64.03	69.40	62.59	48.40	87.60	68.31
700	0.00	0.00	45.28	0.00	50.50	0.00	22.64	8.41	0.00	47.02	0.00	14.10
+/-	0.00	0.00	64.03	0.00	0.00	0.00	45.28	20.62	0.00	45.38	0.00	31.19
800	78.45	0.00	75.75	0.00	21.33	4.59	27.54	11.18	39.22	41.25	3.60	24.78
+/-	149.78	0.00	151.50	0.00	56.97	15.20	91.36	36.80	106.64	97.88	13.49	76.79
900	0.00	101.00	0.00	0.00	0.00	0.00	25.25	0.00	101.00	0.00	0.00	14.42
+/-	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00	0.00	0.00	0.00	38.17
1000	4.56	101.00	0.00	101.00	0.00	0.00	101.00	0.00	28.67	0.00	33.66	19.60
+/-	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.44	0.00	58.31	40.36
1000+	31.98	40.40	0.00	16.83	25.77	1.75	13.17	11.91	34.46	12.32	6.06	16.33
+/-	53.29	90.33	0.00	41.23	63.36	6.71	46.22	42.17	63.31	44.70	22.47	45.89
OK	40.76	36.54	27.90	32.71	20.50	25.05	31.70	22.75	39.75	24.08	27.85	31.69
+/-	87.36	77.94	61.34	74.86	52.02	62.70	70.21	57.55	85.18	56.80	67.45	72.93

**CONTINUED**

**1 OF 3**

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231

RECORDS READ 006819  
VALID DATE RANGES 002920  
DISTINCT FILE NUMBERS 006005  
INCLUDED RECORDS 002756  
EXCLUDED RECORDS 000164  
MULTIPLE EXPERIENCES 000814  
TOO LATE END DATE 003083  
TOO EARLY START DATE 000002  
INVALID RISK & SUPER 000000  
INVALID STATUS 000000  
INVALID COST 000000  
INVALID TIMES ON PROB 000000

END OF PROGRAM

:RUN DOLL2SV

ENTER STUDY START DATE YYMMDD:  
810101

ENTER END OF REPORT PERIOD YYMMDD:  
821231

SHALL I PRINT STATUS/END ERRORS (Y/N)?:

Y

810101 THROUGH 821231 OKAY?

TYPE Y TO CONFIRM:

Y

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 NUMBERS OF EXPERIENCES

PAGE 1

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY ANY	ANY ANY	ANY ANY	
0	671.00	137.00	200.00	116.00	168.00	148.00	453.00	316.00	808.00	368.00	264.00	1440.00
100	9.00	5.00	7.00	2.00	9.00	12.00	14.00	21.00	14.00	16.00	14.00	44.00
200	61.00	26.00	34.00	31.00	48.00	95.00	91.00	83.00	87.00	82.00	55.00	235.00
300	5.00	5.00	6.00	3.00	8.00	7.00	14.00	15.00	10.00	14.00	10.00	34.00
400	5.00	5.00	4.00	0.00	4.00	7.00	9.00	11.00	11.00	8.00	7.00	26.00
500	1.00	1.00	3.00	1.00	1.00	4.00	5.00	5.00	2.00	4.00	5.00	11.00
600	22.00	9.00	14.00	10.00	24.00	24.00	33.00	48.00	31.00	38.00	34.00	103.00
700	0.00	0.00	1.00	0.00	1.00	2.00	1.00	3.00	0.00	2.00	2.00	4.00
800	2.00	3.00	1.00	1.00	3.00	7.00	5.00	10.00	5.00	4.00	8.00	17.00
900	0.00	1.00	2.00	0.00	0.00	3.00	3.00	3.00	1.00	2.00	3.00	6.00
1000	2.00	1.00	0.00	1.00	3.00	2.00	2.00	5.00	3.00	3.00	3.00	9.00
1000+	8.00	3.00	8.00	4.00	4.00	7.00	15.00	11.00	11.00	12.00	11.00	34.00
OK	787.00	196.00	280.00	169.00	273.00	258.00	645.00	531.00	983.00	553.00	427.00	1963.00

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 AVERAGE RESTITUTION RECEIVED

PAGE 2

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY	
0	11.55	8.74	13.95	9.79	6.66	2.19	11.31	4.57	11.07	10.62	5.53	9.94
+/-	58.08	65.73	74.55	47.60	40.57	13.71	66.10	31.08	59.60	61.45	33.32	56.23
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	12.84	6.99	46.64	41.98	0.84	12.51	33.72	5.76	11.09	19.83	26.35	18.43
+/-	69.03	35.65	179.34	36.43	4.00	58.44	113.49	38.20	60.84	116.74	51.17	82.72
300	35.14	0.00	2.52	67.33	18.93	0.00	15.51	10.10	17.57	11.90	20.20	16.01
+/-	78.59	0.00	6.16	116.62	53.56	0.00	53.82	39.12	55.57	40.37	63.87	51.09
400	41.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.40	0.00	0.00	9.47
+/-	100.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.30	0.00	0.00	48.32
500	0.00	0.00	0.00	67.00	0.00	50.00	13.40	40.00	0.00	0.00	53.40	24.27
+/-	0.00	0.00	0.00	0.00	0.00	100.00	29.95	89.44	0.00	0.00	86.93	61.64
600	1.28	0.00	5.55	5.00	4.20	7.41	3.87	5.81	0.91	4.70	5.70	4.22
+/-	6.00	0.00	20.78	15.81	20.62	35.33	15.84	29.26	5.00	20.40	31.45	22.00
700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800	0.00	61.84	0.00	0.00	0.00	33.63	37.10	23.54	37.10	0.00	29.43	24.76
+/-	0.00	107.12	0.00	0.00	0.00	82.87	82.97	69.58	82.97	0.00	77.64	67.60
900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000+	0.00	0.00	25.14	0.00	0.00	0.00	13.41	0.00	0.00	16.76	0.00	5.91
+/-	0.00	0.00	71.13	0.00	0.00	0.00	51.94	0.00	0.00	58.08	0.00	34.50
0k	11.41	7.98	16.68	16.30	5.17	5.33	13.94	5.25	10.73	11.00	9.67	10.57
+/-	57.91	58.66	89.78	46.87	33.70	32.02	71.58	32.86	58.04	68.32	38.90	57.69

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 AVERAGE COSTS COLLECTED

PAGE 3

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MODERATE ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	7.32	7.27	6.23	5.47	4.23	4.02	6.35	4.13	7.32	5.32	4.66	6.32
+/-	13.93	14.42	11.92	10.30	15.10	11.18	12.37	13.38	14.00	13.49	10.82	13.38
100	2.80	11.71	3.75	19.19	3.59	0.00	8.80	1.53	5.98	3.66	2.74	4.10
+/-	8.37	26.19	9.90	27.13	7.28	0.00	18.60	4.90	16.55	8.19	10.25	11.89
200	13.90	7.76	9.53	11.51	11.85	12.81	9.70	12.25	12.07	10.89	12.20	11.69
+/-	15.78	12.77	13.89	13.53	14.53	23.75	19.38	18.84	15.13	14.21	19.49	16.12
300	11.51	15.35	6.39	12.79	7.43	0.00	10.96	3.96	13.43	6.98	3.83	7.95
+/-	25.73	21.00	15.65	12.61	10.58	0.00	16.49	8.43	22.25	12.45	8.54	15.17
400	19.33	5.85	17.36	0.00	58.58	14.71	10.97	30.66	13.21	37.97	14.71	21.29
+/-	21.84	13.08	23.71	0.00	104.76	22.05	18.25	63.83	18.89	73.68	22.05	43.69
500	0.00	0.00	10.77	0.00	76.76	5.00	6.46	19.35	0.00	27.27	4.00	11.73
+/-	0.00	0.00	9.20	0.00	0.00	10.00	9.06	39.23	0.00	33.94	8.94	23.04
600	6.42	4.26	6.20	10.27	7.22	9.32	6.90	8.27	5.79	6.84	9.60	7.44
+/-	11.83	8.43	16.70	9.11	13.98	17.23	12.65	15.30	10.86	14.49	15.17	13.67
700	0.00	0.00	44.44	0.00	25.25	0.00	44.44	8.41	0.00	34.84	0.00	17.42
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.56	0.00	13.56	0.00	21.59
800	9.59	64.19	0.00	0.00	0.00	3.60	38.51	2.52	42.35	0.00	3.15	13.94
+/-	13.56	86.83	0.00	0.00	0.00	9.54	70.75	7.94	68.63	0.00	8.89	39.64
900	0.00	38.38	0.00	0.00	0.00	0.00	12.79	0.00	98.38	0.00	0.00	6.39
+/-	0.00	0.00	0.00	0.00	0.00	0.00	22.14	0.00	0.00	0.00	0.00	15.65
1000	9.59	44.44	0.00	25.25	0.00	0.00	34.84	0.00	21.21	0.00	8.41	9.87
+/-	19.56	0.00	0.00	0.00	0.00	0.00	19.56	0.00	22.27	0.00	14.56	16.19
1000+	9.59	6.39	0.00	4.79	3.75	2.74	2.55	3.10	8.72	1.25	3.48	4.39
+/-	10.25	11.05	0.00	9.59	7.48	7.21	6.71	6.93	10.00	4.24	7.75	8.06
0k	7.90	8.65	6.67	7.19	6.94	5.56	7.41	6.27	8.05	6.80	6.21	7.30
+/-	14.18	18.36	12.69	11.36	19.63	14.28	14.35	17.26	15.10	16.49	13.19	15.13

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 FIRST EXPERIENCES  
 AVERAGE COSTS INCURRED

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE UNSUPER.	MODERATE UNSUPER.	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	66.95	83.88	90.05	91.17	94.44	92.17	88.47	93.38	69.82	92.05	91.73	79.52
+/-	11.18	30.46	30.59	24.92	29.93	32.02	29.31	30.89	17.32	30.93	29.07	26.04
100	71.73	74.09	106.98	146.08	85.26	77.87	100.82	81.04	72.57	94.76	87.61	85.43
+/-	13.60	15.13	29.31	20.17	34.21	15.49	33.29	24.78	19.64	33.03	29.12	27.95
200	75.25	83.68	97.68	112.54	97.65	100.54	98.74	98.87	77.77	97.66	106.18	92.69
+/-	27.20	20.54	27.78	43.61	28.71	37.19	34.15	32.37	25.57	28.16	40.47	33.35
300	68.38	124.32	110.40	109.82	120.66	85.14	115.25	104.09	96.35	116.26	92.55	103.43
+/-	3.46	88.23	38.38	42.85	55.10	16.67	57.38	44.42	65.83	47.21	27.11	48.80
400	77.79	114.17	89.71	0.00	97.63	113.64	103.30	107.82	94.33	93.67	113.64	99.32
+/-	18.97	59.92	9.00	0.00	8.72	69.47	44.63	50.05	44.47	9.22	63.47	43.13
500	100.10	82.34	142.80	80.44	87.73	132.75	118.23	123.75	91.22	129.03	122.29	119.09
+/-	0.00	0.00	84.26	0.00	0.00	122.54	68.42	108.02	12.53	74.09	108.67	81.16
600	85.74	101.18	118.12	97.64	124.44	117.85	107.30	121.15	90.22	122.11	111.91	109.15
+/-	33.82	53.05	45.52	23.17	66.36	43.58	42.27	55.63	40.02	58.94	39.46	49.08
700	0.00	0.00	92.49	0.00	137.83	116.74	92.49	123.77	0.00	115.16	116.74	115.95
+/-	0.00	0.00	0.00	0.00	0.00	45.97	0.00	34.70	0.00	32.05	45.97	32.36
800	93.78	122.82	133.39	103.27	84.03	101.32	121.02	96.19	111.20	96.37	101.56	103.17
+/-	4.80	45.04	0.00	0.00	13.42	35.62	33.66	30.92	35.68	27.00	32.98	31.05
900	0.00	152.10	88.36	0.00	0.00	193.01	109.61	193.01	152.10	88.36	193.01	151.31
+/-	0.00	0.00	23.30	0.00	0.00	95.41	40.31	95.41	0.00	23.30	95.41	79.86
1000	121.66	214.25	0.00	76.31	130.85	167.19	143.28	145.39	152.52	130.85	136.89	140.09
+/-	51.57	0.00	0.00	0.00	29.83	100.72	97.53	58.11	64.71	29.83	88.46	57.61
1000+	121.89	129.48	117.69	113.97	150.99	111.65	119.05	125.58	129.96	128.79	112.11	121.83
+/-	79.50	18.22	54.83	31.26	65.62	24.10	42.33	45.23	62.13	57.93	25.38	50.34
OK	69.07	88.50	94.74	96.91	99.40	98.75	93.41	99.09	72.95	97.04	98.03	85.19
+/-	17.38	36.12	33.60	30.76	37.19	40.53	33.79	38.81	29.71	35.45	36.95	32.89

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 SUBSEQUENT EXPERIENCES  
 NUMBERS OF EXPERIENCES

RISK DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	70.00	60.00	86.00	58.00	115.00	115.00	204.00	230.00	130.00	201.00	173.00	504.00
100	4.00	1.00	5.00	6.00	10.00	7.00	12.00	17.00	5.00	15.00	13.00	39.00
200	13.00	15.00	24.00	6.00	22.00	22.00	45.00	44.00	28.00	46.00	28.00	102.00
300	1.00	0.00	2.00	1.00	2.00	2.00	3.00	4.00	1.00	4.00	3.00	8.00
400	1.00	1.00	8.00	3.00	2.00	7.00	12.00	9.00	2.00	10.00	10.00	22.00
500	1.00	0.00	0.00	0.00	4.00	1.00	0.00	5.00	1.00	4.00	1.00	6.00
600	4.00	5.00	19.00	8.00	17.00	19.00	26.00	36.00	9.00	30.00	27.00	66.00
700	0.00	0.00	1.00	2.00	0.00	3.00	3.00	3.00	0.00	1.00	5.00	5.00
800	2.00	1.00	3.00	2.00	4.00	4.00	6.00	8.00	3.00	7.00	6.00	16.00
900	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
1000	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	2.00
1000+	4.00	2.00	4.00	2.00	7.00	8.00	8.00	15.00	6.00	11.00	10.00	27.00
OK	101.00	85.00	147.00	88.00	184.00	188.00	320.00	372.00	186.00	331.00	275.00	793.00

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM B10101 TO B21291  
 SUBSEQUENT EXPERIENCES  
 AVERAGE RESTITUTION RECEIVED

PAGE 6

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MODERATE ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	1.91	0.58	3.14	1.74	23.17	19.94	1.99	21.56	1.30	14.60	13.84	10.91
+/-	16.00	4.47	23.92	13.23	66.66	76.58	17.20	71.66	12.12	53.62	63.40	50.87
100	0.00	0.00	0.00	0.00	0.00	8.30	0.00	3.41	0.00	0.00	4.46	1.76
+/-	0.00	0.00	0.00	0.00	0.00	21.95	0.00	14.07	0.00	0.00	15.09	10.10
200	0.00	47.62	10.81	0.00	0.00	0.90	21.64	0.45	25.51	5.64	0.71	9.74
+/-	0.00	136.55	36.73	0.00	0.00	4.24	83.64	3.00	101.26	26.81	3.74	56.25
300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400	0.00	0.00	0.00	0.00	0.00	5.08	0.00	4.79	0.00	0.00	4.26	1.93
+/-	0.00	0.00	0.00	0.00	0.00	16.09	0.00	14.18	0.00	0.00	13.45	9.06
500	0.00	0.00	0.00	0.00	25.83	0.00	0.00	20.67	0.00	25.83	0.00	17.22
+/-	0.00	0.00	0.00	0.00	51.67	0.00	0.00	46.22	0.00	51.67	0.00	42.19
600	0.00	16.16	0.00	0.00	5.22	5.19	3.10	5.68	8.97	9.52	3.65	4.32
+/-	0.00	36.12	0.00	0.00	25.63	22.65	15.84	23.75	26.93	19.25	19.00	20.07
700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	414.00	0.00	0.00	414.00	0.00	414.00	0.00	207.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	292.74
1000+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0K	1.32	9.77	3.60	1.14	17.86	13.37	4.56	15.59	5.18	11.33	9.47	9.32
+/-	13.34	59.29	29.60	10.72	61.98	61.02	34.94	61.45	41.32	49.26	50.99	48.16

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM B10101 TO B21231  
 SUBSEQUENT EXPERIENCES  
 AVERAGE COSTS COLLECTED

PAGE 7

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	6.59	7.52	4.24	4.64	3.98	5.12	5.32	4.55	7.02	4.09	4.96	5.15
+/-	12.65	12.53	9.70	10.95	13.00	9.95	11.00	11.58	12.57	11.70	10.30	11.49
100	10.60	0.00	3.83	0.00	0.00	0.00	1.59	0.00	8.48	1.27	0.00	1.86
+/-	13.89	0.00	8.54	0.00	0.00	0.00	3.48	0.00	12.92	4.90	0.00	6.32
200	8.08	13.66	12.69	9.19	7.75	5.78	11.75	6.77	11.07	10.33	5.22	9.13
+/-	15.59	18.03	14.32	7.81	11.58	8.37	15.13	10.00	16.88	13.19	8.19	13.30
300	0.00	0.00	0.00	0.00	0.00	9.59	0.00	4.79	0.00	0.00	6.39	2.39
+/-	0.00	0.00	0.00	0.00	0.00	13.56	0.00	9.59	0.00	0.00	11.05	6.78
400	0.00	0.00	17.42	1.75	0.00	18.32	12.05	14.25	0.00	13.93	13.35	12.40
+/-	0.00	0.00	22.36	3.00	0.00	23.39	19.57	21.79	0.00	21.05	20.74	19.75
500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600	12.12	0.00	0.00	4.79	1.12	7.33	1.47	4.40	5.38	0.63	6.58	3.71
+/-	14.56	0.00	0.00	13.56	4.58	15.68	7.48	12.08	10.95	3.46	14.87	10.82
700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800	18.68	0.00	19.19	0.00	4.79	0.00	9.59	2.39	12.45	10.96	0.00	7.13
+/-	26.42	0.00	33.23	0.00	9.59	0.00	23.49	6.78	21.56	21.75	0.00	16.85
900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	19.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.13	0.00	0.00
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.27
1000+	0.00	0.00	0.00	0.00	9.69	1.25	0.00	5.19	0.00	6.16	1.00	2.88
+/-	0.00	0.00	0.00	0.00	12.53	3.46	0.00	9.59	0.00	10.86	3.16	7.48
0k	7.00	7.72	6.02	3.77	3.99	5.39	5.85	4.70	7.33	4.89	4.87	5.46
+/-	12.92	13.34	12.37	10.00	11.62	11.00	12.08	11.91	13.08	12.00	10.72	11.87

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 SUBSEQUENT EXPERIENCES  
 AVERAGE COSTS INCURRED

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	70.27	85.42	86.59	100.56	92.17	97.91	90.22	95.04	77.26	89.78	98.80	89.65
+/-	14.93	26.76	25.42	36.62	26.59	40.52	30.33	34.32	22.45	26.59	39.17	31.69
100	66.64	115.95	105.99	120.49	80.15	82.52	114.07	81.12	76.50	88.76	100.04	91.35
+/-	5.29	0.00	49.24	45.42	16.46	20.52	43.27	17.66	22.52	32.03	38.18	33.59
200	74.29	87.97	96.75	93.33	112.33	96.65	93.37	104.49	81.62	104.20	95.94	95.73
+/-	17.52	20.78	34.71	34.26	44.89	28.90	30.28	38.14	20.22	40.22	29.48	33.91
300	66.80	0.00	108.81	147.66	69.18	83.29	121.76	76.23	66.80	88.99	104.74	92.12
+/-	0.00	0.00	54.93	0.00	10.05	9.98	44.84	11.35	0.00	39.53	37.75	35.24
400	197.13	84.24	93.04	91.32	111.99	85.69	91.87	91.53	140.68	96.83	87.38	96.52
+/-	0.00	0.00	17.78	17.44	70.62	18.92	16.22	32.03	79.82	29.39	17.69	32.16
500	103.27	0.00	0.00	0.00	142.19	113.42	0.00	136.44	103.27	142.19	113.42	130.91
+/-	0.00	0.00	0.00	0.00	76.60	0.00	67.57	0.00	76.60	0.00	61.94	
600	109.29	98.07	105.09	115.91	99.89	112.91	107.07	105.76	103.06	102.14	113.80	107.04
+/-	45.23	31.29	58.79	23.94	48.57	43.92	44.93	45.98	35.94	52.34	38.63	44.83
700	0.00	0.00	87.10	86.62	0.00	148.21	86.78	148.21	0.00	87.10	123.57	117.49
+/-	0.00	0.00	0.00	7.81	0.00	41.38	5.48	41.38	0.00	0.00	44.82	42.77
800	99.46	333.17	146.28	94.07	93.83	112.70	160.03	103.26	177.36	116.31	106.49	124.07
+/-	14.80	0.00	75.46	27.35	20.45	49.48	101.37	36.47	135.33	53.79	41.36	69.92
900	0.00	0.00	75.05	0.00	0.00	0.00	75.05	0.00	0.00	75.05	0.00	75.05
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	65.22	0.00	0.00	0.00	399.76	0.00	0.00	399.76	65.22	399.76	0.00	232.49
+/-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	236.55
1000+	108.18	77.26	200.62	151.94	136.15	138.96	157.61	137.65	97.87	159.60	141.56	139.20
+/-	38.03	12.53	70.06	12.77	60.92	56.44	71.14	56.44	39.97	68.98	50.25	59.14
0k	75.77	89.68	95.45	103.74	99.07	101.04	96.20	100.07	82.13	97.46	101.90	95.41
+/-	24.04	36.86	39.77	35.58	42.59	40.39	38.13	41.45	31.27	41.34	38.87	39.03

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 NUMBERS OF EXPERIENCES

PAGE 9

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	Moderate ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	741.00	197.00	286.00	174.00	283.00	263.00	657.00	545.00	938.00	569.00	437.00	1944.00
100	13.00	6.00	12.00	8.00	19.00	19.00	26.00	38.00	19.00	31.00	27.00	77.00
200	74.00	41.00	58.00	37.00	70.00	57.00	136.00	127.00	115.00	129.00	94.00	397.00
300	6.00	5.00	8.00	4.00	10.00	9.00	17.00	19.00	11.00	18.00	13.00	42.00
400	7.00	6.00	12.00	3.00	6.00	14.00	21.00	20.00	13.00	18.00	17.00	48.00
500	2.00	1.00	3.00	1.00	5.00	5.00	5.00	10.00	9.00	8.00	6.00	17.00
600	26.00	14.00	27.00	18.00	41.00	43.00	59.00	84.00	40.00	68.00	61.00	169.00
700	0.00	0.00	2.00	2.00	1.00	5.00	4.00	6.00	0.00	3.00	7.00	10.00
800	4.00	4.00	4.00	3.00	7.00	11.00	11.00	18.00	8.00	11.00	14.00	33.00
900	0.00	1.00	3.00	0.00	0.00	3.00	4.00	3.00	1.00	3.00	3.00	7.00
1000	3.00	1.00	0.00	1.00	4.00	2.00	2.00	6.00	4.00	4.00	3.00	11.00
1000+	12.00	5.00	12.00	6.00	11.00	15.00	23.00	26.00	17.00	23.00	21.00	61.00
0k	888.00	281.00	427.00	257.00	457.00	446.00	965.00	903.00	1169.00	884.00	703.00	2756.00

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 AVERAGE RESTITUTION RECEIVED

PAGE 10

RISK: DESCP	SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE UNSUPER.	MINIMUM	HIGH MAXIMUM	HIGH MINIMUM	MEDIUM MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0		10.63	6.25	10.70	7.10	13.37	9.96	8.41	11.73	9.71	12.03	8.82	10.19	
+/-		35.55	55.77	63.84	39.74	59.26	52.91	55.86	52.78	55.60	58.78	47.67	54.88	
100		0.00	0.00	0.00	0.00	0.00	3.05	0.00	1.52	0.00	0.00	2.15	0.75	
+/-		0.00	0.00	0.00	0.00	0.00	13.30	0.00	9.98	0.00	0.00	11.18	5.56	
200		10.58	21.85	31.81	35.17	0.57	8.03	29.72	3.92	14.60	14.73	18.71	15.80	
+/-		52.78	87.82	139.57	96.77	3.32	45.96	104.40	30.97	72.52	94.83	44.42	75.72	
300		29.29	0.00	1.89	50.30	15.15	0.00	12.77	7.97	15.97	9.25	15.53	12.96	
+/-		71.74	0.00	5.29	101.00	47.91	0.00	48.90	34.76	52.98	35.67	56.02	46.27	
400		35.20	0.00	0.00	0.00	0.00	3.04	0.00	2.13	18.95	0.00	2.50	6.02	
+/-		93.13	0.00	0.00	0.00	0.00	11.36	0.00	9.49	68.34	0.00	10.30	35.96	
500		0.00	0.00	0.00	0.00	0.00	40.00	13.40	30.33	0.00	12.91	44.50	21.78	
+/-		0.00	0.00	0.00	67.00	20.67	89.44	29.95	67.88	0.00	36.54	80.75	54.25	
600		1.08	5.77	2.88	2.77	5.04	6.43	3.53	3.75	2.72	4.18	5.35	4.26	
+/-		5.48	21.59	14.97	11.75	22.34	30.72	15.72	26.89	13.42	19.77	26.51	21.21	
700		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
+/-		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
800		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
+/-		0.00	46.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900		6.00	92.77	0.00	0.00	0.00	21.40	16.86	13.08	23.19	0.00	16.81	12.75	
+/-		0.00	0.00	0.00	0.00	0.00	66.39	55.94	52.04	65.60	0.00	58.94	49.43	
1000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
+/-		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000+		0.00	0.00	0.00	0.00	103.50	0.00	0.00	69.00	0.00	103.50	0.00	37.63	
+/-		0.00	0.00	16.76	0.00	207.00	0.00	0.00	169.01	0.00	207.00	0.00	124.82	
0k		0.00	0.00	58.08	0.00	0.00	0.00	8.74	0.00	0.00	8.74	0.00	3.29	
+/-		10.26	8.52	12.18	11.11	10.28	8.72	10.83	41.94	0.00	0.00	41.94	0.00	25.75
		54.78	58.74	74.22	39.15	47.52	46.60	62.02	47.05	55.74	61.83	44.01	55.11	

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM B10101 TO B21231  
 ALL EXPERIENCES  
 AVERAGE COSTS COLLECTED

PAGE 11

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY UNSUPER.	ANY MINIMUM	ANY MAXIMUM	ANY ANY
0	7.25	7.35	5.63	5.19	4.13	4.30	6.03	4.31	7.27	4.88	4.78	6.01
+/-	13.78	13.86	11.31	10.49	14.28	10.68	11.96	12.65	13.78	12.88	10.58	12.92
100	5.20	9.76	3.78	4.79	1.70	0.00	5.47	0.85	6.64	2.50	1.42	3.14
+/-	10.44	23.90	8.94	13.56	5.10	0.00	14.39	3.61	15.36	6.78	7.35	9.85
200	12.88	9.92	10.84	10.16	10.56	10.09	10.38	10.35	11.82	10.69	10.12	10.92
+/-	15.78	14.97	14.04	13.08	13.71	19.52	13.96	16.49	15.49	13.82	17.18	15.36
300	9.59	15.35	4.79	9.59	5.94	2.13	9.03	4.13	12.21	5.43	4.42	6.89
+/-	23.49	21.00	13.56	12.12	9.85	6.32	15.49	8.37	21.47	11.27	8.72	14.07
400	16.57	4.88	17.40	1.75	39.05	16.52	11.58	23.28	11.17	24.61	13.91	17.18
+/-	21.24	11.92	21.73	3.00	86.60	21.91	18.55	49.13	17.94	51.20	20.62	34.79
500	0.00	0.00	10.77	0.00	15.35	4.00	6.46	9.67	0.00	19.63	3.33	7.59
+/-	0.00	0.00	9.80	0.00	34.32	8.94	9.06	24.39	0.00	26.57	8.12	19.10
600	7.30	2.74	3.21	7.83	4.69	8.44	4.51	6.61	5.70	4.11	8.26	5.98
+/-	12.12	6.93	12.21	11.27	11.00	16.40	10.95	14.07	10.72	11.40	14.97	12.73
700	0.00	0.00	22.22	0.00	23.25	0.00	11.11	4.20	0.00	29.23	0.00	6.96
+/-	0.00	0.00	31.42	0.00	0.00	0.00	22.20	10.30	0.00	22.27	0.00	15.36
800	14.14	48.14	14.39	0.00	2.74	2.29	22.74	2.46	31.14	6.97	1.80	10.64
+/-	17.92	77.83	28.77	0.00	7.21	7.55	50.06	7.21	55.35	17.72	6.71	30.51
900	0.00	38.38	0.00	0.00	0.00	0.00	9.39	0.00	38.38	0.00	0.00	5.48
+/-	0.00	0.00	0.00	0.00	0.00	0.00	19.18	0.00	0.00	0.00	0.00	14.49
1000	10.77	44.44	0.00	25.25	0.00	0.00	34.84	0.00	19.19	0.00	8.41	9.27
+/-	9.80	0.00	0.00	0.00	0.00	0.00	13.56	0.00	18.63	0.00	14.56	14.89
1000+	6.39	3.83	0.00	3.19	7.53	1.94	1.66	4.30	3.64	3.60	2.30	3.72
+/-	9.43	8.54	0.00	7.81	10.95	5.39	5.48	8.49	9.06	8.31	6.00	7.75
OK	7.80	8.37	6.45	6.02	5.75	5.49	6.89	5.62	7.94	6.09	5.68	6.77
+/-	14.04	16.97	12.57	11.00	16.94	13.00	13.67	15.10	14.80	14.97	12.29	14.28

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231  
 ALL EXPERIENCES  
 AVERAGE COSTS INCURRED

RISK: DSCP SUPERVISION:	LOW UNSUPER.	MODERATE UNSUPER.	MODERATE MINIMUM	MODERATE MAXIMUM	HIGH MINIMUM	HIGH MAXIMUM	MEDIUM ANY	HIGH ANY	ANY ANY	ANY ANY	ANY ANY	
0	67.26	84.35	89.01	94.30	93.52	94.68	89.01	94.08	70.85	91.25	94.53	82.14
+/-	11.58	29.33	29.39	29.56	28.60	36.03	29.61	32.36	18.30	29.07	33.57	27.95
100	70.16	81.07	106.57	126.89	82.57	79.58	106.93	81.08	73.61	91.86	93.60	87.96
+/-	11.66	21.79	36.74	40.89	25.75	17.09	38.01	21.61	15.81	32.16	33.72	30.41
200	75.08	85.25	97.29	109.42	102.26	99.04	96.96	100.81	78.71	100.01	103.13	93.61
+/-	25.67	20.47	30.55	42.43	34.96	34.01	32.89	34.44	24.35	33.00	37.67	33.30
300	68.12	124.32	110.00	119.28	110.37	84.73	116.39	98.22	93.66	110.20	95.36	101.28
+/-	9.16	88.23	38.51	39.77	53.33	14.83	54.17	41.13	63.09	46.00	28.58	46.36
400	94.84	109.18	91.93	91.92	102.42	99.66	96.77	100.49	101.46	95.42	98.19	98.04
+/-	48.32	54.97	15.03	17.44	39.14	47.28	31.22	42.66	49.82	22.25	43.17	38.12
500	101.68	82.34	142.80	80.44	131.30	128.89	118.23	130.09	95.23	135.61	120.81	123.26
+/-	2.00	0.00	84.26	0.00	70.66	106.48	68.42	85.21	11.27	70.12	97.27	73.14
600	89.36	100.07	111.85	105.76	114.26	115.67	107.20	114.98	99.11	113.30	112.74	108.32
+/-	35.81	45.11	51.72	24.64	60.21	43.28	43.08	51.91	39.08	56.60	38.78	47.35
700	0.00	0.00	89.79	86.62	137.83	135.62	88.20	135.99	0.00	105.80	121.62	116.87
+/-	0.00	0.00	3.74	7.81	0.00	41.00	5.29	36.69	0.00	27.86	41.27	36.96
800	96.62	175.41	143.06	97.14	89.63	105.45	142.30	99.30	136.01	109.06	103.67	113.91
+/-	9.54	111.42	61.94	20.05	17.23	39.10	77.50	32.66	84.46	45.34	35.36	53.72
900	0.00	152.10	83.92	0.00	0.00	193.01	100.97	193.01	152.10	83.92	193.01	140.41
+/-	0.00	0.00	18.17	0.00	0.00	95.41	37.18	95.41	0.00	18.17	95.41	78.40
1000	102.84	214.25	0.00	76.31	198.08	167.19	145.28	187.78	130.69	198.08	136.89	156.89
+/-	48.90	0.00	0.00	0.00	195.64	100.72	97.53	116.13	68.33	136.64	88.46	98.22
1000+	117.32	108.59	145.33	126.62	141.55	125.94	132.47	132.54	114.75	143.52	126.14	129.52
+/-	62.27	91.98	70.14	31.67	59.79	45.27	55.70	51.37	54.20	63.94	41.03	54.64
0k	69.83	88.86	94.98	99.25	99.27	99.72	94.34	99.49	74.41	97.20	99.55	88.13
+/-	18.38	96.29	35.79	32.39	39.41	40.44	35.30	39.90	25.26	37.73	35.07	

ARTHUR YOUNG & COMPANY DATA ANALYSIS ORGANIZATION REPORTS - DATA FROM 810101 TO 821231

RECORDS READ 006819  
VALID DATE RANGES 002920  
DISTINCT FILE NUMBERS 006005  
INCLUDED RECORDS 002756  
EXCLUDED RECORDS 000164  
MULTIPLE EXPERIENCES 000814  
TOO LATE END DATE 0030B3  
TOO EARLY START DATE 000002  
INVALID RISK & SUPER 000000  
INVALID STATUS 000000  
INVALID COST 000000  
INVALID TIMES ON PROB 000000

END OF PROGRAM

:BYE

CPU=568, CONNECT=81, TUE, JUL 26, 1983, 11:17 PM

NO CARRIER

APPLE 85C:05

]

Appendix B  
Data Analysis Program Listings

DBOLPREP DSCPA, DSCPSV  
0001 HP32213C, 02.08 (C) HEWLETT-PACKARD CO. 1980  
001100 IDENTIFICATION DIVISION.  
001200 PROGRAM-ID. DSCP.  
001300 AUTHOR. JIM BACKUS.  
001400 ENVIRONMENT DIVISION.  
001500 CONFIGURATION SECTION.  
001600 SOURCE-COMPUTER, HP-3000.  
001700 OBJECT-COMPUTER, HP-3000.  
001800 INPUT-OUTPUT SECTION.  
001900 FILE-CONTROL.  
002000 SELECT EXPIN ASSIGN TO "HCLIST".  
002100 SELECT PRTOUT ASSIGN TO "PRINTER".  
002200 DATA DIVISION.  
002300 FILE SECTION.  
002400 FD EXPIN  
002500 LABEL RECORDS ARE STANDARD.  
002600 RECORD CONTAINS 60 CHARACTERS.  
002700 01 EXPIN-REC PIC X(60).  
002800 FD PRTOUT  
002900 LABEL RECORDS ARE OMITTED.  
003000 RECORD CONTAINS 132 CHARACTERS.  
003100 01 PRTOUT-REC PIC X(132).  
003200 WORKING-STORAGE SECTION.  
003300 01 PROBATIONER-REC.  
003400 05 FILE-NUM PIC X(6).  
003500 05 EXP-NUM PIC 99.  
003600 05 RISK-LEVEL PIC X(2).  
003700\*RISK = "LO" "MO" "HI"  
003800 05 SUPER-LEVEL PIC X(2).  
003900\*SUPERVISION = "MA" "MI" "UN"  
004000 05 COST-OF-PROB PIC 9(5)V99.  
004100\*INTAKE=\$62.05  
004200\*/\$/MILE=\$0.185  
004300\*/\$/MINUTE=\$0.3171  
004400 05 COSTS PIC 9(5)V99.  
004500 05 FINES PIC 9(5)V99.  
004600 05 RESTITUTION PIC 9(5)V99.  
004700 05 POINTS PIC 9(4).  
004800 05 PROB-STATUS PIC XX.  
004900\*ACTIVE > "AC"  
005000\*SUCCESSFUL > "SC"  
005100\*\*\*SUCCESSFUL > "SC"  
005200\*\*\*TERMINATED EARLY > "TE"  
005300\*UNSUCCESSFUL > "RE"  
005400\*\*\*CONTINUED > "CO"  
005500\*\*\*PV RECORDED > "PV"  
005600\*\*\*REVOKED > "RE"  
005700\*\*\*TERMINATED UNSC. > "TU"  
005800 05 START-DATE PIC 9(6).  
005900 05 END-DATE PIC 9(6).  
006000\*BOTH DATES ARE IN YYMMDD FORMAT  
006100 05 EXCL-CODE PIC XX.  
006200 01 DSCP-RPT-DATA.  
006300 05 RESULT-GRP OCCURS 3 TIMES  
006400 INDEXED BY RESULT-CODE.  
006500\*RESULT-CODE=1 >> SUCCESS  
006600\* =2 >> REVOCATION  
006700\* =3 >> ANY RESULT  
006800 10 EXPERIENCE-GRP OCCURS 3 TIMES  
006900 INDEXED BY EXPERIENCE-CODE.

007000\*EXPERIENCE-CODE=1 >> FIRST EXPERIENCE  
 007100\* =2 >> SUBSEQUENT EXPERIENCE  
 007200\* =3 >> ANY EXPERIENCE  
 007300 15 RS-GRP OCCURS 12 TIMES  
 007400 INDEXED BY RS-CODE.  
 007500\*RS-CODE =1 >> LOW RISK UNSUPERVISED  
 007600\* =2 >> MOD RISK UNSUPERVISED  
 007700\* =3 >> MOD RISK MIN SUPERVISION  
 007800\* =4 >> MOD RISK MAX SUPERVISION  
 007900\* =5 >> HI RISK MIN SUPERVISION  
 008000\* =6 >> HI RISK MAX SUPERVISION  
 008100\* =7 >> MOD RISK ANY SUPERVISION  
 008200\* =8 >> HI RISK ANY SUPERVISION  
 008300\* =9 >> ANY RISK UNSUPERVISED  
 008400\* =10>> ANY RISK MIN SUPERVISION  
 008500\* =11>> ANY RISK MAX SUPERVISION  
 008600\* =12>> ANY RISK ANY SUPERVISION  
 008700 20 NUMBER-OF-EXPS PIC 9(5).  
 008800 20 DSCP PIC 9(8).  
 008900\*NUMBER OF POINTS SCORED  
 009000 20 DSCP-SQ PIC 9(11).  
 009100\*ACCUMULATED SQUARES OF POINTS  
 009200 01 MISCELLANEOUS-STUFF.  
 009300 05 EXPIN-EOP-SW PIC X VALUE "N".  
 009400 05 PRINT-STATUS-END-ERROR-SW PIC X.  
 009500 05 LAST-INVALID-RS-FILE-NUM PIC X(6).  
 009600 05 LAST-INVALID-RS-EXP-NUM PIC 99.  
 009700 05 GOOD-DATE-SW PIC X VALUE "N".  
 009800 05 VALID-PS-SW PIC X.  
 009900 05 LINE-CNT PIC 99 VALUE 60.  
 010000 05 PAGE-CNT PIC 99 VALUE ZERO.  
 010100 05 TEMP-SQ PIC 9(6).  
 010200 05 TEMP-DSCP PIC 9(5).  
 010300 05 RECORDS-READ PIC 9(6) VALUE ZEROES.  
 010400 05 CORRECT-DATE-RANGE-CNT PIC 9(6) VALUE ZEROES.  
 010500 05 FILE-NUM-CNT PIC 9(6) VALUE ZEROES.  
 010600 05 INCLUDE-CNT PIC 9(6) VALUE ZEROES.  
 010700 05 EXCLUDE-CNT PIC 9(6) VALUE ZEROES.  
 010800 05 DUPLICATE-CNT PIC 9(6) VALUE ZEROES.  
 010900 05 TOO-LATE-CNT PIC 9(6) VALUE ZEROES.  
 011000 05 TOO-EARLY-CNT PIC 9(6) VALUE ZEROES.  
 011100 05 INVALID-RS-CNT PIC 9(6) VALUE ZEROES.  
 011200 05 INVALID-STATUS-CNT PIC 9(6) VALUE ZEROES.  
 011300 05 INVALID-COST-CNT PIC 9(6) VALUE ZEROES.  
 011400 05 INVALID-EXP-CNT PIC 9(6) VALUE ZEROES.  
 011500 05 LAST-FILE-NUM PIC X(6) VALUE SPACES.  
 011600 05 LONG-TEMP PIC 9(18).  
 011700 01 FORM-FEED PIC S9(4) COMP VALUE 12.  
 011800 01 CONTROL-L REDEFINES FORM-FEED PIC XX.  
 011900 01 PRINT-LINE-PARTS.  
 012000 05 CNTL-L PIC XX.  
 012100 05 FILLER PIC X(130) VALUE SPACES.  
 012200 01 PRINT-LINE PIC X(132).  
 012300 01 HEADER-LINE-1.  
 012400 05 FILLER PIC X  
 012500 05 FILLER PIC X(32)  
 012600 05 FILLER PIC X(32)  
 012700 05 FILLER PIC X(32)  
 012800 05 FILLER PIC X(32)  
 012900 05 FILLER PIC X(6)  
 013000 05 FILLER PIC X  
 013100 05 FILLER PIC X(6)  
 013200 05 STUDY-START-DATE PIC 9(6).

013300	05 FILLER PIC X(4)
013400	05 VALUE " TO ",
013500	05 REPORT-DATE PIC 9(6).
013600	05 FILLER PIC X(37)
013700	05 VALUE SPACES.
013800	05 FILLER PIC X(5)
013900	05 VALUE "PAGE ",
014000	05 PAGE-NUM PIC Z9.
014100	05 FILLER PIC X
014200	05 VALUE SPACES.
014300	01 EDIT-HEADER-LINE:
014400	05 FILLER PIC X
014500	05 VALUE SPACES.
014600	05 FILLER PIC X(24)
014700	05 VALUE "EDIT PROBATIONER RECORDS",
014800	05 FILLER PIC X(107) VALUE SPACES.
014900	01 INVALID-EXP-NUM-LINE:
015000	05 FILLER PIC X VALUE SPACES.
015100	05 FILLER PIC X(26)
015200	05 VALUE "INVALID EXPERIENCE NUMBER ",
015300	05 FILLER PIC X(7) VALUE SPACES.
015400	05 FILLER PIC X(32)
015500	05 VALUE " PROBATIONER FILE AND EXP EQUAL ",
015600	05 INVALID-EXP-NUM-FILE-NUM-OUT PIC X(6),
015700	05 INVALID-EXP-NUM-EXP-NUM-OUT PIC 99.
015800	05 FILLER PIC X(58),
015900	01 INVALID-RS-LINE:
016000	05 FILLER PIC X VALUE SPACES.
016100	05 FILLER PIC X(29)
016200	05 VALUE "INVALID RISK AND SUPERVISION ",
016300	05 INVALID-RISK-OUT PIC XX,
016400	05 INVALID-SUPER-OUT PIC XX,
016500	05 FILLER PIC X(32)
016600	05 VALUE " PROBATIONER FILE AND EXP EQUAL ",
016700	05 INVALID-RS-FILE-NUM-OUT PIC X(6),
016800	05 INVALID-RS-EXP-NUM-OUT PIC 99,
016900	05 FILLER PIC X(58) VALUE SPACES.
017000	01 INVALID-STATUS-LINE:
017100	05 FILLER PIC X VALUE SPACES.
017200	05 FILLER PIC X(24)
017300	05 VALUE "INVALID STATUS & END ",
017400	05 INVALID-STATUS-OUT PIC XX,
017500	05 FILLER PIC X VALUE SPACES.
017600	05 INVALID-END-DATE-OUT PIC 9(6),
017700	05 FILLER PIC X(32)
017800	05 VALUE " PROBATIONER FILE AND EXP EQUAL ",
017900	05 INVALID-STATUS-FILE-NUM-OUT PIC X(6),
018000	05 INVALID-STATUS-EXP-NUM-OUT PIC 99,
018100	05 FILLER PIC X(58) VALUE SPACES.
018200	01 INVALID-COST-OF-PROB-LINE:
018300	05 FILLER PIC X(27)
018400	05 VALUE " INVALID COST OF PROBATION ",
018500	05 INVALID-COST-OF-PROB-OUT PIC 9(5)V99,
018600	05 FILLER PIC X(32)
018700	05 VALUE " PROBATIONER FILE AND EXP EQUAL ",
018800	05 INVALID-COST-OF-PROB-FILE-OUT PIC X(6),
018900	05 INVALID-COST-OF-PROB-EXP-OUT PIC XX,
019000	05 FILLER PIC X(58) VALUE SPACES.
019100	01 DSCP-RPT-HEADER-LINE-2:
019200	05 FILLER PIC X(55) VALUE SPACES.
019300	05 DATA-DESCRIPTION PIC X(22),
019400	05 FILLER PIC X(55) VALUE SPACES.
019500	01 DSCP-RPT-RISK-TITLE-LINE:

```

019600 05 FILLER PIC X(9) VALUE SPACES.
019700 05 FILLER PIC X(13) VALUE "RISK: ", .
019800 05 FILLER PIC X(9) VALUE " LOW".
019900 05 FILLER PIC X(9) VALUE " MODERATE".
020000 05 FILLER PIC X(9) VALUE " MODERATE".
020100 05 FILLER PIC X(9) VALUE " MODERATE".
020200 05 FILLER PIC X(9) VALUE " HIGH".
020300 05 FILLER PIC X(9) VALUE " HIGH".
020400 05 FILLER PIC X(9) VALUE " MODERATE".
020500 05 FILLER PIC X(9) VALUE " HIGH".
020600 05 FILLER PIC X(9) VALUE " ANY".
020700 05 FILLER PIC X(9) VALUE " ANY".
020800 05 FILLER PIC X(9) VALUE " ANY".
020900 05 FILLER PIC X(9) VALUE " ANY".
021000 05 FILLER PIC X(2) VALUE SPACES.
021100 01 DSCP-RPT-SUPER-TITLE-LINE.
021200 05 FILLER PIC X(9) VALUE SPACES.
021300 05 FILLER PIC X(13) VALUE "SUPERVISION: " .
021400 05 FILLER PIC X(9) VALUE " UNSUPER." .
021500 05 FILLER PIC X(9) VALUE " UNSUPER." .
021600 05 FILLER PIC X(9) VALUE " MINIMUM".
021700 05 FILLER PIC X(9) VALUE " MAXIMUM".
021800 05 FILLER PIC X(9) VALUE " MINIMUM".
021900 05 FILLER PIC X(9) VALUE " MAXIMUM".
022000 05 FILLER PIC X(9) VALUE " ANY".
022100 05 FILLER PIC X(9) VALUE " ANY".
022200 05 FILLER PIC X(9) VALUE " UNSUPER." .
022300 05 FILLER PIC X(9) VALUE " MINIMUM".
022400 05 FILLER PIC X(9) VALUE " MAXIMUM".
022500 05 FILLER PIC X(9) VALUE " ANY".
022600 05 FILLER PIC X(2) VALUE SPACES.
022700 01 DSCP-RPT-RES-EXP-TITLE-LINE.
022800 05 FILLER PIC X(7) VALUE " RESULT".
022900 05 FILLER PIC X(7) VALUE " EXPER." .
023000 05 FILLER PIC X(118) VALUE SPACES.
023100 01 DSCP-RPT-DATA-LINE-AVG.
023200 05 FILLER PIC X VALUE SPACES.
023300 05 EXPERIENCE-DESC PIC X(6).
023400 05 RESULT-DESC PIC X(7).
023500 05 FILLER PIC X(8) VALUE SPACES.
023600 05 DATA-PORTION-AVG OCCURS 12 TIMES
023700 INDEXED BY AVG-INDEX.
023800 10 DATA-AVG PIC Z(9).
023900 05 FILLER PIC X(2) VALUE SPACES.
024000 01 DSCP-RPT-DATA-LINE-STDEV.
024100 05 FILLER PIC X(5) VALUE " +/- " .
024200 05 FILLER PIC X(17) VALUE SPACES.
024300 05 DATA-PORTION-STDEV OCCURS 12 TIMES
024400 INDEXED BY STDEV-INDEX.
024500 10 DATA-STDEV PIC Z(9).
024600 05 FILLER PIC XX VALUE SPACES.
024700 01 COUNT-OUT-LINE.
024800 05 FILLER PIC X VALUE SPACES.
024900 05 COUNT-DESC PIC X(21).
025000 05 FILLER PIC X VALUE SPACES.
025100 05 COUNT-OUT PIC 9(5).
025200 05 FILLER PIC X(103) VALUE SPACES.
025300 PROCEDURE DIVISION.
025400 0000-PRODUCE-DSCP-STATS.
025500 PERFORM 1000-SETUP.
025600 PERFORM 2000-PROC-EACH-REC UNTIL
025700 EXPIN-EOF-SW EQUAL TO "Y".
025800 CLOSE EXPIN.

```

```

025900 PERFORM 3000-WRITE-RESULTS.
026000 CLOSE PRTOUT.
026100 STOP RUN.
026200 1000-SETUP.
026300 MOVE "N" TO EXPIN-EOF-SW.
026400 OPEN INPUT EXPIN.
026500 OPEN OUTPUT PRTOUT.
026600 MOVE "N" TO GOOD-DATE-SW.
026700 PERFORM 1100-GET-DATE-PARMS UNTIL
026800 GOOD-DATE-SW EQUAL TO "Y".
026900 MOVE ZEROES TO RESULT-GRP ( 1 ) .
027000 MOVE ZEROES TO RESULT-GRP ( 2 ) .
027100 MOVE ZEROES TO RESULT-GRP ( 3 ) .
027200 1100-GET-DATE-PARMS.
027300 DISPLAY SPACE.
027400 DISPLAY "ENTER STUDY START DATE YYMMDD:" .
027500 ACCEPT STUDY-START-DATE.
027600 DISPLAY SPACE.
027700 DISPLAY "ENTER END OF REPORT PERIOD YYMMDD:" .
027800 ACCEPT REPORT-DATE.
027900 DISPLAY SPACE.
028000 DISPLAY "SHALL I PRINT STATUS/END ERRORS (Y/N)?:" .
028100 ACCEPT PRINT-STATUS-END-ERROR-SW.
028200 DISPLAY SPACE.
028300 DISPLAY STUDY-START-DATE.
028400 " THROUGH ". REPORT-DATE.
028500 " OKAY? " .
028600 DISPLAY SPACE.
028700 DISPLAY "TYPE Y TO CONFIRM:" .
028800 ACCEPT GOOD-DATE-SW.
028900 2000-PROC-EACH-REC.
029000 READ EXPIN RECORD INTO PROBATIONER-REC
029100 AT END MOVE "Y" TO EXPIN-EOF-SW.
029200 IF EXPIN-EOF-SW NOT EQUAL TO "Y"
029300 ADD 1 TO RECORDS-READ
029400 IF FILE-NUM > LAST-FILE-NUM
029500 ADD 1 TO FILE-NUM-CNT
029600 MOVE FILE-NUM TO LAST-FILE-NUM
029700 IF START-DATE NOT < STUDY-START-DATE
029800 IF END-DATE NOT > REPORT-DATE
029900 ADD 1 TO CORRECT-DATE-RANGE-CNT
030000 IF EXCL-CODE = SPACES
030100 ADD 1 TO INCLUDE-CNT
030200 IF COST-OF-PROB > 62.04
030300 IF PROB-STATUS = "SC"
030400 OR PROB-STATUS= "TE"
030500 OR PROB-STATUS= "CO"
030600 OR PROB-STATUS= "PV"
030700 OR PROB-STATUS= "TU"
030800 OR PROB-STATUS = "RE"
030900 PERFORM 2100-UPDATE-DSCP-RPT-DATA
031000 ELSE PERFORM 2200-WRITE-INVALID-STATUS
031100 ELSE PERFORM 2400-WRITE-INVALID-COST-PROB
031200 ELSE ADD 1 TO EXCLUDE-CNT
031300 ELSE ADD 1 TO TOO-LATE-CNT
031400 ELSE ADD 1 TO TOO-EARLY-CNT
031500 ELSE ADD 1 TO DUPLICATE-CNT.
031600 2100-UPDATE-DSCP-RPT-DATA,
031700 IF EXP-NUM = 1
031800 SET EXPERIENCE-CODE TO 1
031900 PERFORM 2105-UPDATE-SPEC'D-EXP
032000 SET EXPERIENCE-CODE TO 3
032100 PERFORM 2105-UPDATE-SPEC'D-EXP

```

```

032200 ELSE IF EXP-NUM > 1
032300   SET EXPERIENCE-CODE TO 2
032400   PERFORM 2105-UPDATE-SPEC'D-EXP
032500   SET EXPERIENCE-CODE TO 3
032600   PERFORM 2105-UPDATE-SPEC'D-EXP
032700   ELSE PERFORM 2140-WRITE-INVALID-EXP-NUM.
032800 2105-UPDATE-SPEC'D-EXP.
032900   IF PROB-STATUS = "SC"
033000   OR PROB-STATUS = "TE"
033100     SET RESULT-CODE TO 1
033200     PERFORM 2110-UPDATE-SPEC'D-RESULT
033300     SET RESULT-CODE TO 3
033400     PERFORM 2110-UPDATE-SPEC'D-RESULT
033500   ELSE IF PROB-STATUS = "RE"
033600   OR PROB-STATUS = "CO"
033700   OR PROB-STATUS = "PV"
033800   OR PROB-STATUS = "TU"
033900     SET RESULT-CODE TO 2
034000     PERFORM 2110-UPDATE-SPEC'D-RESULT
034100     SET RESULT-CODE TO 3
034200     PERFORM 2110-UPDATE-SPEC'D-RESULT
034300   ELSE PERFORM 2200-WRITE-INVALID-STATUS.
034400 2110-UPDATE-SPEC'D-RESULT.
034500   MOVE "Y" TO VALID-RS-SW.
034600   IF RISK-LEVEL = "LO"
034700     IF SUPER-LEVEL = "UN"
034800       SET RS-CODE TO 1
034900       PERFORM 2111-UPDATE-SPEC'D-RS
035000       SET RS-CODE TO 9
035100       PERFORM 2111-UPDATE-SPEC'D-RS
035200   ELSE PERFORM 2112-WRITE-INVALID-RS
035300   ELSE IF RISK-LEVEL = "MO"
035400     IF SUPER-LEVEL = "UN"
035500       SET RS-CODE TO 2
035600       PERFORM 2111-UPDATE-SPEC'D-RS
035700       SET RS-CODE TO 7
035800       PERFORM 2111-UPDATE-SPEC'D-RS
035900       SET RS-CODE TO 9
036000       PERFORM 2111-UPDATE-SPEC'D-RS
036100   ELSE IF SUPER-LEVEL = "MI"
036200     SET RS-CODE TO 3
036300     PERFORM 2111-UPDATE-SPEC'D-RS
036400     SET RS-CODE TO 7
036500     PERFORM 2111-UPDATE-SPEC'D-RS
036600     SET RS-CODE TO 10
036700     PERFORM 2111-UPDATE-SPEC'D-RS
036800   ELSE IF SUPER-LEVEL = "MA"
036900     SET RS-CODE TO 4
037000     PERFORM 2111-UPDATE-SPEC'D-RS
037100     SET RS-CODE TO 7
037200     PERFORM 2111-UPDATE-SPEC'D-RS
037300     SET RS-CODE TO 11
037400     PERFORM 2111-UPDATE-SPEC'D-RS
037500   ELSE PERFORM 2112-WRITE-INVALID-RS
037600   ELSE IF RISK-LEVEL = "HI"
037700     IF SUPER-LEVEL = "MI"
037800       SET RS-CODE TO 5
037900       PERFORM 2111-UPDATE-SPEC'D-RS
038000       SET RS-CODE TO 8
038100       PERFORM 2111-UPDATE-SPEC'D-RS
038200       SET RS-CODE TO 10
038300       PERFORM 2111-UPDATE-SPEC'D-RS
038400   ELSE IF SUPER-LEVEL = "MA"

038500   SET RS-CODE TO 6
038600   PERFORM 2111-UPDATE-SPEC'D-RS
038700   SET RS-CODE TO 8
038800   PERFORM 2111-UPDATE-SPEC'D-RS
038900   SET RS-CODE TO 11
039000   PERFORM 2111-UPDATE-SPEC'D-RS
039100   ELSE PERFORM 2112-WRITE-INVALID-RS
039200   ELSE PERFORM 2112-WRITE-INVALID-RS,
039300     IF VALID-RS-SW = "Y"
039400       SET RS-CODE TO 12
039500       PERFORM 2111-UPDATE-SPEC'D-RS,
039600 2111-UPDATE-SPEC'D-RS.
039700     ADD 1 TO NUMBER-OF-EXPS
039800       ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE ),
039900     MULTIPLY POINTS BY POINTS GIVING TEMP-SQ,
040000     ADD TEMP-SQ TO DSCP-SQ
040100       ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE ),
040200     ADD POINTS TO DSCP
040300       ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE ),
040400 2112-WRITE-INVALID-RS.
040500     MOVE "N" TO VALID-RS-SW.
040600     IF FILE-NUM = LAST-INVALID-RS-FILE-NUM
040700       IF EXP-NUM = LAST-INVALID-RS-EXP-NUM
040800     NEXT SENTENCE
040900     ELSE PERFORM 2113-WRITE-INVALID-RS-2
041000   ELSE PERFORM 2113-WRITE-INVALID-RS-2,
041100 2113-WRITE-INVALID-RS-2,
041200     ADD 1 TO INVALID-RS-CNT.
041300     MOVE FILE-NUM TO INVALID-RS-FILE-NUM-OUT.
041400     MOVE EXP-NUM TO INVALID-RS-EXP-NUM-OUT.
041500     MOVE RISK-LEVEL TO INVALID-RISK-OUT.
041600     MOVE SUPER-LEVEL TO INVALID-SUPER-OUT.
041700     ADD 1 TO LINE-CNT.
041800     IF LINE-CNT > 55
041900       PERFORM 8888-WRITE-EDIT-HEADER.
042000     MOVE INVALID-RS-LINE TO PRINT-LINE.
042100     PERFORM 9999-WRITE-PRINT-LINE.
042200     MOVE FILE-NUM TO LAST-INVALID-RS-FILE-NUM.
042300     MOVE EXP-NUM TO LAST-INVALID-RS-EXP-NUM,
042400 2140-WRITE-INVALID-EXP-NUM.
042500     ADD 1 TO INVALID-EXP-CNT.
042600     MOVE FILE-NUM TO
042700     INVALID-EXP-NUM-FILE-NUM-OUT,
042800     MOVE EXP-NUM TO
042900     INVALID-EXP-NUM-EXP-NUM-OUT,
043000     ADD 1 TO LINE-CNT,
043100     IF LINE-CNT > 55
043200       PERFORM 8888-WRITE-EDIT-HEADER.
043300     MOVE INVALID-EXP-NUM-LINE TO PRINT-LINE.
043400     PERFORM 9999-WRITE-PRINT-LINE,
043500 2200-WRITE-INVALID-STATUS,
043600     ADD 1 TO INVALID-STATUS-CNT,
043700     MOVE FILE-NUM TO INVALID-STATUS-FILE-NUM-OUT,
043800     MOVE EXP-NUM TO INVALID-STATUS-EXP-NUM-OUT,
043900     MOVE PROB-STATUS TO INVALID-STATUS-OUT,
044000     MOVE END-DATE TO INVALID-END-DATE-OUT,
044100     IF PRINT-STATUS-END-ERROR-SW = "Y"
044200       ADD 1 TO LINE-CNT
044300       IF LINE-CNT > 55
044400       PERFORM 8888-WRITE-EDIT-HEADER,
044500     IF PRINT-STATUS-END-ERROR-SW = "Y"
044600     MOVE INVALID-STATUS-LINE TO PRINT-LINE
044700     PERFORM 9999-WRITE-PRINT-LINE,

```

044800 2400-WRITE-INVALID-COST-PROB.  
 044900 ADD 1 TO INVALID-COST-CNT.  
 045000 MOVE FILE-NUM TO INVALID-COST-OF-PROB-FILE-OUT.  
 045100 MOVE EXP-NUM TO INVALID-COST-OF-PROB-EXP-OUT.  
 045200 MOVE COST-OF-PROB TO INVALID-COST-OF-PROB-OUT.  
 045300 ADD 1 TO LINE-CNT.  
 045400 IF LINE-CNT > 55  
     PERFORM 8888-WRITE-EDIT-HEADER.  
 045500 MOVE INVALID-COST-OF-PROB-LINE TO PRINT-LINE.  
 045600 PERFORM 9999-WRITE-PRINT-LINE.  
 045700  
 045800 3000-WRITE-RESULTS.  
 045900 MOVE "NUMBERS OF EXPERIENCES" TO DATA-DESCRIPTION.  
 046000 PERFORM 3100-WRITE-DSCP-RPT-HEADER.  
 046100 SET EXPERIENCE-CODE TO 1.  
 046200 MOVE "FIRST" TO EXPERIENCE-DESC.  
 046300 SET RESULT-CODE TO 1.  
 046400 MOVE "SUCCESS" TO RESULT-DESC.  
 046500 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 046600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 046700 PERFORM 9999-WRITE-PRINT-LINE.  
 046800 SET RESULT-CODE TO 2.  
 046900 MOVE "FAILURE" TO RESULT-DESC.  
 047000 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 047100 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 047200 PERFORM 9999-WRITE-PRINT-LINE.  
 047300 SET RESULT-CODE TO 3.  
 047400 MOVE "ANY" TO RESULT-DESC.  
 047500 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 047600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 047700 PERFORM 9999-WRITE-PRINT-LINE.  
 047800 SET RESULT-CODE TO 4.  
 047900 MOVE "LATER" TO EXPERIENCE-DESC.  
 048000 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 048100 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 048200 PERFORM 9999-WRITE-PRINT-LINE.  
 048300 SET EXPERIENCE-CODE TO 2.  
 048400 MOVE "FAILURE" TO RESULT-DESC.  
 048500 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 048600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 048700 PERFORM 9999-WRITE-PRINT-LINE.  
 048800 SET RESULT-CODE TO 1.  
 048900 MOVE "SUCCESS" TO RESULT-DESC.  
 049000 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 049100 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 049200 PERFORM 9999-WRITE-PRINT-LINE.  
 049300 SET RESULT-CODE TO 2.  
 049400 MOVE "FAILURE" TO RESULT-DESC.  
 049500 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 049600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 049700 PERFORM 9999-WRITE-PRINT-LINE.  
 049800 SET RESULT-CODE TO 3.  
 049900 MOVE "ANY" TO RESULT-DESC.  
 050000 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 050100 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 050200 PERFORM 9999-WRITE-PRINT-LINE.  
 050300 SET EXPERIENCE-CODE TO 3.  
 050400 MOVE "FAILURE" TO RESULT-DESC.  
 050500 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 050600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 050700 PERFORM 9999-WRITE-PRINT-LINE.  
 050800 SET EXPERIENCE-CODE TO 4.  
 050900 MOVE "ANY" TO EXPERIENCE-DESC.  
 051000 SET RESULT-CODE TO 1.  
 051100 MOVE "SUCCESS" TO RESULT-DESC.

051100 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 051200 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 051300 PERFORM 9999-WRITE-PRINT-LINE.  
 051400 SET RESULT-CODE TO 2.  
 051500 MOVE "FAILURE" TO RESULT-DESC.  
 051600 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 051700 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 051800 PERFORM 9999-WRITE-PRINT-LINE.  
 051900 SET RESULT-CODE TO 3.  
 052000 MOVE "ANY" TO RESULT-DESC.  
 052100 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 052200 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 052300 PERFORM 9999-WRITE-PRINT-LINE.  
 052400 SET RESULT-CODE TO 4.  
 052500 MOVE "FAILURE" TO RESULT-DESC.  
 052600 PERFORM 3200-MOVE-A-NUM-EXP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 052700 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 052800 PERFORM 9999-WRITE-PRINT-LINE.  
 052900 MOVE "AVERAGE PC SCORES" TO DATA-DESCRIPTION.  
 053000 PERFORM 3100-WRITE-DSCP-RPT-HEADER.  
 053100 SET EXPERIENCE-CODE TO 1.  
 053200 MOVE "FIRST" TO EXPERIENCE-DESC.  
 053300 SET RESULT-CODE TO 1.  
 053400 MOVE "SUCCESS" TO RESULT-DESC.  
 053500 PERFORM 3300-MOVE-A-DSCP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 053600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 053700 PERFORM 9999-WRITE-PRINT-LINE.  
 053800 SET RESULT-CODE TO 2.  
 053900 MOVE "FAILURE" TO RESULT-DESC.  
 054000 PERFORM 3300-MOVE-A-DSCP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 054100 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.  
 054200 PERFORM 9999-WRITE-PRINT-LINE.  
 054300 SET RESULT-CODE TO 3.  
 054400 MOVE "ANY" TO RESULT-DESC.  
 054500 PERFORM 3300-MOVE-A-DSCP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 054600 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 054700 PERFORM 9999-WRITE-PRINT-LINE.  
 054800 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.  
 054900 PERFORM 9999-WRITE-PRINT-LINE.  
 055000 SET RESULT-CODE TO 4.  
 055100 MOVE "FAILURE" TO RESULT-DESC.  
 055200 PERFORM 3300-MOVE-A-DSCP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 055300 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 055400 PERFORM 9999-WRITE-PRINT-LINE.  
 055500 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.  
 055600 PERFORM 9999-WRITE-PRINT-LINE.  
 055700 SET RESULT-CODE TO 3.  
 055800 MOVE "ANY" TO RESULT-DESC.  
 055900 PERFORM 3300-MOVE-A-DSCP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 056000 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 056100 PERFORM 9999-WRITE-PRINT-LINE.  
 056200 SET EXPERIENCE-CODE TO 2.  
 056300 MOVE "LATER" TO EXPERIENCE-DESC.  
 056400 SET RESULT-CODE TO 1.  
 056500 MOVE "SUCCESS" TO RESULT-DESC.  
 056600 PERFORM 3300-MOVE-A-DSCP-COLUMN  
     VARYING RS-CODE FROM 1 BY 1  
     UNTIL RS-CODE > 12.  
 056700 MOVE DSCP-RPT-DATA-LINE-AVG TO PRINT-LINE.  
 056800 PERFORM 9999-WRITE-PRINT-LINE.  
 056900 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.  
 057000 PERFORM 9999-WRITE-PRINT-LINE.  
 057100 SET RESULT-CODE TO 2.  
 057200 MOVE "FAILURE" TO RESULT-DESC.  
 057300

```

057400 PERFORM 3300-MOVE-A-DSCP-COLUMN
057500   VARYING RS-CODE FROM 1 BY 1
057600     UNTIL RS-CODE > 12.
057700 MOVE DSCP-RPT-DATA-LINE- AVG TO PRINT-LINE.
057800 PERFORM 9999-WRITE-PRINT-LINE.
057900 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.
058000 PERFORM 9999-WRITE-PRINT-LINE.
058100 SET RESULT-CODE TO 3.
058200 MOVE "ANY " TO RESULT-DESC.
058300 PERFORM 3300-MOVE-A-DSCP-COLUMN
058400   VARYING RS-CODE FROM 1 BY 1
058500     UNTIL RS-CODE > 12.
058600 MOVE DSCP-RPT-DATA-LINE- AVG TO PRINT-LINE.
058700 PERFORM 9999-WRITE-PRINT-LINE.
058800 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.
058900 PERFORM 9999-WRITE-PRINT-LINE.
059000 SET EXPERIENCE-CODE TO 3.
059100 MOVE "ANY " TO EXPERIENCE-DESC.
059200 SET RESULT-CODE TO 1.
059300 MOVE "SUCCESS" TO RESULT-DESC.
059400 PERFORM 3300-MOVE-A-DSCP-COLUMN
059500   VARYING RS-CODE FROM 1 BY 1
059600     UNTIL RS-CODE > 12.
059700 MOVE DSCP-RPT-DATA-LINE- AVG TO PRINT-LINE.
059800 PERFORM 9999-WRITE-PRINT-LINE.
059900 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.
060000 PERFORM 9999-WRITE-PRINT-LINE.
060100 SET RESULT-CODE TO 2.
060200 MOVE "FAILURE" TO RESULT-DESC.
060300 PERFORM 3300-MOVE-A-DSCP-COLUMN
060400   VARYING RS-CODE FROM 1 BY 1
060500     UNTIL RS-CODE > 12.
060600 MOVE DSCP-RPT-DATA-LINE- AVG TO PRINT-LINE.
060700 PERFORM 9999-WRITE-PRINT-LINE.
060800 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.
060900 PERFORM 9999-WRITE-PRINT-LINE.
061000 SET RESULT-CODE TO 3.
061100 MOVE "ANY " TO RESULT-DESC.
061200 PERFORM 3300-MOVE-A-DSCP-COLUMN
061300   VARYING RS-CODE FROM 1 BY 1
061400     UNTIL RS-CODE > 12.
061500 MOVE DSCP-RPT-DATA-LINE- AVG TO PRINT-LINE.
061600 PERFORM 9999-WRITE-PRINT-LINE.
061700 MOVE DSCP-RPT-DATA-LINE-STDEV TO PRINT-LINE.
061800 PERFORM 9999-WRITE-PRINT-LINE.
061900 PERFORM 9000-WRITE-FIRST-HEADER-LINE.
062000 MOVE "RECORDS READ" TO COUNT-DESC.
062100 MOVE RECORDS-READ TO COUNT-OUT.
062200 PERFORM 3010-WRITE-COUNT.
062300 MOVE "VALID DATE RANGES" TO COUNT-DESC.
062400 MOVE CORRECT-DATE-RANGE-CNT TO COUNT-OUT.
062500 PERFORM 3010-WRITE-COUNT.
062600 MOVE "DISTINCT FILE NUMBERS" TO COUNT-DESC.
062700 MOVE FILE-NUM-CNT TO COUNT-OUT.
062800 PERFORM 3010-WRITE-COUNT.
062900 MOVE "INCLUDED RECORDS" TO COUNT-DESC.
063000 MOVE INCLUDE-CNT TO COUNT-OUT.
063100 PERFORM 3010-WRITE-COUNT.
063200 MOVE "EXCLUDED RECORDS" TO COUNT-DESC.
063300 MOVE EXCLUDE-CNT TO COUNT-OUT.
063400 PERFORM 3010-WRITE-COUNT.
063500 MOVE "MULTIPLE EXPERIENCES" TO COUNT-DESC.
063600 MOVE DUPLICATE-CNT TO COUNT-OUT.

```

```

063700 PERFORM 3010-WRITE-COUNT.
063800 MOVE "TOO LATE END DATE" TO COUNT-DESC.
063900 MOVE TOO-LATE-CNT TO COUNT-OUT.
064000 PERFORM 3010-WRITE-COUNT.
064100 MOVE "TOO EARLY START DATE" TO COUNT-DESC.
064200 MOVE TOO-EARLY-CNT TO COUNT-OUT.
064300 PERFORM 3010-WRITE-COUNT.
064400 MOVE "INVALID RISK & SUPER" TO COUNT-DESC.
064500 MOVE INVALID-RS-CNT TO COUNT-OUT.
064600 PERFORM 3010-WRITE-COUNT.
064700 MOVE "INVALID STATUS" TO COUNT-DESC.
064800 MOVE INVALID-STATUS-CNT TO COUNT-OUT.
064900 PERFORM 3010-WRITE-COUNT.
065000 MOVE "INVALID COST" TO COUNT-DESC.
065100 MOVE INVALID-COST-CNT TO COUNT-OUT.
065200 PERFORM 3010-WRITE-COUNT.
065300 MOVE "INVALID TIMES ON PROB" TO COUNT-DESC.
065400 MOVE INVALID-EXP-CNT TO COUNT-OUT.
065500 PERFORM 3010-WRITE-COUNT.
065600 3010-WRITE-COUNT.
065700 MOVE COUNT-OUT-LINE TO PRINT-LINE.
065800 PERFORM 9999-WRITE-PRINT-LINE.
065900 3100-WRITE-DSCP-RPT-HEADER.
066000 PERFORM 9000-WRITE-FIRST-HEADER-LINE.
066100 MOVE DSCP-RPT-HEADER-LINE-2 TO PRINT-LINE.
066200 PERFORM 9999-WRITE-PRINT-LINE.
066300 MOVE SPACES TO PRINT-LINE.
066400 PERFORM 9999-WRITE-PRINT-LINE.
066500 PERFORM 9999-WRITE-PRINT-LINE.
066600 MOVE DSCP-RPT-RISK-TITLE-LINE TO PRINT-LINE.
066700 PERFORM 9999-WRITE-PRINT-LINE.
066800 MOVE DSCP-RPT-SUPER-TITLE-LINE TO PRINT-LINE.
066900 PERFORM 9999-WRITE-PRINT-LINE.
067000 MOVE DSCP-RPT-RES-EXP-TITLE-LINE TO PRINT-LINE.
067100 PERFORM 9999-WRITE-PRINT-LINE.
067200 MOVE SPACES TO PRINT-LINE.
067300 PERFORM 9999-WRITE-PRINT-LINE.
067400 3200-MOVE-A-NUM-EXP-COLUMN.
067500 SET AVG-INDEX TO RS-CODE.
067600 MOVE NUMBER-OF-EXPS ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE )
      )
      TO DATA- AVG ( AVG-INDEX ) .
067800 3300-MOVE-A-DSCP-COLUMN.
067900 SET AVG-INDEX TO RS-CODE.
068000 SET STDEV-INDEX TO RS-CODE.
068100 IF NUMBER-OF-EXPS ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE )
      > 1
      DIVIDE DSCP ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE )
      BY NUMBER-OF-EXPS ( RESULT-CODE, EXPERIENCE-CODE,
      RS-CODE ) GIVING
      DATA- AVG ( AVG-INDEX )
      COMPUTE LONG-TEMP =
      ( ( DSCP-SQ ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE )
      - ( DSCP ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE )
      * DSCP ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE )
      / NUMBER-OF-EXPS ( RESULT-CODE, EXPERIENCE-CODE ,
      RS-CODE ) ) )
      / ( NUMBER-OF-EXPS ( RESULT-CODE, EXPERIENCE-CODE,
      RS-CODE )
      - 1 ) )
      COMPUTE DATA-STDEV ( STDEV-INDEX ) = LONG-TEMP ** 0.5
      ELSE MOVE DSCP ( RESULT-CODE, EXPERIENCE-CODE, RS-CODE ) TO
      DATA- AVG ( AVG-INDEX )

```

```

069900 MOVE ZEROES TO DATA-STDDEV ( STDDEV-INDEX ),
070000 8888-WRITE-EDIT-HEADER,
070100 PERFORM 9000-WRITE-FIRST-HEADER-LINE,
070200 MOVE PAGE-CNT TO PAGE-NUM,
070300 WRITE PRTOUT-REC FROM EDIT-HEADER-LINE
070400 AFTER ADVANCING 1,
070500 ADD 1 TO LINE-CNT,
070600 9000-WRITE-FIRST-HEADER-LINE,
070700 MOVE CONTROL-L TO CNTL-L,
070800 MOVE PRINT-LINE-PARTS TO PRINT-LINE,
070900 PERFORM 9999-WRITE-PRINT-LINE,
071000 ADD 1 TO PAGE-CNT,
071100 MOVE ZEROES TO LINE-CNT,
071200 MOVE PAGE-CNT TO PAGE-NUM,
071300 MOVE HEADER-LINE-1 TO PRINT-LINE,
071400 PERFORM 9999-WRITE-PRINT-LINE,
071500 9999-WRITE-PRINT-LINE,
071600 WRITE PRTOUT-REC FROM PRINT-LINE
071700 AFTER ADVANCING 1.

```

DATA AREA IS %005421 WORDS,  
 CPU TIME = 0:00:31, WALL TIME = 0:25:54,  
 COBOL/3000 COMPILATION. NO ERRORS. NO WARNINGS.

OF COMPILE

OF PREPARE  
IVE DSCPSV

JRGE DOLL1SV  
JBLPREP DOLL1A.DOLL1SV

JE 0001 HP32213C.02.08 (C) HEWLETT-PACKARD CO. 1980

```

001100 IDENTIFICATION DIVISION.
001200 PROGRAM-ID. DOLL1.
001300 AUTHOR. JIM BACKUS.
001400 ENVIRONMENT DIVISION.
001500 CONFIGURATION SECTION.
001600 SOURCE-COMPUTER, HP-3000.
001700 OBJECT-COMPUTER, HP-3000.
001800 INPUT-OUTPUT SECTION.
001900 FILE-CONTROL.
002000 SELECT EXPIN ASSIGN TO "HCCLIST".
002100 SELECT PRTOUT ASSIGN TO "PRINTER".
002200 DATA DIVISION.
002300 FILE SECTION.
002400 FD EXPIN
002500 LABEL RECORDS ARE STANDARD
002600 RECORD CONTAINS 60 CHARACTERS.
002700 01 EXPIN-REC PIC X(60).
002800 FD PRTOUT
002900 LABEL RECORDS ARE OMITTED
003000 RECORD CONTAINS 132 CHARACTERS.
003100 01 PRTOUT-REC PIC X(132).
003200 WORKING-STORAGE SECTION.
003300 01 PROBATIONER-REC.
003400 05 FILE-NUM PIC X(6).
003500 05 EXP-NUM PIC 99.
003600 05 RISK-LEVEL PIC X(2).
003700*RISK = "LO" "MO" "HI"
003800 05 SUPER-LEVEL PIC X(2).
003900*SUPERVISION = "MA" "MI" "UN"
004000 05 COST-OF-PROB PIC 9(5)V99.
004100*INTAKE=$62.05
004200*/$MILE=$0.185
004300*/$MINUTE=$0.3171
004400 05 COSTS PIC 9(5)V99.
004500 05 FINES PIC 9(5)V99.
004600 05 RESTITUTION PIC 9(5)V99.
004700*COSTS, FINES, AND RESTITUTION PAID BY PROBATIONER
004800 05 POINTS PIC 9(4).
004900 05 PROB-STATUS PIC XX.
005000*ACTIVE > "AC"
005100*SUCCESSFUL > "SC"
005200***SUCCESSFUL > "SC"
005300***TERMINATED EARLY > "TE"
005400*UNSUCCESSFUL > "RE"
005500***CONTINUED > "CO"
005600***PV RECORDED > "PV"
005700***REVOKED > "RE"
005800***TERMINATED UNSC. > "TU"
005900 05 START-DATE PIC 9(6).
006000 05 END-DATE PIC 9(6).
006100 05 EXCL-CODE PIC XX.
006200*BOTH DATES ARE IN YYMMDD FORMAT
006300 01 DOLLAR-RPT-DATA.
006400 05 EXP-GRP OCCURS 3 TIMES
006500 INDEXED BY EXP-CODE.
006600*EXP-CODE=1 >> FIRST TIME
006700* =2.>> SUBSEQUENT TIME
006800* =3 >> ANY TIME

```

006900 10 RISK-RP OCCURS 12 TIMES  
 007000 INDEXED BY RS-CODE.  
 007100\*RS-CODE =1 >> LOW RISK UNSUPERVISED  
 007200\* =2 >> MOD RISK UNSUPERVISED  
 007300\* =3 >> MOD RISK MIN SUPERVISION  
 007400\* =4 >> MOD RISK MAX SUPERVISION  
 007500\* =5 >> HI RISK MIN SUPERVISION  
 007600\* =6 >> HI RISK MAX SUPERVISION  
 007700\* =7 >> MOD RISK ANY SUPERVISION  
 007800\* =8 >> HI RISK ANY SUPERVISION  
 007900\* =9 >> ANY RISK UNSUPERVISED  
 008000\* =10>> ANY RISK MIN SUPERVISION  
 008100\* =11>> ANY RISK MAX SUPERVISION  
 008200\* =12>> ANY RISK ANY SUPERVISION  
 008300 15 DSCP-GRP OCCURS 13 TIMES  
 008400 INDEXED BY DSCP-CODE.  
 008500\*DSCP-CODE = 1 >> 0 POINTS  
 008600\* = 2 >> 100 POINTS  
 008700\* = 3 >> 200 POINTS  
 008800\* = 4 >> 300 POINTS  
 008900\* = 5 >> 400 POINTS  
 009000\* = 6 >> 500 POINTS  
 009100\* = 7 >> 600 POINTS  
 009200\* = 8 >> 700 POINTS  
 009300\* = 9 >> 800 POINTS  
 009400\* =10 >> 900 POINTS  
 009500\* =11 >>1000 POINTS  
 009600\* =12 >> MORE THAN 1000 POINTS  
 009700\* =13 >> ANY POINT LEVEL  
 009800 20 NUMBER-OF-EXPS PIC 9(5).  
 009900\*EXCESS OF RECEIPTS OVER COSTS:  
 010000 20 EXCESS PIC S9(7)V99.  
 010100 20 EXCESS-SQ PIC 9(10)V9.  
 010200\*FINES + RESTITUTION + COSTS INCURRED  
 010300 20 CROSS PIC 9(7)V99.  
 010400 20 CROSS-SQ PIC 9(10)V9.  
 010500 20 FINE PIC 9(7)V99.  
 010600 20 FINE-SQ PIC 9(10)V9.  
 010700 01 MISCELLANEOUS-STUFF.  
 010800 05 EXPIN-EOF-SW PIC X VALUE "N".  
 010900 05 PRINT-STATUS-END-ERROR-SW PIC X.  
 011000 05 LAST-INVALID-RS-FILE-NUM PIC X(6).  
 011100 05 LAST-INVALID-RS-EXP-NUM PIC 9(2).  
 011200 05 GOOD-DATE-SW PIC X VALUE "N".  
 011300 05 VALID-RS-SW PIC X.  
 011400 05 LINE-CNT PIC 99 VALUE 60.  
 011500 05 PAGE-CNT PIC 99 VALUE ZERO.  
 011600 05 TEMP PIC 9(7)V99.  
 011700 05 TEMP-SQ PIC 9(6)V9.  
 011800 05 GROSS-TEMP PIC 9(7)V99.  
 011900 05 EXCESS-TEMP PIC S9(7)V99.  
 012000 05 TEMP-DSCP PIC 9(5).  
 012100 05 RECORDS-READ PIC 9(6) VALUE ZEROES.  
 012200 05 CORRECT-DATE-RANGE-CNT PIC 9(6) VALUE ZEROES.  
 012300 05 FILE-NUM-CNT PIC 9(6) VALUE ZEROES.  
 012400 05 INCLUDE-CNT PIC 9(6) VALUE ZEROES.  
 012500 05 EXCLUDE-CNT PIC 9(6) VALUE ZEROES.  
 012600 05 DUPLICATE-CNT PIC 9(6) VALUE ZEROES.  
 012700 05 TOO-LATE-CNT PIC 9(6) VALUE ZEROES.  
 012800 05 TOO-EARLY-CNT PIC 9(6) VALUE ZEROES.  
 012900 05 INVALID-RS-CNT PIC 9(6) VALUE ZEROES.  
 013000 05 INVALID-STATUS-CNT PIC 9(6) VALUE ZEROES.  
 013100 05 INVALID-COST-CNT PIC 9(6) VALUE ZEROES.

013200 05 INVALID-EXP-CNT PIC 9(6) VALUE ZEROES.  
 013300 05 LAST-FILE-NUM PIC X(6) VALUE SPACES.  
 013400 05 TEMP-PTS PIC 9(4).  
 013500 05 LONG-TEMP PIC 9(18).  
 013600 01 FORM-FEED PIC S9(4) COMP VALUE 12.  
 013700 01 CONTROL-L REDEFINES FORM-FEED PIC XX.  
 013800 01 PRINT-LINE-PARTS.  
 013900 05 CNTL-L PIC XX.  
 014000 05 FILLER PIC X(130) VALUE SPACES.  
 014100 01 PRINT-LINE PIC X(132).  
 014200 01 HEADER-LINE-1.  
 014300 05 FILLER PIC X  
 014400 05 FILLER VALUE SPACES.  
 014500 05 FILLER PIC X(32)  
 014600 05 FILLER VALUE "ARTHUR YOUNG & COMPANY DATA ANAL".  
 014700 05 FILLER PIC X(32)  
 014800 05 FILLER VALUE "YSIS ORGANIZATION REPORTS - DATA".  
 014900 05 FILLER PIC X(6)  
 015000 05 FILLER VALUE " FROM ".  
 015100 05 STUDY-START-DATE PIC 9(6).  
 015200 05 FILLER PIC X(4)  
 015300 05 FILLER VALUE " TO ".  
 015400 05 REPORT-DATE PIC 9(6).  
 015500 05 FILLER PIC X(37)  
 015600 05 FILLER VALUE SPACES.  
 015700 05 FILLER PIC X(5)  
 015800 05 FILLER VALUE "PAGE ".  
 015900 05 PAGE-NUM PIC Z9.  
 016000 05 FILLER PIC X  
 016100 05 FILLER VALUE SPACES.  
 016200 01 EDIT-HEADER-LINE.  
 016300 05 FILLER PIC X  
 016400 05 FILLER VALUE SPACES.  
 016500 05 FILLER PIC X(24)  
 016600 05 FILLER VALUE "EDIT PROBATIONER RECORDS".  
 016700 05 FILLER PIC X(107) VALUE SPACES.  
 016800 01 INVALID-EXP-NUM-LINE.  
 016900 05 FILLER PIC X VALUE SPACES.  
 017000 05 FILLER PIC X(26)  
 017100 05 FILLER VALUE "INVALID EXPERIENCE NUMBER ".  
 017200 05 FILLER PIC X(7) VALUE SPACES.  
 017300 05 FILLER PIC X(32)  
 017400 05 FILLER VALUE " PROBATIONER FILE AND EXP EQUAL ".  
 017500 05 INVALID-EXP-NUM-FILE-NUM-OUT PIC X(6).  
 017600 05 INVALID-EXP-NUM-EXP-NUM-OUT PIC 99.  
 017700 05 FILLER PIC X(58) VALUE SPACES.  
 017800 01 INVALID-RS-LINE.  
 017900 05 FILLER PIC X VALUE SPACES.  
 018000 05 FILLER PIC X(29)  
 018100 05 FILLER VALUE "INVALID RISK AND SUPERVISION ".  
 018200 05 INVALID-RISK-OUT PIC XX.  
 018300 05 INVALID-SUPER-OUT PIC XX.  
 018400 05 FILLER PIC X(32)  
 018500 05 FILLER VALUE " PROBATIONER FILE AND EXP EQUAL ".  
 018600 05 INVALID-RS-FILE-NUM-OUT PIC X(6).  
 018700 05 INVALID-RS-EXP-NUM-OUT PIC 99.  
 018800 05 FILLER PIC X(58) VALUE SPACES.  
 018900 01 INVALID-STATUS-LINE.  
 019000 05 FILLER PIC X VALUE SPACES.  
 019100 05 FILLER PIC X(24)  
 019200 05 FILLER VALUE "INVALID STATUS & END ".  
 019300 05 INVALID-STATUS-OUT PIC XX.  
 019400 05 FILLER PIC X VALUE SPACES.

```

019500 05 INVALID-END-DATE-OUT PIC 9(6).
019600 05 FILLER PIC X(32)
019700 05 VALUE " PROBATIONER FILE AND EXP EQUAL ".
019800 05 INVALID-STATUS-FILE-NUM-OUT PIC X(6).
019900 05 INVALID-STATUS-EXP-NUM-OUT PIC 99.
020000 05 FILLER PIC X(58) VALUE SPACES.
020100 01 INVALID-COST-OF-PROB-LINE.
020200 05 FILLER PIC X(27)
020300 05 VALUE " INVALID COST OF PROBATION ".
020400 05 INVALID-COST-OF-PROB-OUT PIC 9(5)V99.
020500 05 FILLER PIC X(32)
020600 05 VALUE " PROBATIONER FILE AND EXP EQUAL ".
020700 05 INVALID-COST-OF-PROB-FILE-OUT PIC X(6).
020800 05 INVALID-COST-OF-PROB-EXP-OUT PIC XX.
020900 05 FILLER PIC X(58) VALUE SPACES.
021000 01 DOLLAR-RPT-HEADER-LINE-2.
021100 05 FILLER PIC X(55) VALUE SPACES.
021200 05 EXPERIENCE-DESCRIPTION PIC X(22).
021300 05 FILLER PIC X(55) VALUE SPACES.
021400 01 DOLLAR-RPT-HEADER-LINE-3.
021500 05 FILLER PIC X(52) VALUE SPACES.
021600 05 DATA-DESCRIPTION PIC X(29).
021700 05 FILLER PIC X(51) VALUE SPACES.
021800 01 DOLLAR-RPT-RISK-TITLE-LINE.
021900 05 FILLER PIC X(6) VALUE SPACES.
022000 05 FILLER PIC X(13) VALUE "RISK".
022100 05 FILLER PIC X(9) VALUE " LOW".
022200 05 FILLER PIC X(9) VALUE " MODERATE".
022300 05 FILLER PIC X(9) VALUE " MODERATE".
022400 05 FILLER PIC X(9) VALUE " MODERATE".
022500 05 FILLER PIC X(9) VALUE " HIGH".
022600 05 FILLER PIC X(9) VALUE " HIGH".
022700 05 FILLER PIC X(9) VALUE " MODERATE".
022800 05 FILLER PIC X(9) VALUE " HIGH".
022900 05 FILLER PIC X(9) VALUE " ANY".
023000 05 FILLER PIC X(9) VALUE " ANY".
023100 05 FILLER PIC X(9) VALUE " ANY".
023200 05 FILLER PIC X(9) VALUE " ANY".
023300 05 FILLER PIC X(5) VALUE SPACES.
023400 01 DOLLAR-RPT-SUPER-TITLE-LINE.
023500 05 FILLER PIC X VALUE SPACES.
023600 05 FILLER PIC X(5) VALUE "DSCP".
023700 05 FILLER PIC X(13) VALUE "SUPERVISION".
023800 05 FILLER PIC X(9) VALUE " UNSUPER".
023900 05 FILLER PIC X(9) VALUE " UNSUPER".
024000 05 FILLER PIC X(9) VALUE " MINIMUM".
024100 05 FILLER PIC X(9) VALUE " MAXIMUM".
024200 05 FILLER PIC X(9) VALUE " MINIMUM".
024300 05 FILLER PIC X(9) VALUE " MAXIMUM".
024400 05 FILLER PIC X(9) VALUE " ANY".
024500 05 FILLER PIC X(9) VALUE " ANY".
024600 05 FILLER PIC X(9) VALUE " UNSUPER".
024700 05 FILLER PIC X(9) VALUE " MINIMUM".
024800 05 FILLER PIC X(9) VALUE " MAXIMUM".
024900 05 FILLER PIC X(9) VALUE " ANY".
025000 05 FILLER PIC X(5) VALUE SPACES.
025100 01 DOLLAR-RPT-DATA-LINE-AVG.
025200 05 FILLER PIC X VALUE SPACES.
025300 05 NUM-PTS PIC ZZZ9.
025400 05 VALUE-PLUS PIC X VALUE SPACES.
025500 05 FILLER PIC X(13) VALUE SPACES.
025600 05 DATA-PORTION-AVG OCCURS 12 TIMES
025700 INDEXED BY AVG-INDEX.

```

```

025800 10 DATA-AVG PIC -----9,99.
025900 05 FILLER PIC X(5) VALUE SPACES.
026000 01 DOLLAR-RPT-DATA-LINE-STDEV.
026100 05 FILLER PIC X(5) VALUE " +/- ".
026200 05 FILLER PIC X(14) VALUE SPACES.
026300 05 DATA-PORTION-STDEV OCCURS 12 TIMES
026400 INDEXED BY STDDEV-INDEX.
026500 10 DATA-STDEV PIC ZZZZZ9,99.
026600 05 FILLER PIC X(5) VALUE SPACES.
026700 01 COUNT-OUT-LINE.
026800 05 FILLER PIC X VALUE SPACES.
026900 05 COUNT-DESC PIC X(21).
027000 05 FILLER PIC X VALUE SPACES.
027100 05 COUNT-OUT PIC 9(6).
027200 05 FILLER PIC X(103) VALUE SPACES.
027300 PROCEDURE DIVISION.
027400 0000-PRODUCE-DOLLAR-STATS.
027500 PERFORM 1000-SETUP.
027600 PERFORM 2000-PROC-EACH-REC UNTIL
027700 EXPIN-EOF-SW EQUAL TO "Y",
027800 CLOSE EXPIN.
027900 PERFORM 3000-WRITE-RESULTS.
028000 CLOSE PRTOUT.
028100 STOP RUN.
028200 1000-SETUP.
028300 MOVE "N" TO EXPIN-EOF-SW.
028400 OPEN INPUT EXPIN.
028500 OPEN OUTPUT PRTOUT.
028600 MOVE "N" TO GOOD-DATE-SW.
028700 PERFORM 1100-GET-DATE-PARMS UNTIL
028800 GOOD-DATE-SW EQUAL TO "Y".
028900 MOVE ZEROES TO EXP-GRP ( 1 ).
029000 MOVE ZEROES TO EXP-GRP ( 2 ).
029100 MOVE ZEROES TO EXP-GRP ( 3 ).
029200 1100-GET-DATE-PARMS.
029300 DISPLAY SPACE.
029400 DISPLAY "ENTER STUDY START DATE YYMMDD:",.
029500 ACCEPT STUDY-START-DATE.
029600 DISPLAY SPACE.
029700 DISPLAY "ENTER END OF REPORT PERIOD YYMMDD:",.
029800 ACCEPT REPORT-DATE.
029900 DISPLAY SPACE.
030000 DISPLAY "SHALL I PRINT STATUS/END ERRORS (Y/N)?:",.
030100 ACCEPT PRINT-STATUS-END-ERROR-SW.
030200 DISPLAY SPACE.
030300 DISPLAY STUDY-START-DATE.
030400 " THROUGH ". REPORT-DATE.
030500 " OKAY? ",.
030600 DISPLAY SPACE.
030700 DISPLAY "TYPE Y TO CONFIRM:",.
030800 ACCEPT GOOD-DATE-SW.
030900 2000-PROC-EACH-REC.
031000 READ EXPIN RECORD INTO PROBATIONER-REC
031100 AT END MOVE "Y" TO EXPIN-EOF-SW.
031200 IF EXPIN-EOF-SW NOT EQUAL TO "Y"
031300 ADD 1 TO RECORDS-READ
031400 IF FILE-NUM > LAST-FILE-NUM
031500 ADD 1 TO FILE-NUM-CNT
031600 MOVE FILE-NUM TO LAST-FILE-NUM
031700 IF START-DATE NOT < STUDY-START-DATE
031800 IF END-DATE NOT > REPORT-DATE
031900 ADD 1 TO CORRECT-DATE-RANGE-CNT
032000 IF EXCL-CODE = SPACES

```

```

032100      ADD 1 TO INCLUDE-CNT
032200      IF COST-OF-PROB > 62.04
032300          IF PROB-STATUS = "SC"
032400          OR PROB-STATUS= "TE"
032500          OR PROB-STATUS= "CO"
032600          OR PROB-STATUS= "PV"
032700          OR PROB-STATUS= "TU"
032800          OR PROB-STATUS = "RE"
032900              PERFORM 2100-UPDATE-DOLLAR-RPT-DATA
033000          ELSE PERFORM 2200-WRITE-INVALID-STATUS
033100          ELSE PERFORM 2400-WRITE-INVALID-COST-PROB
033200          ELSE ADD 1 TO EXCLUDE-CNT
033300          ELSE ADD 1 TO TOO-LATE-CNT
033400          ELSE ADD 1 TO TOO-EARLY-CNT
033500          ELSE ADD 1 TO DUPLICATE-CNT.
033600 2100-UPDATE-DOLLAR-RPT-DATA.
033700      IF EXP-NUM = 1
033800          SET EXP-CODE TO 1
033900          PERFORM 2110-UPDATE-SPEC'D-EXP
034000          SET EXP-CODE TO 3
034100          PERFORM 2110-UPDATE-SPEC'D-EXP
034200      ELSE IF EXP-NUM > 1
034300          SET EXP-CODE TO 2
034400          PERFORM 2110-UPDATE-SPEC'D-EXP
034500          SET EXP-CODE TO 3
034600          PERFORM 2110-UPDATE-SPEC'D-EXP
034700      ELSE PERFORM 2140-WRITE-INVALID-EXP-NUM.
034800 2110-UPDATE-SPEC'D-EXP.
034900      MOVE "Y" TO VALID-RS-SW.
035000      IF RISK-LEVEL = "LO"
035100          IF SUPER-LEVEL = "UN"
035200              SET RS-CODE TO 1
035300              PERFORM 2111-UPDATE-SPEC'D-RS
035400              SET RS-CODE TO 9
035500              PERFORM 2111-UPDATE-SPEC'D-RS
035600      ELSE PERFORM 2112-WRITE-INVALID-RS
035700      ELSE IF RISK-LEVEL = "MO"
035800          IF SUPER-LEVEL = "UN"
035900              SET RS-CODE TO 2
036000              PERFORM 2111-UPDATE-SPEC'D-RS
036100              SET RS-CODE TO 7
036200              PERFORM 2111-UPDATE-SPEC'D-RS
036300              SET RS-CODE TO 9
036400              PERFORM 2111-UPDATE-SPEC'D-RS
036500      ELSE IF SUPER-LEVEL = "MI"
036600          SET RS-CODE TO 3
036700          PERFORM 2111-UPDATE-SPEC'D-RS
036800          SET RS-CODE TO 7
036900          PERFORM 2111-UPDATE-SPEC'D-RS
037000          SET RS-CODE TO 10
037100          PERFORM 2111-UPDATE-SPEC'D-RS
037200      ELSE IF SUPER-LEVEL = "MA"
037300          SET RS-CODE TO 4
037400          PERFORM 2111-UPDATE-SPEC'D-RS
037500          SET RS-CODE TO 7
037600          PERFORM 2111-UPDATE-SPEC'D-RS
037700          SET RS-CODE TO 11
037800          PERFORM 2111-UPDATE-SPEC'D-RS
037900      ELSE PERFORM 2112-WRITE-INVALID-RS
038000      ELSE IF RISK-LEVEL = "HI"
038100          IF SUPER-LEVEL = "MI"
038200              SET RS-CODE TO 5
038300              PERFORM 2111-UPDATE-SPEC'D-RS

```

```

038400      SET RS-CODE TO 8
038500      PERFORM 2111-UPDATE-SPEC'D-RS
038600      SET RS-CODE TO 10
038700      PERFORM 2111-UPDATE-SPEC'D-RS
038800      ELSE IF SUPER-LEVEL = "MA"
038900          SET RS-CODE TO 6
039000          PERFORM 2111-UPDATE-SPEC'D-RS
039100          SET RS-CODE TO 8
039200          PERFORM 2111-UPDATE-SPEC'D-RS
039300          SET RS-CODE TO 11
039400          PERFORM 2111-UPDATE-SPEC'D-RS
039500      ELSE PERFORM 2112-WRITE-INVALID-RS
039600      ELSE PERFORM 2112-WRITE-INVALID-RS.
039700      IF VALID-RS-SW = "Y"
039800          SET RS-CODE TO 12
039900          PERFORM 2111-UPDATE-SPEC'D-RS.
040000 2111-UPDATE-SPEC'D-RS.
040100      DIVIDE POINTS BY 100 GIVING TEMP-DSCP.
040200      ADD 1 TO TEMP-DSCP.
040300      IF TEMP-DSCP > 12
040400          MOVE 12 TO TEMP-DSCP.
040500          SET DSCP-CODE TO TEMP-DSCP.
040600          PERFORM 2120-UPDATE-SPEC'D-DSCP.
040700          SET DSCP-CODE TO 13.
040800          PERFORM 2120-UPDATE-SPEC'D-DSCP.
040900 2112-WRITE-INVALID-RS.
041000      MOVE "N" TO VALID-RS-SW.
041100      IF FILE-NUM = LAST-INVALID-RS-FILE-NUM
041200          IF EXP-NUM = LAST-INVALID-RS-EXP-NUM
041300          NEXT SENTENCE
041400      ELSE PERFORM 2113-WRITE-INVALID-RS-2
041500      ELSE PERFORM 2113-WRITE-INVALID-RS-2.
041600 2113-WRITE-INVALID-RS-2.
041700      ADD 1 TO INVALID-RS-CNT.
041800      MOVE FILE-NUM TO INVALID-RS-FILE-NUM-OUT.
041900      MOVE EXP-NUM TO INVALID-RS-EXP-NUM-OUT.
042000      MOVE RISK-LEVEL TO INVALID-RISK-OUT.
042100      MOVE SUPER-LEVEL TO INVALID-SUPER-OUT.
042200      ADD 1 TO LINE-CNT.
042300      IF LINE-CNT > 55
042400          PERFORM 8888-WRITE-EDIT-HEADER.
042500          MOVE INVALID-RS-LINE TO PRINT-LINE.
042600          PERFORM 9999-WRITE-PRINT-LINE.
042700          MOVE FILE-NUM TO LAST-INVALID-RS-FILE-NUM.
042800          MOVE EXP-NUM TO LAST-INVALID-RS-EXP-NUM.
042900 2120-UPDATE-SPEC'D-DSCP.
043000      ADD 1 TO NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ),
043100      ADD COSTS, FINES, RESTITUTION GIVING CROSS-TEMP,
043200      SUBTRACT COST-OF-PROB FROM CROSS-TEMP
043300          GIVING EXCESS-TEMP.
043400      ADD EXCESS-TEMP TO EXCESS ( EXP-CODE, RS-CODE, DSCP-CODE ),
043500      MULTIPLY EXCESS-TEMP BY EXCESS-TEMP
043600          GIVING TEMP-SQ.
043700      ADD TEMP-SQ TO EXCESS-SQ ( EXP-CODE, RS-CODE, DSCP-CODE ),
043800      ADD CROSS-TEMP TO CROSS ( EXP-CODE, RS-CODE, DSCP-CODE ),
043900      MULTIPLY CROSS-TEMP BY CROSS-TEMP
044000          GIVING TEMP-SQ.
044100      ADD TEMP-SQ TO CROSS-SQ ( EXP-CODE, RS-CODE, DSCP-CODE ),
044200      ADD FINES TO FINE ( EXP-CODE, RS-CODE, DSCP-CODE ),
044300      MULTIPLY FINES BY FINES GIVING
044400          TEMP-SQ.
044500      ADD TEMP-SQ TO FINE-SQ ( EXP-CODE, RS-CODE, DSCP-CODE ),
044600 2140-WRITE-INVALID-EXP-NUM.

```

044700 ADD 1 TO INVALID-EXP-CNT.  
 044800 MOVE FILE-NUM TO  
    INVALID-EXP-NUM-FILE-NUM-OUT.  
 044900 MOVE EXP-NUM TO  
    INVALID-EXP-NUM-EXP-NUM-OUT.  
 045000 ADD 1 TO LINE-CNT.  
 045100 MOVE "INVALID-EXP-NUM-EXP-NUM-OUT".  
 045200 ADD 1 TO LINE-CNT.  
 045300 IF LINE-CNT > 55  
        PERFORM 8888-WRITE-EDIT-HEADER.  
 045400 MOVE INVALID-EXP-NUM-LINE TO PRINT-LINE.  
 045500 PERFORM 9999-WRITE-PRINT-LINE.  
 045700 2200-WRITE-INVALID-STATUS.  
 045800 ADD 1 TO INVALID-STATUS-CNT.  
 045900 MOVE FILE-NUM TO INVALID-STATUS-FILE-NUM-OUT.  
 046000 MOVE EXP-NUM TO INVALID-STATUS-EXP-NUM-OUT.  
 046100 MOVE PROB-STATUS TO INVALID-STATUS-OUT.  
 046200 MOVE END-DATE TO INVALID-END-DATE-OUT.  
 046300 IF PRINT-STATUS-END-ERROR-SW = "Y"  
        ADD 1 TO LINE-CNT  
        IF LINE-CNT > 55  
            PERFORM 8888-WRITE-EDIT-HEADER.  
 046400 IF PRINT-STATUS-END-ERROR-SW = "Y"  
        MOVE INVALID-STATUS-LINE TO PRINT-LINE  
 046500 PERFORM 9999-WRITE-PRINT-LINE.  
 047000 2400-WRITE-INVALID-COST-PROB.  
 047100 ADD 1 TO INVALID-COST-CNT.  
 047200 MOVE FILE-NUM TO INVALID-COST-OF-PROB-FILE-OUT.  
 047300 MOVE EXP-NUM TO INVALID-COST-OF-PROB-EXP-OUT.  
 047400 MOVE COST-OF-PROB TO INVALID-COST-OF-PROB-OUT.  
 047500 ADD 1 TO LINE-CNT.  
 047600 IF LINE-CNT > 55  
        PERFORM 8888-WRITE-EDIT-HEADER.  
 047700 MOVE INVALID-COST-OF-PROB-LINE TO PRINT-LINE.  
 047900 PERFORM 9999-WRITE-PRINT-LINE.  
 048000 3000-WRITE-RESULTS.  
 048100 SET EXP-CODE TO 1.  
 048200 MOVE "FIRST EXPERIENCES" TO EXPERIENCE-DESCRIPTION.  
 048300 PERFORM 3100-PRINT-7-PAGES.  
 048400 MOVE "SUBSEQUENT EXPERIENCES" TO EXPERIENCE-DESCRIPTION.  
 048500 SET EXP-CODE TO 2.  
 048600 PERFORM 3100-PRINT-7-PAGES.  
 048700 SET EXP-CODE TO 3.  
 048800 MOVE "ALL EXPERIENCES" TO EXPERIENCE-DESCRIPTION.  
 048900 PERFORM 3100-PRINT-7-PAGES.  
 049000 PERFORM 9000-WRITE-FIRST-HEADER-LINE.  
 049100 MOVE "RECORDS READ" TO COUNT-DESC.  
 049200 MOVE RECORDS-READ TO COUNT-OUT.  
 049300 PERFORM 3010-WRITE-COUNT.  
 049400 MOVE "VALID DATE RANGES" TO COUNT-DESC.  
 049500 MOVE CORRECT-DATE-RANGE-CNT TO COUNT-OUT.  
 049600 PERFORM 3010-WRITE-COUNT.  
 049700 MOVE "DISTINCT FILE NUMBERS" TO COUNT-DESC.  
 049800 MOVE FILE-NUM-CNT TO COUNT-OUT.  
 049900 PERFORM 3010-WRITE-COUNT.  
 050000 MOVE "INCLUDED RECORDS" TO COUNT-DESC.  
 050100 MOVE INCLUDE-CNT TO COUNT-OUT.  
 050200 PERFORM 3010-WRITE-COUNT.  
 050300 MOVE "EXCLUDED RECORDS" TO COUNT-DESC.  
 050400 MOVE EXCLUDE-CNT TO COUNT-OUT.  
 050500 PERFORM 3010-WRITE-COUNT.  
 050600 MOVE "MULTIPLE EXPERIENCES" TO COUNT-DESC.  
 050700 MOVE DUPLICATE-CNT TO COUNT-OUT.  
 050800 PERFORM 3010-WRITE-COUNT.  
 050900 MOVE "TOO LATE END DATE" TO COUNT-DESC.

051000 MOVE TOO-LATE-CNT TO COUNT-OUT.  
 051100 PERFORM 3010-WRITE-COUNT.  
 051200 MOVE "TOO EARLY START DATE" TO COUNT-DESC.  
 051300 MOVE TOO-EARLY-CNT TO COUNT-OUT.  
 051400 PERFORM 3010-WRITE-COUNT.  
 051500 MOVE "INVALID RISK & SUPER" TO COUNT-DESC.  
 051600 MOVE INVALID-RS-CNT TO COUNT-OUT.  
 051700 PERFORM 3010-WRITE-COUNT.  
 051800 MOVE "INVALID STATUS" TO COUNT-DESC.  
 051900 MOVE INVALID-STATUS-CNT TO COUNT-OUT.  
 052000 PERFORM 3010-WRITE-COUNT.  
 052100 MOVE "INVALID COST" TO COUNT-DESC.  
 052200 MOVE INVALID-COST-CNT TO COUNT-OUT.  
 052300 PERFORM 3010-WRITE-COUNT.  
 052400 MOVE "INVALID TIMES ON PROB" TO COUNT-DESC.  
 052500 MOVE INVALID-EXP-CNT TO COUNT-OUT.  
 052600 PERFORM 3010-WRITE-COUNT.  
 052700 3010-WRITE-COUNT.  
 052800 MOVE COUNT-OUT-LINE TO PRINT-LINE.  
 052900 PERFORM 9999-WRITE-PRINT-LINE.  
 053000 3100-PRINT-7-PAGES.  
 053100 MOVE "NUMBERS OF EXPERIENCES" TO DATA-DESCRIPTION.  
 053200 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.  
 053300 PERFORM 3120-WRITE-NUM-EXPS-DATA-LINE VARYING TEMP-DSCP  
        FROM 1 BY 1 UNTIL TEMP-DSCP = 14.  
 053400 MOVE "EXCESS OF RECEIPTS OVER COSTS" TO DATA-DESCRIPTION.  
 053500 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.  
 053600 PERFORM 3130-WRITE-EXCESS-DATA-LINES VARYING TEMP-DSCP  
        FROM 1 BY 1 UNTIL TEMP-DSCP = 14.  
 053800 MOVE "AVERAGE GROSS RECEIPTS" TO DATA-DESCRIPTION.  
 053900 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.  
 054000 PERFORM 3140-WRITE-GROSS-DATA-LINES VARYING TEMP-DSCP  
        FROM 1 BY 1 UNTIL TEMP-DSCP = 14.  
 054100 MOVE "AVERAGE FINES COLLECTED" TO DATA-DESCRIPTION.  
 054200 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.  
 054300 PERFORM 3150-WRITE-FINES-DATA-LINES VARYING TEMP-DSCP  
        FROM 1 BY 1 UNTIL TEMP-DSCP = 14.  
 054700 3110-WRITE-DOLLAR-RPT-HEADER.  
 054800 PERFORM 9000-WRITE-FIRST-HEADER-LINE.  
 054900 MOVE DOLLAR-RPT-HEADER-LINE-2 TO PRINT-LINE.  
 055000 PERFORM 9999-WRITE-PRINT-LINE.  
 055100 MOVE DOLLAR-RPT-HEADER-LINE-3 TO PRINT-LINE.  
 055200 PERFORM 9999-WRITE-PRINT-LINE.  
 055300 MOVE SPACES TO PRINT-LINE.  
 055400 PERFORM 9999-WRITE-PRINT-LINE.  
 055500 PERFORM 9999-WRITE-PRINT-LINE.  
 055600 MOVE DOLLAR-RPT-RISK-TITLE-LINE TO PRINT-LINE.  
 055700 PERFORM 9999-WRITE-PRINT-LINE.  
 055800 MOVE DOLLAR-RPT-SUPER-TITLE-LINE TO PRINT-LINE.  
 055900 PERFORM 9999-WRITE-PRINT-LINE.  
 056000 MOVE SPACES TO PRINT-LINE.  
 056100 PERFORM 9999-WRITE-PRINT-LINE.  
 056200 3120-WRITE-NUM-EXPS-DATA-LINE.  
 056300 PERFORM 3122-SET-UP-DATA-LINE-TEXT.  
 056400 PERFORM 3121-MOVE-A-NUM-EXP-COLUMN  
        VARYING RS-CODE FROM 1 BY 1  
        UNTIL RS-CODE > 12.  
 056600 MOVE DOLLAR-RPT-DATA-LINE- AVG TO PRINT-LINE.  
 056800 PERFORM 9999-WRITE-PRINT-LINE.  
 056900 3122-SET-UP-DATA-LINE-TEXT.  
 057000 MULTIPLY TEMP-DSCP BY 100 GIVING TEMP-PTS.  
 057100 SUBTRACT 100 FROM TEMP-PTS.  
 057200 MOVE TEMP-PTS TO NUM-PTS.

```

057300 MOVE SPACES TO VALUE-PLUS.
057400 IF TEMP-DSCP = 12
057500 MOVE 1000 TO NUM-PTS
057600 MOVE "+" TO VALUE-PLUS.
057700 IF TEMP-DSCP > 12
057800 MOVE ZEROES TO NUM-PTS
057900 MOVE "&" TO VALUE-PLUS.
058000 3121-MOVE-A-NUM-EXP-COLUMN.
058100 SET AVG-INDEX TO RS-CODE.
058200 SET DSCP-CODE TO TEMP-DSCP.
058300 MOVE NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
      TO DATA-AVG ( AVG-INDEX ).^
058400 3130-WRITE-EXCESS-DATA-LINES.
058500 3131-MOVE-AN-EXCESS-COLUMN
058600 PERFORM 3131-MOVE-AN-EXCESS-COLUMN
058700 VARYING RS-CODE FROM 1 BY 1
058800 UNTIL RS-CODE > 12.
058900 PERFORM 3132-WRITE-2-DATA-LINES.
059000 3131-MOVE-AN-EXCESS-COLUMN.
059100 SET AVG-INDEX TO RS-CODE.
059200 SET STDDEV-INDEX TO RS-CODE.
059300 SET DSCP-CODE TO TEMP-DSCP.
059400 IF NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) > 1
      COMPUTE LONG-TEMP =
      ( ( EXCESS-SQ ( EXP-CODE, RS-CODE, DSCP-CODE )
      - ( EXCESS ( EXP-CODE, RS-CODE, DSCP-CODE )
      * EXCESS ( EXP-CODE, RS-CODE, DSCP-CODE )
      / NUMBER-OF-EXPS ( EXP-CODE, RS-CODE,
      DSCP-CODE ) ) )
      / ( NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
      - 1 ) )
059600 COMPUTE DATA-STDDEV ( STDDEV-INDEX ) =
059700 LONG-TEMP ** 0.5
059800 DIVIDE EXCESS ( EXP-CODE, RS-CODE, DSCP-CODE ) BY
059900 NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) GIVING
060000 DATA-AVG ( AVG-INDEX )
060100 ELSE MOVE EXCESS ( EXP-CODE, RS-CODE, DSCP-CODE ) TO
060200 DATA-AVG ( AVG-INDEX )^
WARNING 179 LEFT TRUNCATION MAY OCCUR.
061000 MOVE ZEROES TO DATA-STDDEV ( STDDEV-INDEX ).^
061100 3132-WRITE-2-DATA-LINES.
061200 PERFORM 3122-SET-UP-DATA-LINE-TEXT.
061300 MOVE DOLLAR-RPT-DATA-LINE-AVG TO PRINT-LINE.
061400 PERFORM 9999-WRITE-PRINT-LINE.
061500 MOVE DOLLAR-RPT-DATA-LINE-STDDEV TO PRINT-LINE.
061600 PERFORM 9999-WRITE-PRINT-LINE.
061700 3140-WRITE-CROSS-DATA-LINES.
061800 PERFORM 3141-MOVE-A-CROSS-COLUMN
061900 VARYING RS-CODE FROM 1 BY 1
062000 UNTIL RS-CODE > 12.
062100 PERFORM 3132-WRITE-2-DATA-LINES.
062200 3141-MOVE-A-CROSS-COLUMN.
062300 SET AVG-INDEX TO RS-CODE.
062400 SET STDDEV-INDEX TO RS-CODE.
062500 SET DSCP-CODE TO TEMP-DSCP.
062600 IF NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) > 1
      DIVIDE CROSS ( EXP-CODE, RS-CODE, DSCP-CODE )
      BY NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
      GIVING DATA-AVG ( AVG-INDEX )
062800 COMPUTE LONG-TEMP =
      ( ( CROSS-SQ ( EXP-CODE, RS-CODE, DSCP-CODE )
      - ( CROSS ( EXP-CODE, RS-CODE, DSCP-CODE )
      * CROSS ( EXP-CODE, RS-CODE, DSCP-CODE ) )

```

```

063400 / NUMBER-OF-EXPS ( EXP-CODE, RS-CODE,
      DSCP-CODE ) ) )
063500 / ( NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
      - 1 ) )
063600 COMPUTE DATA-STDDEV ( STDDEV-INDEX ) =
063700 LONG-TEMP ** 0.5
063800 ELSE MOVE CROSS ( EXP-CODE, RS-CODE, DSCP-CODE )
      TO DATA-AVG ( AVG-INDEX )^
I. WARNING 179 LEFT TRUNCATION MAY OCCUR. SEE 060900
064200 MOVE ZEROES TO DATA-STDDEV ( STDDEV-INDEX ).^
064300 3150-WRITE-FINES-DATA-LINES.
064400 PERFORM 3151-MOVE-A-FINE-COLUMN
064500 VARYING RS-CODE FROM 1 BY 1
064600 UNTIL RS-CODE > 12.
064700 PERFORM 3132-WRITE-2-DATA-LINES.
064800 3151-MOVE-A-FINE-COLUMN.
064900 SET AVG-INDEX TO RS-CODE.
065000 SET STDDEV-INDEX TO RS-CODE.
065100 SET DSCP-CODE TO TEMP-DSCP.
065200 IF NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) > 1
      DIVIDE FINE ( EXP-CODE, RS-CODE, DSCP-CODE )
      BY NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
      GIVING DATA-AVG ( AVG-INDEX )
065500 COMPUTE LONG-TEMP =
065600 ( ( FINE-SQ ( EXP-CODE, RS-CODE, DSCP-CODE )
065700 - ( FINE ( EXP-CODE, RS-CODE, DSCP-CODE )
065800 * FINE ( EXP-CODE, RS-CODE, DSCP-CODE )
065900 / NUMBER-OF-EXPS ( EXP-CODE, RS-CODE,
      DSCP-CODE ) ) )
066000 / ( NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
      - 1 ) )
066200 COMPUTE DATA-STDDEV ( STDDEV-INDEX ) =
066300 LONG-TEMP ** 0.5
066400 ELSE MOVE ZEROES TO DATA-STDDEV ( STDDEV-INDEX )
066500 MOVE FINE ( EXP-CODE, RS-CODE, DSCP-CODE )
      TO DATA-AVG ( AVG-INDEX )^
WARNING 179 LEFT TRUNCATION MAY OCCUR. SEE 064100
066900 8888-WRITE-EDIT-HEADER.
067000 PERFORM 9000-WRITE-FIRST-HEADER-LINE.
067100 MOVE PAGE-CNT TO PAGE-NUM.
067200 WRITE PRTOUT-REC FROM EDIT-HEADER-LINE
067300 AFTER ADVANCING 1.
067400 ADD 1 TO LINE-CNT.
067500 9000-WRITE-FIRST-HEADER-LINE.
067600 MOVE CONTROL-L TO CNTL-L.
067700 MOVE PRINT-LINE-PARTS TO PRINT-LINE.
067800 PERFORM 9999-WRITE-PRINT-LINE.
067900 ADD 1 TO PAGE-CNT.
068000 MOVE ZEROES TO LINE-CNT.
068100 MOVE PAGE-CNT TO PAGE-NUM.
068200 MOVE HEADER-LINE-1 TO PRINT-LINE.
068300 PERFORM 9999-WRITE-PRINT-LINE.
068400 9999-WRITE-PRINT-LINE.
068500 WRITE PRTOUT-REC FROM PRINT-LINE
068600 AFTER ADVANCING 1.^
DATA AREA IS %040665 WORDS.
CPU TIME = 0:00:31. WALL TIME = 0:24:28.
COBOL/3000 COMPILEATION. NO ERRORS, 003 WARNINGS. SEE 066800
OF COMPILE

```

RCE DOLL2SV  
BOLPREP DOLL2S\A.DOLL2SV

E 0001 HP32213C.02.08 (C) HEWLETT-PACKARD CO. 1980

001100 IDENTIFICATION DIVISION.  
001200 PROGRAM-ID. DOLL2.  
001300 AUTHOR. JIM BACKUS.  
001400 ENVIRONMENT DIVISION.  
001500 CONFIGURATION SECTION.  
001600 SOURCE-COMPUTER. HP-3000.  
001700 OBJECT-COMPUTER. HP-3000.  
001800 INPUT-OUTPUT SECTION.  
001900 FILE-CONTROL.  
002000 SELECT EXPIN ASSIGN TO "HCCLIST".  
002100 SELECT PRTOUT ASSIGN TO "PRINTER".  
002200 DATA DIVISION.  
002300 FILE SECTION.  
002400 FD EXPIN  
002500 LABEL RECORDS ARE STANDARD  
002600 RECORD CONTAINS 60 CHARACTERS.  
002700 01 EXPIN-REC PIC X(60).  
002800 FD PRTOUT  
002900 LABEL RECORDS ARE OMITTED  
003000 RECORD CONTAINS 132 CHARACTERS.  
003100 01 PRTOUT-REC PIC X(132).  
003200 WORKING-STORAGE SECTION.  
003300 01 PROBATIONER-REC.  
003400 05 FILE-NUM PIC X(6).  
003500 05 EXP-NUM PIC 99.  
003600 05 RISK-LEVEL PIC X(2).  
003700\*RISK = "LO" "MO" "HI"  
003800 05 SUPER-LEVEL PIC X(2).  
003900\*SUPERVISION = "MA" "MI" "UN"  
004000 05 COST-OF-PROB PIC 9(5)V99.  
004100\*INTAKE=\$62.05  
004200\*\*\$/MILE=\$0.185  
004300\*\*\$/MINUTE=\$0.3171  
004400 05 COSTS PIC 9(5)V99.  
004500 05 FINES PIC 9(5)V99.  
004600 05 RESTITUTION PIC 9(5)V99.  
004700\*COSTS, FINES, AND RESTITUTION PAID BY PROBATIONER  
004800 05 POINTS PIC 9(4).  
004900 05 PROB-STATUS PIC XX.  
005000\*ACTIVE > "AC"  
005100\*SUCCESSFUL > "SC"  
005200\*\*\*SUCCESSFUL > "SC"  
005300\*\*\*TERMINATED EARLY > "TE"  
005400\*UNSUCCESSFUL > "RE"  
005500\*\*\*CONTINUED > "CO"  
005600\*\*\*PV RECORDED > "PV"  
005700\*\*\*REVOKE > "RE"  
005800\*\*\*TERMINATED UNSC. > "TU"  
005900 05 START-DATE PIC 9(6).  
006000 05 END-DATE PIC 9(6).  
006100 05 EXCL-CODE PIC XX.  
006200\*BOTH DATES ARE IN YYMMDD FORMAT  
006300 01 DOLLAR-RPT-DATA.  
006400 05 EXP-GRP OCCURS 3 TIMES  
006500 INDEXED BY EXP-CODE.  
006600\*EXP-CODE=1 >> FIRST TIME  
006700\* =2 >> SUBSEQUENT TIME  
006800\* =3 >> ANY TIME

006900 10 RS-GRP OCCURS 12 TIMES  
007000 INDEXED BY RS-CODE.  
007100\*RS-CODE =1 >> LOW RISK UNSUPERVISED  
007200\* =2 >> MOD RISK UNSUPERVISED  
007300\* =3 >> MOD RISK MIN SUPERVISION  
007400\* =4 >> MOD RISK MAX SUPERVISION  
007500\* =5 >> HI RISK MIN SUPERVISION  
007600\* =6 >> HI RISK MAX SUPERVISION  
007700\* =7 >> MOD RISK ANY SUPERVISION  
007800\* =8 >> HI RISK ANY SUPERVISION  
007900\* =9 >> ANY RISK UNSUPERVISED  
008000\* =10 >> ANY RISK MIN SUPERVISION  
008100\* =11 >> ANY RISK MAX SUPERVISION  
008200\* =12 >> ANY RISK ANY SUPERVISION  
008300 15 DSCP-GRP OCCURS 13 TIMES  
008400 INDEXED BY DSCP-CODE.  
008500\*DSCP-CODE = 1 >> 0 POINTS  
008600\* = 2 >> 100 POINTS  
008700\* = 3 >> 200 POINTS  
008800\* = 4 >> 300 POINTS  
008900\* = 5 >> 400 POINTS  
009000\* = 6 >> 500 POINTS  
009100\* = 7 >> 600 POINTS  
009200\* = 8 >> 700 POINTS  
009300\* = 9 >> 800 POINTS  
009400\* = 10 >> 900 POINTS  
009500\* = 11 >> 1000 POINTS  
009600\* = 12 >> MORE THAN 1000 POINTS  
009700\* = 13 >> ANY POINT LEVEL  
009800 20 NUMBER-OF-EXPS PIC 9(5).  
009900 20 RESTI PIC 9(7)V99.  
010000 20 RESTI-SQ PIC 9(10)V9.  
010100\*(COURT) COSTS CHARGED TO PROBATIONER:  
010200 20 CCOSTS PIC 9(7)V99.  
010300 20 CCOSTS-SQ PIC 9(10)V9.  
010400\*(PROBATION) COSTS INCURRED FOR SUPERVISION:  
010500 20 PCOST PIC 9(7)V99.  
010600 20 PCOST-SQ PIC 9(10)V9.  
010700 01 MISCELLANEOUS-STUFF.  
010800 05 EXPIN-EOP-SW PIC X VALUE "N".  
010900 05 PRINT-STATUS-END-ERROR-SW PIC X,  
011000 05 LAST-INVALID-RS-FILE-NUM PIC X(6),  
011100 05 LAST-INVALID-RS-EXP-NUM PIC 99.  
011200 05 GOOD-DATE-SW PIC X VALUE "N".  
011300 05 VALID-RS-SW PIC X,  
011400 05 LINE-CNT PIC 99 VALUE 60.  
011500 05 PAGE-CNT PIC 99 VALUE ZERO.  
011600 05 TEMP PIC 9(7)V99.  
011700 05 TEMP-SQ PIC 9(6)V9.  
011800 05 GROSS-TEMP PIC 9(7)V99.  
011900 05 EXCESS-TEMP PIC 9(7)V99.  
012000 05 TEMP-DSCP PIC 9(5).  
012100 05 RECORDS-READ PIC 9(6) VALUE ZEROES.  
012200 05 CORRECT-DATE-RANGE-CNT PIC 9(6) VALUE ZEROES.  
012300 05 FILE-NUM-CNT PIC 9(6) VALUE ZEROES.  
012400 05 INCLUDE-CNT PIC 9(6) VALUE ZEROES.  
012500 05 EXCLUDE-CNT PIC 9(6) VALUE ZEROES.  
012600 05 DUPLICATE-CNT PIC 9(6) VALUE ZEROES.  
012700 05 TOO-LATE-CNT PIC 9(6) VALUE ZEROES.  
012800 05 TOO-EARLY-CNT PIC 9(6) VALUE ZEROES.  
012900 05 INVALID-RS-CNT PIC 9(6) VALUE ZEROES.  
013000 05 INVALID-STATUS-CNT PIC 9(6) VALUE ZEROES.  
013100 05 INVALID-COST-CNT PIC 9(6) VALUE ZEROES.

013200 05 INVALID-EXP-CNT PIC 9(6) VALUE ZEROES.  
 013300 05 LAST-FILE-NUM PIC X(6) VALUE SPACES.  
 013400 05 TEMP-PTS PIC 9(4).  
 013500 05 LONG-TEMP PIC 9(18).  
 013600 01 FORM-FEED PIC S9(4) COMP VALUE 12.  
 013700 01 CONTROL-L REDEFINES FORM-FEED PIC XX.  
 013800 01 PRINT-LINE-PARTS.  
 013900 05 CNTL-L PIC XX.  
 014000 05 FILLER PIC X(130) VALUE SPACES.  
 014100 01 PRINT-LINE PIC X(132).  
 014200 01 HEADER-LINE-1.  
 014300 05 FILLER PIC X  
 014400 05 FILLER VALUE SPACES.  
 014500 05 FILLER PIC X(32)  
 014600 05 VALUE "ARTHUR YOUNG & COMPANY DATA ANAL".  
 014700 05 FILLER PIC X(32)  
 014800 05 VALUE "YSIS ORGANIZATION REPORTS - DATA".  
 014900 05 FILLER PIC X(6)  
 015000 05 VALUE " FROM ".  
 015100 05 STUDY-START-DATE PIC 9(6).  
 015200 05 FILLER PIC X(4)  
 015300 05 VALUE " TO ".  
 015400 05 REPORT-DATE PIC 9(6).  
 015500 05 FILLER PIC X(37)  
 015600 05 VALUE SPACES.  
 015700 05 FILLER PIC X(5)  
 015800 05 VALUE "PAGE ".  
 015900 05 PAGE-NUM PIC Z9.  
 016000 05 FILLER PIC X  
 016100 05 VALUE SPACES.  
 016200 01 EDIT-HEADER-LINE.  
 016300 05 FILLER PIC X  
 016400 05 VALUE SPACES.  
 016500 05 FILLER PIC X(24)  
 016600 05 VALUE "EDIT PROBATIONER RECORDS".  
 016700 05 FILLER PIC X(107) VALUE SPACES.  
 016800 01 INVALID-EXP-NUM-LINE.  
 016900 05 FILLER PIC X VALUE SPACES.  
 017000 05 FILLER PIC X(26)  
 017100 05 VALUE "INVALID EXPERIENCE NUMBER ".  
 017200 05 FILLER PIC X(7) VALUE SPACES.  
 017300 05 FILLER PIC X(32)  
 017400 05 VALUE " PROBATIONER FILE AND EXP EQUAL ".  
 017500 05 INVALID-EXP-NUM-FILE-NUM-OUT PIC X(6).  
 017600 05 INVALID-EXP-NUM-EXP-NUM-OUT PIC 99.  
 017700 05 FILLER PIC X(58) VALUE SPACES.  
 017800 01 INVALID-RS-LINE.  
 017900 05 FILLER PIC X VALUE SPACES.  
 018000 05 FILLER PIC X(29)  
 018100 05 VALUE "INVALID RISK AND SUPERVISION ".  
 018200 05 INVALID-RISK-OUT PIC XX.  
 018300 05 INVALID-SUPER-OUT PIC XX.  
 018400 05 FILLER PIC X(32)  
 018500 05 VALUE " PROBATIONER FILE AND EXP EQUAL ".  
 018600 05 INVALID-RS-FILE-NUM-OUT PIC X(6).  
 018700 05 INVALID-RS-EXP-NUM-OUT PIC 99.  
 018800 05 FILLER PIC X(58) VALUE SPACES.  
 018900 01 INVALID-STATUS-LINE.  
 019000 05 FILLER PIC X VALUE SPACES.  
 019100 05 FILLER PIC X(24)  
 019200 05 VALUE "INVALID STATUS & END ".  
 019300 05 INVALID-STATUS-OUT PIC XX.  
 019400 05 FILLER PIC X VALUE SPACES.

019500 05 INVALID-END-DATE-OUT PIC 9(6).  
 019600 05 FILLER PIC X(32)  
 019700 05 VALUE " PROBATIONER FILE AND EXP EQUAL ".  
 019800 05 INVALID-STATUS-FILE-NUM-OUT PIC X(6).  
 019900 05 INVALID-STATUS-EXP-NUM-OUT PIC 99.  
 020000 05 FILLER PIC X(58) VALUE SPACES.  
 020100 01 INVALID-COST-OF-PROB-LINE.  
 020200 05 FILLER PIC X(27)  
 020300 05 VALUE " INVALID COST OF PROBATION ".  
 020400 05 INVALID-COST-OF-PROB-OUT PIC 9(5)V99.  
 020500 05 FILLER PIC X(32)  
 020600 05 VALUE " PROBATIONER FILE AND EXP EQUAL ".  
 020700 05 INVALID-COST-OF-PROB-FILE-OUT PIC X(6).  
 020800 05 INVALID-COST-OF-PROB-EXP-OUT PIC XX.  
 020900 05 FILLER PIC X(58) VALUE SPACES.  
 021000 01 DOLLAR-RPT-HEADER-LINE-2.  
 021100 05 FILLER PIC X(55) VALUE SPACES.  
 021200 05 EXPERIENCE-DESCRIPTION PIC X(22).  
 021300 05 FILLER PIC X(55) VALUE SPACES.  
 021400 01 DOLLAR-RPT-HEADER-LINE-3.  
 021500 05 FILLER PIC X(52) VALUE SPACES.  
 021600 05 DATA-DESCRIPTION PIC X(29).  
 021700 05 FILLER PIC X(51) VALUE SPACES.  
 021800 01 DOLLAR-RPT-RISK-TITLE-LINE.  
 021900 05 FILLER PIC X(6) VALUE SPACES.  
 022000 05 FILLER PIC X(13) VALUE "RISK: ",  
 022100 05 FILLER PIC X(9) VALUE " LOW ".  
 022200 05 FILLER PIC X(9) VALUE " MODERATE ".  
 022300 05 FILLER PIC X(9) VALUE " MODERATE ".  
 022400 05 FILLER PIC X(9) VALUE " MODERATE ".  
 022500 05 FILLER PIC X(9) VALUE " HIGH ".  
 022600 05 FILLER PIC X(9) VALUE " HIGH ".  
 022700 05 FILLER PIC X(9) VALUE " MODERATE ".  
 022800 05 FILLER PIC X(9) VALUE " HIGH ".  
 022900 05 FILLER PIC X(9) VALUE " ANY ".  
 023000 05 FILLER PIC X(9) VALUE " ANY ".  
 023100 05 FILLER PIC X(9) VALUE " ANY ".  
 023200 05 FILLER PIC X(9) VALUE " ANY ".  
 023300 05 FILLER PIC X(5) VALUE SPACES.  
 023400 01 DOLLAR-RPT-SUPER-TITLE-LINE.  
 023500 05 FILLER PIC X VALUE SPACES.  
 023600 05 FILLER PIC X(5) VALUE "DSOP ".  
 023700 05 FILLER PIC X(13) VALUE "SUPERVISION: ".  
 023800 05 FILLER PIC X(9) VALUE " UNSUPER ".  
 023900 05 FILLER PIC X(9) VALUE " UNSUPER ".  
 024000 05 FILLER PIC X(9) VALUE " MINIMUM ".  
 024100 05 FILLER PIC X(9) VALUE " MAXIMUM ".  
 024200 05 FILLER PIC X(9) VALUE " MINIMUM ".  
 024300 05 FILLER PIC X(9) VALUE " MAXIMUM ".  
 024400 05 FILLER PIC X(9) VALUE " ANY ".  
 024500 05 FILLER PIC X(9) VALUE " ANY ".  
 024600 05 FILLER PIC X(9) VALUE " UNSUPER ".  
 024700 05 FILLER PIC X(9) VALUE " MINIMUM ".  
 024800 05 FILLER PIC X(9) VALUE " MAXIMUM ".  
 024900 05 FILLER PIC X(9) VALUE " ANY ".  
 025000 05 FILLER PIC X(5) VALUE SPACES.  
 025100 01 DOLLAR-RPT-DATA-LINE-AVG.  
 025200 05 FILLER PIC X VALUE SPACES.  
 025300 05 NUM-PTS PIC ZZZ9.  
 025400 05 VALUE-PLUS PIC X VALUE SPACES.  
 025500 05 FILLER PIC X(13) VALUE SPACES.  
 025600 05 DATA-PORTION-AVG OCCURS 12 TIMES  
 025700 05 INDEXED BY AVG-INDEX.

```

025900 05 FILLER PIC X(5) VALUE SPACES.
026000 01 DOLLAR-RPT-DATA-LINE-STDDEV.
026100 05 FILLER PIC X(5) VALUE "+/-".
026200 05 FILLER PIC X(14) VALUE SPACES.
026300 05 DATA-PORTION-STDDEV OCCURS 12 TIMES
        INDEXED BY STDDEV-INDEX.
026400 10 DATA-STDDEV PIC ZZZZZ9.99.
026500 05 FILLER PIC X(5) VALUE SPACES.
026700 01 COUNT-OUT-LINE.
026800 05 FILLER PIC X VALUE SPACES.
026900 05 COUNT-DESC PIC X(21).
027000 05 FILLER PIC X VALUE SPACES.
027100 05 COUNT-OUT PIC 9(6).
027200 05 FILLER PIC X(103) VALUE SPACES.
027300 PROCEDURE DIVISION.
027400 0000-PRODUCE-DOLLAR-STATS.
027500    PERFORM 1000-SETUP.
027600    PERFORM 2000-PROC-EACH-REC UNTIL
            EXPIN-EOF-SW EQUAL TO "Y".
027800    CLOSE EXPIN.
027900    PERFORM 3000-WRITE-RESULTS.
028000    CLOSE PRTOUT.
028100    STOP RUN.
028200 1000-SETUP.
028300    MOVE "N" TO EXPIN-EOF-SW.
028400    OPEN INPUT EXPIN.
028500    OPEN OUTPUT PRTOUT.
028600    MOVE "N" TO GOOD-DATE-SW.
028700    PERFORM 1100-GET-DATE-PARMS UNTIL
            GOOD-DATE-SW EQUAL TO "Y".
028800    MOVE ZEROES TO EXP-GRP ( 1 ) .
028900    MOVE ZEROES TO EXP-GRP ( 2 ) .
029100    MOVE ZEROES TO EXP-GRP ( 3 ) .
029200 1100-GET-DATE-PARMS.
029300    DISPLAY SPACE.
029400    DISPLAY "ENTER STUDY START DATE YYMMDD:".
029500    ACCEPT STUDY-START-DATE.
029600    DISPLAY SPACE.
029700    DISPLAY "ENTER END OF REPORT PERIOD YYMMDD:".
029800    ACCEPT REPORT-DATE.
029900    DISPLAY SPACE.
030000    DISPLAY "SHALL I PRINT STATUS/END ERRORS (Y/N)?:".
030100    ACCEPT PRINT-STATUS-END-ERROR-SW.
030200    DISPLAY SPACE.
030300    DISPLAY STUDY-START-DATE.
030400    " THROUGH ", REPORT-DATE.
030500    " OKAY? ".
030600    DISPLAY SPACE.
030700    DISPLAY "TYPE Y TO CONFIRM:".
030800    ACCEPT GOOD-DATE-SW.
030900 2000-PROC-EACH-REC.
031000    READ EXPIN RECORD INTO PROBATIONER-REC
        AT END MOVE "Y" TO EXPIN-EOF-SW.
031200    IF EXPIN-EOF-SW NOT EQUAL TO "Y"
        ADD 1 TO RECORDS-READ
        IF FILE-NUM > LAST-FILE-NUM
            ADD 1 TO FILE-NUM-CNT
            MOVE FILE-NUM TO LAST-FILE-NUM
            IF START-DATE NOT < STUDY-START-DATE
                IF END-DATE NOT > REPORT-DATE
                    ADD 1 TO CORRECT-DATE-RANGE-CNT
                    IF EXCL-CODE = SPACES

```

```

032200    IF COST-OF-PROB > 62.04
032300        IF PROB-STATUS = "SC"
032400        OR PROB-STATUS= "TE"
032500        OR PROB-STATUS= "CO"
032600        OR PROB-STATUS= "PV"
032700        OR PROB-STATUS= "TU"
032800        OR PROB-STATUS = "RE"
032900        PERFORM 2100-UPDATE-DOLLAR-RPT-DATA
033000        ELSE PERFORM 2200-WRITE-INVALID-STATUS
033100        ELSE PERFORM 2400-WRITE-INVALID-COST-PROB
033200        ELSE ADD 1 TO EXCLUDE-CNT
033300        ELSE ADD 1 TO TOO-LATE-CNT
033400        ELSE ADD 1 TO TOO-EARLY-CNT
033500        ELSE ADD 1 TO DUPLICATE-CNT.
033600 2100-UPDATE-DOLLAR-RPT-DATA.
033700    IF EXP-NUM = 1
033800        SET EXP-CODE TO 1
033900        PERFORM 2110-UPDATE-SPEC'D-EXP
034000        SET EXP-CODE TO 3
034100        PERFORM 2110-UPDATE-SPEC'D-EXP
034200    ELSE IF EXP-NUM > 1
034300        SET EXP-CODE TO 2
034400        PERFORM 2110-UPDATE-SPEC'D-EXP
034500        SET EXP-CODE TO 3
034600        PERFORM 2110-UPDATE-SPEC'D-EXP
034700        ELSE PERFORM 2140-WRITE-INVALID-EXP-NUM.
034800 2110-UPDATE-SPEC'D-EXP.
034900    MOVE "Y" TO VALID-RS-SW.
035000    IF RISK-LEVEL = "LO"
035100        IF SUPER-LEVEL = "UN"
035200            SET RS-CODE TO 1
035300            PERFORM 2111-UPDATE-SPEC'D-RS
035400            SET RS-CODE TO 9
035500            PERFORM 2111-UPDATE-SPEC'D-RS
035600        ELSE PERFORM 2112-WRITE-INVALID-RS
035700    ELSE IF RISK-LEVEL = "MO"
035800        IF SUPER-LEVEL = "UN"
035900            SET RS-CODE TO 2
036000            PERFORM 2111-UPDATE-SPEC'D-RS
036100            SET RS-CODE TO 7
036200            PERFORM 2111-UPDATE-SPEC'D-RS
036300            SET RS-CODE TO 9
036400            PERFORM 2111-UPDATE-SPEC'D-RS
036500        ELSE IF SUPER-LEVEL = "MI"
036600            SET RS-CODE TO 3
036700            PERFORM 2111-UPDATE-SPEC'D-RS
036800            SET RS-CODE TO 7
036900            PERFORM 2111-UPDATE-SPEC'D-RS
037000            SET RS-CODE TO 10
037100            PERFORM 2111-UPDATE-SPEC'D-RS
037200        ELSE IF SUPER-LEVEL = "MA"
037300            SET RS-CODE TO 4
037400            PERFORM 2111-UPDATE-SPEC'D-RS
037500            SET RS-CODE TO 7
037600            PERFORM 2111-UPDATE-SPEC'D-RS
037700            SET RS-CODE TO 11
037800            PERFORM 2111-UPDATE-SPEC'D-RS
037900        ELSE PERFORM 2112-WRITE-INVALID-RS
038000    ELSE IF RISK-LEVEL = "HI"
038100        IF SUPER-LEVEL = "MI"
038200            SET RS-CODE TO 5
038300            PERFORM 2111-UPDATE-SPEC'D-RS

```

```

038400      SET RS-CODE TO 8
038500      PERFORM 2111-UPDATE-SPEC'D-RS
038600      SET RS-CODE TO 10
038700      PERFORM 2111-UPDATE-SPEC'D-RS
038800      ELSE IF SUPER-LEVEL = "MA"
038900          SET RS-CODE TO 6
039000          PERFORM 2111-UPDATE-SPEC'D-RS
039100          SET RS-CODE TO 8
039200          PERFORM 2111-UPDATE-SPEC'D-RS
039300          SET RS-CODE TO 11
039400          PERFORM 2111-UPDATE-SPEC'D-RS
039500          ELSE PERFORM 2112-WRITE-INVALID-RS
039600      ELSE PERFORM 2112-WRITE-INVALID-RS.
039700      IF VALID-RS-SW = "Y"
039800          SET RS-CODE TO 12
039900          PERFORM 2111-UPDATE-SPEC'D-RS.
040000 2111-UPDATE-SPEC'D-RS.
040100      DIVIDE POINTS BY 100 GIVING TEMP-DSCP.
040200      ADD 1 TO TEMP-DSCP.
040300      IF TEMP-DSCP > 12
040400          MOVE 12 TO TEMP-DSCP.
040500          SET DSCP-CODE TO TEMP-DSCP.
040600          PERFORM 2120-UPDATE-SPEC'D-DSCP.
040700          SET DSCP-CODE TO 13.
040800          PERFORM 2120-UPDATE-SPEC'D-DSCP.
040900 2112-WRITE-INVALID-RS.
041000      MOVE "N" TO VALID-RS-SW.
041100      IF FILE-NUM = LAST-INVALID-RS-FILE-NUM
041200          IF EXP-NUM = LAST-INVALID-RS-EXP-NUM
041300              NEXT SENTENCE
041400          ELSE PERFORM 2113-WRITE-INVALID-RS-2
041500      ELSE PERFORM 2113-WRITE-INVALID-RS-2.
041600 2113-WRITE-INVALID-RS-2.
041700      ADD 1 TO INVALID-RS-CNT.
041800      MOVE FILE-NUM TO INVALID-RS-FILE-NUM-OUT.
041900      MOVE EXP-NUM TO INVALID-RS-EXP-NUM-OUT.
042000      MOVE RISK-LEVEL TO INVALID-RISK-OUT.
042100      MOVE SUPER-LEVEL TO INVALID-SUPER-OUT,
042200      ADD 1 TO LINE-CNT.
042300      IF LINE-CNT > 55
042400          PERFORM 8888-WRITE-EDIT-HEADER.
042500          MOVE INVALID-RS-LINE TO PRINT-LINE.
042600          PERFORM 9999-WRITE-PRINT-LINE.
042700          MOVE FILE-NUM TO LAST-INVALID-RS-FILE-NUM.
042800          MOVE EXP-NUM TO LAST-INVALID-RS-EXP-NUM.
042900 2120-UPDATE-SPEC'D-DSCP.
043000      ADD 1 TO NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ),
043100      ADD RESTITUTION TO RESTI ( EXP-CODE, RS-CODE, DSCP-CODE ),
043200      MULTIPLY RESTITUTION BY RESTITUTION
043300          GIVING TEMP-SQ.
043400      ADD TEMP-SQ TO RESTI-SQ ( EXP-CODE, RS-CODE, DSCP-CODE ).
043500      ADD COSTS TO CCOSTS ( EXP-CODE, RS-CODE, DSCP-CODE ).
043600      MULTIPLY COSTS BY COSTS
043700          GIVING TEMP-SQ.
043800      ADD TEMP-SQ TO CCOSTS-SQ ( EXP-CODE, RS-CODE, DSCP-CODE ),
043900      ADD COST-OF-PROB TO PCOST ( EXP-CODE, RS-CODE, DSCP-CODE ),
044000      MULTIPLY COST-OF-PROB BY COST-OF-PROB
044100          GIVING TEMP-SQ.
044200      ADD TEMP-SQ TO PCOST-SQ ( EXP-CODE, RS-CODE, DSCP-CODE ),
044300 2140-WRITE-INVALID-EXP-NUM.
044400      ADD 1 TO INVALID-EXP-CNT.
044500      MOVE FILE-NUM TO
044600          INVALID-EXP-NUM-FILE-NUM-OUT.

```

```

044700      MOVE EXP-NUM TO
044800          INVALID-EXP-NUM-EXP-NUM-OUT.
044900      ADD 1 TO LINE-CNT.
045000      IF LINE-CNT > 55
045100          PERFORM 8888-WRITE-EDIT-HEADER.
045200          MOVE INVALID-EXP-NUM-LINE TO PRINT-LINE.
045300          PERFORM 9999-WRITE-PRINT-LINE.
045400 2200-WRITE-INVALID-STATUS.
045500      ADD 1 TO INVALID-STATUS-CNT.
045600      MOVE FILE-NUM TO INVALID-STATUS-FILE-NUM-OUT.
045700      MOVE EXP-NUM TO INVALID-STATUS-EXP-NUM-OUT.
045800      MOVE PROB-STATUS TO INVALID-STATUS-OUT.
045900      MOVE END-DATE TO INVALID-END-DATE-OUT.
046000      IF PRINT-STATUS-END-ERROR-SW = "Y"
046100          ADD 1 TO LINE-CNT
046200          IF LINE-CNT > 55
046300              PERFORM 8888-WRITE-EDIT-HEADER.
046400          IF PRINT-STATUS-END-ERROR-SW = "Y"
046500              MOVE INVALID-STATUS-LINE TO PRINT-LINE
046600              PERFORM 9999-WRITE-PRINT-LINE.
046700 2400-WRITE-INVALID-COST-PROB.
046800      ADD 1 TO INVALID-COST-CNT.
046900      MOVE FILE-NUM TO INVALID-COST-OF-PROB-FILE-OUT.
047000      MOVE EXP-NUM TO INVALID-COST-OF-PROB-EXP-OUT.
047100      MOVE COST-OF-PROB TO INVALID-COST-OF-PROB-OUT.
047200      ADD 1 TO LINE-CNT.
047300      IF LINE-CNT > 55
047400          PERFORM 8888-WRITE-EDIT-HEADER.
047500          MOVE INVALID-COST-OF-PROB-LINE TO PRINT-LINE.
047600          PERFORM 9999-WRITE-PRINT-LINE.
047700 3000-WRITE-RESULTS.
047800      SET EXP-CODE TO 1.
047900      MOVE "FIRST EXPERIENCES" TO EXPERIENCE-DESCRIPTION.
048000      PERFORM 3100-PRINT-7-PAGES.
048100      MOVE "SUBSEQUENT EXPERIENCES" TO EXPERIENCE-DESCRIPTION.
048200      SET EXP-CODE TO 2.
048300      PERFORM 3100-PRINT-7-PAGES.
048400      SET EXP-CODE TO 3.
048500      MOVE "ALL EXPERIENCES" TO EXPERIENCE-DESCRIPTION.
048600      PERFORM 3100-PRINT-7-PAGES.
048700      PERFORM 9000-WRITE-FIRST-HEADER-LINE.
048800      MOVE "RECORDS READ" TO COUNT-DESC.
048900      MOVE RECORDS-READ TO COUNT-OUT.
049000      PERFORM 3010-WRITE-COUNT.
049100      MOVE "VALID DATE RANGES" TO COUNT-DESC.
049200      MOVE CORRECT-DATE-RANGE-CNT TO COUNT-OUT.
049300      PERFORM 3010-WRITE-COUNT.
049400      MOVE "DISTINCT FILE NUMBERS" TO COUNT-DESC.
049500      MOVE FILE-NUM-CNT TO COUNT-OUT.
049600      PERFORM 3010-WRITE-COUNT.
049700      MOVE "INCLUDED RECORDS" TO COUNT-DESC.
049800      MOVE INCLUDE-CNT TO COUNT-OUT.
049900      PERFORM 3010-WRITE-COUNT.
050000      MOVE "EXCLUDED RECORDS" TO COUNT-DESC.
050100      MOVE EXCLUDE-CNT TO COUNT-OUT.
050200      PERFORM 3010-WRITE-COUNT.
050300      MOVE "MULTIPLE EXPERIENCES" TO COUNT-DESC.
050400      MOVE DUPLICATE-CNT TO COUNT-OUT.
050500      PERFORM 3010-WRITE-COUNT.
050600      MOVE "TOO LATE END DATE" TO COUNT-DESC.
050700      MOVE TOO-LATE-CNT TO COUNT-OUT.
050800      PERFORM 3010-WRITE-COUNT.
050900      MOVE "TOO EARLY START DATE" TO COUNT-DESC.

```

```

051000 MOVE TOO-EARLY-CNT TO COUNT-OUT.
051100 PERFORM 3010-WRITE-COUNT.
051200 MOVE "INVALID RISK & SUPER" TO COUNT-DESC.
051300 MOVE INVALID-RS-CNT TO COUNT-OUT.
051400 PERFORM 3010-WRITE-COUNT.
051500 MOVE "INVALID STATUS" TO COUNT-DESC.
051600 MOVE INVALID-STATUS-CNT TO COUNT-OUT.
051700 PERFORM 3010-WRITE-COUNT.
051800 MOVE "INVALID COST" TO COUNT-DESC.
051900 MOVE INVALID-COST-CNT TO COUNT-OUT.
052000 PERFORM 3010-WRITE-COUNT.
052100 MOVE "INVALID TIMES ON PROB" TO COUNT-DESC.
052200 MOVE INVALID-EXP-CNT TO COUNT-OUT.
052300 PERFORM 3010-WRITE-COUNT.
052400 3010-WRITE-COUNT.
052500 MOVE COUNT-OUT-LINE TO PRINT-LINE.
052600 PERFORM 9999-WRITE-PRINT-LINE.
052700 3100-PRINT-7-PAGES.
052800 MOVE "NUMBERS OF EXPERIENCES" TO DATA-DESCRIPTION.
052900 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.
053000 PERFORM 3120-WRITE-NUM-EXPS-DATA-LINE VARYING TEMP-DSCP
    FROM 1 BY 1 UNTIL TEMP-DSCP = 14.
053100 MOVE "AVERAGE RESTITUTION RECEIVED" TO DATA-DESCRIPTION.
053200 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.
053300 PERFORM 3160-WRITE-RESTI-DATA-LINES VARYING TEMP-DSCP
    FROM 1 BY 1 UNTIL TEMP-DSCP = 14.
053400 MOVE "AVERAGE COSTS COLLECTED" TO DATA-DESCRIPTION.
053500 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.
053600 PERFORM 3170-WRITE-COSTS-DATA-LINES VARYING TEMP-DSCP
    FROM 1 BY 1 UNTIL TEMP-DSCP= 14.
053700 MOVE "AVERAGE COSTS INCURRED" TO DATA-DESCRIPTION.
053800 PERFORM 3180-WRITE-PCOST-DATA-LINES VARYING TEMP-DSCP
    FROM 1 BY 1 UNTIL TEMP-DSCP = 14.
053900 PERFORM 3110-WRITE-DOLLAR-RPT-HEADER.
054000 MOVE DOLLAR-RPT-HEADER-LINE-2 TO PRINT-LINE.
054100 PERFORM 9999-WRITE-PRINT-LINE.
054200 MOVE DOLLAR-RPT-HEADER-LINE-3 TO PRINT-LINE.
054300 PERFORM 9999-WRITE-PRINT-LINE.
054400 3110-WRITE-DOLLAR-RPT-HEADER.
054500 MOVE DOLLAR-RPT-RISK-TITLE-LINE TO PRINT-LINE.
054600 PERFORM 9999-WRITE-PRINT-LINE.
054700 MOVE DOLLAR-RPT-SUPER-TITLE-LINE TO PRINT-LINE.
054800 PERFORM 9999-WRITE-PRINT-LINE.
054900 MOVE SPACES TO PRINT-LINE.
055000 PERFORM 9999-WRITE-PRINT-LINE.
055100 PERFORM 9999-WRITE-PRINT-LINE.
055200 MOVE DOLLAR-RPT-RISK-TITLE-LINE TO PRINT-LINE.
055300 PERFORM 9999-WRITE-PRINT-LINE.
055400 MOVE DOLLAR-RPT-SUPER-TITLE-LINE TO PRINT-LINE.
055500 PERFORM 9999-WRITE-PRINT-LINE.
055600 MOVE SPACES TO PRINT-LINE.
055700 PERFORM 9999-WRITE-PRINT-LINE.
055800 PERFORM 9999-WRITE-PRINT-LINE.
055900 3120-WRITE-NUM-EXPS-DATA-LINE.
056000 PERFORM 3122-SET-UP-DATA-LINE-TEXT.
056100 PERFORM 3121-MOVE-A-NUM-EXP-COLUMN
    VARYING RS-CODE FROM 1 BY 1
    UNTIL RS-CODE > 12.
056200 MOVE DOLLAR-RPT-DATA-LINE- AVG TO PRINT-LINE.
056300 PERFORM 9999-WRITE-PRINT-LINE.
056400 PERFORM 3122-SET-UP-DATA-LINE-TEXT.
056500 MOVE TEMP-PTS TO NUM-PTS.
056600 MOVE SPACES TO VALUE-PLUS.
056700 IF TEMP-DSCP = 12
    MOVE 1000 TO NUM-PTS.

```

```

057300 MOVE "+" TO VALUE-PLUS.
057400 IF TEMP-DSCP > 12
    MOVE ZEROES TO NUM-PTS
    MOVE "&" TO VALUE-PLUS.
057500 3121-MOVE-A-NUM-EXP-COLUMN.
057600 SET AVG-INDEX TO RS-CODE.
057700 SET DSCP-CODE TO TEMP-DSCP.
057800 MOVE NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
    TO DATA- AVG ( AVG-INDEX ), 3132-WRITE-2-DATA-LINES.
057900 PERFORM 3122-SET-UP-DATA-LINE-TEXT.
058000 MOVE DOLLAR-RPT-DATA-LINE- AVG TO PRINT-LINE.
058100 MOVE DOLLAR-RPT-DATA-LINE-STDEV TO PRINT-LINE,
    PERFORM 9999-WRITE-PRINT-LINE.
058200 3160-WRITE-RESTI-DATA-LINES.
058300 PERFORM 3161-MOVE-A-RESTI-COLUMN
    VARYING RS-CODE FROM 1 BY 1
    UNTIL RS-CODE > 12.
058400 PERFORM 3132-WRITE-2-DATA-LINES.
058500 3161-MOVE-A-RESTI-COLUMN.
058600 SET AVG-INDEX TO RS-CODE.
058700 SET STDDEV-INDEX TO RS-CODE.
058800 SET DSCP-CODE TO TEMP-DSCP.
058900 IF NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) > 1
    DIVIDE RESTI ( EXP-CODE, RS-CODE, DSCP-CODE )
    BY NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
    GIVING DATA- AVG ( AVG-INDEX ) COMPUTE LONG-TEMP =
    ( ( RESTI-SQ ( EXP-CODE, RS-CODE, DSCP-CODE )
    - ( RESTI ( EXP-CODE , RS-CODE , DSCP-CODE )
    * RESTI ( EXP-CODE . RS-CODE , DSCP-CODE )
    / NUMBER-OF-EXPS ( EXP-CODE , RS-CODE ,
    DSCP-CODE ) ) )
    / ( NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
    - 1 ) ) COMPUTE DATA-STDEV ( STDDEV-INDEX ) =
    LONG-TEMP ** 0.5
059000 ELSE MOVE RESTI ( EXP-CODE, RS-CODE, DSCP-CODE )
    TO DATA- AVG ( AVG-INDEX )
    ^
WARNING 179 LEFT TRUNCATION MAY OCCUR.
059100 MOVE ZEROES TO DATA-STDEV ( STDDEV-INDEX ), 3170-WRITE-COSTS-DATA-LINES.
059200 PERFORM 3171-MOVE-A-COSTS-COLUMN
    VARYING RS-CODE FROM 1 BY 1
    UNTIL RS-CODE > 12.
059300 PERFORM 3132-WRITE-2-DATA-LINES.
059400 3171-MOVE-A-COSTS-COLUMN.
059500 SET AVG-INDEX TO RS-CODE.
059600 SET STDDEV-INDEX TO RS-CODE.
059700 SET DSCP-CODE TO TEMP-DSCP.
059800 IF NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) > 1
    DIVIDE CCOSTS ( EXP-CODE, RS-CODE, DSCP-CODE )
    BY NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
    GIVING DATA- AVG ( AVG-INDEX ) COMPUTE LONG-TEMP =
    ( ( CCOSTS-SQ ( EXP-CODE, RS-CODE, DSCP-CODE )
    - ( CCOSTS ( EXP-CODE , RS-CODE , DSCP-CODE )
    * CCOSTS ( EXP-CODE , RS-CODE , DSCP-CODE )
    / NUMBER-OF-EXPS ( EXP-CODE , RS-CODE ,
    DSCP-CODE ) ) )
    / ( NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
    - 1 ) ) 
```

```

063400      - 1 ) )
063500      COMPUTE DATA-STDDEV ( STDDEV-INDEX ) =
063600      LONG-TEMP ** 0.5
063700      ELSE MOVE CCOSTS ( EXP-CODE, RS-CODE, DSCP-CODE )
063800      TO DATA-AVG ( AVG-INDEX )

. WARNING 179 LEFT TRUNCATION MAY OCCUR. SEE 061200
063900      MOVE ZEROES TO DATA-STDDEV ( STDDEV-INDEX ).

064000 3180-WRITE-PCOST-DATA-LINES.
064100      PERFORM 3181-MOVE-A-PCOST-COLUMN
064200      VARYING RS-CODE FROM 1 BY 1
064300      UNTIL RS-CODE > 12.
064400      PERFORM 3132-WRITE-2-DATA-LINES.
064500 3181-MOVE-A-PCOST-COLUMN.
064600      SET AVG-INDEX TO RS-CODE.
064700      SET STDDEV-INDEX TO RS-CODE.
064800      SET DSCP-CODE TO TEMP-DSCP.
064900      IF NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE ) > 1
065000      DIVIDE PCOST ( EXP-CODE, RS-CODE, DSCP-CODE )
065100      BY NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
065200      GIVING DATA-AVG ( AVG-INDEX )
065300      COMPUTE LONG-TEMP =
065400      ( ( PCOST-SQ ( EXP-CODE, RS-CODE, DSCP-CODE )
065500      - ( PCOST ( EXP-CODE , RS-CODE , DSCP-CODE )
065600      * PCOST ( EXP-CODE , RS-CODE , DSCP-CODE )
065700      / NUMBER-OF-EXPS ( EXP-CODE , RS-CODE ,
065800      DSCP-CODE ) ) )
065900      / ( NUMBER-OF-EXPS ( EXP-CODE, RS-CODE, DSCP-CODE )
066000      - 1 ) )
066100      COMPUTE DATA-STDDEV ( STDDEV-INDEX ) =
066200      LONG-TEMP ** 0.5
066300      ELSE MOVE ZEROES TO DATA-STDDEV ( STDDEV-INDEX )
066400      MOVE PCOST ( EXP-CODE, RS-CODE, DSCP-CODE )
066500      TO DATA-AVG ( AVG-INDEX ).
```

. WARNING 179 LEFT TRUNCATION MAY OCCUR. SEE 063800

```

066600 8888-WRITE-EDIT-HEADER.
066700      PERFORM 9000-WRITE-FIRST-HEADER-LINE.
066800      MOVE PAGE-CNT TO PAGE-NUM.
066900      WRITE PRTOUT-REC FROM EDIT-HEADER-LINE
067000      AFTER ADVANCING 1.
067100      ADD 1 TO LINE-CNT.
067200 9000-WRITE-FIRST-HEADER-LINE.
067300      MOVE CONTROL-L TO CNTL-L.
067400      MOVE PRINT-LINE-PARTS TO PRINT-LINE.
067500      PERFORM 9999-WRITE-PRINT-LINE.
067600      ADD 1 TO PAGE-CNT.
067700      MOVE ZEROES TO LINE-CNT.
067800      MOVE PAGE-CNT TO PAGE-NUM.
067900      MOVE HEADER-LINE-1 TO PRINT-LINE.
068000      PERFORM 9999-WRITE-PRINT-LINE.
068100 9999-WRITE-PRINT-LINE.
068200      WRITE PRTOUT-REC FROM PRINT-LINE
068300      AFTER ADVANCING 1.
```

DATA AREA IS %040665 WORDS.

CPU TIME = 0:00:30. WALL TIME = 0:24:40.

) COBOL/3000 COMPILEATION. NO ERRORS, 003 WARNINGS. SEE 066500

OF COMPILE

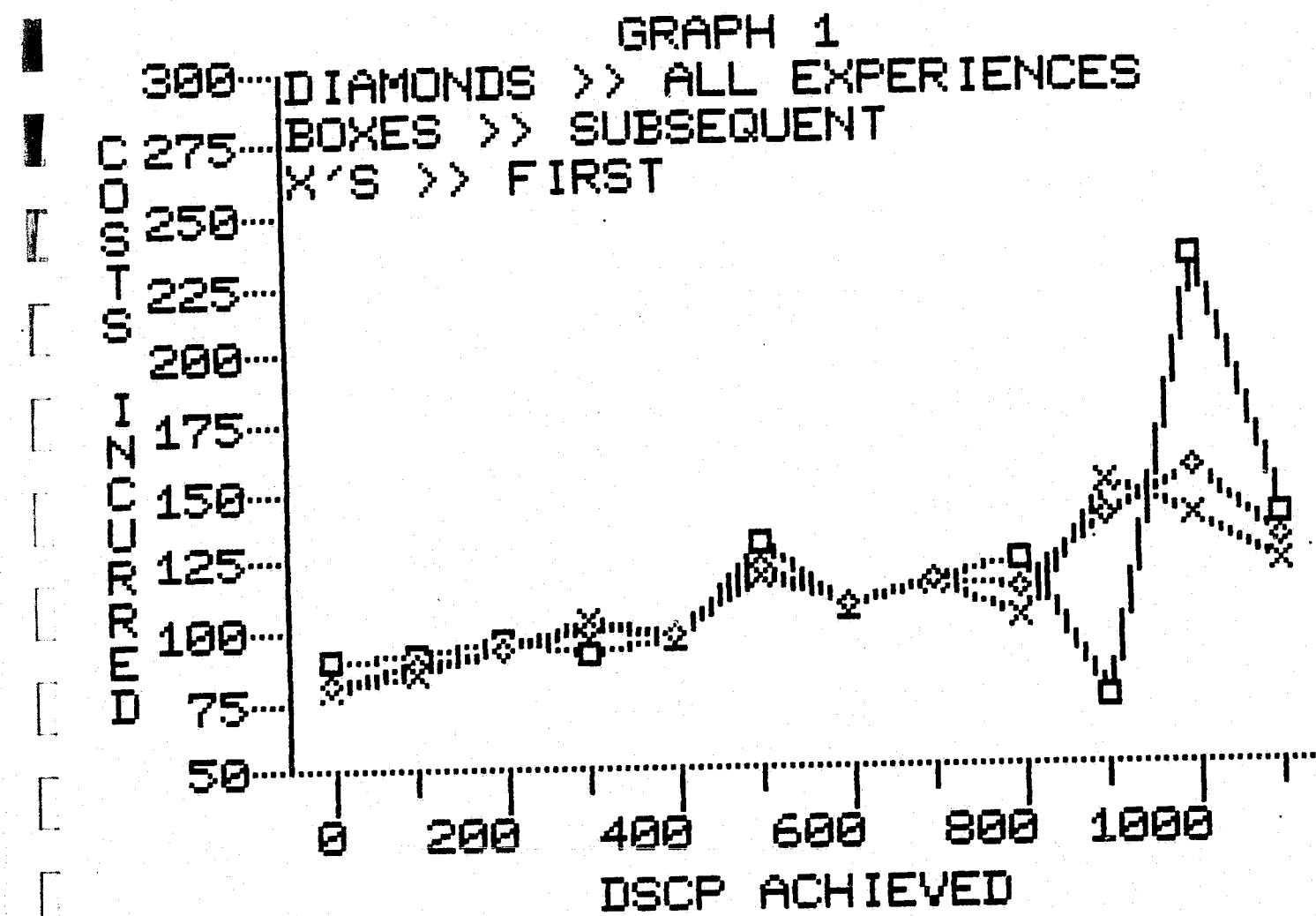
OF PREPARE

VE DOLL2SV.

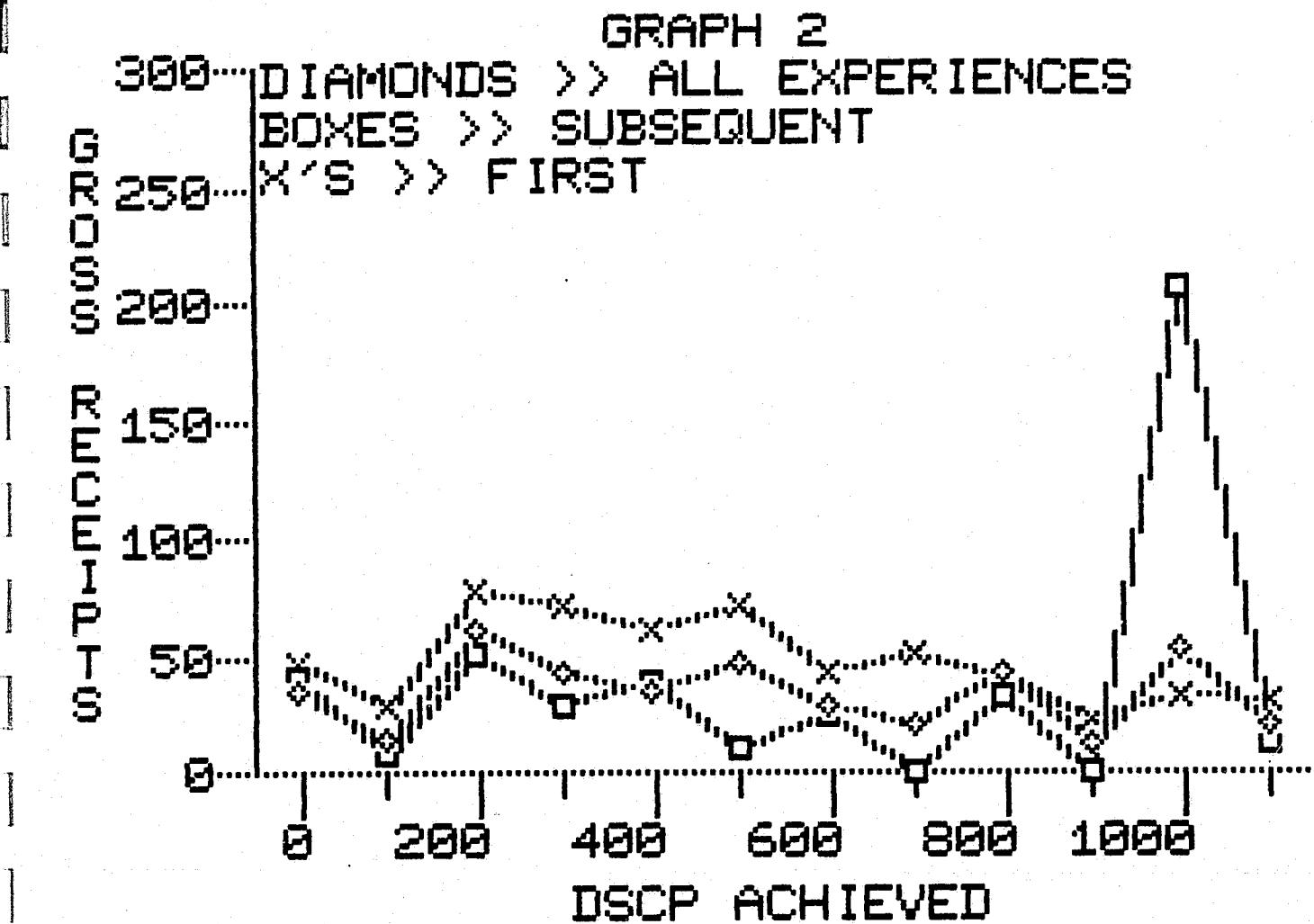
#### Appendix C

##### Graphs

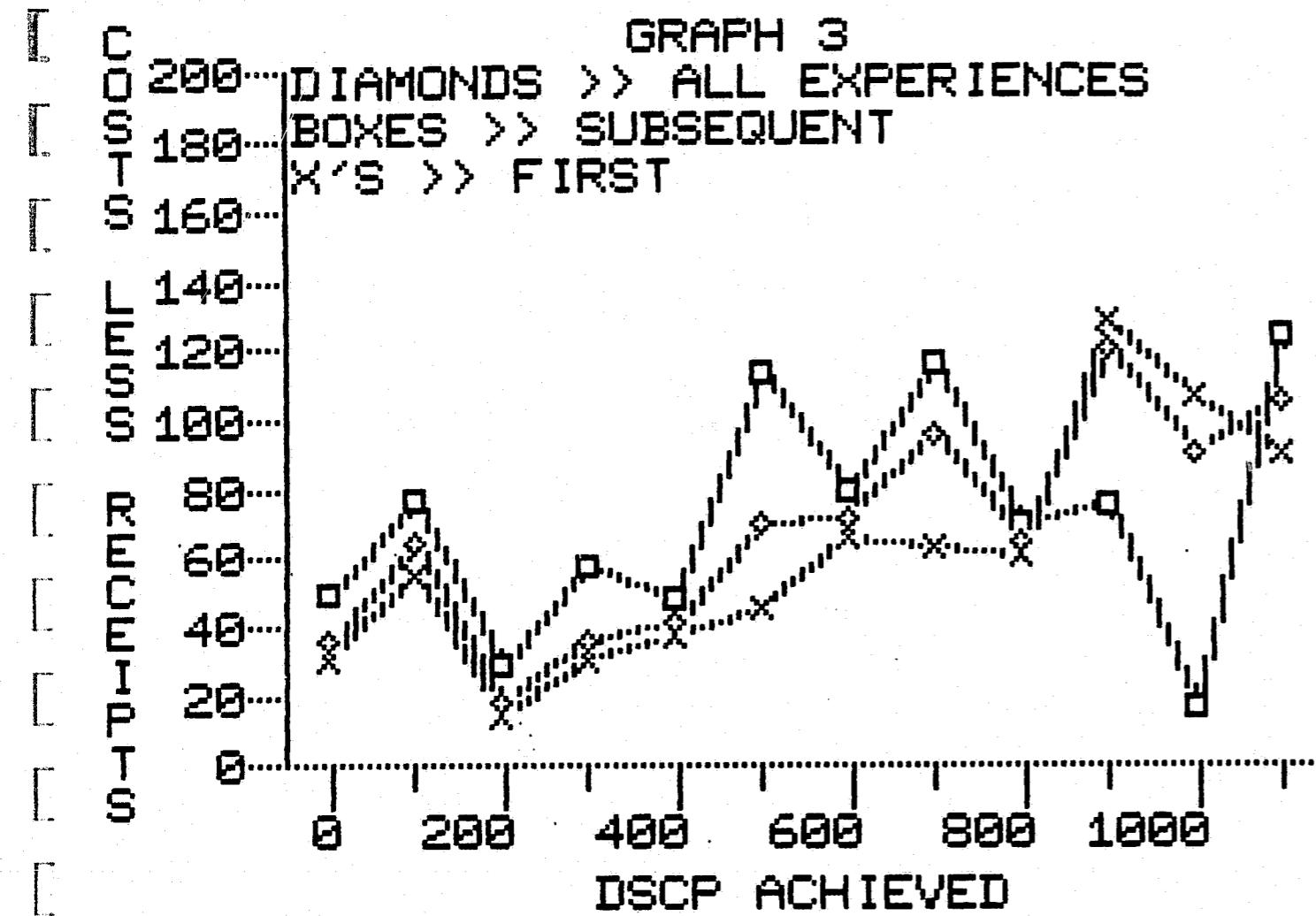
GRAPH 1



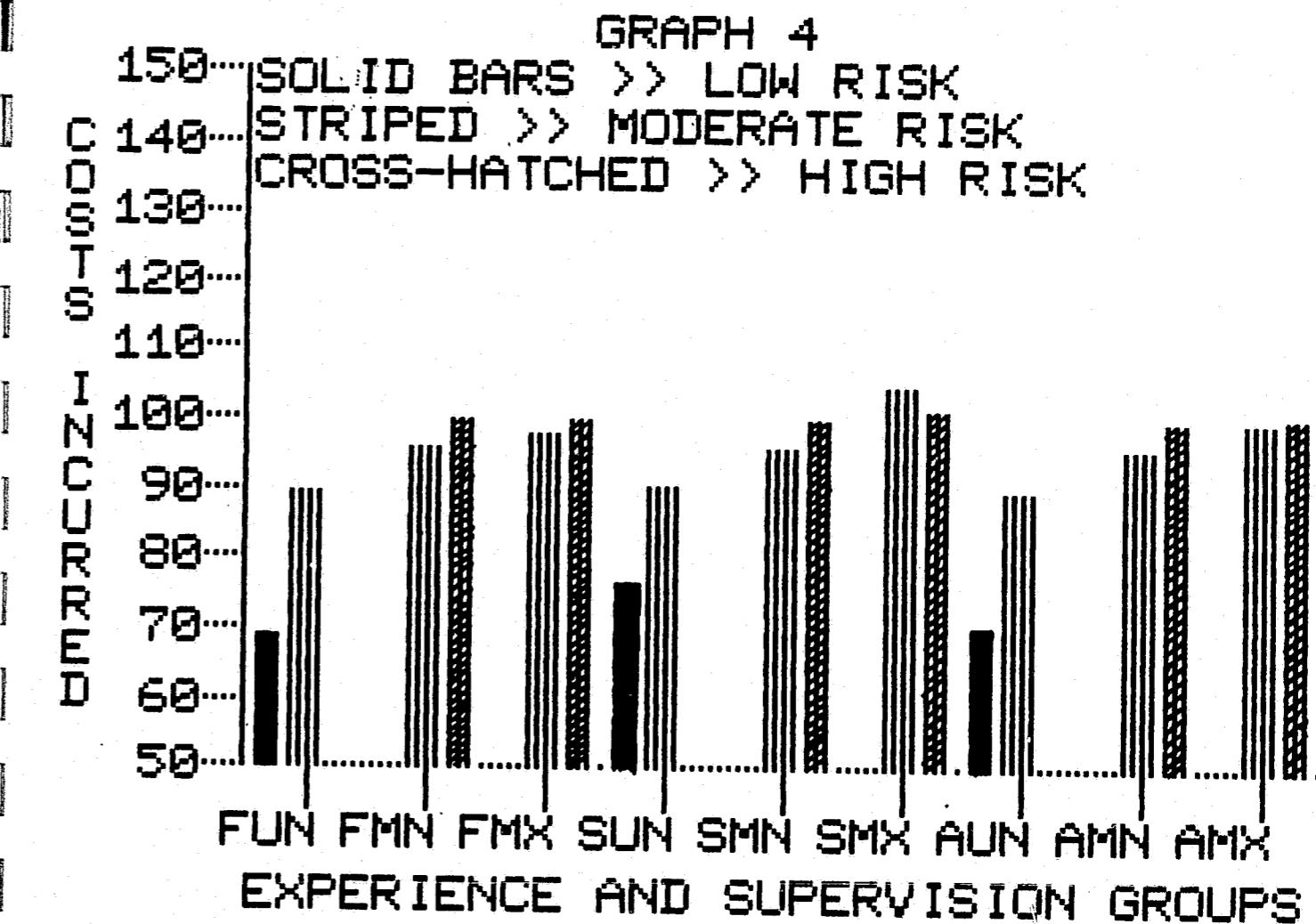
GRAPH 2

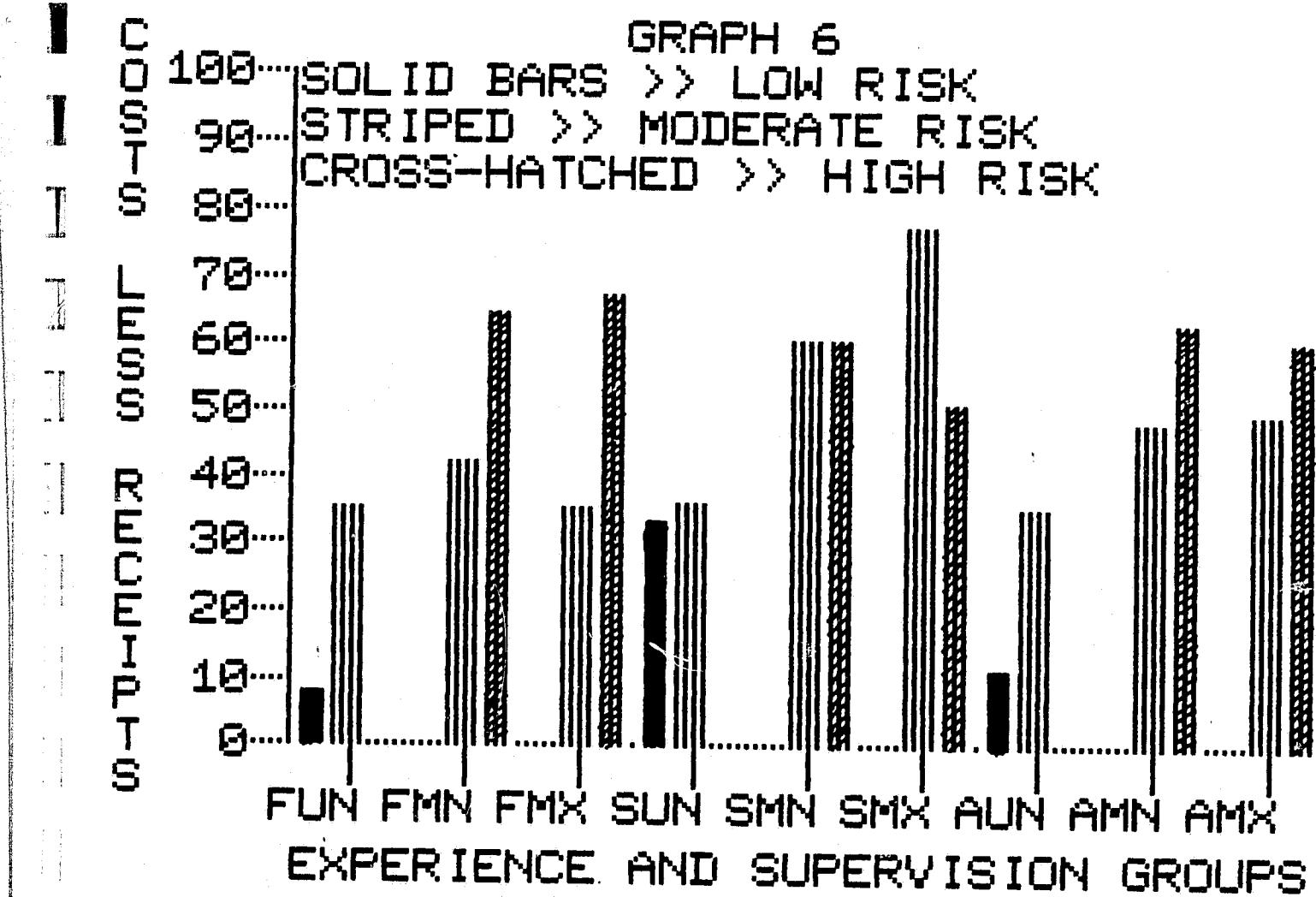
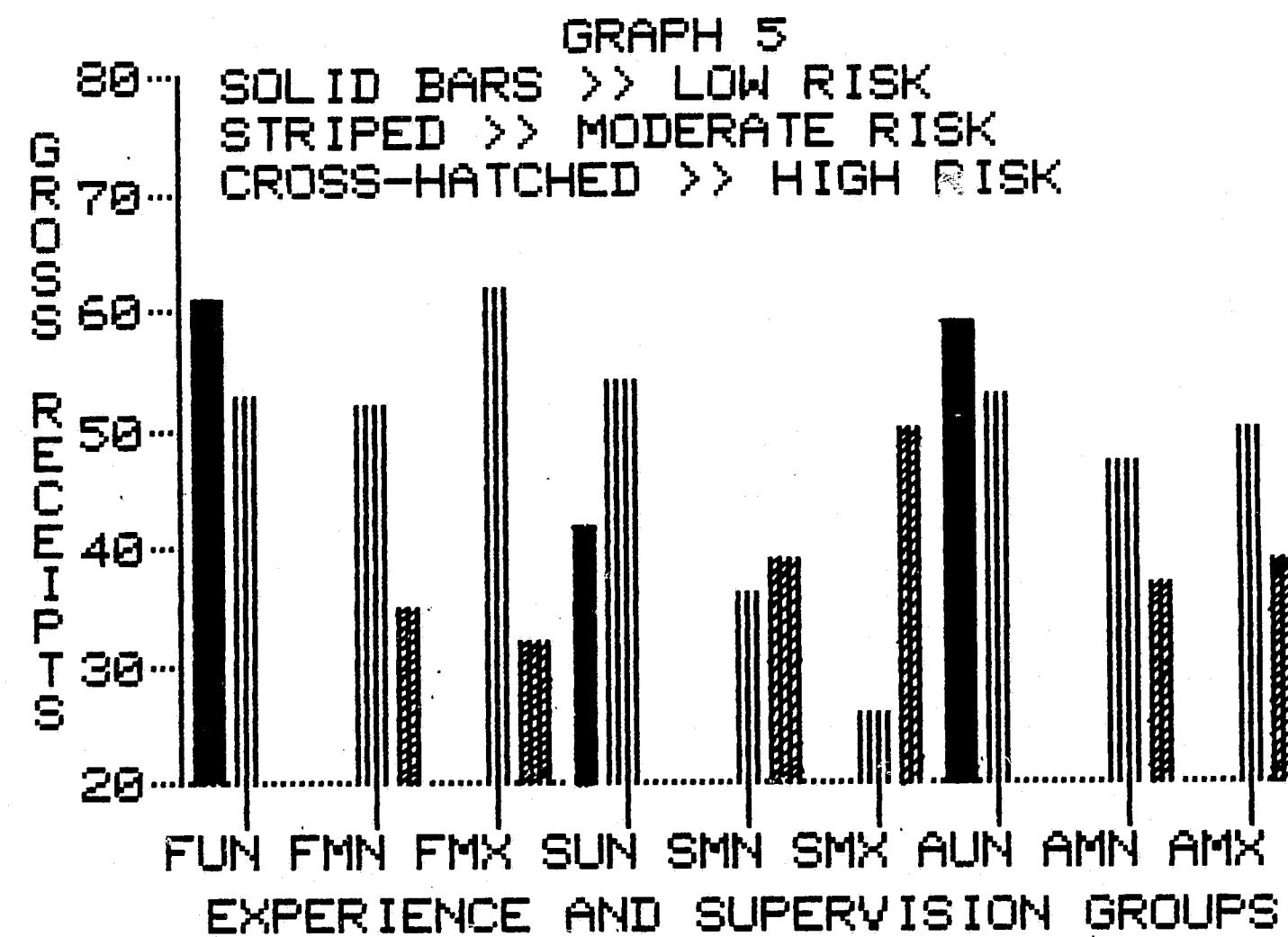


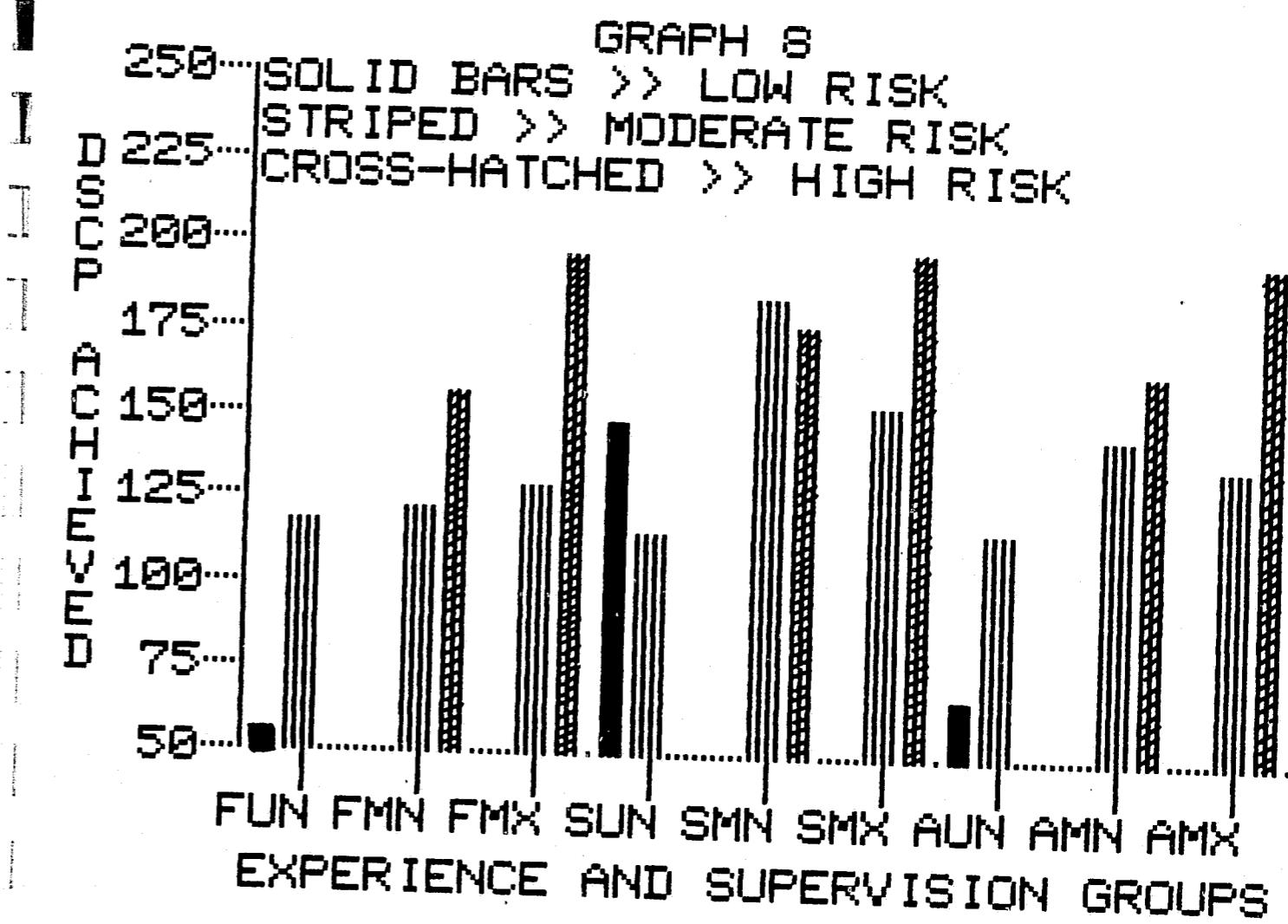
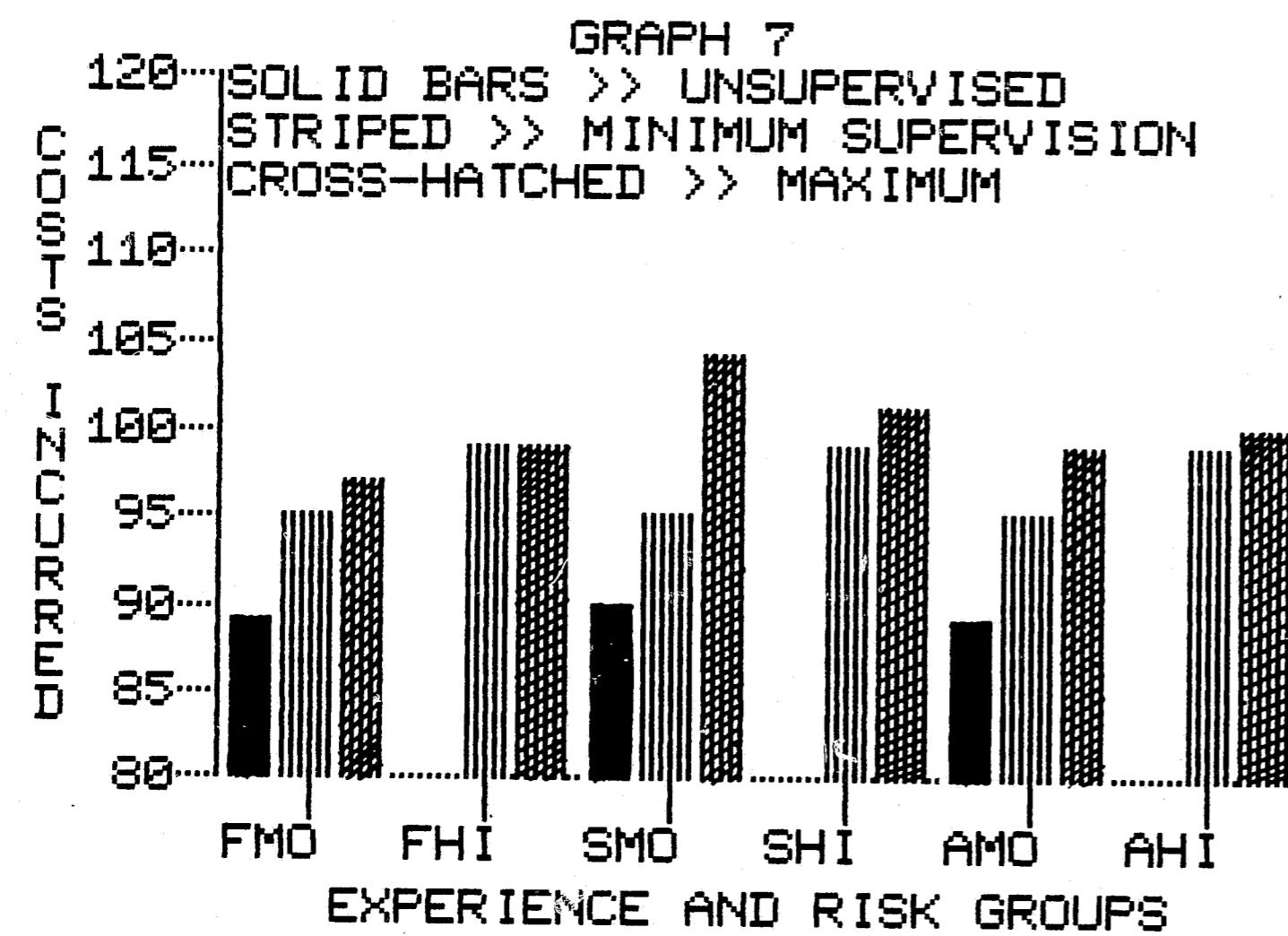
GRAPH 3

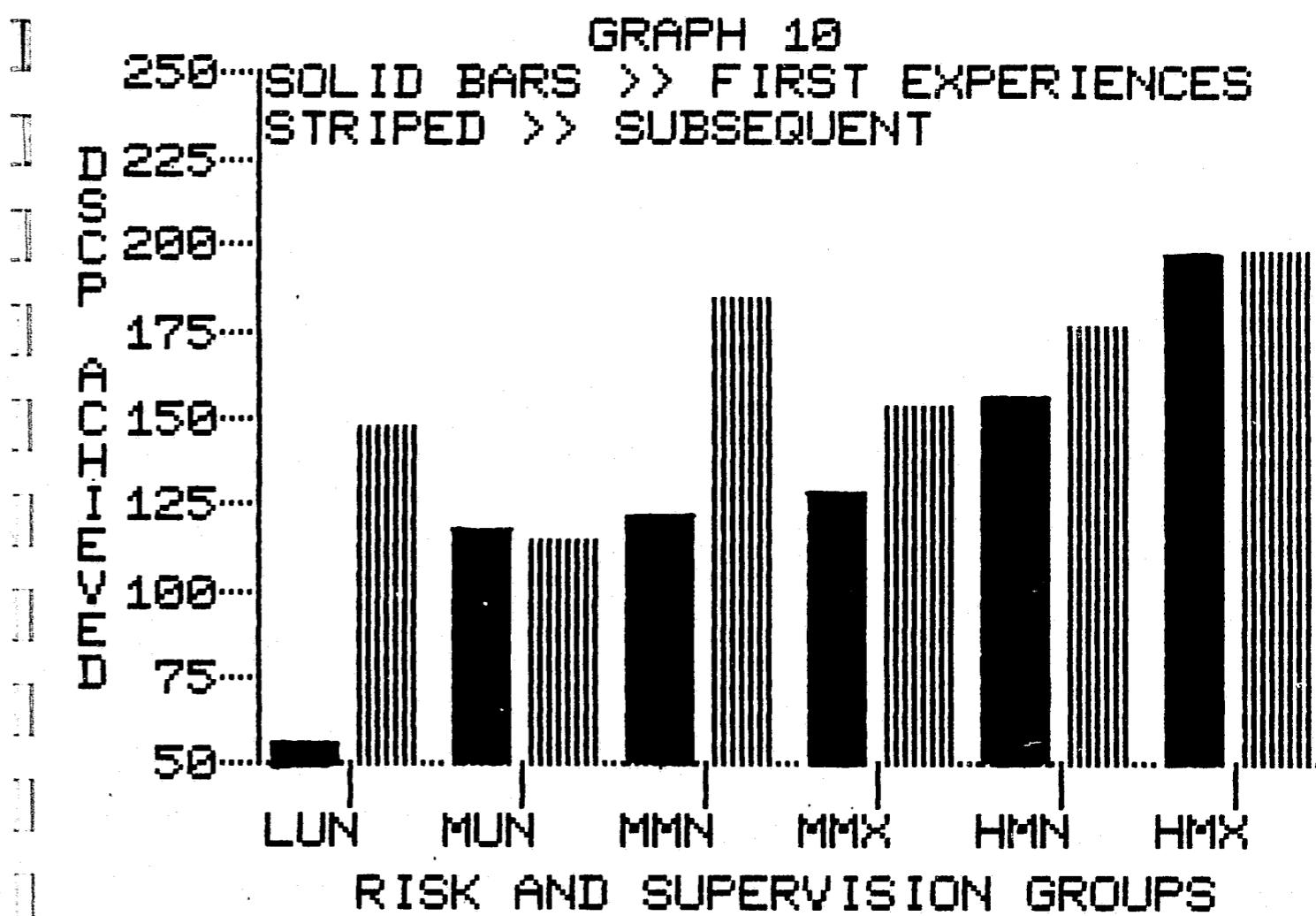
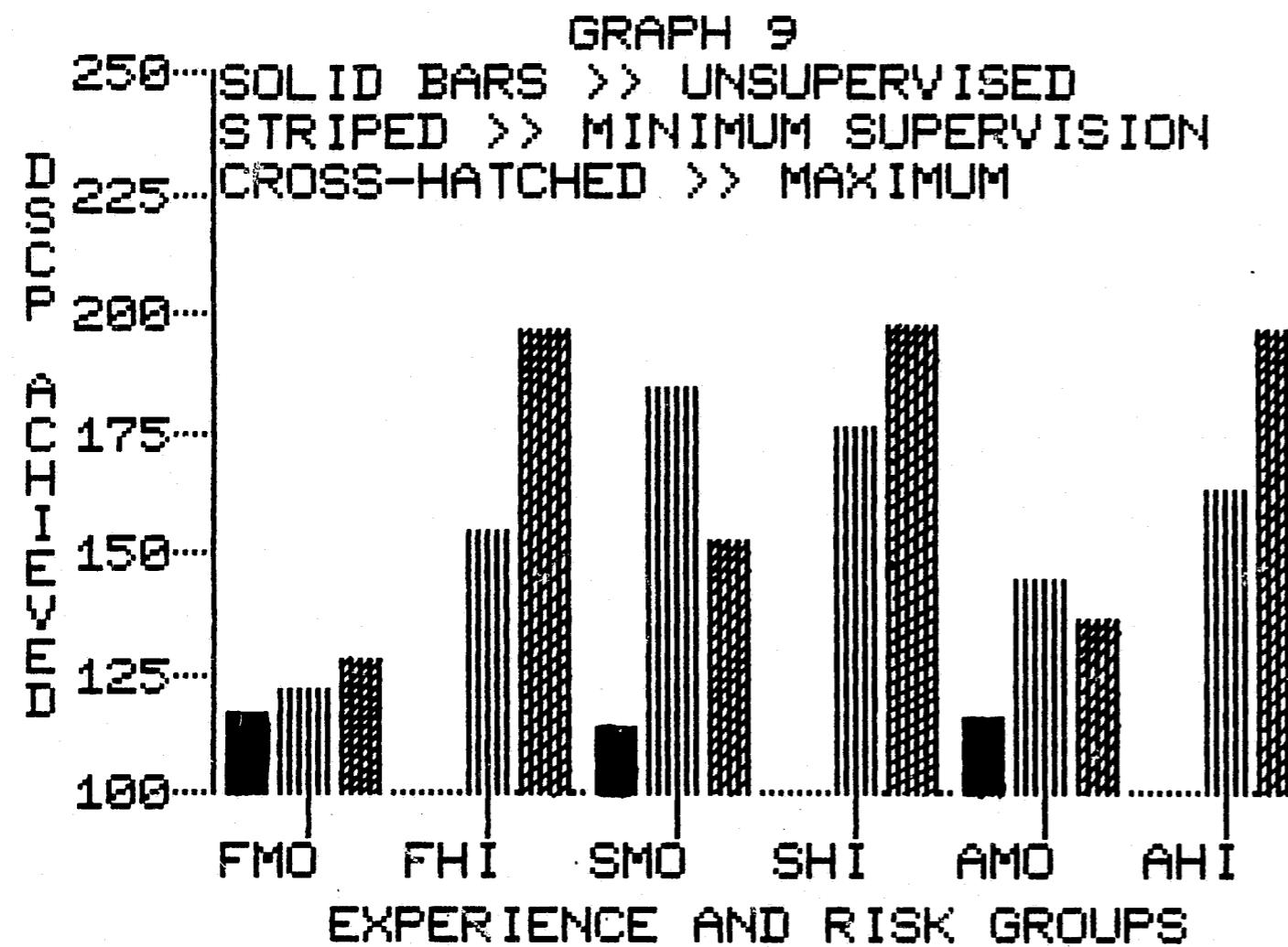


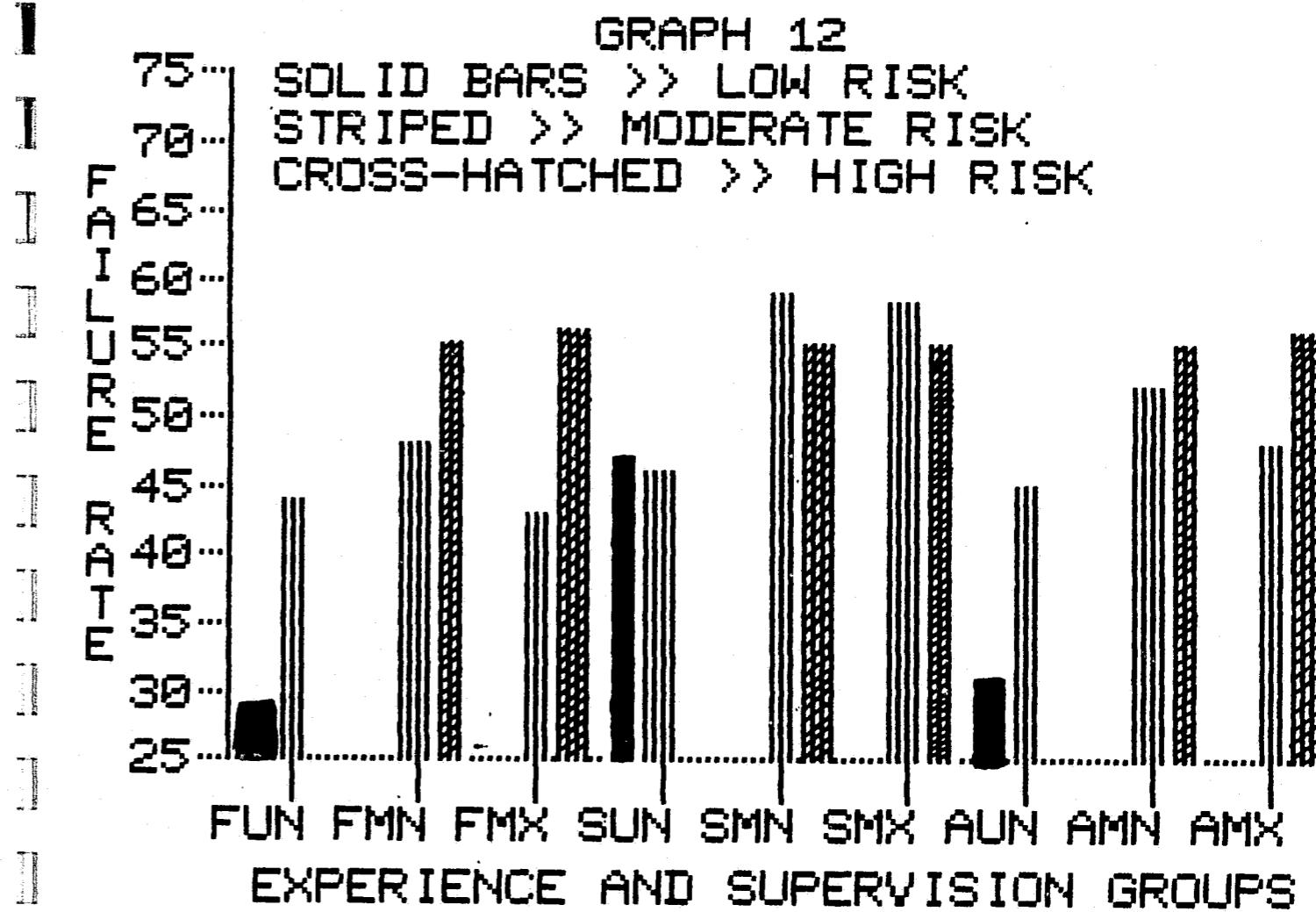
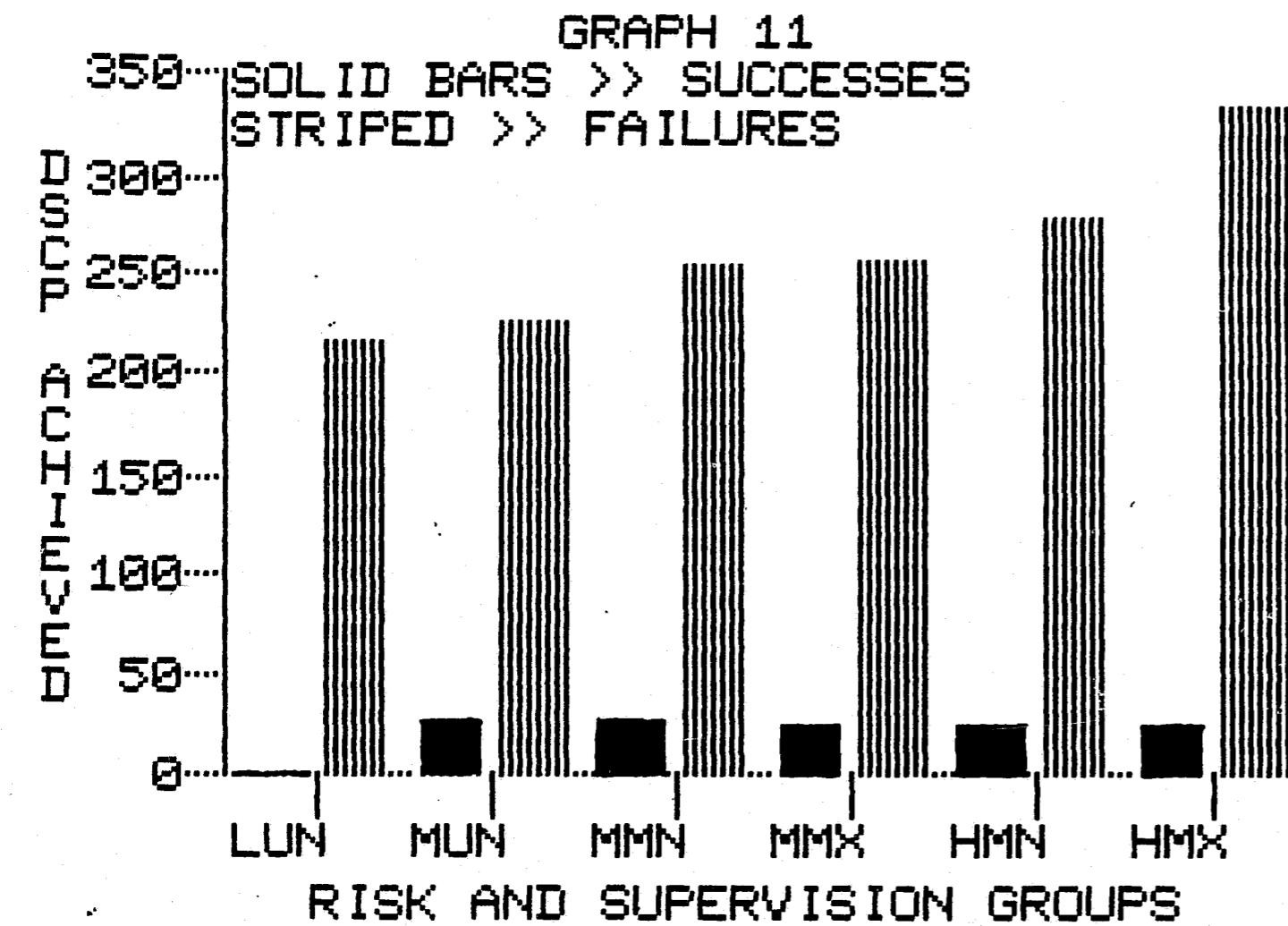
GRAPH 4

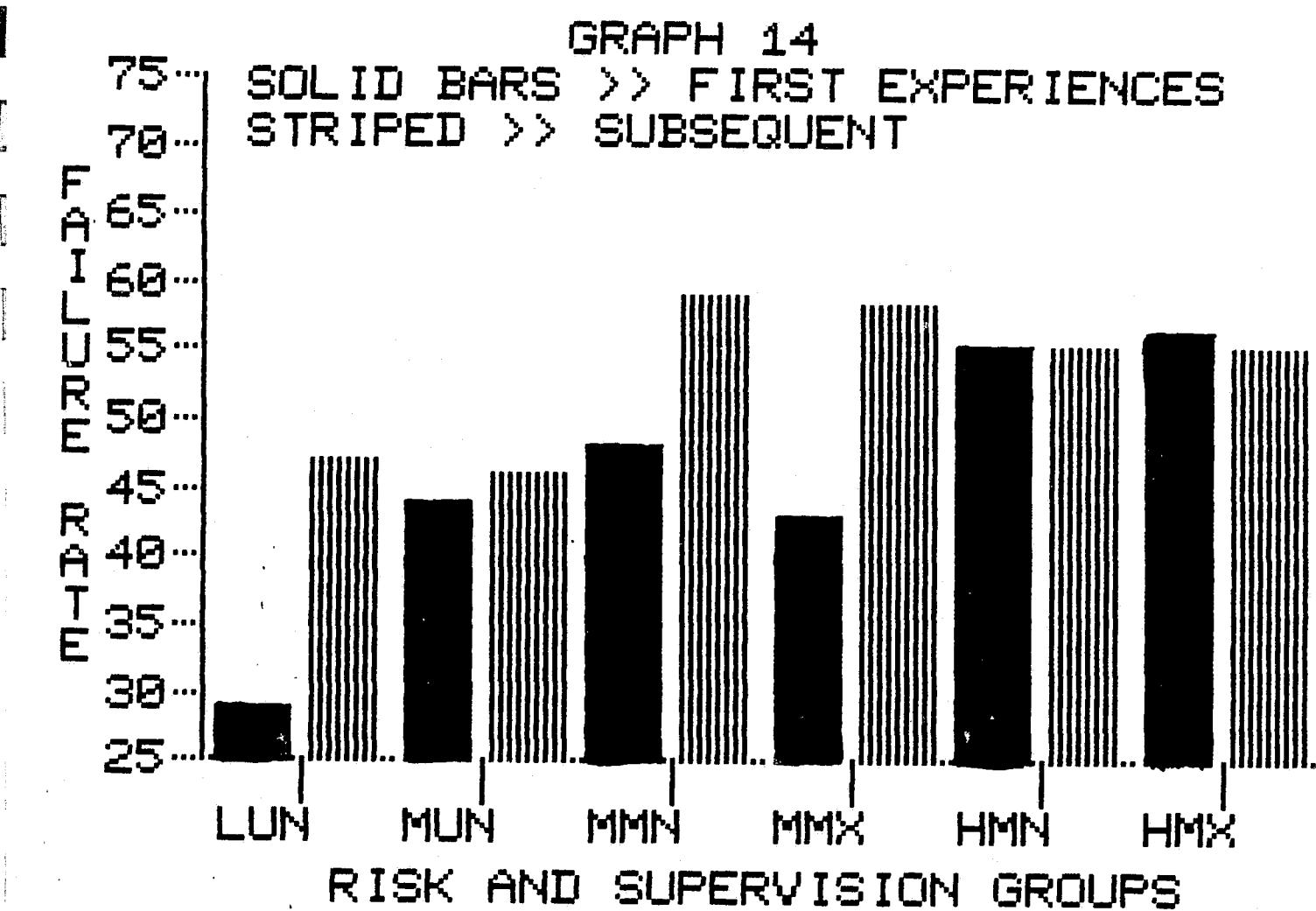
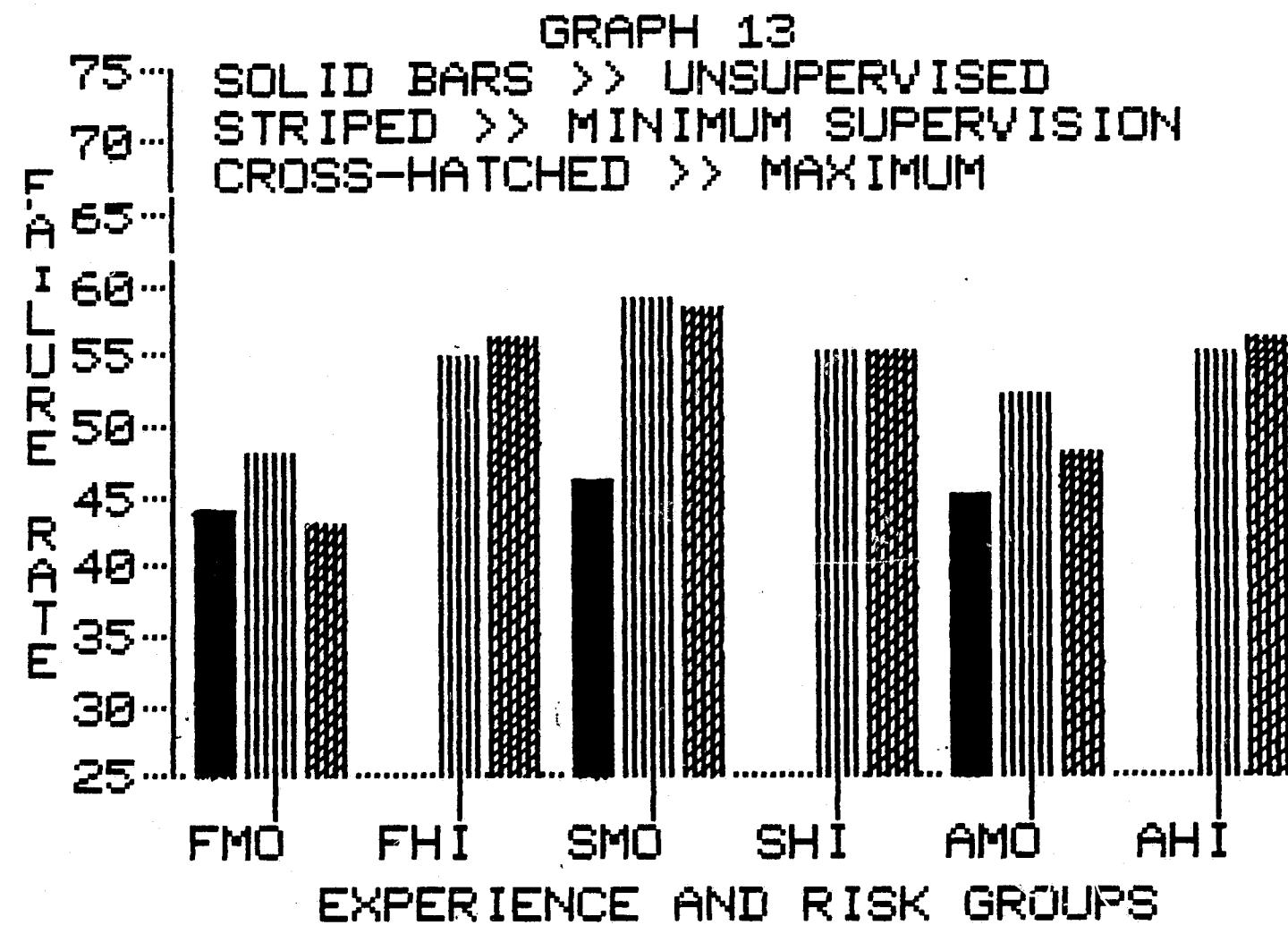












**PROBATION DEPARTMENT EXHIBITS**

- P-1 PSI and Probation Assignment Sheet
- P-2 Interview Form
- P-3 Drinking Questionnaire
- P-4 Drug Questionnaire
- P-5 Risk Prediction Score Sheet
- P-6 Representative Model of the Design
- P-7 Conditions of Probation (Supervised)
- P-8 Conditions of Informal, Non-Reporting Probation
- P-9 Major Events in the Intake Process
- P-10 Memorandum - Intake
- P-11 Memorandum - February 9, 1981 Training Session
- P-12 Daily Probationer Supervision Log
- P-13 Table of Probation Standards
- P-14 Collections Sheet
- P-15 Data Coordinator Consolidated Data Sheet

**Appendix D**

**Probation Department Exhibits**

HAMILTON COUNTY MUNICIPAL COURT  
PROBATION DIVISION -- LOWER LEVEL  
222 E. Central Parkway  
Cincinnati, Ohio 45202

PSI and Probation Assignment Sheet  
Court Date:

, having been convicted as charged  
of \_\_\_\_\_, before Honorable \_\_\_\_\_  
, is this day:

Assigned to the Probation Division for a Pre-Sentence Investigation  
and written report. DATE DUE \_\_\_\_\_

- |                                  |                          |  |                          |
|----------------------------------|--------------------------|--|--------------------------|
| 1. Facts of Arrest               | <input type="checkbox"/> | 5. Physical or Mental Health (Drugs/Alcohol) | <input type="checkbox"/> |
| 2. Prior Record                  | <input type="checkbox"/> | 6. Restitution/Damages                       | <input type="checkbox"/> |
| 3. Employment                    | <input type="checkbox"/> | 7. Fines Only                                | <input type="checkbox"/> |
| 4. P.W.'s Feeling about Sentence | <input type="checkbox"/> | 8. Complete PSI & Report                     | <input type="checkbox"/> |

Granted probation and assigned to the Probation Division for supervision.  
The sentence of the Court is as follows:

CASE NO.

PROBATION TERM

IMPORTANT: If granted probation, the probationer is required by the Court  
to comply with the CONDITIONS OF PROBATION as set forth on the  
reverse side of this form. The Court also imposes the following additional requirements:

SPECIAL CONDITIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By Order of \_\_\_\_\_

PLEASE NOTE:

If Court appearance occurs Monday through Friday at the County Courthouse  
report to the above address on the same day by 1:00 P.M. if Morning Court  
or 3:30 P.M. if Afternoon Court. If Court appearance occurs on Saturday  
report by Noon the following Monday.

If Court appearance in County Courts occurs Monday through Thursday nights,  
report the following morning by 9:00 A.M. to the above address. If Court  
appearance occurs in County Courts on Friday night, report the following  
Monday morning by 9:00 A.M.

INTERVIEW FORM

R.P.# \_\_\_\_\_

Name \_\_\_\_\_ Folder # \_\_\_\_\_ Date \_\_\_\_\_

Docket No.(s) \_\_\_\_\_ Charge(s) \_\_\_\_\_

Present Offense \_\_\_\_\_

Marital Status M SP D W S How long?

Education (Last school attended) \_\_\_\_\_

Last grade completed \_\_\_\_\_ Check box if client has GED

Military Branch \_\_\_\_\_ Yrs. in Service \_\_\_\_\_ to \_\_\_\_\_

Type of Discharge: Honorable \_\_\_\_\_ General \_\_\_\_\_ Dishonorable \_\_\_\_\_

Employment (3 jobs)  
Company \_\_\_\_\_ Position \_\_\_\_\_ Salary \_\_\_\_\_ Dates \_\_\_\_\_

Prior Record of Juvenile and out of County offenses. If client is  
under 21, contact Juvenile Court to check juvenile record, Dial 8096.  
Check box if Juvenile Court contacted

Date	Charge	Disposition
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Health Good \_\_\_\_\_ Fair \_\_\_\_\_ Poor \_\_\_\_\_ (if poor) Why \_\_\_\_\_

Alcohol Problem yes \_\_\_\_\_ no \_\_\_\_\_? Drug Problem yes \_\_\_\_\_ no \_\_\_\_\_?

Comments \_\_\_\_\_

## DRINKING QUESTIONNAIRE

P-3

1. How many days a week do you drink alcoholic beverages? \_\_\_\_\_
2. How much do you usually drink? \_\_\_\_\_
3. How much does it take to get you high? \_\_\_\_\_
4. How many times a week do you get high? \_\_\_\_\_
5. Do you drink more now than you used to? \_\_\_\_\_
6. Do you ever drink more than you plan to? \_\_\_\_\_
7. How much do you think you can drink at one time? \_\_\_\_\_
8. Have you ever thought about cutting down? \_\_\_\_\_
9. Were you drinking when you got into this trouble? \_\_\_\_\_
10. Have you ever been arrested before because of something you did while under the influence of alcohol? \_\_\_\_\_ Charge(s) \_\_\_\_\_
11. Have you ever lost time from work because of drinking? \_\_\_\_\_  
How many times in the past year? \_\_\_\_\_
12. Do you ever drink in the morning? \_\_\_\_\_ How often? \_\_\_\_\_
13. Do you ever drink alone? \_\_\_\_\_ How often? \_\_\_\_\_
14. Do you sometimes forget what happened while you were drinking? \_\_\_\_\_
15. Have you ever felt bad or guilty about drinking? \_\_\_\_\_
16. Have you ever had money problems because of drinking? \_\_\_\_\_
17. Do you ever drink when you're worried, angry, or lonely? \_\_\_\_\_
18. Has your spouse, family, or friends ever expressed concern about your drinking? \_\_\_\_\_
19. Have either of your parents, grandparents, or brothers and sisters ever had a drinking problem? \_\_\_\_\_
20. Have you ever been involved in a program for problem drinkers? \_\_\_\_\_  
Program \_\_\_\_\_ When \_\_\_\_\_
21. Have you ever attended an A.A. Meeting? \_\_\_\_\_

## DRUG QUESTIONNAIRE

P-4

1. What drugs have you tried? \_\_\_\_\_
2. Have you ever tried marijuana \_\_\_\_\_ hashish \_\_\_\_\_ hallucinogens (LSD, PCP, MDA) \_\_\_\_\_ barbiturates (downs) \_\_\_\_\_ amphetamines (ups, speed) \_\_\_\_\_ tranquilizers (valium, librium) \_\_\_\_\_ heroin \_\_\_\_\_ morphine \_\_\_\_\_ cocaine \_\_\_\_\_ T's & B's \_\_\_\_\_ codeine \_\_\_\_\_ dilaudid \_\_\_\_\_ sopors \_\_\_\_\_ preludin \_\_\_\_\_ glue/aerosol \_\_\_\_\_ or any other drug \_\_\_\_\_
3. Which of these drugs have you used on a regular basis \_\_\_\_\_  
occasionally \_\_\_\_\_  
more than once \_\_\_\_\_
4. What drug(s) are you currently using \_\_\_\_\_
5. How often do you use the drug(s) Daily \_\_\_\_\_ Several times a week \_\_\_\_\_  
Once a week \_\_\_\_\_ Less than once a week \_\_\_\_\_
6. When did you use the drug(s) last \_\_\_\_\_  
How much did you use? \_\_\_\_\_
7. How much do you usually use (of each) \_\_\_\_\_
8. How much does it take to get you high? \_\_\_\_\_
9. How much money do you spend on drugs a week? \_\_\_\_\_
10. Do you use more now than you used to? \_\_\_\_\_
11. Have you ever thought about cutting down? \_\_\_\_\_
12. Were you high when you got into this trouble? \_\_\_\_\_
13. Have you ever been arrested before because of something you did while under the influence of drugs? \_\_\_\_\_ Charge(s) \_\_\_\_\_
14. Have you ever felt bad or guilty about using drugs? \_\_\_\_\_
15. Do you ever use drugs when you're worried, upset, or lonely? \_\_\_\_\_
16. Do you ever mix drugs with alcohol? \_\_\_\_\_  
What combination? \_\_\_\_\_ How often? \_\_\_\_\_
17. Have you ever had money problems because of drugs? \_\_\_\_\_
18. Has your spouse, family, or friends ever expressed concern about your using drugs? \_\_\_\_\_
19. Do any of your friends use drugs? \_\_\_\_\_
20. Have you ever tried to quit using drugs? \_\_\_\_\_
21. Have you ever been involved in any kind of drug treatment program? \_\_\_\_\_ When \_\_\_\_\_

RISK PREDICTION SCORE SHEET

P-5

(Give appropriate weights  
to information drawn from  
case history interview.  
Add score and check in  
proper category at bottom.)

Client \_\_\_\_\_  
Screeener \_\_\_\_\_

EDUCATION

- (-2) \_\_\_\_\_ high school graduate or G.E.D.  
(2) \_\_\_\_\_ 12th grade or below

MARITAL

- (0) \_\_\_\_\_ married, living with spouse  
(6) \_\_\_\_\_ separated, (less than one year)  
(2) \_\_\_\_\_ divorced, widowed, single

MILITARY

- (0) \_\_\_\_\_ honorable discharge  
(2) \_\_\_\_\_ no service  
(6) \_\_\_\_\_ general or undesirable discharge

PRIOR RECORD

- (2) \_\_\_\_\_ less than 3 misdemeanors  
(4) \_\_\_\_\_ 3 or more misdemeanors  
(6) \_\_\_\_\_ 1 or more felony convictions

DRINKING

- (2) \_\_\_\_\_ none/occasional  
(6) \_\_\_\_\_ problem drinking  
(6) \_\_\_\_\_ prior drinking-related arrest

DRUGS

- (2) \_\_\_\_\_ none/occasional  
(6) \_\_\_\_\_ problem drug use  
(6) \_\_\_\_\_ prior drug-related arrest

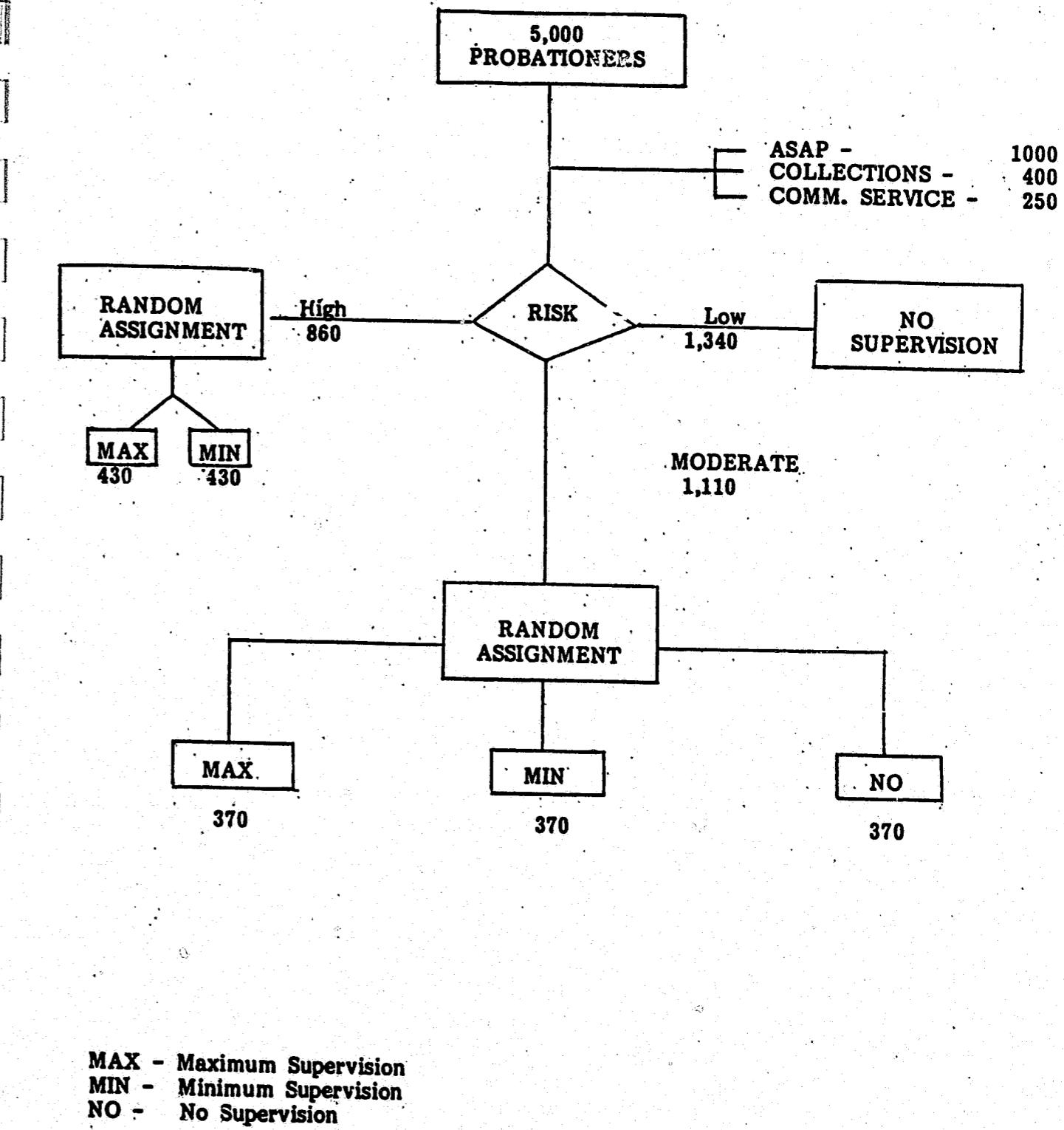
(+/-2) \_\_\_\_\_ Screeener's assessment

\_\_\_\_\_ Total

Low Risk \_\_\_\_\_ Marginal Risk \_\_\_\_\_ High Risk \_\_\_\_\_  
(4-10) (12-16) (18 or higher)

P-6

REPRESENTATIVE MODEL OF  
THE DESIGN



PROBATION DEPARTMENT  
HAMILTON COUNTY MUNICIPAL COURT  
GENERAL RULES FOR PROBATIONERS

P-7

Probation is a privilege not a right. This privilege may be revoked at any time. Make sure you understand all the conditions of your probation before you sign them. If you have questions, ask your Probation Officer to explain them to you.

The Probation Officer wants to help you, but the first and most important step is for you to help yourself. When you have a problem, talk to your Probation Officer.

As a probationer, you can be arrested on sight without a warrant by any Probation Officer or any other Police authority, whenever there are reasonable grounds to believe that you have violated the terms of your probation.

Although a strict curfew has not been given to you, it is certainly in your best interest to keep reasonable hours. Should you prove you are not keeping these hours, a curfew will be imposed.

Following is a summary of the General Rules for all probationers which you shall follow:

1. I shall obey all laws, this includes city, county, state and federal laws.
2. I may not carry a firearm or other lethal weapon.
3. I shall not use narcotics, and shall stay out of places where they are sold or dispensed. I shall consent to medical tests to determine if I have violated this rule.
4. I shall support those persons whom I am required by law to maintain and support.
5. I shall improve myself and will seek additional education or vocational training. I will seek a job and, upon getting a job, I will work regularly. I will be punctual and industrious on the job.
6. I shall FIRST obtain permission from my Probation Officer before leaving any employment.
7. I shall obtain permission from the Probation Department before leaving either Hamilton County or the State of Ohio.
8. I shall report, immediately, any change of my home residence or telephone number to my Probation Officer.
9. I shall report to my Probation Officer at such time and place and as often as the Municipal Probation Department or the Court may require. Failure to do so could be a ground for revocation of probation.  
My time to report is on \_\_\_\_\_ of each week-month. I will report dressed properly.
10. I shall make restitution in the sum of \$ \_\_\_\_\_ within \_\_\_\_\_ months from the date of this Order, and pay Costs of Prosecution, estimated at \$ \_\_\_\_\_ to the Municipal Probation Department. I agree to pay \$ \_\_\_\_\_ per (week, month). I agree to pay a fine of \$ \_\_\_\_\_. If I cannot meet these obligations I shall discuss it with my Probation Officer immediately.
11. I agree to abide by the above rules and conditions of my probation. These rules may be modified in the future if the circumstances of my life change. I shall also abide by the following conditions as stated by Judge \_\_\_\_\_ or my Probation Officer.

I HAVE READ OR HAVE HAD READ TO ME THE ABOVE WHICH MY PROBATION OFFICER HAS ALSO EXPLAINED TO ME. I UNDERSTAND ALL RULES AND PROMISE TO ABIDE BY THEM. I REALIZE ANY VIOLATION MAY CAUSE MY PROBATION TO BE REVOKED AND THE SENTENCE PUT INTO EFFECT FOR THE OFFENSE I HAVE COMMITTED. I WILL KEEP MY COPY OF THESE RULES.

DATE \_\_\_\_\_ PROBATIONER \_\_\_\_\_

PROBATION OFFICER \_\_\_\_\_

P-8

## CONDITIONS OF INFORMAL, NON-REPORTING PROBATION

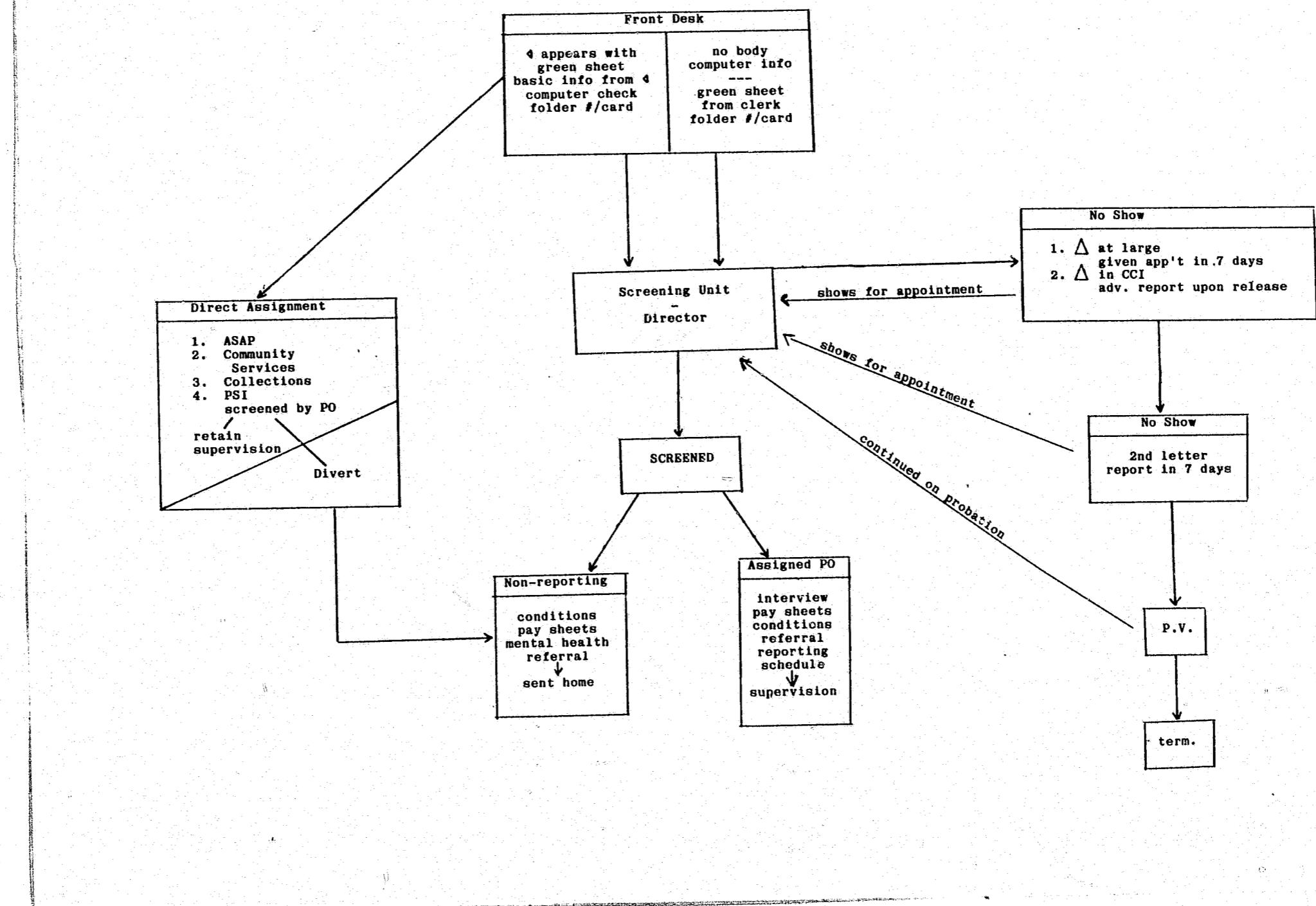
You have been placed on informal, non-reporting probation. That means that you will not have a probation officer, and that you will not have to report to the probation department on a regular basis. However, you must understand that you are on probation and must obey the following rules or conditions:

- (1) You must obey the law. Conviction of any offense may result in a violation of your probation.
- (2) You may not leave Hamilton County for more than two (2) weeks without permission from Mr. Muse, Senior Probation Officer. Phone 632-8779.
- (3) You must report any change of address, telephone number, or employment status to Mr. Muse within one week of the change.
- (4) If you were ordered to pay fines, court costs, and/or restitution, through the probation department, you must make regularly scheduled payments as set up by the probation department.
- (5) You must comply with any special conditions imposed by the Court \_\_\_\_\_.

If you do not obey all of the above conditions, your probation may be violated. If this happens, you will have to come back to court for a hearing in front of the Judge who put you on probation. If you are found guilty of violating the rules of your probation, the Judge can put you in jail for the number of days he originally suspended.

Remember to call Mr. Muse at 632-8779 if you plan to leave Hamilton County for more than two (2) weeks, or if you change your address, or phone number, or job. Mr. Muse will also be available to help you if you run into problems while you are on probation.

## MAJOR EVENTS IN THE INTAKE PROCESS



JULY 31 1980

P-10

MEMORANDUM - Intake

TO: Dick Hartigan

FROM: Anne Bolduc

RE: Intake

Larry Muse and I have discussed the intake process and my concern as to accurate data collection on program participants at the point of intake. As you are aware, I have been unable to ascertain precisely who is placed on probation since no one list is currently compiled.

Since all probationers are screened, Larry and I have agreed that a daily list will be compiled by himself and his volunteers of all individuals screened. The attached data sheet indicates the columns which the screeners will fill-in daily. In addition, I will review the log book daily in order to collect data on those individuals who are unscreened.

If you concur this process will begin on November 5th.

cc: Larry Muse  
Irv McMurry  
Jack Collins

ULI 31 1980

P-10

MEMORANDUM - Intake

TO: Dick Hartigan

FROM: Anne Bolduc

RE: Intake

Larry Muse and I have discussed the intake process and my concern as to accurate data collection on program participants at the point of intake. As you are aware, I have been unable to ascertain precisely who is placed on probation since no one list is currently compiled.

Since all probationers are screened, Larry and I have agreed that a daily list will be compiled by himself and his volunteers of all individuals screened. The attached data sheet indicates the columns which the screeners will fill-in daily. In addition, I will review the log book daily in order to collect data on those individuals who are unscreened.

If you concur this process will begin on November 5th.

cc: Larry Muse  
Irv McMurtry  
Jack Collins

M E M O R A N D U M

2/9/81 Training Session

TO: Project Participants  
FROM: Anne Bolduc *Anne*  
RE: 2/9/81 Training Session

Per our discussion at the 2/9/81 Training Session the following codes should be used under the "I" on the data instrument:

- ✓ (with x minutes) = PO saw probationer on screening date
- P (with x minutes) = PO saw probationer with a previous pre-sentence investigation on the date he/she entered probation
- S (with 0 minutes) = Probationer was screened but not seen by PO on that day
- P (with 0 minutes) = Probationer with PI was not seen by PO on the date he/she entered probation

**CONTINUED**

**2 OF 3**

Rev. 3 Oct 1980

**DAILY PROBATIONER SUPERVISION**

P.O.: \_\_\_\_\_

Date

## HAMILTON COUNTY PROBATION DEPARTMENT

## MUNICIPAL COURT DIVISION

## PROBATION MANAGEMENT INFORMATION SYSTEM.

TABLE OF PROBATION STANDARDSDESCRIPTION.

The successful completion of probation consists of the probationer, during his period of probation, fulfilling all of the conditions of probation defined by the Court. These conditions must be fulfilled to the satisfaction of the Probation Officer charged with the supervision such that the Probation Officer may with sufficient confidence recommend to the Court that the probationer be discharged from his probation at an appropriate point.

During the period of probation the probationer's conduct is in many instances between perfect conformity and perfect non-conformity with one or more of the conditions of probation, conduct which is unsatisfactory to the Probation Officer but not meriting a formal violation of probation being filed.

In the exercise of the supervisory power delegated to the Probation Officer by the Court he exercises significant discretion in determining the degree to which a probationer's conduct is or is not in conformity with each condition of probation. In these instances the Probation Officer exercises his supervisory judgment to determine the cause and degree of non-conformity and to determine the degree and type of direction, advice, instruction, admonishment, reproof, or caution he must provide the probationer. Each time the Probation Officer exercises the judgment and discretion described above he shall record that action in the form of one or more PC codes using the Table below.

Each PC code is merely a shorthand notation for a condition of probation. Each value assigned to a PC code is a value assigned by the Court based upon a rank ordering of the relative significance of each condition of probation. By so recording this information a readily recognizable and measurable indicator of probationer conduct may be examined during his period of probation and a degree of successful performance may be assigned upon his completion of probation.

ACTION.

Each Probation Officer shall select one or more of the PC codes listed in the STANDARDS TABLE below and record the same in the PC column of the applicable PMIS Report, whenever:

1. The probationer is displaying tendencies, the continuation of which would, in the Probation Officer's judgment, result in his filing a violation of one or more of the conditions of probation; and/or
2. The probationer is not meeting the payment schedule defined in the "PMIS Probationer Payment Schedule for Costs, Fines and Restitution" attached and/or
3. The Probation Officer advises the probationer to improve his conduct in relation to 1 above.

STANDARDS TABLE

PC (PROBATION CONDITION)	VALUE	PC CODE
1 Conviction of Traffic Offense	100	T
2 Conviction of Minor Misdemeanor	100	MM
3 Left jurisdiction w/o permission	300	J
4 Failed to report address change	300	RA
5 Failed to report personally as required	100	RR
6 Failed to comply with special condition	200	SC
7 Conviction of misdemeanor	600	MD
8 Money Owed/Money paid on time	200	\$/S
9 Treatment programs-participate fully in	300	TP
10 Conviction of felony	600	F
Violation of one or more of the Conditions of Probation	0	PV
Terminated Probation Successfully	0	TS

\* The procedures described herein shall supplement applicable parts of the Probation Department "Rules and Procedures Manual" until such time as a change to that Manual is published on this subject.

## **COURT FINES & CO RESTITUTION CHILD SUPPORT**



**COLLECTIONS SHEET**

File No. \_\_\_\_\_  
P.O. \_\_\_\_\_  
Date: \_\_\_\_\_  
Term: \_\_\_\_\_

**TOTAL AMOUNT OWED**

Name

### **Address:**

1

P-14

Rev. 3 Oct 1980

**DATA COORDINATOR  
CONSOLIDATED DATA SHEET**

Da 6

**Appendix E**  
**Acronyms**

**ACRONYMS**

<b><u>Acronym</u></b>	<b><u>Meaning</u></b>
CDS	Consolidated Data Sheet
CSSO	Computer System Service Organization
DAO	Data Analysis Organization
DC	Data Coordinator
DSCP	Degree of Successful Completion of Probation
HCMC	Hamilton County Municipal Court
MIS	Management Information System
NIJ	National Institute of Justice
PC	Probation Condition
PO	Probation Officer
PSI	Pre-Sentence Investigation
RLI	Risk Level Indicator

**END**